

FOOD-GRAIN SUPPLY AND FAMINE RELIEF

IN

BEHAR AND BENGAL.



REPORT ON THE FOOD-GRAIN SUPPLY  
AND  
STATISTICAL REVIEW  
OF THE  
RELIEF OPERATIONS IN THE DISTRESSED DISTRICTS  
OF  
BEHAR AND BENGAL

During the Famine of 1873-74.

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BY  
A. P. MACDONNELL,  
Of the Bengal Civil Service.

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1876.



No. 2513, dated Yacht *Rhotas*, on Tour, the 21st July 1875.

From—C. E. BUCKLAND, Esq., Offg. Junior Secretary to the Government of Bengal,

To—A. P. MACDONNELL, Esq., c.s., on special duty.

In forwarding for your information the correspondence marginally noted,

Letter from the Government of India, Department of Revenue, Agriculture, and Commerce, No. 86, dated 26th February 1875.

Letter to the Government of India, Department of Revenue, Agriculture, and Commerce, No. 989, dated 23rd March 1875.

Letter from the Government of India, Department of Revenue, Agriculture, and Commerce, No. 145, dated 16th April 1875.

I am directed by His Honor the Lieutenant-Governor to state that he has appointed you to collate statistics which the Governor-General in Council desires to have collated on the subject of the late failure in the crops in certain parts of Behar and Bengal as contrasted with the extent to which it was necessary to afford relief. The particular districts concerned will be found specified in the Lieutenant-Governor's report on the famine dated 31st October 1874.

2. From this correspondence, the primary object of collating these statistics is sufficiently evident. It is the analysis of the facts of the famine with a view to placing in clear relief the relation which, in each district, existed between the failure there and the consequent distress, in order that on future occasions of a similar nature the Government may have the benefit of this experience for determining the provisions to be made for meeting the distress: in other words, that there may be available the data of this experience for solving these questions—given a certain failure in a certain area with a certain population, what will be the extent of the distress? and what provision, in cash or in grain, will the Government have to make? There are, however, in the Lieutenant-Governor's opinion, various matters ancillary to, and resulting from, an enquiry of this nature, which may be appropriately considered in connection with it.

3. I am accordingly desired to note, for your information and guidance, the following observations regarding the primary object of the enquiry, the best way of dealing with the materials now available, the steps which you should take to supply omissions or correct defects in those materials, and the matters which, being germane to the enquiry, may be considered in connection with it.

4. The Lieutenant-Governor apprehends the wish of the Governor-General in Council to be mainly this: that in the event of another scarcity in any part of the country, such information, tested and verified by the experience of last year in Bengal and Behar, should be at hand, as would enable Government to determine the extent (if any) to which State relief should be afforded. Therefore to formulate, from the experience of the years 1873 and 1874, rules for future guidance in making provision for another scarcity, and to reduce to a compendious form the data from which such rules are deducible, should be, in the first instance, your main object.

5. The first point to which, with this object in view, I am to direct your attention, is the exhibition of the extent to which, in each district and subdivision of a district, the harvest failed in 1873-74. For such a statement you will, the Lieutenant-Governor trusts, find full materials in the existing records. You are aware that the failure varied in intensity in different districts—often in different parts of the same district—and that, in the estimates furnished to Government at the outset of the scarcity, these variations were expressed in fractions of the rupee: for instance, four annas of the crop were reported to have been lost in one place, eight annas in another, twelve annas in some, and so on. A carefully tabulated statement of these numerous variations in the many diverse districts, and parts of districts, will be of practical utility in connection with the degree of distress consequent on each.

6. The next point is the determination, as far as possible, of the quantity of food represented by the reported loss of four annas, eight annas, or other proportion, as the case may be, in the various districts. Now, to the formation of an accurate estimate of the deficiency in food supply, caused by a failure in the crops in any district, a knowledge of the average annual yield in food crops of that district in ordinary years is a necessary antecedent. At the commencement of the famine, information was furnished regarding the quantity of food believed to have been destroyed by the failure. But inasmuch as any such estimate must depend on a knowledge of the average annual food supply of the district—a point of considerable difficulty statistically,—it is desirable to examine this particular with the greater leisure which the present time allows. The Lieutenant-Governor trusts that a diligent scrutiny of the materials at hand<sup>1</sup> may lead to satisfactory results. I am therefore to request that you will consult all available sources of information regarding the average annual yield in food grains of each of the districts, or parts of districts, concerned.

7. Any estimate of food supply which does not take account of stocks in hand must necessarily be defective. The estimates of the deficiency in food supply submitted by local officers to Government in the commencement of the famine did, as you are aware, make some allowance for stocks in hand, though it was believed generally at the time that these stocks might prove comparatively small. Now, some light was thrown during 1874 on this confessedly obscure point. The result of the relief operations demonstrated that considerable stocks must have existed at the commencement of the famine. To this point, therefore, I am to direct your special attention, with the view of determining the quantity of food grain in store in each district in January 1874.

8. The results of your enquiries on the preceding subjects, namely, the average annual produce in food grain, the stocks in hand, and the extent of the losses in 1873-74, should be tabulated district by district, and, as far as possible, sub-division by sub-division.

9. The next point to which your attention will be directed is the local trade in grain affecting the food supply in the districts concerned. There will, the Lieutenant-Governor fears, be difficulty in bringing statistical information to bear on the several districts, or parts of districts, in detail. Still some very important facts can be set forth from returns already published, and more facts of the same nature, already known in the main, may be further investigated locally. The annual average of private importations of grain by the guaranteed railways is obtainable from the records of the railway companies. Much information may be also gathered from the reports of the River Trade Registration Office at Sahebgunge, and in every district information can be obtained from local traders, which, though only approximate and wanting in statistical precision, will yet be correct in the main, and will be both valuable and interesting as regards the exportation and the importation of food grains.

10. Your next business, therefore, will be to tabulate the average quantities of food grains in ordinary years imported to, and exported from, each of the districts concerned.

11. Subsidiary to the enquiry outlined in the preceding paragraphs are questions connected with the rainfall of each district. The incidence of the distress last year was unequal, chiefly because of the inequality in a rainfall, which, besides, was scanty over the distressed area. The relation which existed between the rainfall in each district, and the extent of the failure which prevailed there, it is of much interest to know. It may happen that owing to activity in the grain trade of a particular locality, a scanty rainfall has not been followed by much distress. Apart, however, from such an exceptional condition of things, there will generally be found a connection between the rainfall in a district and the local food supply. Whether from the statistics at hand on this point any degree of fixity in this connection can be evolved, is a matter which I am to recommend to your attention.

12. In reference to this matter then, you will be good enough to prepare a tabulated statement showing the average rainfall in each of the districts concerned, compared with the actual rainfall in 1873, that is, the season immediately

preceding the scarcity. Attention should be paid not only to the average of the year or of the season, but to the failure of rain in particular months which affect the grain crops of each district.

13. The importance of prices current as bearing upon the points mentioned in the preceding paragraphs, is manifest. It is indeed well known to you that, in some places, during the worst months of 1874, these quotations of prices for food grains were nominal, there being no food in the market. Often, too, they recorded the prices which prevailed in the chief mart of the locality, without due regard being had to more distant and worse supplied places. To all these points I am to call your attention, as they bear directly on the ability of private trade to supply a deficiency. Moreover, it will be in your recollection that the case of the distressed districts was materially aggravated by the high prices prevailing in neighbouring districts not actually distressed, and indeed throughout the provinces under the Government of Bengal.

14. Your next concern, then, will be to prepare a statement of the average prices current in all the districts under the Government of Bengal, and those which actually prevailed in the years 1873-74.

15. Then, in connection with this, would come the statement which you should prepare of the quantity of grain actually issued by Government in each district in 1873 and 1874. This would be best shown by exhibiting the quantity brought into the district by Government, the quantity expended, and the surplus remaining unexpended at the end. This table should also show, for each district or sub-division, the quantity expended in each of the several forms which relief actually assumed, that is, charitable distribution, wages in kind, sales to the public, and advances to cultivators.

16. As closely bearing on the expenditure of Government grain, you would present a statement of the amount paid in money to recipients of charitable relief, or to relief laborers, by Government, either through its own agency directly, or indirectly by advances of cash to private persons.

17. Having elucidated, as far as possible by statistical tables, the matters indicated in the preceding paragraphs, you will next direct your attention to analysing and tabulating the returns which exhibit the numbers of those who were assisted in the various ways by which relief was administered.

18. I am therefore to request your special attention to these existing returns which show the numbers of indigent and distressed persons whom responsible local officers found it necessary to relieve. The tabular statement which you will prepare should show, for each district, the numbers classed under the heads so well known to you, namely, charitable relief, relief works, sales, and advances: the two first, namely, charitable relief and relief works, will consist of actual figures; the two last, sales and advances, will consist of figures deduced from the quantities of grain sold and advanced.

19. The preceding outline will, the Lieutenant-Governor thinks, cover the substance of the enquiry to which, in paragraph 16 of the resolution dated 18th February 1875, the Governor-General in Council drew the attention of the Government of Bengal. Together with the statistical tables, you should offer such analytical remarks, and such deductions, as may appear to you to be requisite or desirable. And you will be careful to note, in every case where your figures are not actual facts, and where they are only to be taken as approximate, the general *data* on which they have been assumed by you.

20. Further, during your analysis of the failure in each district, and of the numbers distressed in consequence, various considerations connected with the density of the population will probably suggest themselves to you. Although, for the reasons stated at pages 83 and 84 of his report on the famine dated 31st October 1874, the Lieutenant-Governor is inclined to doubt whether the population of Bengal does, on the whole, press on the means of subsistence so much as may have been sometimes supposed, still he apprehends that certain tracts in the districts lately distressed are overpeopled, and consequently liable to suffer severely from vicissitudes of season. In order to bring this apprehension to the test, the Lieutenant-Governor considers you should institute a comparison between the density of the population and food supply of each of the districts concerned.

This was done for the Durbhunga sub-division during last October, and the statistics then collected furnished valuable information regarding the economic condition of that portion of Behar. The Lieutenant-Governor wishes that information of a similar kind may now be collected by you for the districts lately distressed, as far as this can be done, from the records in the various offices at the Presidency, and, if necessary, at the district head-quarters. Your enquiries on this head will partially coincide with those prescribed in the preceding paragraph 6 of this letter. It will be of interest also to know how far the sub-division of land has operated, either to enable the people to bear a scarcity, or to render them more liable to it.

21. If, from these enquiries, you should be satisfied that any district is overpeopled, or that emigration from it is advisable, you are requested to consider how, and whither, such emigration can be best promoted. It is not desired you should, in the body of your report, enter into the general question of the applicability of emigration as a remedy to any district in which the population is thought to be too great for the means of subsistence. This subject should be separately treated at the end of your report. While fully appreciating the advantages of emigration to foreign countries, and desiring to assist it, the Lieutenant-Governor cannot forget that even within the territories subject to the Government of Bengal (not to mention neighbouring provinces), there is room for the surplus population of the more populous districts. The limitation of the interest, however, which, under the permanent settlement, Government possesses in the soil of much of those territories, renders interference in this direction a matter of difficulty. This difficulty, however, does not exist in regard to many of those districts which have the largest proportion of reclaimable waste land within their area. In reference hereto, I am directed to forward copy of a Minute, dated 18th May 1875, which the Lieutenant-Governor has recorded on the subject of the ascertainment of the amount of available waste lands in the territories under the Government of Bengal.

22. Such being the nature of the enquiries entrusted to you, the Lieutenant-Governor desires that, in the first instance, you should proceed to Calcutta and there examine, in the light of the foregoing instructions, the records and documents connected with the famine. To this end the Bengal Secretariat will be instructed to furnish you with all facilities. The Board of Revenue and the Surveyor-General will also be addressed with a view to the records of their offices being made available for your inspection.

23. Whenever the information thus obtainable is incomplete, or when the necessary information does not exist, I am to request you will proceed to the district in reference to which the information is wanting, and there, in communication with the district officer, supply the deficiency. Or, if time should not admit of your visiting each of the districts—the distant districts more especially—you can address your enquiries to the Collectors, who will be directed to afford you every assistance in their power.

24. In conclusion, I am to say that Sir Richard Temple has much confidence in your ability to prepare the desired information in a manner that will be useful in future occurrences similar to that which afflicted Bengal and Behar in the years 1873 and 1874.



## PART I.



# TABLE OF CONTENTS.

## INTRODUCTION.

	PAGE.
Origin and scope of the report	i
Method of the report. Examination of district food-grain supply in normal years	iii
Examination of district food-grain supply under the abnormal circumstances of 1873-74	x
Examination of the influences by which these abnormal circumstances were neutralized	xii
Examination of the question of over-population in Bengal, and of its remedy	xiv-xviii

## PATNA DIVISION.

### SHAHABAD.

Agricultural statistics. Analysis of existing data. Present estimates of agricultural statistics	1
Average rates of crop-yield. Calculation of harvest outturn. Quantified estimate of food-grain supply	7
Local consumption. Requirements for food and seed. Retention of necessary food-supply in the district	8
Disposal of surplus. Process of financing for rent. Export grain fund	10
Wastage within year of production. Probable <i>minimum</i> limits of exportation and maximum limits of reserves	12
Reserves or stocks in hand; their magnitude. Various opinions on this question discussed	13
Examination of existing statistics of the river-borne and railway-borne trade in normal times	16
Normal rainfall and prices current of food-grain	16
Character of seasons preceding 1873; deficient rainfall in that year	17
Effect of this deficiency on the crops. Character of the harvests. Quantification of deficient outturn	18
Threatened inadequacy of local food-grain supply in 1874 to meet local wants	19
Private trade to Shahabad in 1874. Its activity and effects exhibited	20
Prices current in 1874; their high level and upward tendency	21
Policy of Government. Active interference rendered unnecessary by satisfactory rubber harvest. Character of this harvest	16
Examination of extent and effect of relief expenditure in Shahabad	22

### SARUN.

Agricultural statistics. Analysis of existing data. Present estimate of agricultural statistics for the district	27
Average rates of crop-yield. Calculation of harvest outturn. Quantified estimate of food-grain supply	32
Local consumption: requirements for food and seed. Surplus production over absolute requirements	33
Process of financing for rent. Average prices current. Stocks in hand. Disposal of surplus	16
Trade in food-grain. Importation large. Exportation [unreplaced by imports] nil	35
Existing trade statistics for Sarun. Average rainfall in Sarun. Error in previous returns	36
Character of seasons antecedent to 1873. Unfavourable harvests and high prices during this antecedent period	37
Rainfall in 1873: its deficiency and unseasonable character, and injurious effects on the crops considered	38*
Character of the bhadoi and rice harvests of 1873. The deficiency of outturn quantified	16
Local food-grain supply in Sarun in 1874. Its insufficiency to supply local wants	39
Prices current. Private trade to Sarun in 1874. Magnitude and result of private trade	40
Effect on private enterprise of Government action discussed. Necessity for Government interference	41
Relief expenditure in Sarun during 1874: its extent and effect	43

\* Also see errata.

## DURBHUNGA.

	PAGE.
Agricultural statistics. Previous data unsatisfactory ... ..	49
Special agricultural census of the Durbhunga sub-division ... ..	50
Character of agriculture: double cropping. Percentages on area of various crop lands in the Durbhunga sub-division ... ..	51
Mudhoobunnee sub-division. Method of elaborating estimates of agricultural statistics. Statistical data for Mudhoobunnee ... ..	52
Statistical data for the Tajpore sub-division. Estimate of agricultural statistics for the district ... ..	55
Average rates of crop-yield. Calculation of harvest outturn. Quantified estimate of food-grain supply in each sub-division ... ..	57
Local consumption of each sub-division. Requirements for food and seed. Surplus production over absolute requirements ... ..	59
Process of financing for rent. Prices current. Export grain fund. Disposal of surplus ... ..	60
Trade of Durbhunga: its character and magnitude. Examination of existing trade statistics ... ..	63
Stocks in hand in Durbhunga. Further consideration of the limits of stocks in hand	64
Average rainfall of normal years ... ..	65
Character of seasons preceding 1873 in Durbhunga ... ..	ib.
Rainfall in 1873: its insufficiency and unseasonable distribution ... ..	66
Effects of the insufficient rainfall on the harvests. Deficient outturn quantified ... ..	ib.
Local food-grain supply in Durbhunga during 1874; its insufficiency to meet local wants ... ..	67
Private trade; its vitality in Tajpore and stagnation in the rest of the district ... ..	68
Prices current in Durbhunga in 1874. Comparison of the years 1874 and 1866 in this respect. Examination of existing statistics of trade in 1874 ... ..	69
Examination of the extent and effect of relief expenditure ... ..	71

## MOZUFFERPORE.

Agricultural statistics. Existing estimates unsatisfactory ... ..	77
Elaboration of estimates of agricultural statistics for the sudder sub-division ... ..	78
Ditto ditto Seetamurhee division ... ..	79
Ditto ditto Hajepore division ... ..	80
Estimate of agricultural statistics for the whole district ... ..	81
Average rates of crop-yield. Calculation of harvest outturn. Quantified estimates of food-grain supply for each sub-division ... ..	ib.
Local consumption of each sub-division. Requirements for food and seed. Surplus production over absolute requirements ... ..	83
Disposal of the surplus. Process of financing for rent. Average prices current ... ..	84
Export trade. Probable limits of exportations and of stocks in hand. Existing trade statistics examined ... ..	86
Normal rainfall in Mozufferpore ... ..	87
Character of seasons antecedent to 1873. Rainfall in 1873: its deficiency and unseasonable distribution ... ..	ib.
The bhadoi and rice harvests of 1873. Quantification of deficient outturn ... ..	89
Local food-grain supply in Mozufferpore during 1874: its insufficiency to meet local wants ... ..	ib.
Private trade during 1874. Its vitality in Hajepore and fluctuations elsewhere in the district ... ..	90
Examination of the existing trade statistics for the Mozufferpore district and tabulation of the prices current there during 1874 ... ..	91
Extent and effect of relief expenditure ... ..	92

## CHUMPARUN.

Agricultural statistics. Special enquiries, and estimates based on them ... ..	97
Average rates of crop-yield. Calculation of outturn. Quantified estimate of food-supply	100
Local consumption. Requirements for food and seed. Surplus production over absolute requirements ... ..	101
Process of financing for rent. Prices current. Quantity of food-grain available for export and for storing ... ..	102
Trade of Chumparun. Examination of trade statistics. Estimate of the magnitude of the district's export trade in food-grain ... ..	104
Average rainfall of normal years ... ..	105
Character of seasons preceding 1873 ... ..	ib.
Rainfall in 1873: its deficiency and effects on the harvests ... ..	106
Character of the bhadoi and rice harvests of 1873. The deficient outturn quantified ... ..	ib.
Local food-supply during 1874. Its inadequacy to supply local wants ... ..	107
Private trade and prices current in Chumparun in 1874 ... ..	108
Extent and effect of relief expenditure ... ..	109

## GYA.

	PAGE.
Unsatisfactory character of existing agricultural statistics ... ..	115
Agricultural conditions prevalent in Gya similar to those in Shahabad ... ..	116
Extension to Gya of crop percentages elicited for Shahabad ... ..	117
Probable estimate of agricultural statistics for Gya ... ..	<i>ib.</i>
Quantification of food-grain produce. Local consumption ... ..	<i>ib.</i>
Rent system in Gya. Division of the produce between rent payer and rent receiver. Surplus production ... ..	118
Trade in Gya. Average prices and normal rainfall ... ..	119
Rainfall in Gya in 1873. Character of harvests ... ..	<i>ib.</i>
Quantified estimate of outturn in 1873 ... ..	121
Satisfactory rubbee harvest. Private trade. Prices current ... ..	<i>ib.</i>
Extent and effect of Government action ... ..	122

GENERAL OBSERVATIONS ON POPULATION IN THE PATNA  
DIVISION IN RELATION TO LAND AND  
TO FOOD-SUPPLY.

Distribution of population. Pressure greatest north of Ganges. Urban and rural population. Its dependence on agriculture ... ..	127
Pressure of population on soil of each district ... ..	128
Prospects south of the river brighter than north of it. Obstacles in the way of prosperity south of the river ... ..	129
System of rent payment by division of profits. Its unfairness to the cultivator pointed out ... ..	<i>ib.</i>
Further examination of pressure of population: (a) on the gross area, (b) on the cultivated area ... ..	130
The food-supply of the Patna division ... ..	<i>ib.</i>
Condition of the people. Unsatisfactory north of the Ganges. Causes of this discussed. Insecurity of tenure and prevalence of the "thikadari" or farming system ... ..	131
Prices of food and wages of labour. Rise in the former incommensurably great compared with the latter ... ..	133
Remedies for unsatisfactory condition of North Behar. Railway communication. Irrigation ... ..	<i>ib.</i>
Sufficiency of local food-grain supply of Patna division discussed ... ..	134
Trade (import and export) in normal years ... ..	135
Trade in the year 1873-74; its magnitude and area defined ... ..	137
Summary of the position of the Patna division as regards local food-supply, trade, and Government action during the famine ... ..	139
Magnitude of the danger in 1874 defined ... ..	140

## BHAGULPORE DIVISION.

## BHAGULPORE.

Local estimates of agricultural statistics ... ..	143
The revenue survey statistics examined; their value defined ... ..	144
Local estimates unsatisfactory. Elaboration of estimates for North Bhagulpore. Impossibility of forming estimates for southern sub-divisions demonstrated ... ..	145
Quantification of local food-grain supply for North Bhagulpore ... ..	151
Local consumption. Requirements for food and seed ... ..	<i>ib.</i>
Process of financing for rent. Prices current ... ..	152
Trade. Railway-borne and river-borne trade statistics. Average rainfall in the Bhagulpore district ... ..	153
Character of seasons preceding 1873. Rainfall in 1873 ... ..	155
Failure in the bhadoi and winter rice crops. Deficient outturn quantified ... ..	156
Local food-grain supply in 1873-74 in North Bhagulpore. Sufficient in Mudheypura, insufficient in Soopool ... ..	157
Trade in Bhagulpore during 1874. Exportation partially unaffected by local scarcity. The reason of this explained ... ..	<i>ib.</i>
Prices current in 1874 ... ..	159
Extent and effect of relief expenditure ... ..	160

## MONGHYR.

Agricultural statistics. Revenue survey statistics examined ... ..	165
Local estimates analysed: their unsatisfactory character indicated ... ..	166
Tabulated estimates of agricultural statistics for the district ... ..	170
Rates of crop-yield. Quantification of food-grain supply for Monghyr ... ..	<i>ib.</i>
Local consumption. Requirements for food and seed. Surplus production ... ..	171
Process of financing for rent. Prices current. Export grain fund. Stocks in hand... ..	172

	Page
Trade. River-borne and Railway-borne trade statistics. Average rainfall	174
Character of antecedent harvests. Rainfall in 1873	174
Harvests of 1873. Deficient outturn quantified	175
Prices current in 1866 and 1874 compared. Private trade in 1874; its nature and tendency discussed. Railway and river trade statistics tabulated	176
Extent and effect of relief expenditure...	180

#### SONTHAL PERGUNNAHS.

Want of agricultural statistics	185
Nature of country and cultivation	186
Trade statistics of Sonthal Pergunnahs; their character discussed	ib.
Average rainfall and prices current in Sonthal Pergunnahs	188
Rainfall in 1873. Character of harvest	190
Condition of Sonthal Pergunnahs in 1866 compared with its condition in 1874.	
Prices current in 1874	191
Rubbee harvest in 1866 and 1874 in Sonthal Pergunnahs. Subsidiary food-supply	192
Private trade in Sonthal Pergunnahs in 1874	194
Extent and effect of relief expenditure	195

#### PURNEAH.

Agricultural statistics examined. Their insufficient character pointed out	199
Character of district agriculture	202
Trade statistics. Normal prices current and average rainfall...	203
Rainfall in 1873. Its deficient and unseasonable character	204
Extent of crop-failure determined and localized	205
Prices current and private trade in 1874	ib.
Extent and effect of relief expenditure...	206

### RAJSHAHYE DIVISION.

#### DINAGEPore.

Agricultural statistics. Inadequacy of revenue survey figures	211
Local estimates of agricultural statistics. Their trustworthiness tested by special enquiries. Estimates of agricultural statistics for Dinagepore	212
Dr. Buchanan's estimates of cultivated area contrasted with the preceding. Probable retrogression in agriculture and population since Dr. Buchanan's time	213
Rates of crop-yield. Quantification of crop-outturn	216
Local consumption. Average daily consumption of food-grain per individual in Bengal determined. Local requirements for food and seed...	217
Disposal of surplus. Process of financing for rent. Prices current. Stocks in hand	218
Trade in Dinagepore. River-borne trade statistics examined. Inclusion of Rungpore exports in Dinagepore trade statistics	221
Average rainfall in Dinagepore	223
Character of antecedent seasons. Rainfall in 1873. Its great deficiency pointed out	224
Effect of insufficient rainfall on harvests. Deficient outturn quantified	ib.
Food-grain supply of Dinagepore in 1874 inadequate for local wants	225
Prices current and trade during 1874. Prevalence of famine rates for food-grain	226
Extent and effect of relief expenditure	227

#### RUNGPORE.

Agricultural statistics. Special statistical enquiries	231
Estimated statistics of agriculture for Rungpore	235
Average rates of crop-yield. Quantification of outturn	235
Local consumption. Requirements for food and seed	234
Disposal and surplus. Process of financing for rent. Prices current	ib.
Export trade. Stocks in hand. Average monthly rainfall	236
Character of antecedent seasons. Rainfall in 1873. Its character discussed	237
Effect of insufficient rainfall on harvests. Deficient outturn quantified	ib.
Local food-supply in Rungpore in 1874. Its inadequacy to supply local wants	238
Prices current and trade in Rungpore during 1874. Salutary influence of Government sales of grain	239
Private charity in Rungpore	241
Extent and effect of relief expenditure	ib.

## MALDAH.

	PAGE.
Want of agricultural statistics. Character of the district's agriculture ... ..	247
Private trade. Normal prices and normal rainfall ... ..	249
Character of antecedent seasons. Rainfall in 1873 ... ..	251
Deficient crop outturn in 1873 ... ..	<i>ib.</i>
Effect of failure in the harvest on prices of food-grain. Prices current and trade during 1874 ... ..	252
Extent and effect of relief expenditure... ..	253

## MOORSHEDABAD.

Character of soil and agriculture ... ..	259
Sources of statistical information regarding agriculture: (a) revenue survey statistics, (b) local estimates examined and tabulated ... ..	260
Rates of crop-yield. Quantification of food-supply ... ..	262
Local consumption. Surplus production ... ..	<i>ib.</i>
Disposal of surplus. Process of financing for rent. Prices ... ..	263
District trade and normal rainfall ... ..	264
Character of antecedent seasons. Rainfall in 1873 ... ..	266
Varying effect on early and late rice harvests of deficient rainfall. Quantification of outturn impossible through want of information regarding relative proportion of early to late rice cultivation ... ..	267
Prices current and private trade during 1874 ... ..	268
Extent and effect of relief expenditure ... ..	269

## RAJSHAHYE.

Unsatisfactory character of agricultural statistics. Quantified estimate of normal food-grain supply impracticable ... ..	273
Character of cultivation in Rajshahye... ..	275
Trade. Normal prices current and normal rainfall ... ..	276
Rainfall in 1873. Failure in the harvests ... ..	277
Effect of failure upon prices and private trade ... ..	278
Necessity for relief. Extent and effect of relief expenditure ... ..	279

## BOGRA.

Unsatisfactory nature of agricultural statistics. Quantified estimate of food-grain supply impracticable ... ..	285
Trade. Average prices current and average rainfall in Bogra... ..	287
Character of antecedent harvests. Deficient rainfall in 1873 ... ..	288
Extent of failure in the harvests. Its effect on prices current and private trade ... ..	289
Extent and effect of relief expenditure . ... ..	290

## PUBNA.

Want of agricultural statistics ... ..	295
Deficient rainfall in 1873. Failure in the harvests ... ..	296
Extent and effect of relief expenditure ... ..	297





## E R R A T A .

Read in continuation of paragraph 28, page x, Introduction—

These statements of normal rainfall have been extracted from the Meteorological Report for 1874-75. *All data* in the possession of Government regarding rainfall in Bengal have been utilized in preparing those statements, which are based on figures in many instances extending over fifteen years.

Paragraph 9, page 78—

Since the submission to Government of this report, I have discovered that '75' in the 4th line of this paragraph should have been '80.' The error results in an understatement of the *bhadoo* produce by about 5,000 tons. It is not possible now to correct the calculations, but I beg to note the existence of this error here, and to request that it may be borne in mind.

Omit the words '*except one*' in the 5th last line at page vii of Introduction.

Page 38, paragraph 39, insert :—

*Statement showing the Monthly Rainfall in the District of Sarun in 1873.*

SUB-DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Opupa ... ..	0'29	...	1'70	1'00	...	3'42	15'57	10'80	1'10	...	...	...	33'88
Swan ... ..	0'34	0'06	0'72	0'25	1'33	4'80	16'31	8'34	1'14	...	...	0'08	33'37
District average...	0'31	0'06	1'21	0'62	1'33	4'11	15'94	9'57	1'12	...	...	0'08	33'62

Page 40, paragraph 46, line 9, for '*imply*' read '*implies*.'

Page 109, paragraph 37, column 1 of the statement of grain expenditure, for '*29,181*' read '*29,183*.'

Page 186, paragraph 6, line 2, for '*area*' read '*areas*.'

Page 237, paragraph 26, for '*is much*' in line 6 read '*are*.'

Page 280, paragraph 26, column 4 of the statement of cash expenditure, for '*2,33,711*' read '*2,32,711*.'

Page 41, Appendix I.—Price of common rice in Moorshedabad in June 1874—For '*18 to 12*' read '*10 to 12*.'

Page 56, for '*184,104*' acres rubbee area in Durbhunga sudder sub-division read '*157,318*' acres. This error results in an overestimate of the rubbee outturn reaching 7,653 tons. The error having been discovered after the Report was printed, the necessary corrections cannot now be made in the text. I request the correction may be borne in mind.



## INTRODUCTION.

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THE following "Report on the Food-grain Supply and Statistical Review of the Relief Operations in the distressed districts of Bengal and Behar during the Famine of 1873-74" has been prepared in obedience to the instructions\* noted below. The present volume is concerned with the Behar province and the districts of the Rajshahye division in the Bengal province only. These regions were in 1873-74 the scene of the severest failure in the crops, of the deepest distress among the people, and of the greatest exertions to relieve this distress on the part of Government. These circumstances therefore attach to the examination of events in the Behar and Rajshahye districts a special interest and importance which do not in the same degree belong to other districts. Furthermore, it has unhappily come to pass that the insufficiency and unseasonable distribution of the rainfall last year has again injuriously affected tracts in North Behar, which in 1873 had suffered most severely. It is therefore of importance that I should hasten to lay before the Government such information, gained from the experience of the past, as may contribute to a successful treatment of the new difficulty. Anticipating, then, the completion of the work, I beg to submit to Government that portion of it which has been already finished.

2. It may be well, at the outset, to state briefly the object, scope, and method of this report; for, although I do not purpose to make this introduction a *resumé* of all the questions which are dealt with in the following pages, the discussions contained in each section will probably be more intelligible if there be previously formed a precise conception of my general aim and plan.

3. The primary object of undertaking the work, which has now been partially completed, was the collation and analysis of those various interesting and valuable statistics which, collected during the

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\* Letter from Government of India, Department of Revenue, Agriculture, and Commerce, No. 86, dated 26th February 1875.

Letter from Government of Bengal to Government of India, No. 989, dated 23rd March 1875.

Letter from Government of India, Department of Revenue, Agriculture, and Commerce, No. 145, dated 16th April 1875.

Letter from Government of Bengal, Statistical Department, to A. P. MacDonnell, Esq., c.s., on special duty, No. 2513, dated 21st July 1875.

famine relief operations, bear on the economic condition of the districts recently distressed. It seemed, however, on further consideration that, with this primary object, other important aims might be usefully combined. It was thought that advantage might be taken of the occasion for the purpose not only of collating the economical information scattered through the large mass of famine literature, but also of reviewing the information we possess on the question of Agricultural Statistics in Bengal; of eliminating from it that which was worthless; of comparing the valuable residuum with the knowledge acquired during the famine; and of exhibiting the result in a connected form, with such deductions and inferences on practical questions of the day as the premises might warrant. In the matter of agricultural economy, particularly in its relation to food-supply, the Lieutenant-Governor was desirous that the results of those desultory enquiries, which from time to time have been made, should be summarized and examined. He was anxious to know the exact value of the knowledge we possess on that point, and the extent of ground it covers. Knowing this, he would be in a position to determine how far available information was trustworthy, how far it should be supplemented, and how best supplementary statistical enquiries might be directed.

4. Combining these objects with the more special aim of the Government of India, the Lieutenant-Governor directed the issue to me of instructions which may be conveniently classified under four heads. I was directed to enquire, in the first instance, into the general condition, in normal years, of each district recently distressed regarding food-grain supply and trade. Having realized the normal condition in those respects of each district, I was instructed next to turn my attention to the exceptional condition of each district during the year 1873-74, with a view to measuring the extent to which, as regards food-grain supply and trade, it varied from the normal rule. In the third place I was instructed to analyse and verify the information relating to the efforts made by Government to relieve or prevent distress, and to exhibit the financial results of these efforts, and their effect as regards the numbers relieved thereby. The last head of the instructions refer to the practical lessons to be drawn from the discussion of the preceding points as regards the prevention of future famines or their treatment, should they occur. Those instructions, therefore, outlined an economic enquiry of wide compass, and of considerable difficulty.

5. I propose now to indicate briefly the method adopted in the following attempt to carrying those instructions into effect.

6. To estimate the true significance of an unusual phenomenon, one must know the state of things from which it varies. To realize the position of a distressed district in 1874, and to gauge the difficulties each has to contend with, one should know its normal position. The first question therefore it became necessary to determine was the normal annual supply of food-grain of each district.

7. This supply is derived from two sources—from local production and from importation. It was necessary to measure the extent to which each source contributed to the result.

8. To an estimate of the local production of food-grain, a necessary antecedent is the knowledge of the cultivated area of each district, and of the proportion of this area which is occupied with the production of food-grain. At the very threshold of my enquiry I was thus confronted with what has been held to be a great want to an administrator in Bengal,—the want of agricultural statistics. In the endeavour to supply this want no labor has been spared; and I believe in each section as trustworthy estimates on this point have been presented as it is possible to obtain from existing sources of information. No other character, however, than approximations to the truth is claimed for these estimates. In some cases I believe them to be close approximations, in others they are less satisfactory. But care has been taken in each section to set forth in full detail my *data* and method of utilizing them, so that Government may be always able to follow my reasoning, and, from a knowledge of the premises, weigh for itself the worth of my conclusions.

9. Having elaborated for each district a detailed statement of agricultural statistics, I next addressed myself to calculating the food-grain produced in normal years. For this end it was essential to estimate the average outturn per acre of each sort of food-grain grown in the district. To these estimates particular attention and rigorous criticism are invited, for this question of average rates of produce has been one of the most perplexing with which I have had to deal. One maund, more or less, per acre may alter the complexion of a conclusion; may make a district look prosperous, while it really gives a bare sufficiency to its people; or make it look poverty-stricken, while it is in reality prosperous. There is reason to believe that many experienced men under-estimate the rates of produce. There is a tendency to err on the safe side. While recognizing the danger of the opposite course, I have striven to avoid over-cautiousness in estimating average rates of produce.

The rates finally accepted are based on a large number of recorded facts, and, in many instances, on the results of special enquiries. They are, it should be carefully remembered, such as prevail in ordinary good years; bad years on the one hand, and bumper years on the other, being left out of consideration. It was found impossible to strike an average so as to include bad and bumper years; for not only has no record been kept of the average outturn per acre of each crop in past years, but also the estimates of general crop yield or character of harvests, as embodied in annual reports, are altogether devoid of precision. I thought it right, then, in estimating average rates of produce, to aim at a standard from which deviations either way might be measured. In this report, therefore, the estimates of outturn are for ordinary good years.

10. Knowing approximately the area devoted to the production of food-grain crops, knowing the nature and extent of the custom of double cropping (which I examine at length), knowing the various kinds of food-grain grown in each district, and the average rate of produce of each, I had no difficulty in estimating the average annual outturn of food-grain for that district.

11. It did not enter into my purpose to consider the sources of food-supply (obviously numerous), other than food-grain, each district possesses in normal years. Neither did it concern me to determine the quantity or value of other agricultural products which are not edible. My aim was the limited one of realizing the actual position of each district as regards its food-supply in grain locally produced. Obviously, this limitation must result in an imperfect representation of district economy generally. A discussion which does not deal with products, which, though not themselves life-supporting, confer on the producer the power of buying food, must necessarily be imperfect. Neither the time, however, nor the materials for a review of district economy in all its bearings were at my command. Although by an examination of our sources of knowledge concerning the trade of, and a tabulation of the various sources of commercial wealth intrinsic to, each district, I have striven to make the way easier for future enquiry, I am still very conscious of the imperfection of my present contribution to our statistical knowledge of Bengal.

12. Following the determination for each district of the supply of food-grain locally produced, the next step, were the preservation of logical sequence possible, should have been an enquiry into the effect

of the district's trade, import or export, in increasing or reducing this supply. But our imperfect knowledge of the magnitude of inter-district trade precluded such mode of treatment and compelled me to deal with the question in an indirect manner. To this point I shall come presently. I note it here in explanation of the reason why the natural sequence of the enquiry has been infringed.

13. Having calculated the average annual supply of food-grain, my next step was to contrast this supply with the wants of the people. The absolute wants are two: grain for food, and grain for seed. I have calculated the quantity required by each district on both heads, and for the basis of the calculation I beg to refer to the section on Shahabad, and to paragraphs 25-27 of the section on Dinagepore. This brings me to a portion of my argument which may challenge contradiction, and I therefore invite attention to the following statement of it. The statement is but a *resumé* of reasons which shall be fully dwelt upon hereafter.

14. I submit that in rural Behar and Bengal a quantity of food-grain, equal to the absolute wants of the people during the intervals between harvests, is always in the district. The people must live, and all experience teaches the lesson that they, or, what for my purpose is the same thing, their mahajuns, keep in stock a provision at least sufficient to carry them on from one harvest to another. The inter-harvest periods being short, people will not run the risk of impairing, by exportation, the sufficiency of this provision, unless simultaneous importation, altering possibly the composition of the provision, leaves its absolute magnitude unaltered.

15. Now, necessary and usual as is the retention of a portion of each crop for subsistence till the next crop comes in, the disposal of another portion to pay rent is, as things go in Behar and Bengal, as necessary and imperative. Everywhere a very considerable portion of the cultivator's rent is paid from the sale-proceeds of food-grain; and the grain on which the rent is thus financed for is, I submit, over and above the provision for subsistence made from each crop, and referred to in the last paragraph. In the case of those cultivators who lock up in their own store-rooms the provision necessary to carry them over the interval before next harvest, this is obviously so; it is less obvious, but not less true, in the case of the needy classes who are in the mahajun's hands. For it is manifest that if a ryot of this latter description be only partially indebted, his partial independence, like the greater independence of his

well-to-do neighbour, will show itself in the reservation of a provision for the immediate future ; the grain, therefore, on which the finances for rent will be over and above that provision. If he be wholly in the mahajun's hands, the food-supply necessary for his subsistence and for rent payment alike, goes to the mahajun. But as the latter must, and does, support the ryot under pain of losing his principal and interest together, it comes to the same thing in the end, as if the ryot had, with the mahajun's sanction, retained the provision for subsistence and made over the rent-grain.

16. In fine, it is, I submit, a proposition generally true that the minimum food-supply necessary to support from harvest to harvest a district which is a surplus-producing district may be, in considerations dealing with the disposal of such surplus, looked on as a fixed quantity, and, with the wants it supplies, eliminated from the argument.

17. With a view to tracing out the manner in which this surplus is disposed of, it next became requisite to determine the quantity of food-grain which in each district is thrown on the market in financing for rent. To the solution of the question it was necessary to know, first, the actual amount of rent liquidated from the sale-proceeds of food-grain ; secondly, the average prices at which food-grain is sold to realize this amount. On both points local enquiry was necessary, and these local enquiries were, at my request, conducted by the various district officers and the results communicated to me. The results are interesting and valuable, not only as far as the purpose in hand is concerned, but also as suggestive of trains of enquiry which will doubtless be followed up. It may not be out of place here to acknowledge the assistance I have received from the Collectors on whose time I have trespassed, and the very courteous attention which has been always paid to my, I fear, often troublesome communications.

18. Conjoined with the question of the proportion of the rent liquidated by the sale-proceeds of food-grain was the determination of the gross rental of each district. In those districts which enjoy the advantages of the Road Cess Act this was an easy matter ; but in those districts into which the Act had not been, or was being, introduced there was some slight difficulty. I think, however, the difficulty has been surmounted, and that each section, in which the information was of use, contains a close approximation to the aggregate rents collected by zemindars in the particular district. I may note, in passing, that the rental of every district is very disproportionately large compared



with the amount which, in the shape of land revenue, such district contributes to the imperial exchequer.

19. The determination of the share of rent liquidated by the sale-proceeds of food-grain, the ascertainment of the actual amount of this share in cash, and the knowledge of the average rates at which food-grain is sold, rendered the calculation of the quantity so sold a matter of no difficulty. The point thus reached, or the knowledge thus acquired, enabled me to make a tripartite division of the local food-grain supply into —(a) the supply necessary for absolute wants, (b) the supply necessary to liquidate rent claims, (c) the residue, if any.

20. This brought me to the consideration of the questions of district trade and stocks in hand, questions of high importance, but regarding which there is a complete want of precise information. This want will, it is hoped, be supplied when our present system of inter-district trade registration shall have surmounted the difficulties incidental to all new arrangements. At present, however, the information to be gathered from this source is interesting, more for the promise of improvement it holds out, than for its intrinsic worth; more for the light it throws on the nature of the various commodities in which each district trades, than for the precision with which it gauges the magnitude of such trade.

21. It was, however, necessary for me to estimate the extent to which food-grain is kept in stock in each district, and this necessarily involved the question of the district's trade in that commodity. Impelled by this necessity on the one hand, and having in ascertained facts but a slender and not often significant basis for argument on the other, I was obliged to have recourse to speculation to supplement the points in which actual experience was defective. For the speculation I venture to make, I claim no further value than that it affords some clue to an opinion on matters confessedly obscure and intricate. I venture to suggest that in a district which produces a surplus, the quantity of grain sold to pay rent charges forms the grain fund as it were, from which exportations are in the first instance made. The terms of the argument, if I be permitted to dignify the speculation by such a name, presuppose a surplus, portion of which is sold to defray rent, and the sequel will show that every district with which I shall deal, except one, produces such a surplus. The grain therefore sold to pay rent is over and above the quantity required for consumption, and over and above a quantity which exists in addition and is held in reserve. In proportion to the sufficiency of this quantity held in reserve, the grain which

in liquidation of rent charges, passes into the grain-dealer's hands is in the home market a drug, and in ordinary years continues to be so. There being no market for it at home, it being superfluous as a reserve, it must be exported.

22. But seeing that a residue still exists, in addition both to the provision for subsistence and to this grain on which the rent is financed for; seeing that this residue, or a large portion of it, comes sooner or later into the grain-dealer's hands, whether in satisfaction of debts, or in financing for other wants, is it not fanciful to say that it is from the rent-grain exportation is first made, and not from the residue? How can a distinction be drawn? To this I answer, that the certainty (as I shall demonstrate) with which at fixed seasons grain is thrown on the market to meet rent charges, and the fact that at these seasons, immediately following each harvest, prices are cheaper than at other times, induce traders to buy in and export. This fact then indicates a distinction. The grain sold to pay rent is sold at stated times and at cheap prices; the grain sold for other necessities not so pressing is sold at various times and at dearer prices. Traders from outside (who carry on a large business this way), or home traders who supply foreign demand, will certainly export first the grain which affords the largest margin to cover profit and expenses. Afterwards, if the demand be greater than they can supply from this stock, they will export other grain, which, bought up by them at more unfavorable times and dearer prices, affords less of a profit.

23. There are special circumstances in connection with the rice cultivation and export trade of North Behar which support the speculation that the grain sold to pay rents is all exported; but those special circumstances will come more properly under the districts in which they occur. Here I shall sum up by stating that in every district of which I have treated, the grain sold cheapest is the grain sold to pay rents; and that as this will give the largest profit in foreign markets, it is the grain which is probably first exported; *i.e.*, the minimum exportation of ordinary years, if the district reserves permit of its being all exported.

24. Then arose the question—Is the residue of the year's surplus the maximum quantity reserved? If not, what is the limit of accumulation of reserves, and how is this limit maintained?

25. Suppose that a surplus-producing district this year hold 50,000 tons of grain in reserve, and that next year's harvests are average

harvests—Will these 50,000 tons which have not been drawn on this year be added to the reserve the ensuing year furnishes afresh? And if so, where is this accumulation to stop? These are the most abstruse, as they are among the most important questions of district economy.\*

26. I cannot undertake to summarize the modes of treating them in each case that came up for discussion. Here I shall only say that, if in the case supposed the ensuing year be an average year, there is no doubt the previous year's reserves partly swell the export grain fund; such of them as do not swell the export grain fund are utilized by the freer consumption which cheap prices, consequent on the abundant supply, permit; much of them is wasted, grain being a very perishable commodity. In my estimates of production I contemplate a good average year; short years on the one hand, and bumper years on the other, being excluded from the calculation of the average. But short years are of the more frequent recurrence; and those often recurring short seasons are great solvents of surplus accumulations, whose *raison d'être* is the knowledge, begotten of experience, that short years will come.

27. Having thus [by a method which, I admit, is speculative, but to which, under the special circumstances of our defective knowledge of the facts, may, I think, be accorded the modified importance I claim for it] striven to elicit a clue to the *minimum* limits of exportation and the *maximum* limits of stocks in hands in surplus-producing districts, I next addressed myself to the examination of the existing information regarding the trade of each district in normal years. This enquiry my speculations were, it will be remembered, intended to supplement. I have carefully examined not only the statistics furnished by our system of river-trade registration, but also various district and divisional reports on this subject. Furthermore, I have obtained, through the courtesy of the Board of Agency of the East Indian Railway, valuable classified statistics of its entire traffic in a normal year to and from each district of these provinces through which the line passes. These statistics I shall produce in due time. The Government will be thus enabled to judge, and I shall, on opportune occasions, point out how far my speculations on district trade are in accordance with our still imperfect knowledge of the actual facts. Finally, while I am touching on the question of inter-district trade, I beg to

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\* See the 61st and following paragraphs of the section on Shahabad.

In the section on Shahabad some important points are finally discussed, reference being merely made to the discussion when such points present themselves again. I therefore request that the section on Shahabad, which is first in order, may be read before any other section.

acknowledge my indebtedness for information on the subject to the comprehensive Trade Reviews which have recently emanated from the Bengal Secretariat, and to some valuable statistical papers on the Rice Trade of Bengal contributed to the pages of the *Calcutta Review* by Mr. Cotton of the Civil Service.

28. The exposition of the existing information on district trade has been followed by a carefully prepared statement of the average prices-current of the various sorts of food-grain in use in each district, unless the requirements of my argument called for an earlier introduction of such a statement. Finally, a statement of the average rainfall in each district, tabulated month by month, and, where possible, sub-division by sub-division, winds up the examination of the normal aspect of each district.

29. The review of the condition of those districts under the abnormal aspects presented by them in 1873-74 has been, as far as materials permitted, introduced by a brief examination of the antecedent seasons. It was obviously of importance to know whether each distressed district had suffered from prior adverse harvests and markets dearer than usual, or whether it had entered unweighted in the struggle which ensued.

30. Passing from this important question of antecedent harvests, I have in the case of each district, and, where possible, each sub-division of a district, examined the character of the weather in 1873. Carefully prepared statements of monthly rainfall have been presented and the significance of its deficiency or unseasonable distribution dwelt upon. The effect of the deficiency or unseasonable rainfall on each crop in each district, and, when possible, in each sub-division of a district, has next been dealt with, and the verified estimates of failure in each harvest set forth, and, when necessary, commented upon. Those estimates of total loss, or of deficient outturn, as the case may be, were next compared with the average outturn of each crop as previously determined, and thus the actual deficiency of each food-grain crop in 1873-74 has been estimated with as much precision as existing means of information permit of.

31. My instructions suggested the possibility that the varied experience of 1873 might afford some clue to the establishment of a fixed connection between an ascertained deficiency in the rainfall at any place and a consequent failure in the crops there. I regret I have failed to establish any definite connection of the kind. The following pages will make this fact very clear, that the character of a harvest depends, within certain wide limits, much more on the seasonable distribution of the rainfall than on its absolute quantity. Although a well marked deficiency in the rainfall will certainly entail a deficient crop-yield,

yet the magnitude of the deficiency will depend on the distribution of the rain which fell. For the bhadoi and late rice harvests it would seem that the distribution most favorable to agriculture—the husbandman's ideal year—is when premonitory showers, falling in May or early in June, facilitate that spade husbandry which, to secure a really good crop, *must* precede ploughing operations. The rain in the end of June and in July should be heavy: then should come an interval of comparatively fair weather, in which weeding operations may be successfully prosecuted. The September rains must be heavy, shading off into fine weather with October showers. On the sufficiency of the September rains, more than of any other month, depends the character of the winter rice crop—the chief harvest in these provinces. Finally periodic showers from December to February (inclusive) are essential to a good rubbee harvest.

32. In years of abnormal weather the distribution of the rainfall is usually capricious. In one place the seasonableness of the fall may go far to counterbalance its deficiency; in a neighbouring place the case may be reversed. I have, in abnormal years, seen fields bearing fair crops contiguous to fields with indifferent crops, or with no crops at all. The quantity of the rainfall, its distribution, the nature of the soil, whether retentive of moisture or not, the system of agriculture, the facilities for irrigation, beside other causes, combine to influence the result of the harvest. It is therefore impossible to attribute the result to, or to isolate the effect of, any one influence.

33. Returning to the point from which I digressed, I have stated that the deficiency of each food crop in 1873-74 had been estimated. The situation then was this,—the number of the people in each district was known; their requirements for food and seed in ordinary years were known; the outturn of the various harvests from September 1873 to August 1874 was known with as much precision as existing data could secure; and such an allowance, *in every case a maximum allowance*, was made for stocks in hand as the preceding consideration of the district economy in normal years suggested. On these data the deficiency in food-supply locally produced, with which in 1874 each district and (when possible) each sub-division of a district had to contend, has been specifically set forth.

34. The extent to which the deficiency in food-grain supply attained in each district having been thus realized, the effect had by this limitation in the supply on the price of the various sorts of food-grain was next considered. I have exhibited in tabulated prices-current,

carefully prepared for me by the various Collectors and compared with the quotations in the *Gazette*, the rates which in each month of 1874 obtained for each article of food-grain in the chief markets of every district.\* When materials were available, those rates, as well as the general condition of the district, have been compared with the prices and the conditions which there prevailed in the last famine year, 1866; such comments on this head as the comparison suggested have also been offered. I trust to have thus presented a faithful picture of the difficulties with which each district had to contend during 1874.

35. How those difficulties were surmounted was the next subject for exposition. The saving influences at work were three—private trade, Government assistance, abstinence on the part of the people. Commencing with the first, I have striven to exhibit the action and effect of private trade in each distressed district. To my remarks on this subject, particularly the remarks in the section on Sarun, and in the *resumé* of events in the Patna division, I invite attention. It would be out of place here to summarize the operations of private trade during the famine. They differed in various portions of the affected area, and will be dealt with in that connection; but it may generally be said that along the line of railway, and where navigable rivers afforded cheap and established modes of transport, private trade assumed proportions of striking magnitude. Into the Patna division alone it brought 282,000 tons of food-grain. It saved the south Gangetic districts. To it Sarun owes its escape from imminent disaster. It materially assisted the riparian regions of Tirhoot; but to places far inland, tracts which do not usually import, its beneficial effects did not extend.

36. Passing from the effects of private trade in each district in partially supplying the deficiency in the food-supply, I next addressed myself to the consideration of the extent and effect of Government action in the same direction. One mode in which this action operated deserves special attention.

37. Least operative in districts where private trade showed sustained activity, Government action was most effective in places which private trade did not reach; and among the divers modes of relief administration adopted, none was productive of more good than sales of

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\* See paragraph 36, section XV, page 268.

grain by Government. For persons unacquainted with the facts, it is an obvious objection to make that, to those sales of grain is due the depression of private trade; but I trust the whole tenor of this report, and the special passages in which this point is dealt with, will show the objection, which in theory is an obvious one, to be in practice, if not altogether, yet very largely, groundless; and will prove that action in this way was forced on the Government by the extreme depression, and frequently by the total cessation, of private importations.

38. To Government relief administration generally, but directly and chiefly to those sales of grain imported by Government, is due the effect of keeping prices down to the, comparatively speaking, moderate range which prevailed during the second and third quarters of 1874. To me, having a full knowledge of the facts, this is manifest; but in order that I may the better impress my conviction on others, I have, wherever data existed, compared the condition of each district in respect to prices, &c., in January 1874 with its condition in this regard in January 1866. I have shown that in Behar prices were in some instances dearer, in all others as dear in the former as in the latter period. This being so, the obvious inference suggests itself, that if in 1866 [when, as the official records show, the failure in the harvests was much less than in 1874] prices in the summer and autumn were at famine rates, still more prohibitive would have been prevalent rates in the summer and autumn of 1874, had Government not intervened.

39. Continuing the exposition of Government action, I have indicated the various forms in which it operated in each district, presenting for each complete and, I believe, accurate statements of the expenditure, both in grain and money, incurred there in the relief or prevention of distress. The expenditure, however, with which I have concerned myself is that *which actually reached the hands of those in need of relief*. I have not touched on the expenditure incurred in maintaining establishments, in the purchase and transport of grain, or in incidental ways. These, doubtless, indispensable heads of expenditure were not controlled in all their phases by the local officers; the local reports do not contain adequate information regarding them; they therefore fall, not within my province, but within the province of the Comptroller of Famine Accounts, who has now classified and compiled them. I have dealt with all the expenditure which was directly effectual in relieving or preventing distress, and therefore my report offers a full, exhaustive, and correct account of the disposal of all the grain imported into each

district, and of all the cash expenditure incurred in each district, whether in the way of charitable distribution, or of wages on relief works, or of recoverable advances.

40. Following the exhibition of the gross expenditure in grain and money directly incurred in the relief or prevention of distress, the next step was the examination of the effects of this expenditure as regards the numbers of the people in each district relieved thereby. Wherever, in the official records, I found actual figures on this head I have reproduced them, not, however, without a special reference to the Collector of each district, and a verification of the numbers of those who had been so reduced as to need gratuitous charitable relief.

41. Whenever I failed to find a record of the actual numbers relieved by a given expenditure, I have offered estimates, giving in each case the basis on which the estimates are framed. Finally, I have completed my review of the relief operations by an analysis of the numbers relieved, with special reference to the population of each district, summarizing the effect of the famine on the whole population, as exemplified in the length of time they stood in need of extraneous aid.

42. The preceding sketch of what has been done exhausts my instructions, in so far as they fall within the first three of the four heads under which, at page ii, they have been classified; the important fourth head still remains to be dealt with. The questions raised in it are chiefly two: (a) the provision to be made for expenditure in future famines, should they unhappily occur; (b) the necessity for promoting emigration.

43. Since the inception of this report circumstances have come to pass which relieve me of the duty of dealing with the former question. It seems to have passed the stage of discussion in such a report as this, and to have become an Imperial question ripe for solution. I will therefore only say that, had it been necessary for me to consider the question, I should have followed in the steps of the Orissa Famine Commissioners, and recommended that in all, except extreme cases, local resources should *by law* be made chargeable with the expenditure on local famines.

44. To the question of emigration, whether it be for any district needful, and if so, what is the best method of promoting it, I have during my enquiries paid attention. The conclusion I form is this,—that only in case of the Sarun and [though in a modified degree] Tirhoot districts is the question an urgent one, or deserving of special attention. In every other district of which I have treated there seems



to await the plough a margin of reclaimable waste land, adequate to the immediate, and in most instances the prospective, wants of its inhabitants.

45. In Tirhoot the uncultivated margin is less than in any other district, except Sarun; but still there is a margin. Reason has been shown for believing that at present this margin is unculturable; with irrigation, however, there is no reason to doubt of its becoming fertile land. In the seventh section of the report the necessity of irrigation in Tirhoot has been dwelt upon, and incidental allusion made to the extension of the State Railway system there. With both of these agencies at work—the former in fertilizing land now waste, and preserving land now under tillage from drought in one year and floods in another; the latter in establishing communications between Patna, the great trade centre of Behar, and North-East Tirhoot, its most fruitful tract—the question of emigration from Tirhoot would cease to be of urgency. These are the measures which, in preference to any emigration scheme, I would advocate—irrigation and the extension of the State Railway, *via* Jhenjarpore and Narayeh, to Pertabgunge on the Koosi river. Among the people of Tirhoot, especially of the Durbhunga district, the emigrating spirit does not exist; and it is a plant whose growth we cannot force. It must take root of its own accord, and have time to blossom and bear fruit. Meanwhile, we cannot ward off vicissitudes of season or, if the worst come, refuse to meet them in the spirit of 1874.

46. With Sarun the case is different. It will be shown that in this district the margin of culturable waste land is insignificant, if indeed there be any waste land at all which, regard being had to necessary pasturage, could be reclaimed. An irrigation scheme in Sarun therefore would fail in bringing more land into cultivation, though of course it would preserve from drought the land now in tillage.

47. An extension of the State Railway system to the district would doubtless result in local and general advantages; but comparing the district [washed on four-fifths of its boundaries by two perennially navigable rivers] with the fruitful but inaccessible regions of North-East Tirhoot and North Bhagulpore, I submit that, if the State can afford only one extension, that to Pertabgunge should have the preference. In this view of the case, with irrigation deprived of much of its profitable results, and railway communication more urgently needed elsewhere, I think that promotion of emigration from Sarun is the only way out of the pressing difficulty of over population in that district.

48. The question then is—How, and whither, is this emigration to be promoted? Should attention be paid more to promoting emigration to the colonies than emigration to other parts of India where there is spare land? It seems obvious that emigration to the colonies is, and always must be, an insufficient safety-valve for over-population in India. Sarun at present furnishes a small share to the insignificant total of foreign emigrants; suppose it furnished the total, its difficulties would not be removed. I doubt whether all the colonies which import labour from India could take 200,000 emigrants without glutting their labour market for years to come; yet the emigration of 200,000 people, that is, 28,600 families, from Sarun would do no more than bring matters there into such equilibrium that there would be no surplus population which might economically be more usefully employed elsewhere. Since Burmah, as a field for emigration, has disappointed our hopes, I think it would be unwise to found any on emigration to the colonies.

49. Although I see no adequate remedy for over-population in India in colonial emigration, I do not, however, ignore the importance to the colonies themselves of such emigration, or the benefits India can thereby confer on them, while gaining herself in a small way too. The consideration of the question from the colonial point of view is not pertinent to my purpose; but I nevertheless had intended offering a few remarks on the unsatisfactory condition of emigrant recruitment in the mofussil, and a few suggestions for its improvement. I find, however, that in the section on Emigration in the Bengal Administration Report for 1874-75 [with a copy of which I have been this day favoured] the substance of the recommendations I had to make has been anticipated. I need say no more, then, on this part of the subject than that, if Government could assure itself of the loyal performance in the colonies of the promises held out in India to emigrants, it would be well to bring recruitment more under official direction than it is at present; to insist on a more careful selection of recruiting agents; to establish a channel of official communication between the depôt proprietor in Calcutta and the Magistrate of the recruiting district; and to require of the latter some aid in directing recruiting agents to promising recruiting grounds.

50. If colonial emigration be an insufficient remedy for over-populousness in special tracts in India, a sufficient remedy is afforded by the country itself. The following sections will show that, as far as unoccupied land is concerned, Bengal affords ample scope for

relieving over-pressure in Sarun or elsewhere. The difficulty is, not where to get land, but how to get people to settle on it. The limitation of the interest of Government in the soil of permanently settled estates cramps its direct action in promoting emigration to the large unoccupied tracts of the Rajshahye division; while indirect action in such matters is rarely effective. Occupation of land the property of Government, and of land under Government management, may, however, be directly encouraged.

51. There is from Sarun a well-established annual migration of labourers to the eastern districts. This migration has of recent years been greatly encouraged and facilitated by the construction of roads, erection of bridges, abolition of ferry dues, and such ways. If by the allotment of land on favourable terms in the Durbhunga estate in Purneah and the Government land in the Dooars, and by the advance of necessary capital, this migration could, in some instances of prominent men, the heads of migrating gangs, be converted into emigration, the effect might propagate itself. I confess, however, I am not sanguine of success in any attempt of this sort; emigration fostered by bounties is necessarily expensive and partial; the State cannot afford it on a really effective scale.

52. Although I do not think that an attempt to force the growth of an emigrating spirit among the people by bounties on emigration is likely to produce results commensurate with the cost or with the country's needs, still I do not deprecate an attempt being made in this direction. It may be of use in supplementing that policy of material improvement which Government is prosecuting so successfully. I place trust in the ultimate success of this policy,—in the wisdom of facilitating communications between the lands that lie waste and the hands which are, if not idle, yet under-employed. I feel a conviction that, if the journey of one or two months which now divides Sarun from North and East Bengal were, by a railway, reduced to as many days, labour would seek earlier in the year the land that awaits it, and leave it later. Having an easy return always open, the labourer would defer the date of returning; his migration would verge on emigration. Even did he return at last, the production of the country and his own means would have been increased by the devotion to work of time before wasted in travelling. In fine, I see in the proposed extension of the Tirlhoot State Railway to Pertabgunge [I would fain hope some day to Julpigoree] a much-needed means of conveying the rich produce of

North-East Tirhoot and North Bhagulpore to a paying market; an assurance of supplies in time of scarcity for the usually fertile country through which it passes; a link of union between the culturable waste lands of North Bengal and the overcrowded labour markets of Behar; and consequently a remunerative investment for the country's capital.

A. P. M.

*P.S.*—I beg to note that the letter of Her Majesty's Secretary of State for India, proposing [in addition to the instructions I have reproduced] various questions for discussion in this report, reached me after the completion of this portion of my inquiry. On consideration of His Lordship's letter, I think that the points noted therein, which could have been treated without further investigation, have been anticipated and dealt with in the following pages. Some of the weighty questions, however, raised by the Secretary of State can only be discussed after the completion of inquiries specially directed to their elucidation. The information now before me throws an insufficient light upon those questions.

**PATNA DIVISION.**



*[Throughout this Report I have converted maunds into tons, at the rate of 28 maunds per ton. This is not strictly accurate; but to facilitate calculation I have omitted fractions.]*

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## SECTION I.

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### SHAHABAD.

1. THE estimates of agricultural statistics I shall present for this district differ from the estimates embodied in the Collector's reply to the Government circular No. 70\* of 13th October 1873. These estimates, which make the cultivated area of this district 2,200,000 acres, and the average annual food-supply 929,292 tons, present a picture of district economy which is, I believe, much too rose-colored.

2. To bring my belief to the test, I propose to state in detail the reasons which support, and the process by which I have formed, it. It will be of advantage to dwell with some fullness on those points in this section, because the difficulties which underlie them will, in the same or analogous forms, recur in the case of other districts. It will be well, therefore, to enunciate and develop, as far as the circumstances of the case will allow, the principles and system by which I hope to resolve those difficulties.

3. "The statistical statement for zillah Shahabad, prepared from the survey and other records" by Mr. Travers, who was Collector of the district in 1849, formed, I apprehend, the basis of the estimate given in the reply to circular No. 70. But this statistical statement, which makes the cultivated and culturable area 2,085,561 acres, does not say how much was cultivated and how much culturable. No map or record now in the archives of Government furnishes satisfactory information on this all-important point.

4. Disappointed in not receiving such necessary information from the prescribed authoritative sources, I look for it elsewhere. The success of my inquiry hinges on the formation of an accurate estimate of the average annual local supply in food-grain; and to the determination of this supply, a knowledge of the quantity of land usually devoted to its cultivation is essential. The following paragraphs, therefore, embody an attempt to construct a statement of agricultural statistics for the district.

5. This attempt to construct a table of agricultural statistics will deal in the first place with the enquiries in specimen areas which a Deputy Collector has made in this district, and with such analogies as

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\* NOTE.—This circular letter was issued by the Bengal Government to all Collectors when scarcity was anticipated. It called for information on various topics connected with the area under cultivation, the average food-supply, the trade, the character of the preceding and the prospects of the ensuing harvests of each district. As I shall have frequent reasons to refer to it, I shall quote it as circular No. 70.

I may be able to point out between the district and the adjoining districts in the North-Western Provinces, I am in hopes that each plan will act as a test and corrective of the other. The results, however, will necessarily fall short of statistical precision.

6. Beginning with the latter plan, I beg to state that although I am alive to the danger of arguing from the existence in one district of a certain state or condition of things to the existence in a neighbouring district of the same or a similar state or condition, still I believe that, under certain circumstances and with due limitations, the danger inherent in such an argument may be greatly obviated. For instance, I submit that if there be two adjoining rural districts alike in all circumstances of situation, climate, soil, productions, modes or system of agriculture, avocations and standard of comfort prevalent among the people, with populations of the same density, who—an important matter in India—are animated by the same religious persuasions, then there would be sufficient reason to infer that in all likelihood the same quantity of land was under cultivation in each district.

7. If there be two districts in which all the conditions specified in the preceding paragraph do not exist in their entirety, but nevertheless do exist to a certain extent, I submit that in respect to such districts a similar inference, though of course more modified and less cogent, is admissible; and the cogency of the inference will be in proportion to the sufficiency of the conditions.

8. Between the district of Ghazee-pore and the Arrah and Buxar sub-divisions of Shahabad there seems to be a general resemblance of the nature indicated.\* The districts adjoin; between the average rainfall and temperature of each there is no material difference; the agricultural products of both localities are similar; the advantages of railway and of river communication exist in both; the vast majority of the people in both districts are Hindus; and from a comparison which the census reports of both provinces have enabled me to institute, I gather that relatively to the population, which is of nearly equal density in each region, the same pursuits, mainly agricultural, are equally patronised. For the preceding points of similarity there is adequate proof; and although the evidence regarding the prevalence in both districts of the same standard of comfort, the same system of husbandry, and the same physical character of soil, is from the nature of the case not so full, still I have seen nothing which negatives, but much which affords, a presumption of the existence in those respects also of a similarity.

9. Satisfied of the admissibility of the comparison, the doubt suggested itself to me whether, Ghazee-pore being a permanently settled district, more reliance could be placed on the official statistics of agriculture there than on similar figures for our own provinces.

10. To resolve this doubt I addressed the Commissioner of Benares, who informs me that the cultivated area of Ghazee-pore was ascertained preliminary to the imposition of the acreage tax, and that it might be accepted as correct for practical purposes. True though

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\* These remarks apply only to the Buxar and Arrah sub-divisions of Shahabad. With this portion of the district only is Ghazee-pore compared.



they be in the main, therefore the agricultural statistics for Ghazeepore may not be precisely true, and the error, if any, inherent in them, will impart to the following discussion an additional element of uncertainty.

11 Having thus explained my aims, I beg to point out that of the Buxar sub-division, which adjoins the Mahomedabad and Zumaneah tehsils of Ghazeepore, the area is 626 square miles, and the population 371,039 souls. Of the two tehsils the area is 619 square miles, and the population 371,826 persons. There is no considerable urban population in either region. With reference to the foregoing observations, I would infer that 326,928 acres, the area of cultivated land in the two tehsils, gives a fair idea of the cultivated area in Buxar. The cultivated land in the Buxar sub-division would then be 81 per cent. on the area.

12. In like manner I beg to point out the coincidence between area and population in Arrah sudder sub-division on the one hand, and in the Ghazeepore sudder and Balia tehsils on the other, the figures being for Arrah, area 965 square miles, population 614,980; for the Ghazeepore and Balia, area 964 square miles, population 637,930. The larger population in the two tehsils suggests the idea that the cultivated area there (439,585 acres) will not be an under-statement of the cultivated area in Arrah. The cultivated land in Arrah, then, would be 71 per cent. on the area of the sub-division; and, treating the Arrah and Buxar sub-divisions as one tract, the cultivated land in both would thus be 75 per cent. on the amalgamated areas.

13. Azimghur is the only district adjacent to Shahabad which is temporarily settled. It seems that prior to the settlement operations much land was thrown out of cultivation—a disingenuous practice, which, adopted by the inhabitants of Orissa in 1865, resulted so disastrously to them. With Azimghur, therefore, a fair comparison of Shahabad cannot be made.

14. A comparison between the Benares district (excluding the city) and the Buxar and Arrah sub-divisions will give results precisely identical with the foregoing. The addition of a large urban population, however, destroys the identity which would otherwise obtain regarding the pressure of population on the soil of both districts. This urban population creates a demand which may stimulate local production and cause an extension of the area under cultivation. Although I believe that, owing to the great facilities of railway and river communication that exist, the city draws its supplies as much from a distance as from near home, still there is a doubt on the point which makes me forbear from insisting on the comparison.

15. The exceptionally sparse population of the remainder of Shahabad precludes a further prosecution of this comparison. This process, then, of estimating the cultivated area must be here abandoned in favour of that which will deal with the statistical inquiries made in the district. It will be gathered, however, from what has preceded, that, with a probable approximation to truth, it may be said that in the Shahabad district 986,019 people, that is 57 per cent. of the population, cultivate 756,517 acres, that is 27 per cent. of the district area.

16. I now come to the inquiries of the Deputy Collector who, in 1871, was specially deputed to collect statistical information in specimen areas on all the chief points of district economy. I have

carefully analysed the statistics collected by him, and though on some points involved and incomplete, they yet furnish on the whole a valuable addition to our statistical knowledge. It will be seen that in effect they are confirmatory of the results already arrived at by widely different means.

17. The Deputy Collector conducted his inquiries in three different sets of specimen areas, one situated in the Arrah sudder sub-division, one in Buxar, and one in the more sterile, more sparsely cultivated, and more thinly inhabited tracts of Sasseram and Rhotas. My analysis of his statistics shows that in the Buxar set of areas the cultivated land is 80 per cent. on the gross area examined; that in Arrah the percentage was 77; while in Sasseram, as might be expected from the sparseness of the population, the cultivated land is only 40 per cent. on the gross area.

18. I here invite attention to the fact that in the case of the Buxar sub-division there is a precise coincidence between the results of the comparison with Ghazeeepore noted above and the statistics of the Deputy Collector.

19. Although the same precise coincidence does not appear in the case of the Arrah sub-division, still the results are satisfactorily close, and suggest the belief that neither is far off the mark. The Deputy Collector's percentage of the cultivated land is 77 on the area; the comparison with Ghazeeepore gave 71. I submit that these results afford a degree of material corroboration that justifies our reposing some, I will even say considerable, confidence in them.

20. It is not material to my object to preserve henceforward a distinction between the Arrah and Buxar sub-divisions. The method adopted in keeping the accounts of famine expenditure will not allow of the division being maintained in the latter portion of this report; it is therefore useless to maintain it here. In assuming, then, for the amalgamated sub-divisions one percentage of cultivation on area, the preceding remarks dictate 75 as the best average proportion. I shall adopt this.

21. The Deputy Collector's statistics for the less fertile set of areas show a cultivation covering 40 per cent. of the area examined. This result also receives striking confirmation from certain statistical inquiries made by Mr. Eyre while Sub-Divisional Officer at Sasseram. Mr. Eyre's statistics, which are published in the Selections from the Annual Reports for 1872-73, show the cultivated area of the sub-division to be 40.5 per cent. on the gross area. We have, therefore, in this an independent and precise confirmation of the percentage deducible from the Deputy Collector's statistics on the same point. It is only a fair presumption that in the instance where no source of corroboration exists, the Deputy Collector's figures are deserving of confidence. The net result, then, of all the preceding discussion is that 75 per cent. of the Arrah and Buxar, and 40 per cent. of the Sasseram and Bhubooah sub-divisions are cultivated. The cultivated land in the whole district, therefore, will be, in round numbers, 1,480,000 acres, or about 53 per cent. on the district area.

22. Regarding the proportions of cultivated and uncultivated land in Shahabad, there is still another source of information in the results of the inquiries which Mr. Cowley, of the Civil Service, conducted

preliminary to the acquisition of land for the Canal Irrigation scheme. The statistics collected by Mr. Cowley show that throughout the district the cultivated area was about 56 per cent. on the gross area. The inquiries, however, did not extend to the most barren tracts, and therefore, I think, that perhaps the percentage already arrived at (53) will be the safest to adopt. Still I beg to invite attention to the concurrent testimony in favour of the estimate I adopt. Subsequent events will tend to demonstrate further the general correctness of this estimate, which, I would beg to point out, is less by 730,000 acres than the estimate given in the reply to circular No. 70.

23. I now proceed to indicate the principles on which are based the sub-division of this area and the calculation of the gross outturn. The pergunnahs Baragowah, Arrah, Behea, Dinareh, and Bhojpore, covering about one-fourth of the district area, are situated in that fertile part of it where 75 per cent. of the land is cultivated. Knowing the district area, I gather from this that in those pergunnahs the cultivated land occupies 526,200 acres. As there is, with regard to the proportion of rice land and cultivated upland in these pergunnahs, a consensus of opinion between the Collector and the Deputy Collector which makes the rice land about 25 per cent. on the cultivated area, it follows from this that in one-fourth of the district there are 394,650 acres of cultivated upland and 131,550 acres of rice land.

24. The reply to circular No. 70 states that in the remaining three-fourths of the district the greater portion of the cultivated land is rice-growing land. The Deputy Collector's statistics support this view, and from both sources I infer that 70 per cent. rice-growing land and 30 per cent. upland will be a proper distribution of the remaining cultivated area. A simple calculation will now give the following results for the whole district :—

Rice land ...	...	...	...	800,000 acres.*
Upland ...	...	...	...	680,000 ,,

25. From the upland or rubbee area, the reply to circular No. 70 deducts 100,000 acres for the growth of non-food crops—opium, oil-seeds, sugar, fibres, indigo, tobacco, cotton. This estimate is not supported by the statistics from specimen areas, which for the fertile set gives 5 and for the unfertile set 3 per cent. non-food crop cultivation on the total cultivated land. Knowing as I do the exact extent of land under poppy cultivation, also knowing the comparative insignificance in this district of any other non-food crops except oil-seeds, which for the most part grow simultaneously with rubbee food-crops, I believe that a compromise between the two extremes will be near the mark. I therefore allow for the independent cultivation of non-food crops 80,000 acres, and thus we shall have the food-crop area standing thus :—

Rice land ...	...	...	...	800,000 acres.*
Upland ...	...	...	...	600,000 ,,

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\* The more correct figures are, rice land 799,210 acres, upland 680,790 acres. But to facilitate subsequent calculations I take the liberty of transferring to the rice area the odd 790 acres upland.

26. I have already had occasion to notice the statistical information collected by Mr. Cowley, c.s., in connection with the canal irrigation scheme in Shahabad. In addition to this division of the area into cultivated and uncultivated, the statistics collected by him furnish valuable information regarding the proportions the various crops bear to each other. In those regions to which inquiries extended the rubbee cultivation occupies about 56 and the bhadoi cultivation about 44 per cent. of the upland area. For the whole district the corresponding percentages deducible from the Deputy Collector's figures are rubbee 70, bhadoi 30. Taking into account both single and double cropped rubbee land, these proportions are probably correct; but looking to the single cropped and distinctively rubbee land, I submit that a compromise, fixing rubbee at 60 and bhadoi at 40 per cent. of the cultivated area, will be substantially correct. I accept this compromise. It is to be understood these remarks refer only to the land which yields one crop in the year.

27. On the question of the quantity of land which yields two crops in the year, the Deputy Collector furnishes data collected from specimen areas. In one of those areas the double cropped land was more than one-ninth, and in the second less than one-sixth of the cultivated area. This is the sum total of the existing information on the point, and from it I calculate that for the whole district one-eighth of the cultivated area yields a double crop, of which about two-thirds are food-grains (rubbee) and one-third non-food staples.

28. The Deputy Collector's figures furnish indications of the extent to which land lies fallow, and also the quantity of pasturage land as distinguished from land which is absolutely waste. Possibly under the head of pasturage or grass lands will come those expanses of thatching grass which are so valuable. The areas of pasturage and fallow lands are respectively about 4 and 5 per cent. on the area of the district. It only remains for me to say that in the absence of any specific information on the point, I have supposed each village site to occupy the one-sixty-fourth of a square mile, or ten acres, and that "roads and rivers" and "groves and orchards" have been assumed to cover 5 per cent. on the district area.

29. I am now in a position to present a table of agricultural statistics for the district. I have thought it right, even at the risk of being considered tedious, to explain minutely every step of the process of elaborating this table. I shall present similar statistical tables for each district, but I shall not in all cases feel bound to go into such detailed explanations as I have in this case.

*Table of Agricultural Statistics of Zillah Shahabad.*

					Acres.
	Gross area	...	...	...	2,806,400
Cultivated area—					
Rice area	...	...	...	...	800,000
		{ Bhadoi	...	...	240,000
		{ Rubbee	...	...	360,000
Upland area	...	{ Double crop (mixed, food, and non-food crops)	...	...	210,000
		{ Non-food crops	...	...	80,000
					<hr/> 1,690,000 <hr/>

Table of Agricultural Statistics of Zillah Shahabad.—(Continued.)

				Acres.
Uncultivated area—				
	Village sites	...	...	51,100
	Roads and rivers	...	...	140,000
	Fallow	...	...	140,000
	Pasturage and grass	...	...	118,000
	Waste	...	...	737,270
	Orchards	...	...	140,000
			Total	1,326,370

30. The next step in the process is to determine the average yield of each crop per acre, a question on which some diversity of opinion prevails. The reply to circular No. 70 assumes a general average of 12 maunds of cleaned rice per acre. In a "note on rice statistics," compiled from official sources by Lieutenant Otleby of the Irrigation Department and published in the November number of the *Statistical Reporter*, the outturn is said to vary from 16 to 24 maunds paddy, thus confirming the Collector's average. Mr. Cowley, on whose authority I place much confidence, gives 25 maunds paddy as the average, and he assures me that 12 maunds per acre cleaned rice is for the whole district a fair average. The Deputy Collector, going more minutely into the question, states in effect that the yield per acre of winter rice land is from 15 to 25 maunds of paddy. Under these circumstances, I think I shall be safe in assuming an average produce of 12 maunds cleaned grain per acre.

31. There is a consensus of opinion between the Collector and Mr. Cowley regarding the average outturn of bhadoi grain, both putting it at 8 maunds cleaned grain per acre. Their authority outweighs that of the Deputy Collector, who gives the average between 10 and 12 maunds. For rubbee grain Mr. Cowley's average is 12 maunds cleaned food-grain per acre; the Collector's is 15 maunds; while the Special Deputy gives a sliding scale of produce varying from 10 to 17 maunds cleaned food-grain per acre with an average of about 12 maunds. Under the circumstances, I am safe in assuming the average to be 12 maunds or  $\frac{2}{3}$ ths of a ton per acre.

32. The average annual outturn of all three crops will then stand thus:—

				Tons.
	Bhadoi*	...	...	68,571
	Winter rice	...	...	342,857
	Rubbee†	...	...	244,286
			Total	655,714

33. This total, however, does not exhaust the *annual* gross supply of food-grain, for it takes no notice of the cheena (*panicum miliaceum*) and boro dhan crops. The latter, it is true, is in this district insignificant, and the cultivation of the former uncertain. It seems as if the cultivation of the cheena grain, which is a poor article of diet, is regulated

\* The land which produces early rice is included in the term "bhadoi crop land." It is physically capable of growing a rubbee crop, and frequently does after the early rice has been reaped.

† These figures represent rubbee food-grain only.

by the outturn of the other crops. If the chief harvests have been good, but little chena is sown; if bad, the cultivation is more extensive. Still it is cultivated to some extent every year. I believe that I shall be near the truth if in this district I allow five per cent. on the cultivated area for its growth. This will give about 4 lakhs of maunds' outturn, or about 15,000 tons for all food-grain supplies not produced by the three great harvests of the year, the bhadol, aghani, and rubbee harvests. The gross annual food-supply in grain of the district is then, in round numbers, 670,000 tons.

34. It does not enter into my purpose to consider what sources of subsistence (obviously numerous) other than food-grain the district affords; still less am I concerned with determining the quantity or value of the other district products which are not life-supporting. My aim is chiefly the limited one of realizing, with a view to subsequent argument, the actual position of the district as regards its *food-supply in grain locally produced*, and as regards the direct effect of trade in increasing or diminishing this supply. Obviously this latter inquiry opens the door to the discussion of district economy in all its phases; but I shall as far as possible avoid discussions which are not primarily as well as eventually connected with the presence in, or export from, or import into, the district of food-grain. This limitation in my aims will doubtless lead to the presentation of an imperfect view of district economy generally; but neither the time nor the materials at my command are adequate to meet more ambitious ends.

35. Having thus determined the gross annual food-supply of the district to be 670,000 tons, I proceed to consider its sufficiency for district local wants, reserving for a later period the discussion of the effect had on this gross supply by the trade—import and export—of the district.

36. Many varying estimates have been formed of the average daily consumption of food-grain per head of the population. But there is a consensus of opinion that in ordinary easy times the average daily consumption per individual in Behar is not less than three-fourths of a seer (or  $1\frac{1}{2}$  lb). The Deputy Collector, who has especially inquired into the point, says that an adult laborer consumes  $1\frac{1}{4}$  seer of food-grain daily, and that the daily consumption of a family of four (husband, wife, and children) is about four seers of grain. I shall for all Behar districts adopt three-fourths of a seer as the rate of daily consumption of food-grain.\* Now, at three-fourths of a seer per head daily, the population of Shahabad would in the year consume 421,575, or say, in round numbers, 422,000 tons of grain. Therefore, provision being made for the food-supply of the people during the year, there is, in ordinary times, in Shahabad, a surplus production of 248,000 tons.

37. All this quantity of grain, however, is not free for sale or disposal otherwise. Almost as necessary as the present food-supply is

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\* The subsistence allowance granted to each person in the earlier days of relief administration in Durbhunga was half a seer (1 lb) per each adult individual, and something less for children. It was found that adults could barely subsist on this allowance, while the large numbers who were, from previous want, emaciated did not recover strength. The subsistence allowance was then raised to three-fourths of a seer for adults and half a seer for children. This allowance was, it will be remembered, a bare subsistence allowance, not the food rate in ordinary easy times.

provision for the seed from which the next season's crop is to be raised. The rates of seed vary per acre according to the crop, a point on which the Deputy Collector's inquiries have been minute. But it may be generally assumed that for the bhadoi crop, including early rice, an average of ten seers, and for the late rice\* and rubbee food-crops, an average of thirty seers each per acre, are necessary. These rates will be adopted in this report for all the districts in Behar.

38. At these rates the seed-grain required for the three great crops in Shahabad will be, in round numbers, 33,000 tons. Some necessary provision has to be made in addition for the seed of subsidiary crops, such as cheena, and for a percentage to cover wastage, bad seed, or loss before germination. If for this provision and to cover all these contingencies 15 per cent. addition be made, the seed-grain provision will reach 40,000 tons. The surplus available produce will then be reduced to 208,000 tons.

39. From this quantity the export trade in food-grain is supplied and the district reserves replenished. I proceed to consider these questions of district reserves and trade; and as the views I shall now enunciate on this point will be adhered to throughout this report, I invite attention to them.

40. It will be conceded me that a quantity of grain equal to the absolute wants of the people during the short intervals between each harvest is always in the district. The people must live; and all experience teaches this lesson that they, or what for the purpose of this inquiry is the same thing, their mahajuns, keep in stock a provision at least sufficient to carry them on from one harvest to another. The inter-harvest periods being short, people will not run the risk of impairing the sufficiency of this provision by exporting part of it unless simultaneous importation, altering possibly the composition of the provision, leaves its magnitude untouched. A quantity of food-grain, therefore, which at its *minimum* is equal to the aggregate of these inter-harvest provisions—that is, equals 422,000 tons—is retained for consumption during the year by the well-to-do cultivators, and by mahajuns in a greater or less degree for cultivators who are not so well-to-do. But whether the cultivator retains the provision in whole or in part, or whether the mahajun retains it in whole or in part for him, the result is the same; the quantity from harvest to harvest, unaltered save by consumption, remains in the district. As it is a well-known fact that seed-grain is preserved with an almost superstitious tenacity, the quantity of grain which never leaves the district may be said to be 462,000 tons annually.

41. Necessary as is the retention of a portion of each crop for subsistence till the next crop comes in, the disposal of another portion of it to pay rent is, as things go, as imperative. I do not refer merely to land cultivated on the division-of-produce system, which is partially prevalent in Shahabad; I mean that everywhere in Behar where money rents prevail, a considerable portion of the rent of land is paid from the sale proceeds of food-grain. The proportion of the rent so

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\* Of course rice-seed is never husked. Here, however, I consider the quantity of cleaned rice the allowance for seed would give if husked. *All the calculations are in husked grain.*

met varies in different localities according to the greater or smaller production of other staples than food-grain. But everywhere some of the rent is defrayed by selling food-grain. If a proof of this well-known fact be required, it is furnished by the circumstance that the largest *kist* or periodical instalment of rent is fixed by the ripening of the aghani rice-crop, which ripens in mid-winter.

42. Now, the grain sold to defray rent charges is over and above the provisions for subsistence made from each crop and referred to in the preceding paragraph. This is obvious in the case of those cultivators who lock up in their own store-rooms the provision to carry them over the interval before next harvest. It is not the less true, though perhaps less obvious, in the case of the needy classes who are in the mahajun's hands. It is manifest that if they be only partially indebted, their partial independence, like the greater independence of their well-to-do neighbours, will show itself in the reservation of some provision for the immediate future: the grain they sell, therefore, to defray rent will be over and above that provision. If they be wholly in the mahajun's hands, the food-supply necessary for their support and for rent payment also, in fact the whole produce, goes to him. But as he has to support them or lose further profit, it comes to the same thing in the end as if they had, with his sanction, retained the provision, and made over the surplus.

43. In fine, it is, I submit, a proposition generally true that the minimum food-supply necessary to support from harvest to harvest a district which is a surplus food-producing district, may be, in considerations dealing with the disposal of such surplus, looked on as a fixed quantity, and with the wants it supplies eliminated from the argument.

44. The food-grain, therefore, from the sale proceeds of which rent is in part or in whole paid, must, in the present instance, come out of the 176,000 tons surplus produce mentioned in paragraph 39. The question is, how much of this surplus must be thrown on the market for the purpose. The system of rent payment in kind by division of profits is prevalent as far as rice land is concerned in Shahabad. Other lands pay money rents. Consequently, in estimating the quantity of food-grain sold to pay rents, the rent of rice lands must be left out of consideration.

45. Rice lands excepted, then, the cultivated area in Shahabad covers 680,000 acres. Unless where the capacity of growing specially valuable crops confers a monopoly value on the soil, the rates of rent vary, according to the Deputy Collector, from Rs. 3 to Rs. 4 per acre. The Deputy Collector does not give the rates prevalent for pasturage or fallow land or for orchards. They pay rent. To make some allowance or compensation on their account, I fix the average rent of the arable upland at Rs. 3-12 per acre. The money rental of Shahabad, then, will be Rs. 25,50,000.

46. Now the exact proportion of this money rental realized from the sale proceeds of food-grain can only be a matter of conjecture, but it may be accepted as generally true that in no *district* of Behar is less than one-half or more than seven-eighths of the rental defrayed from the sale proceeds of food-grain, the remaining one-half in the former or one-eighth in the latter case being met by the sale of



non-food staples—oil-seeds, tobacco, opium, &c. I think it may be held that about three-fourths of the money rental of Shahabad is met from the sale proceeds of food-grain. The Officiating Collector writes to me to the effect that although absolute accuracy on the point cannot be attained, and customs vary much in different parts of the district, still that “few ryots pay any of their rent from the sale proceeds of *other* crops than food-grain.” In the Buxar sub-division people finance much of the rent from sugar-cane, but on the whole it may be held that in this district not less than three-fourths of the rent is paid from the sale proceeds of food-grain. Therefore food-grain must be sold to the value of, in round numbers, Rs. 19,00,000 in Shahabad.

47. It will be seen from the table of average prices current produced further on in paragraph 68, that at the time when rents fall due, that is at the periods of the chief harvests, the retail market price of rubbee grain is under Rs. 2 a maund, of bhadoi grain about Re. 1-12 per maund, and of rice but little under Rs. 2 per maund. As it is quite impossible to conjecture what sort of grain is disposed of, the division of the rice-crop destroying the comparative certainty which would otherwise prevail, we must assume that at the time the grain comes into the market retail rates average, say, Re. 1-12 per maund. The cultivators must necessarily sell at a lower price than this, else traders could make no profit, and cost of carriage from the cultivators’ threshing floors to market would not be covered. It will not be too much to allow on this head a margin of 15 per cent. to cover cost of carriage and profits of trade. The average rate at which cultivators sell their grain, then, will be Re. 1-8 a maund, and the quantity sold will be, in round numbers, 46,000 tons.

48. I submit that in ordinary years this quantity at least is exported. The terms of the argument presuppose that it is over and above the provision made for the year’s food-supply. They also indicate that its exportation will leave a surplus (162,000 tons) still in the district. In the home market it is therefore a drug, and in ordinary times continues to be so throughout the year. It has been sold partly to dealers from other districts and partly to local grain merchants. There being no market for it at home, it being superfluous as a provision for future unforeseen contingencies, it must, I submit, be exported.

49. I further submit that this quantity does not exhaust the exportations of an ordinary year. It has been stated that for rice lands rents are paid in kind. The grain which under this circumstance passes from the hands of the cultivators into those of the landlord, amounting in quantity to 150,000 tons,\* is not all required for the landlord’s home consumption. Assuming for a moment that no middlemen intervene between the proprietors and cultivators, the numbers of the former (12,292, according to the Census Report) put it out of the question that all the grain they receive is required for consumption in their households. It is a most reasonable and just supposition that they convert a portion of it into cash. Again, on the assumption that in Shahabad, as elsewhere, the immediate receivers of rent from the cultivators are often middlemen, who

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\* *Vide* paragraph 61.

themselves pay money-rents to their superior landlords, then, as all such middlemen are not capitalists, a portion of the grain they receive from the cultivators must find its way into the market. But as on the first assumption it is impossible to gauge the wants of the landlord class, and on the second assumption impossible to determine how many middlemen are not capitalists, and therefore necessitated to sell portion of their share of the produce, it is obviously impossible to state with more than approximate precision the quantity of rice sold by either class or both.

50. We know that theoretically the landlord class in Shahabad receive seven parts out of a total rice yield represented by sixteen parts. This proportion is often irregularly modified in their favour; but never in ordinary years, under such a custom, do they receive as their share less than 150,000 tons, as stated in last paragraph.

51. The probable requirements of such a limited class preclude me from thinking that none of their share is immediately converted into money. There is no doubt much of it is converted into cash as soon as they get possession of it, but how much I can only conjecture. To be well within the mark, I estimate they sell at once one-eighth or thereabouts of their share of the rice produce.

52. On the terms of my argument this quantity also would be superfluous either for home consumption, sale, or (a matter I shall develop more fully presently) for the necessary replenishment of reserves. It consequently swells what I will call the export grain fund of ordinary years, which would then reach 65,000 tons.

53. In my endeavour to fix the normal limit of exportation, I have partially indicated the extent to which grain is held in reserve. The questions of export trade and of reserves re-act on each other so far that, generally speaking, increased exportation means diminished reserves, and increased reserves connote a falling off in the export trade.

54. This relation may not always be precisely true: as, for instance, when a district importing cheap grain it does not grow, but wishes to consume, exports more valuable grain to pay for it; exportation in such a case might not preserve the quantitative relation in question. Matters so adjust themselves, however, that in the long run I believe the relation holds generally true.

55. Now, in the district of Shahabad cultivators and landlords, annually parting with 65,000 tons of grain, while retaining a sufficiency for their wants and a surplus against contingencies, these 65,000 tons form the grain fund available for export, and the surplus still remaining to the landlords and cultivators, or 143,000 tons, forms the grain fund available for reserve. But this reserve is not always kept intact. Much of it is converted into cash; much of it has to be paid away in liquidation of debts contracted with money-lenders or grain-lenders; much of it must be written off to wastage within the year of production. I calculate that this wastage is not less than five per cent. on the gross quantity produced; but the wastage on the final surplus is not inclusive of the wastage on the quantity sold, which presumably is exported before wastage has become quite effective. Excluding the quantity of grain sold in financing the rent, the wastage will amount on a single year's production in Shahabad to 30,000 tons,

and thus the net surplus remaining to the producers from one year's production will be 113,000 tons. Even the proportion of this surplus retained by any cultivator, save the well-to-do cultivator, is small. The greater portion is from time to time thrown on the market and bought up by mahajuns, or appropriated by them without previous sale in satisfaction of debts. How, therefore, can any, except a fanciful distinction be drawn between the portion of this grain which forms the export stock and the portion which forms the reserve stock?

56. The certainty with which at fixed seasons of the year grain is thrown on the market to meet rent charges, and the fact that at these seasons, immediately following each harvest, prices are cheaper than at other times, induce traders from outside to buy in and at once export from the district. This to my own knowledge is the case in Durbhunga, and it is believed, on excellent grounds, to be the case in every exporting district, especially where overland transport prevails, which of course can only be utilized during the dry early months of the year. In point of fact, a large portion of the crop—the rice-crop particularly—is hypothecated from year to year; advances are made on it, and it is exported as soon as reaped. This fact, therefore, indicates to a certain length a distinction—the grain sold to pay rent is sold at stated times and at cheap prices, the grain sold for other necessities not so pressing is sold at various times and at dearer prices. Outside traders or home traders who have to supply foreign demand will certainly export first the grain which affords the largest margin to cover profit and expenses, and afterwards, if the demand be greater than they can supply from this stock, they will export other grain which, bought up by them at more unfavorable times and dearer prices, affords less of a profit. In anticipation of an objection that the state of the market in the North-Western Provinces, with which Shahabad mainly trades, might not in the early months of the year make it remunerative to export, I beg to state that I have examined the prices current in each district of the North-Western Provinces during the first six months of 1873, the only prices current available to me, and which I believe represent the normal state of things there. In no district, except rice-producing Goruckpore, were prices other than remunerative to the importer: this is especially true of rice.

57. I think, therefore, that in the absence of definite information on the point, and as a theory to be modified as necessary afterwards, it is allowable to me to look on the quantity of grain sold cheapest in the local markets, *i.e.*, the quantity sold to pay rent, as forming an export grain fund, as it were, which must be exhausted before other grain is exported. If, then, the circumstances of each district permit of the exportation of all this grain sold cheapest by the producers, is the remainder of the year's surplus the maximum reserve? If not, what is the limit of accumulation of reserves, and how is this limit maintained? These are the most abstruse, as they are among the most important, questions of district economy.

58. It is obvious that the question of reserves or stocks in hand in any year is affected more or less by the character of the preceding year. The shortness of preceding harvests showing itself in a diminished surplus will reduce either the quantity of grain retained in the country

or the quantity exported. Rent charges being fixed and constant, grain, from the sale proceeds of which they are met, may not be held over till short supplies force up prices. It is in the first instance, therefore, generally the reserve, and not the export grain fund, which will suffer a reduction.

59. Although, however, under such circumstances the export grain fund may be after a short harvest up to its normal level, I believe it often happens that the grain is not exported. If from weather warnings or other source traders foresee the likelihood of high remunerative prices at home, they contract their export operations, and if their forecast be right and a year of scarcity ensue, people wonder how all the grain could have been in the country. I do not say this always happens, but I think it often does.

60. The utmost diversity of opinion prevails regarding the extent to which accumulations of food-grain take place. On the one hand, experienced officers say that two years' accumulations with the better class of cultivators are of common occurrence; on the other hand, the Committee of the British Indian Association, speaking with the weight of responsibility imposed on it by the Viceroy's call for information, assure us that people do not accumulate stores now-a-days; that they know their own interest too well to lock up their capital in perishable goods. The truth seems to be between those extremes. As far as actual experience goes, the fact is that stores more than one year old exist in very small quantities indeed, but that stores less than a year old exist usually in large quantities; and as a confirmation of this I may say that I am in possession of information from the largest mahajuns, as he is also one of the most trustworthy native gentlemen in North Behar, to the effect that the rule among the commercial community, of which he is a prominent member, is never to keep in stock more than a six months' supply for their constituents. This is the extreme limit, but it is not often that more than a four months' supply is actually in hand. Therefore at the end of an inter-harvest period, this stock might be reduced to two months' supply, or consumed altogether. As, however, a large part of the population does not depend on mahajuns for supplies, the provision or assurance against scarcities retained by this part cannot be reduced to rule.

61. The stocks in hand in one district may obviously be no measure of the stocks in hand in another, and for this reason the crucial experience we had last year in those tracts where famine, in the neck-and-neck race we had with it, at one time forged ahead of us, may possibly be no test for other regions. But the tract to which I now more especially allude (North-East Tirhoot) is the richest portion of Behar. It is no doubt a thickly populated and a largely exporting tract. But these circumstances, militating against its being able to store largely, would seem to do no more than counterbalance its fertility, and so leave it on a par with neighbouring districts not so fertile whose wants it supplies. A crucial test in North-East Tirhoot of the extent to which grain is held in stock will certainly throw light on the practice in this point prevailing in Behar generally.

62. In anticipation of what I shall dwell on further in a later section, I may here say that in April 1874 the depletion of the

market stocks in North-East Tirhoot was so great that in large tracts grain was hardly procurable at any price, and in May things had come to that pass that rice had altogether disappeared, and the only grain procurable was the coarsest grain (kesari), and such like, which is said to give loin palsy to those who consume it. These food-grains were selling at the very dearest rates which about one-fifth of the population, wholly dependent on the wages earned on relief works, could by any possibility manage to pay. When at this stage the Government stores were thrown open, a perfect distributing agency was found ready at hand in the village bunneah, who assuredly would not have lent himself with such thorough earnestness to further the aims of Government if he had grain of his own to sell. The fact was, his occupation was gone, and the willingness with which he became a Government salesman is, to those who know this class of men, a perfectly convincing proof of this.

63. Now, these are facts within my own knowledge, and on them I submit that in May 1874 the stocks of Durbhunga had for all practical purposes been exhausted. I speak only of those stocks which are available for general sale and consumption. I do not speak of the stocks of local magnates, whose respectability in a great measure depends on their having a redundancy of food stocks, nor of the stocks of the decidedly better class of cultivators, which never see the market. These are outside the argument. They existed in Durbhunga in 1874, though by August I believe they had come to a very low ebb indeed; but their existence was perfectly compatible with the decimation of the people.

64. Having given the matter as careful consideration as I could, I am of opinion that when, at the bhadoi harvest of 1873, failure first disclosed itself, there was not in the Durbhunga sub-division, at ordinary rates of consumption, a three months' stock of food in the hands of cultivators and mahajuns from the previous year. I am strongly inclined to think this is in Behar the maximum limit to accumulations of stocks in hand. On this head, therefore, the correctness of the mahajun's statement, noticed already, has been vindicated by experience.

65. My speculations on the trade in food-grains of Shahabad do not derive great confirmation, though some confirmation they do draw, from available trade statistics. This, however, was to be expected. We know that the trade is almost entirely with the North-Western Provinces and the neighbouring districts in Behar. It therefore could not be registered at Sahebgunge. We know that the district watered by the Ganges and Soane possesses peculiar facilities for cheap river traffic. The railway-borne trade is therefore small. But for trade in non-food-grains the figures collected from the Sahebgunge registration returns and those showing the railway traffic from and to the stations in Shahabad (for which I am much indebted to the courtesy of the Agent, East Indian Railway) go to support what has been written in the preceding pages. The trade in oil-seeds, which is mainly with Calcutta, is as large as one might expect from the extent of non-food-crop cultivation; and the imports by rail of grain (which I take to be rice) show that of the rice locally produced some must be exported. If none were exported, but all locally consumed, there would be an equation between the demand and supply, and no imports. This

follows from considering the proportions of rice and other grains which the people of this district usually consume.

66. The following are the only statistics available. They are for 1872, which was an average year. The statistics of river-borne trade, however, for 1872 are not as reliable as those for the railway traffic. Registration of the river trade was inaugurated in 1872, and the returns for the first half of the year partake probably of the incompleteness incidental to all new arrangements.

*River Traffic Return for Shahabad for 1872.*

			Imports. Mds.	Exports. Mds.
Rice	...	...	24,635	.....
Other food-grains	...	...	320	31,606
Oil-seeds	...	...	.....	18,459
Sugar	...	...	.....	3,542
Tobacco	...	...	.....	133
Salt	...	...	.....	100
Saltpetre	...	...	.....	50
Others	...	...	114	3,648

*Railway Traffic Return for Shahabad for 1872.*

			Imports. Mds.	Exports. Mds.
Food-grains	...	...	6,41,371	31,627
Seeds	...	...	.....	87,791
Indigo	...	...	.....	1,258
Other commodities	...	...	5,69,934	3,24,765

67. It only remains for me on this portion of the subject to present tables showing the average annual rainfall and the average prices current in Shahabad. I shall then have presented a statement of the condition of the district in ordinary years as far as its food-supply is concerned. As a representation of the economic position of the district generally the statement is imperfect. In so far as it does not deal with those products, which, though not themselves life-supporting, confer on the producer the power of buying food, it is obviously imperfect. But as I have said, my object here is the limited one of stating the condition of the district as regards *its food-supply in grain locally produced*. I shall, however, in addition, always tabulate, as I have done above, all the statistics I can procure of the general import and export trade.

*Monthly average Rainfall in the Shahabad District.*

SUB-DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Arrah	89	58	63	78	122	768	1387	994	1018	370	21	06	4870
Basseeram	82	59	17	12	62	689	1488	1148	648	517	...	12	4694
Buzar	71	28	39	21	65	586	1178	1069	835	373	...	19	4387
Bhuboonah	46	38	108	16	98	735	1536	1450	773	380	...	18	5254
District average	60	44	72	31	87	690	1397	1105	819	381	21	13	4763

*Character of seasons preceding 1873-74.*

*Monthly average Prices-Current in the Shahabad District from  
1868 to 1872.*

KIND OF GRAIN.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Common rice ... ..	21.9	22.0	21.8	20.6	20.2	19.7	18.7	19.3	18.6	18.9	18.9	17.
Millet ... ..	28.8	35.9	29.9	27.9	27.	26.4	24.4	25.4	24.7	26.1	26.7	27.9
Pulses* ... ..	22.5	22.2	23.2	23.8	24.	23.5	21.6	22.	21.	20.2	20.2	21.
Wheat ... ..	18.6	18.4	19.2	19.5	19.5	18.9	18.3	18.6	17.5	17.5	15.1	16.2

\* Gram, mussoor, peas, kullai, and moong.

68. From the preceding statement of the condition of the district in ordinary good years, I pass on to the consideration of its condition at the commencement of the famine year of 1874.

PART II.

69. The year 1873 was the last of a series of three years which in Bengal were marked by abnormal rainfall and generally unusual weather. The year 1871 was an unusually wet year; the following year was unusually dry, while in 1873 the rainfall was deficient almost beyond precedent. The following statement will illustrate this summary of the state of the weather as far as Shahabad is concerned:—

District Shahabad—	
Average rainfall	... .. 47.63
Rainfall in 1871	... .. 62.43
Ditto in 1872	... .. 34.64
Ditto in 1873	... .. 32.95

70. The abnormal character of the weather in 1871 and 1872 notwithstanding, the crops in those years were good. In 1871 the heavy and early rains so retarded the transplantation of dhan that at one time fears regarding the outturn of the crop were entertained. "But," says the Collector in his annual administration report, "these forebodings were later on replaced by more sanguine expectations, which, I am glad to say, were eventually realized." In 1872 the deficient rainfall was so seasonably distributed that the Commissioner was able to report "there had been a good bhadoi-crop, a fair rice-crop, and a fair rubbee;" and the Collector in the reply to circular No. 70 speaks to the same effect. I may therefore assume that in the summer of 1873 the condition of the district was much as usual; in fact, that it entered unweighted into the struggle which ensued.

71. The summer and autumn rains of 1873 were deficient by 14½ inches, and this deficient fall, unlike the almost equally deficient fall in the preceding year, was unhappily distributed. The following statement gives the rainfall in 1873. It will be observed that the rains commenced late, were concentrated in July and August, and ceased altogether, at that most important period when the rice-plant, shooting into ear requires abundant moisture to fill out and develop the grain.

## Shahabad :

### atement of Monthly Rainfall in the Shahabad District in 1873.

SUB-DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Arrah ... ..	'82	'06	1'06	.....	'70	1'91	19'76	10'91	3'00	.....	.....	'08	37'80
Sasseram ... ..	.....	'11	'55	.....	'65	1'70	22'61	7'63	1'87	.....	.....	.....	34'91
Buxar ... ..	'40	'10	'65	.....	'23	1'15	10	8'10	1'60	.....	.....	'15	22'38
Bhuboah ... ..	.....	.....	5'50	.....	'36	'21	16'80	10'39	3'45	.....	.....	.....	36'71
District average...	'36	'09	1'94	.....	'49	1'24	17'29	9'25	2'43	.....	.....	'11	32'95

72. The sequence of two years of deficient rainfall in 1872 and 1873, while illustrating the greater importance of seasonable distribution of rainfall than of its quantity, must have also had some effect in producing the disastrous result. At all events, the result was that the bhadoi crop of 1873 turned out to be only one-fourth of an average crop, while one-eighth of the great winter rice-crop alone was saved. The position then was this. The harvests of 1871 and 1872 having been up to the average, and there not having been anything abnormal in the state of trade during those years, the district at the commencement of the summer of 1873 may be considered to have had in store its ordinary maximum reserve, namely, 113,000 tons (exclusive of wastage) of grain,\* in addition to the provision necessary for consumption till the bhadoi harvest in September. The abnormal character of the season checked exportation, so that when the bhadoi crop had been gathered the district had in store—

Maximum reserve ... ..	Tons.
Produce of bhadoi-crop, one-fourth of the average ... ..	113,000
	17,142
Total ... ..	130,142

73. On this stock the district subsisted till such outturn as the winter rice yielded added to the supply. As the bhadoi-crop, though gathered during September, does not come into general consumption till the end of the month or the beginning of October, I have thought it better to fix this as the date on which the people begin to subsist on the new supplies, and in like manner I fix the 1st of January as the date on which the new rice comes into general consumption. These dates, if not strictly accurate, are sufficiently so for practical purposes.

74. Now, during October, November, and December, the people, depending on the reserves and bhadoi-crop, consumed 105,000 tons.† This is at their usual rates of consumption. It may be objected that during these months people will, through prudent forethought, have contracted their consumption, or, if they do not do so voluntarily,

\* It may be that some of the usual export grain fund still remained in the district, but as this grain is generally exported early in the year, the later exportations coming from the reserve, and as the anticipations of abnormal rainfall had not been entertained till July, I have thought it right to exclude the normal export grain fund from consideration.

† *Vide* paragraph 36.



high prices will have enforced abstinence. Regarding the poorest classes of the people, those who have to buy their daily supplies, this may be true, though of this class more than of any other want of prudence may be predicated: regarding the classes above the poorest, its truthfulness may be questioned. Hope that rain would come was not abandoned till November, and as long as there was hope, uncontracted consumption prevailed, I believe, among those classes. I do not see my way to making any allowance for enforced abstinence before the middle of November, and from then till January only among the poorest classes. This being so, and as the allowance I should make could be only purely conjectural, I prefer to make none at all, leaving the matter to be discounted by those who, under special future circumstances, may have to allow for it.

75. Up to January 1874, therefore, out of the district reserves and the produce of the bhadoi-crop, both forming a gross stock of, say, 130,142 tons, 105,000 tons were consumed. The remainder in stock, namely, 25,142 tons, received then an addition of 42,856 tons from the proceeds of the aghani rice-crop, and thus the total local food-supply in hand in January 1874 was, say, 68,000 tons, or about two months' supply at ordinary rates. This was the quantity of grain in stock from the produce of the autumn and winter harvests of 1873, and from the reserves, which I submit, ordinarily are in the district. Whether in 1873 the reserves were higher than usual could only be ascertained from a knowledge of the state of district trade in 1872-73, and upon this point our information is altogether defective. In the last quarter of 1873, however, brisk importations were made into Shahabad, six lakhs of maunds coming by rail alone; and the river-borne import trade from the North-Western Provinces seems also to have been very considerable, though it was unregistered. Taking local stocks and imported stocks together, there were in the district in January 1874 probably not less than 100,000 tons of food-grain, or three months' supply. More than this I am convinced there was not.

76. The reality thus set forth in a concrete form more than justifies the anxious fears which were generally entertained before the prospects of the rubbee crops gave assured promise of a luxuriant harvest in March and April.

77. The anxiety and suspense which in the closing days of 1873 and the commencement of 1874 affected the public mind were naturally reflected in the condition of trade. The disastrous season of 1865-66 was within the vivid recollection of most people, and the remembrance of it amid circumstances of season even more disastrous had a marked effect on prices, especially the price of rice, which in February 1874 ranged higher than it did at the corresponding period of 1866, and this notwithstanding the marvellous energy displayed by private enterprise in throwing grain into the country.

78. No action taken by Government during the famine was more beneficial in its effects than the wide publicity given at the earliest date to the state of the country and the condition of the local markets. The diffusion of accurate knowledge on this point coupled with the reduction in railway freights resulted in an uninterrupted influx of private grain, chiefly from the North-Western Provinces to the

distressed tracts. To this energy of private traders cis-Gangetic Behar owed mainly its immunity from serious hardship. It will be shown too that the district of Sarun, for several months on the verge of imminent disaster, was preserved solely by the altogether unexampled activity of the private trade to that district from the North-Western Provinces. This trade slackened only when the depletion of local stocks caused thereby, adding to the effects of the partial drought in the North-Western Provinces, raised prices there to an equality with those prevailing in Sarun, and thus rendered exportation into the latter district unremunerative. This point will be dealt with fuller in the section on Sarun.

79. The following statement shows the traffic to and from the stations in the Shahabad district during the last quarter of 1873 and the first three quarters of 1874. As far as the down line traffic is concerned, some, but not much, of the grain shown in this statement was carried for Government. The Railway Traffic Office is unable to distinguish Government from private grain, but I shall be able to indicate the distinction. Some also of the grain shown in this statement was possibly consigned to the Sarun district. On this point, however, the materials before me afford no clue to a distinction. The second statement shows the commodities which, consigned to or from places in Shahabad, passed up or down the Ganges, and were registered at Sahebgunge during 1874. The food-grain trade of Shahabad being almost entirely with the North-Western Provinces, these statistics of river-borne traffic convey a very inadequate idea of such trade; but I give them for what they are worth.

I.—*Railway Traffic Return for the Shahabad District for 1873-74.*

	4TH QUARTER OF 1873.				1ST QUARTER OF 1874.					
	Food-grains.	Indigo.	Seeds.	Other commodities.	Food-grains.	Indigo.	Seeds.	Other commodities.		
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.		
Exports ... ..	28,414	1,105	21,377	91,428	28,910	39	19,520	74,594		
Imports ... ..	5,99,499	.....	.....	1,58,297	11,43,339	.....	.....	1,54,489		
	2ND QUARTER OF 1874.				3RD QUARTER OF 1874.				Total food-grains.	
	Food-grains.	Indigo.	Seeds.	Other commodities.	Food-grains.	Indigo.	Seeds.	Other commodities.		
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Tons.
Exports ... ..	60,712	.....	60,476	54,888	59,283	.....	21,193	30,874	1,77,319	or 6,332
Imports ... ..	6,88,582	.....	.....	1,86,400	4,88,348	.....	.....	1,06,416	29,10,768	
									Deduct Mr. Toyinbee's despatches ...	7,74,339
										21,45,379
										52,076
									Deduct deliveries of Government grain purchased in the North-Western Provinces, Central Provinces, Punjab, &c.	
									Remainder ...	20,93,303 or 74,760 tons.

II.—River Traffic Statement for the Shahabad District for 1874.

	Rice.	Other food-grains.	Oil-seeds.	Cotton.	Sugar.	Tobacco.	Salt.	Saltpetre.	Hides.	Others.
Imports ... ..	10,461	1,201	...	...	...	...	700	...	...	1,775
Exports ... ..	8	57,783	31,141	8	5,536	201	28	...	125	7,402

80. The following statement gives the prices-current of the chief articles of diet for each month of 1874:—

KIND OF GRAIN.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Common rice ...	13'3	12'0	12'2	12'0	11'2	10'9	11'7	11'4	11'2	11'5	16'	19'0
Indian-corn ...	17'3	15'9	18'2	18'1	17'7	17'5	17'8	17'6	19'7	20'4	21'6	25'2
Millet ...	16'9	16'8	17'7	18'1	17'9	17'9	17'8	17'1	18'9	19'5	20'5	21'9
Pulses ...	...	...	No quotations in official returns.									
Wheat ...	13'6	14'2	15'1	14'7	14'4	14'5	15'2	14'5	14'6	14'9	15'6	18'

81. In the existence of the Soane canal works (from whose unfinished channels 159,000 acres of land in this district and in Gya were irrigated, and 70,000 tons of aghani and rubbee grain, which would otherwise probably have perished, were saved) the district of Shahabad possessed an advantage over all other distressed districts except Sarun. These works afforded organized labor at a time when elsewhere organized labor was not procurable, and in this way must have had a beneficial effect on the condition of the district. But notwithstanding these advantages, prices continued to rise till, as I have shown, in February 1874 the price of common rice was 12 seers to the rupee—that is, from 8 to 16 per cent. dearer than it was in February 1866. These high prices necessarily caused much distress among the poorer classes, and a contraction in that liberal exercise of private charity which, in ordinary easy times, is an honorable characteristic of rustic life in Behar. The prospects of the rubbee were good, but as yet the crop was by no means assured. The Government policy, though officially declared, had not yet been reduced to action. On both points uncertainty possessed the public mind,—uncertainty as regards the future of the crop, and uncertainty regarding the exact nature and extent of Government action. Prices consequently grew dearer, and the markets, in sympathy with those in the neighbouring districts, indicated an increasing tightness in supplies. When, however, in March the prospects of an abundant rubbee were put beyond all doubt, and when the Government had succeeded in placing in the district the quantity

of grain (3,330 tons) which it deemed necessary to provide against eventualities, the anxiety in the public mind decreased.

82. The rubbee-crop, which from the commencement promised more favorably in Shahabad than elsewhere in this division, yielded a fair average crop in the Arrah and Buxar sub-divisions, the crops on the Dearah lands being particularly favorable. In Sasseram the crop was an average one. In Bhubooah sub-division the reported outturn was somewhat under the average, but the Collector did not credit a short yield. On the whole, it may be assumed that in this district the rubbee of 1874 was an average crop (*see* special narrative of 7th April). Therefore in March the harvest added about 244,000 tons of grain to the local stock already in hand, which then was raised to a ten months' supply. Prices thenceforward became easier, remaining, however, throughout the year from 50 to 80 per cent. over normal rates—a state of things necessitating the continuance of relief works. As far as charitable relief, however, was concerned, Government found that, having due regard to the claims of the aged and indigent weak class, to whom such exceptional prices meant the denial of private charity usually so bountiful, and consequent privation of food, it could transfer 1,390 tons of its Shahabad store of grain to other more distressed districts. This was done, and thenceforward the charitable relief administration in Shahabad assumed a position more of watchful preparedness than of active operation, though, of course, some active work it was called on to do.

83. I now proceed to tabulate the expenditure of cash and of grain incurred in the relief or prevention of distress in this district. The expenditure which I exhibit does not include the cost of establishment, transport charges, or other incidental items of cash expenditure. These will be shown by the regular account department. But all expenditure of cash which reached the hands of the distressed classes, and over which executive officers had control, and the entire expenditure of grain will be found duly tabulated and classified in the following statements. I exhibit the cash expenditure in one and the grain expenditure in another statement.

*Statement of Expenditure of Government grain incurred in the Shahabad District during the Famine of 1874.*

Nominal quantity delivered, exclusive of transfers to other districts.	Grain distributed in charitable relief.	Grain paid as wages of labor.	Grain advanced on loan.	Grain sold for cash.	Remainder.
Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
4,781	287	545	158	3,153	633

*N.B.*—Of the remainder, 104 tons is to be written off to wastage and 534 tons to sale after termination of relief operations. The wastage is less than three per cent. on the nominal quantity delivered. Shahabad being on the line of rail, the wastage incurred in transport operations was inconsiderable. The quantity sold includes 2,773 tons sold to laborers on the Soane Canal works.

Statement of cash expenditure incurred in Shahabad during the Famine of 1874.

Distributed in charitable relief.	Advanced on loan.	Paid away as wages.	Total.
Rs. 33,566	Rs. 17,437	Rs. 1,80,373	Rs. 2,40,376

84. I now proceed to exhibit the numbers of people relieved by the expenditure of cash and grain shown in the foregoing tabulated statements. I present actual figures for those who were relieved by the charitable distribution of grain and money, or who were relieved by wages on relief works. I shall estimate the numbers of those relieved in other ways (sales and advances) on the assumption that every thirty annas afforded relief to an individual for one month, and that another individual was relieved for a similar period by every twenty-three seers of grain sold or advanced on loan. This will be at the average rate of  $\frac{3}{4}$ ths of a seer per day.

Statement of Laborers employed in the Shahabad District during the Relief operations of 1873-74.

DISTRICT.	Aggregate number of individuals employed.	AVERAGE DAILY ATTENDANCE EACH MONTH.										
		1873.		1874.								
		November.	December.	January.	February.	March.	April.	May.	June.	July.	August.	September.
Shahabad ... ..	13,73,760	950	2,286	2,227	2,582	3,033	6,290	10,074	6,454	4,407	4,493	2,996

Statement of the average number of persons charitably relieved in the Shahabad District during the Famine of 1874.

DISTRICT.	FORTNIGHT ENDING ON THE—													
	21st March.	4th April.	18th April.	2nd May.	16th May.	30th May.	13th June.	27th June.	10th July.	24th July.	7th August.	21st September.	4th October.	
Shahabad	136	289	413	2,861	2,827	3,166	647	1,224	2,985	2,559	2,997	2,497	2,300	613

85. An analysis of the former statement will show that as far as mere numbers are concerned it is equivalent to saying that a daily number of 45,792 people was relieved on public works for a period of one month, and treated in a similar manner the statement of persons charitably relieved is equivalent to saying that a daily number of 12,516 individuals received such relief for a period of one month. Now, turning to the relief afforded by sales of grain and advances of grain and money, it will be seen that the relief afforded in these ways was, on the basis of calculation I have adopted, sufficient for the support of 170,531 individuals for a month. The total number, therefore, whom the Government aid was adequate to support for one month was 216,323.

86. It will be observed, however, that in this calculation no allowance has been made for the people who were relieved by the money which, paid away as wages, or as advances, or in charitable relief, returned to the Government treasury in the shape of sale proceeds of grain. From the preceding calculation the numbers of these people should, if possible, be eliminated. It is not possible, however, to do this with any degree of accuracy, though so much of the grain as was sold to laborers on the Soane Canal works was certainly paid for by the wages previously distributed. It is probable that if we had accurate statistics on this point it would be found that not more than five per cent. of the population, if so much, were aided for a period of one month by Government during the famine.







## SECTION II.

### SARUN.

In the earlier paragraphs of the section on Shahabad I argued from what we know of the extension of cultivation in particular regions of the North-Western Provinces to the probable condition in this respect of the adjoining portions of Shahabad, which, in density of population, nature of soil, and products and general circumstances of climate, situation, and domestic economy, resembled the former. The conclusions derived from such a line of argument were, as we have seen, supported and confirmed by other independent modes of reasoning on the question.

2. I fear, however, that the applicability to Shahabad of such an argument will not warrant its employment in the case of a district with a population 20 per cent. more dense. The terms of the argument were broadly; given a certain rural area in one district with a population of a certain density, and a rural area similar in extent in an adjoining district with an equally numerous population; then, *ceteris paribus*, the same extent of land is cultivated in both areas. The proposition will not hold good of equal areas with unequal populations, nor of unequal areas with disproportionate populations, nor of areas which differ in their soils and products. The case of Sarun, as compared with Ghazeeepore or Shahabad, comes under either of the first two categories, and therefore the argument is inapplicable.

3. It is manifest, however, that the limited area of the district of Sarun precludes the possibility of the proportion of cultivated land to each individual of the population exceeding the proportion which prevails in Ghazeeepore or in Shahabad. The greater density of the population in Sarun renders it likely that the proportion of cultivated land per head of the population within its limited area is less than that which obtains in the other districts I have mentioned.

4. In the case of Sarun, therefore, a comparison with conditions prevailing in neighbouring districts is no test of the accuracy of the agricultural statistics contained in the Collector's reply to circular 70 or in his latest return, XLIB. Some test of their accuracy is, however, derivable from the results of statistical inquiries made by Mr. Hodgkinson, c.s., in 179 villages of the Hutwah estate while this estate was still under the care of the Court of Wards. These inquiries were made by a gentleman whose experience and opportunities were such as to command successful results. The figures which he puts forward may, therefore, as far as they go, be looked on as trustworthy.

5. I purpose to make Mr. Hodgkinson's figures the basis of generalizations regarding the agricultural condition of the whole district. This was the use I made of the Deputy Collector's figures in the case

of Shahabad. I recognize the fact that the Shahabad figures, being collected from selected specimen areas, afford a much truer basis for generalizations than Mr. Hodgkinson's statistics do. But still his are the only figures of the kind available for Sarun; and therefore, while acknowledging the objections to which an induction from so few instances is obnoxious, I apprehend it offers a better chance of trustworthy conclusions than the other alternative rough estimates can offer. The following are Mr. Hodgkinson's statistics. There is a slight discrepancy between the totals of columns 6 and 7 and column 3, probably caused by the exclusion from the former columns of the return of garden cultivation: I shall make allowance for this difference.

*Agricultural Statistics of 179 Villages in Pergunnah Sepali, Zillah Sarun.  
Area given in beeghas.*

DISTRICT.	1	2	3	4	5	6	7	8	9	10	11	12
	Number of vil- lages.	Cultivated area.	Orchards.	Pasturage.	Waste.	High lands.	Low lands. Rice.	Indian-corn.	Murrah.	Kado.	Rahar.	Wheat and barley.
Pergunnah Sepali ...	179	45,219	1,419	708	3,905	31,099	12,411	11,428	3,002	10,592	3,642	11,792

DISTRICT.	13	14	15	16	17	18	19	20	REMARKS.
	Peas, gram, &c.	Oil-seeds.	Cotton.	Indigo.	Opium.	Sugar.	Fibres.	Irrigated land.	
Pergunnah Sepali ...	4,312	19,267	1,320	1,964	4,018	604	1,343	4,711	Double crop lands have been counted twice.

*N.B.*—Fractions of beeghas have been omitted.

6. From certain passages in the Collector's famine narratives, read with particular entries in his statistical return XLIB for 1873-74, it would appear that in the preparation of the return, Mr. Drummond utilized that varied knowledge of the agriculture of his district which during the relief operations was acquired. It is therefore fit that I should reproduce Mr. Drummond's figures in their entirety, so that

the emendations I shall have to suggest may be judged side by side with the figures for which I would substitute them : I therefore reproduce Mr. Drummond's return.

*Cultivated area = 1,566,720 acres ; culturable waste = 65,920 acres ;  
unculturable waste = 65,920 acres. Total 1,698,560 acres.*

DISTRICT.	Gross area in acres.	AREA OF RAINY SEASON CROPS, IN ACRES.									TOTAL.
		Rice.	Indian-corn.	Other grains.	Oil-seeds.	Fibres.	Cotton.	Indigo.	Sugar.	Tobacco, tea, &c.	
Sarun ... ..	1,698,568	450,000	400,000	200,000	15,000	14,000	20,000	50,000	20,000	500	1,169,500

DISTRICT.	AREA OF DRY SEASON CROPS, IN ACRES.						Total.	Grand total.	REMARKS.
	Wheat.	Barley.	Gram.	Other food-grains.	Oil-seeds.	Opium.			
Sarun ... ..	90,000	200,000	100,000	560,000	120,000	54,144	1,124,144	2,293,644	The double crop land is counted twice over.

7. It will be seen that Mr. Hodgkinson's figures give the following percentages on the gross area to which his inquiries were limited :—

Uncultivated 11·7	{	Orchards ... 2·8 per cent. on gross area.
		Waste ... 7·6 ditto ditto.
		Pasturage ... 1·3 ditto ditto.
Cultivated 88·3	{	High land ... 63 *
		Rice ... 25·3*

8. Now while these Hutwah statistics (which I assume to be broadly indicative of the agricultural condition of the whole district) show the uncultivated area to be 11·7 on the gross area examined, the Collector's statistical return XLIB shows the uncultivated land in the

\* In these figures allowance has been made for the discrepancy between column 3 and columns 6 and 7.

district to be 7·7 per cent. on the gross area. This latter percentage is, I, with due deference, submit, a physical impossibility. A cultivated area covering 92·3 of the gross area of a district means the total absorption of all pasturage and waste land in the area under tillage, leaving scarcely a sufficient provision for roads, village sites, tanks, thatching-grass lands, and orchards, all of which we know *do* exist in Sarun. There can be no hesitation, I think, in accepting the larger percentage of uncultivated land as nearer the truth.

9. One hesitates rather in believing that the uncultivated margin can be so small that even though the last available acre have been brought under the plough, the land occupied by orchards, pasturage, village sites, roads, tanks, &c., should be no more than a fraction over 11 per cent. on the area. However, in the absence of definite information to the contrary, I accept the proportions deducible from these Hutwah statistics, the effect of which is to show that the district is cultivated to the very last acre. The division of the gross area will therefore be into—

	Acres.
Cultivated area ... ..	1,499,829
Uncultivated ,, ... ..	198,731

10. The next step is to subdivide this cultivated land, according to the nature of the soil, into the low-land, which grows the rice, and the up-land, which grows the rubbee and bhadoi crops. The percentage of rice-land on the cultivated area deducible from the Hutwah statistics is 25·3. From certain inquiries prosecuted under the Collector's orders in the Manghi thana by Mr. Tonnerre of the Bengal Police, it appeared that there the proportion of rice-land to up-land was as 30 to 70. It seems probable that in framing his statistical return XLIB the Collector may have accepted a compromise between these results, the percentage of rice-land on the cultivated area deducible from this return being 28. I, therefore, accepting the Collector's proportion, work out the following result:—

	Acres.
Rice-land ... ..	419,952
Up-land ... ..	1,079,877

11. Before discussing the question of the proportion of the up-land area which grows rubbee and the proportion which grows bhadoi, I beg to invite attention to the fact that the wide prevalence in Sarun of the custom of double-cropping makes the division of the up-land according to the crops grown a cross division, the rubbee area overlapping the bhadoi, and the bhadoi area the rubbee. Bearing this in mind, I have to point out a notable discrepancy between the proportions deducible from the Collector's statistical return and from the Hutwah statistics. The Collector's return XLIB makes rubbee food-crop area occupy 85 per cent. and the bhadoi food-crop 54 per cent. of the up-land cultivated area. The Hutwah statistics, reversing the proportion, make the bhadoi crops 76 per cent. and the rubbee crops 61 per

cent. on the cultivated up-land area. It will be observed that though the estimates differ as to the relative extension of each crop, rubber or bhadoi, they almost exactly agree as to the quantity of land which in the twelve months is occupied with the cultivation of both crops.

12. In March and April 1874 it was of importance to the Collector to gauge, as accurately as possible, the outturn of the rubber crop, and with that object in view he instituted such careful inquiry as at short notice could be made into the area under rubber food-crop cultivation in 1874. The result was a report to Government giving the computed areas under rubber food-crops to be 600,000 acres. Now I gather from the previous narratives that some land ordinarily sown with rubber was, through want of moisture, left unsown in 1874, but I have not seen such fallow land estimated in any locality above one-fourth of the rubber area of that locality, and this only for one place. Therefore I think, if it be assumed that the quantity of rubber land usually sown with food-crop is greater by one-eighth than the area sown down last year with these crops, as wide a margin as is countenanced by the documents before me will have been allowed for such rubber land lying fallow in 1874. The rubber area of the district would thus be 675,000 acres, which is about 63 per cent. on the up-land cultivated area as fixed by me.

13. I think the evidence which exists on this point decidedly precludes an estimate which would make the rubber growing area exceed 675,000 acres to any very considerable extent. The percentages deducible from the Hutwah statistics make it out to be 701,419 acres, and as this latter total accords, not only with the preceding remarks, but also is based on data more or less definite, I accept it.

14. This rubber area, however, is the land which grows the distinctively rubber crops, wheat, barley, gram, pulse, &c. It does not include land which grows "other grains," such as "cheena," which, being a "dry season crop" and harvested not long after the rubber, might be roughly classed under that head. The area sown with cheena cannot be accurately defined, being more in one year than in another; but from references to the crop in the various narratives, I gather that 100,000 acres will be an adequate provision.

15. Now, turning to the bhadoi, we have seen that the Collector has represented them as growing on 54 per cent. of the up-land cultivated area; while, according to the Hutwah specimen statistics, they grow on 76 per cent. of the same area. The inquiries made in the Manghi thana in September 1874, to which I have already alluded, show that the bhadoi cultivation there predominates over the rubber; and this, as far as it goes, confirms the Hutwah statistics on the point. The figures for Manghi thana, however, are incomplete, inasmuch as they ignore the extent to which double-cropping prevails, and they can be cited only as evidencing the broad point of the predominance of bhadoi over rubber cultivation, not as a measure of the extent of such predominance.

16 There being no further materials available to throw light on the question, and the decided tendency of such definite information as does exist being to establish the fact of bhadoi food-crop covering a larger area than the distinctively rubbee food-crop, I accept the percentage deducible from the Hutwah statistics, namely 76, on the up-land cultivated area as representing the area which grows bhadoi.

17. Regarding non-food-crop cultivation, the Collector's figures for opium are strictly accurate, being taken from the Opium Agent's report. His estimate for indigo cultivation is also unobjectionable. For sugar his estimate falls short by only 5 per cent. of the total which a calculation based on the Hutwah statistics would give. The cultivation of cotton and fibres in Hutwah occupy 4 per cent. of the up-land area, while the figures indicating the oil-seed cultivation evidently include the land on which such seeds grow with other crops as well as the land on which they grow alone. I prefer to accept the Collector's figures as they stand on this point, having thus drawn attention to the conclusions deducible from the Hutwah statistics.

18. For the sub-division of the unculturable area, I adopt the percentages noted in paragraph 7, merely appropriating out of the "waste" land an area for village sites at the rate of one-sixty-fourth part of a square mile, or 10 acres for each village site. In so densely peopled a district as Sarun this may perhaps be thought too small a provision.

19. The following statistical table embodies the figured results of the preceding discussion. It will be observed that the aggregate number of acres which yield a crop within the twelve months is slightly greater than the aggregate shown by the Collector. The difference, however, 26,577 acres, is, in such a large matter, insignificant.

*Statement of Agricultural Statistics for Zillah Sarun.\**

	Acres.		Acres.
Gross area ... ..	1,698,560		
<b>CULTIVATED AREA 1,499,829 ACRES—</b>		<b>UNCULTIVATED AREA</b>	
Rice area ... ..	419,952	198,731 acres.	
Up-land area, { Bhadoi ... ..	820,706	{ Pasturage ... ..	22,061
1,079,877. { Rubbee ... ..	701,419	{ Orchards ... ..	47,550
{ Subsidiary food-grain	100,000	{ Village sites ... ..	48,700
{ Non-food-crops ... ..	278,144	{ Roads, tanks,	
		{ waste ... ..	85,000

20. The next step, preliminary to an estimate of the average local food-supply in grain, is the determination of the average rate of produce per acre for each crop. The most competent authority on this point is the Collector of the district, and the rates he adopts are for cleaned rice an average of 800 pounds or 10 maunds, and for all other sorts of grain an average of 9 maunds or 720 pounds per acre.†

\* The survey report on "Sircar's Sarun and Chumparun" throws no light on this discussion, of which this statement is the outcome.

† In Mr. Otley's "Note on Rice Statistics," referred to in the section on Shahabad, the average outturn per acre in Sarun is given at 19 maunds dhan.

I adopt the rates he records, and calculate out the following average annual food-supply for the district:—

	Tons.		Tons.
Winter rice ...	149,983	Subsidiary food-grain ...	32,143
Bhadoi ...	263,800		<hr/>
Rubbee* ...	225,456	Total ...	671,385
			<hr/>

21. I now proceed to contrast this average food-supply with the requirements of the population.

22. The population of Sarun is 2,063,860; at the computed rate of consumption, namely three-fourths of a seer per individual daily, the annual consumption of food-grain in the district will be 504,430 tons. When such consumption is provided for, there will be a surplus production of 166,955 tons.

23. It has been shown in the section on Shahabad that this surplus is disposed of in three ways: storing for seed-grains, storing as a stock to fall back upon in times of difficulty, and sale. At the rates of seed per acre already prescribed the deduction on this head will be 43,000 tons, and the available surplus for sale and replenishment of reserves will then be reduced to 123,955 tons.

24. The argument I submitted in the section on Shahabad, to the effect that a cultivator is necessitated to dispose of a portion of his food-grain-crops to pay a portion of his rent, is applicable to Sarun. But the part of the rent in Sarun defrayed from the sale proceeds of food-grain is less than in Shahabad, the non-food-crops being far less valuable in the latter than in the former district. For instance, for 1,06,250 maunds of oil-seeds registered as exported from Shahabad, Sarun registers an exportation of this commodity exceeding five lakhs of maunds. Opium cultivation is more extensive in Sarun, and so is indigo, which latter industry is conducted in many of the Sarun plantations on a system very remunerative to the ryots. These are not all the agricultural sources of income Sarun possesses, and therefore it is but reasonable to suppose that it sells less food-grain and more of other commodities to defray rent charges. These considerations will assure a ready acceptance for the opinion with which the Collector has favoured me, namely, that in Sarun half the rent only is defrayed by the sale proceeds of food-grain.

25. The road cess statistics have not been completed for the Sarun district; but from such as have been compiled, and which furnish a sufficient basis for an induction, the Officiating Collector, Mr. Porter, concludes the gross rental to be about four times the revenue. The land revenue of the district is Rs. 12,16,158; the land rental will therefore be Rs. 48,64,632. Half of this rental, Rs. 24,32,316, or, in round numbers, twenty-five lakhs of rupees, is paid from the sale proceeds of food-grain.

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\* The outturn of rubbee food-crop is alone shown, allowance having been made for such non-food-crops as grow simultaneously with food-grains.

26. The question now is, how much food-grain must be sold to fetch this price? With a view to solving this question, I beg to present here a statement of average prices-current in the district.

*Average prices-current in the Sarun District from 1868-72.*

NAME OF SUB-DIVISION.	Kind of grain.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
		CHUPRA.	Common rice	20'8	22'8	20'2	20'2	20'4	20	19	18'4	19'4	19'4
	Indian-corn...	22'2	27'8	28'2	28'6	27'4	27'8	25'5	25'7	27'2	23	23	27'8
	Pulses...	17'4	18	18'6	18'8	18'4	18'6	18	16'4	15	15	14'2	14'8
	Wheat ...	18'2	18	17'6	16'8	18'2	18'6	17'8	17'6	17	17	14	15'2
SEWAK.	Common rice	19'8	19'2	18'2	18	17'8	17'8	16'8	17'6	17'8	17'6	16'4	17'6
	Indian-corn...	33	32	30	28	32	32	30'5	25'5	24	21	25'5	26
	Pulses...	16'2	16'4	16'4	17'2	17	16'6	16'4	16'2	19'4	15'8	16'8	15'2
	Wheat ...	19'6	19	17'2	17'4	19	19'4	19'2	19'8	19'6	17'4	16'6	16'8
AVERAGE OF THE DISTRICT.	Common rice	20'3	21	19'2	19'1	19'1	18'9	17'9	18	18'6	18'5	17	18
	Indian-corn...	31'1	29'9	29'1	28'3	29'7	29'9	28	25'6	25'6	25	26'7	26'9
	Pulses...	16'8	17'2	17'5	18	17'7	17'6	17'2	16'3	17'2	15'4	15	15
	Wheat ...	18'9	18'5	17'4	17'1	18'6	19	18'5	18'7	18'3	17'2	15'3	16

27. It will be observed that the average price of rice in the months it comes into the market first is about 20 seers, and the average price of rubbee grains about 18 seers. These are the grains which are chiefly sold to pay rents, and with them I am mainly concerned. Now, it will be admitted that these rates, which are retail market rates, are dearer than the rates at which the grain dealers bought the grain from the producers. But prices are always dear in Sarun, a fact sufficiently accounted for by the density of the population and the consequent high demand; therefore producers will not dispose of their grain at a great reduction under current rates. Say they sell at an all-round average rate of 23 seers to the rupee; that will give the dealers about 15 per cent. to cover freight and give a margin of profit, and this allowance will, I submit, be not far off the mark. At this rate, then, in order to realize twenty-five lakhs of rupees, 51,340 tons of food-grain must be sold, and the surplus which will then remain with the cultivators, less by the usual wastage on the year's production, will be about 40,000 tons, or a month's supply.

28. In the section on Shahabad I suggested that in ordinary years the food-grain, from the sale proceeds of which rents are in part paid, forms the grain fund from which exportation is in the first instance made, and which is generally all exported. The proposition was that as the wants of the people had been provided for or satisfied, and as, besides, there was a surplus sufficient to replenish reserves, the grain sold to pay rents could find no remunerative market at home, and being unnecessary must either be exported or perish.



29. Now, the facts, as hitherto exhibited in the case of Sarun, would seem to modify the terms of this proposition without, however, fundamentally altering the conclusion. It cannot be said that a month's reserve is a sufficient reserve. If there were in the district at any period only sufficient food to carry the people on to the next harvest, with but one month's stock in hand besides, every vicissitude of season would plunge the district into distress. That this is not so is due either to the fact that the grain thrown on the market to pay rents is not exported, or that, if in whole or in part exported, prices are kept down, and, in considerable vicissitudes of season, provided against by corresponding importation.

30. The latter is the correct explanation. Sarun imports rice largely. For the average year 1872 her consignments of this commodity from Bengal were, according to the Sahebgunge trade statistics, 11,239 tons. Durbhunga and the Nepal Terai are, in ordinary years, importing sources of supply on which she largely draws. From all sources her annual importations are, according to the most moderate estimates, never under 60,000 tons.

31. Now these 60,000 tons of annually imported grain are either exchanged for grain locally produced, in which case Sarun, growing more valuable staples than she imports, gains some 15 per cent. on the transaction, or being paid for in some other way, they still free a large quantity of grain from the liability to immediate or prospective use. In the former case the quantity of grain which is exported to pay for imports is, having regard to the price of rice current in Tirhoot and Bengal, and the price of wheat there and in the North-Western Provinces, a matter of tolerable certainty. In the latter case, which I think the more probable alternative, the quantity which will be exported can only be conjectured with reference to what the district usually considers a sufficient reserve. In a regularly importing district this reserve has always been found to be smaller than in a district which does not in any way depend on importation to supply its wants; but, having regard to the liability an importing district is under of having its supplies shut off temporarily, or at least curtailed by vicissitudes of season in the exporting tract, it is doubtful if in ordinary times stocks fall below a three months' supply. If a three months' supply for Sarun be subtracted from the total surplus available for reserve export, plus the total importations, the remainder would be about 20,000 tons.

32. The result I arrive at, then, is this, that the quantity of food-grain exported from Sarun, in consequence of the importation of a similar commodity, does not on the average reach more than 20,000 tons in the year.

33. On this matter of export trade from Sarun the official information is indefinite. The existence of some export trade in food-grains is recorded; the figures given, however, do not pretend to be complete, and I prefer to accept them more as a proof of the existence of exportation than as a measure of its extent.

34. The following statement shows the district trade as far as passing down stream to Calcutta, it has been registered at Sahebgunge. It is unnecessary to insist further on the incompleteness of a statement which takes no note of the railway-borne traffic going southwards, or

of the railway or river-borne traffic to the north-west. As Sarun has the Ganges between it and the railway, and as the railway traffic office takes no note of places from which consignments are made, no statement of railway traffic can be shown for the district; indeed such a statement cannot be given, save with approximate correctness, for a smaller area than the division:—

*River Traffic Statement for Sarun for 1872.*

	Imports.	Exports.		Imports.	Exports.
Rice ... ..	3,14,697	.....	Tobacco ... ..	.....	658
Other food-grains ... ..	26,041	26,592	Salt ... ..	2,58,637	2,680
Oil-seeds ... ..	.....	5,39,040	Saltpetre ... ..	.....	77,942
Cotton ... ..	.....	31	Hides ... ..	.....	.....
Sugar ... ..	.....	48,019	Others ... ..	2,591	14,510

35. The second statement, showing the average rainfall of the district, will complete that limited *resumé* of the condition of the district in ordinary years to which I have restricted my remarks.

*Statement showing the average monthly Rainfall in the District of Sarun from 1868-1872.*

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
1868... ..	0'36	0'80	0'60	0'32	2'62	5'45	3'20	7'91	4'45	...	...	...	25'71
1869... ..	0'78	0'57	0'54	0'51	1'25	6'26	8'63	7'72	5'96	2'59	0'03	...	34'85
1870... ..	...	...	...	0'69	0'44	11'12	11'34	7'79	6'70	11'24	...	...	49'32
1871... ..	...	2'72	0'24	0'90	3'53	7'96	14'14	20'17	29'02	0'85	...	0'63	80'16
1872... ..	1'74	0'11	0'19	0'05	1'14	6'45	13'72	7'12	12'64	0'62	...	...	43'78
District average...	0'96	1'05	0'39	0'49	1'80	7'45	10'21	10'14	11'75	3'82	0'03	0'63	46'76

36. With reference to this average rainfall statement, I wish here to correct an error which is calculated to create an erroneous impression regarding the extent of the failure of the harvest in 1873. It has been stated that the average annual rainfall of the district is 37'78 inches, and the average for the Sudder station recorded in the Meteorological Report for 1874 is only 15 greater than this. The information which, in reply to a special application made to him, the Collector of the district has favored me with, throws doubt on the correctness of this average, showing that from 1867 to 1870 the average annual fall at the Sudder station was 47'30 inches; and a calculation of the average yearly fall, based on the returns from 1867 to 1874 inclusive (a period which embraced very abnormal seasons), will give 47 inches as the average for the Sudder sub-division of Chupra. *This average, then, and not 37'78 inches, must be adopted for the Sudder sub-division, and thus the hitherto accepted deficiency of 5 inches in 1873 will be enhanced into the very large deficiency of 14 inches.\**

\* I have stated this difficulty to the Meteorological Reporter to the Governments of India and Bengal. Mr. Blandford, on a revision of the records, thinks that 40 inches is a fair average for Chupra. Mr. Willson, basing his calculations on the figures as reported to him from 1867 to 1874, makes the average 44'23 inches. It seems certain that the figures before 1867, are not trustworthy. Since the Orissa Famine Commission drew attention to the importance of the subject, greater care has been exercised in recording rainfall.

PART II.

37. Passing from the consideration of the district under normal to its condition under abnormal aspects, I have, in the first place, to call attention to the fact that Sarun suffered considerably from the deficient rainfall of 1872. That year the rainfall was in the Sudder sub-division 9 inches under the normal quantity, and though a happy distribution of the rain which did fall mitigated greatly the evil effects of such an unusual absence of moisture, it could not wholly avert them. In the Sewan sub-division, on the other hand, the rainfall in 1872, though up to the average, was unhappily distributed. The general effect reported by the Collector was that for the district as a whole the bhadoi crop yielded fairly; the rice-crop was from eight to ten annas, say five-eighths of an average crop, and the rubbee crop of 1873 was from two to three annas, that is about one-eighth short of an average crop. Thus the year 1873-74 was ushered in by a year which was itself unseasonable, and the unseasonable character of this antecedent period had the usual effect on prices, which, during the earlier months of 1873, were considerably above the rates which usually prevail at that time of the year.

38. This unseasonableness in the rainfall of 1872, and its prejudicial effects on the crops of that year in Sarun, combined with the short rice harvest of 1871 and high prices in 1872 in Durbhunga, a district from which Sarun largely draws supplies, has an obviously important bearing on the stocks in hand in the latter district in 1873. The preceding year being one of short harvests at home and short supplies from without, it may reasonably be supposed that the surplus food-supply in the district was, at the end of the year, less than usual. The high prices which ruled in Sarun in the early part of 1873\* are both a proof and a consequence of such a limitation

\* The following is the prices-current in 1873 for the chief articles of food. A comparison of this table with that given in paragraph 26 will illustrate the correctness of the comments above.

Prices-current in the Sarun District in 1873.

SUB-DIVISION.	Kind of grain.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
		CHUPRA.	Common rice	22	22	22	19	16	16	16	16	15	13
CHUPRA.	Indian-corn ...	31	32	33	27	24	22	22	22	22	22	16	18
	Pulses ...	15	15	20	19	18	18	18	16	15	14	13	14
	Wheat ...	14	12	13	14	14	14	14	14	13	11	12	13
	Millet ...	...	...	...	...	32	31	30	30	28	25	21	18
	Common rice	18	18	17	16	16	15	15	16	16	13	13	12
SEWAN.	Indian-corn ...	...	...	...	...	...	21	24	21	22	21	18	17
	Pulses ...	16	15	16	16	16	15	15	14	15	14	12	11
	Wheat ...	12	12	13	13	13	13	14	14	14	11	12	13
	Millet ...	...	...	...	...	...	24	26	22	22	21	21	19
DISTRICT AVEE-AGE.	Common rice	20	20	19 <sup>5</sup>	17 <sup>5</sup>	16	15 <sup>5</sup>	15 <sup>5</sup>	16	15 <sup>5</sup>	13	12	12 <sup>5</sup>
	Indian-corn ...	31	32	33	27	24	21 <sup>5</sup>	23	21 <sup>5</sup>	22	21 <sup>5</sup>	17	17 <sup>5</sup>
	Pulses ...	15 <sup>5</sup>	15	18	17 <sup>5</sup>	17	16 <sup>5</sup>	16 <sup>5</sup>	15	15	14	12 <sup>5</sup>	12 <sup>5</sup>
	Wheat ...	13	12	13	13 <sup>5</sup>	13 <sup>5</sup>	13 <sup>5</sup>	14	14	13 <sup>5</sup>	11	12	12 <sup>5</sup>
	Millet ...	...	...	...	...	32	27 <sup>5</sup>	28	26	25	23	21	18 <sup>5</sup>

on the supplies. The district of Sarun, therefore, in the autumn of 1873 had in all probability less than a three months' stock in hand, which there is reason to assume as her largest reserve. An assumption fixing her stocks in hand in September 1873 at three months' supply will, then, in all likelihood, represent her position in a very favorable light.

39. The deficient rainfall of 1872 was followed by a fall still more deficient in 1873; there was also in this latter year the added element of unfavorable distribution. Beginning late in the season, the fall was excessive in July, deficient in August, while in September, the month in which copious moisture is most necessary, only one inch of rain, instead of 13 inches, fell. The result of such drought was inevitable: the bhadoi crop was but two-thirds of an average crop, while of the winter rice only one-tenth of the average outturn was harvested. What the average outturn of each crop is has been stated in paragraph 20. It follows, therefore, that in 1873 the outturn of the—

				Tons.
Bhadoi crop was ...	...	...	...	175,860*
Late rice	...	...	...	14,998
			Total	190,858

The average outturn in ordinary years of the bhadoi and rice-crops being 413,783 tons, it follows that in 1873 there was a deficiency of 222,925 tons.

40. In September the only food in the country was the stocks in hand and the produce of the bhadoi crop. On this food-supply the district subsisted (private importations being for the moment left out of consideration) till it was supplemented by the produce of the late rice-crop in January. The quantity consumed in the interval at ordinary rates of consumption† was 126,000 tons. But it has been submitted that in September 1873 the district reserves cannot be supposed to have been above a three months' supply, that is, 126,000 tons.‡ The aggregate of the reserves and the produce of the bhadoi crop having, therefore, been diminished in the last quarter in the year by 126,000 tons, it follows that the stock in hand in January was, in round numbers, 176,000 tons. This stock was raised in January 1874 by the addition of the late rice harvest to a total of 191,000 tons, or about a five months' supply, and formed the first resources with which the district entered on the famine year. It is noteworthy that five months' supply was the most sanguine estimate of the district resources which, in January 1874, any local officer ventured to make. This estimate was indeed only made by one officer, the sub-divisional officer of Sewan, and he saw reason to reduce it in subsequent reports. I would confidently submit that the position I assign to the district in January 1874 is the most favorable that a liberal interpretation of the evidence affords; indeed, in dealing with the famine literature, I

\* The outturn of the early rice-crop is included in this total, early rice forming portion of the bhadoi crop.

† See section 74 on Shahabad.

‡ I believe on further consideration that this allowance is excessive; but as I write this note when the section is on type. I abstain from allowing the text.

have usually adopted a liberal mode of interpretation. I have felt myself bound to discount to some extent the tendency to take a gloomy view of the situation which, in the end of 1873 and commencement of 1874, pervaded the minds of all intelligent men in Behar. Under the circumstances of a failure in the harvest more intense than that of 1866, which every one remembered, it was perhaps impossible that matters should be otherwise. I have thought it, however, none the less my duty to discount the tendency to which I allude, when such could be done without contravening direct authority.

41. It may be well, before I proceed to the questions of prices, private trade, and Government action in the district during 1874, to complete the statement of the food-supply, which during the continuance of the scarcity—that is, till the bhadoi harvest was reaped in September—the district drew from local sources. The only source of the kind that remains to be noticed is the rubbee crop which was harvested in April and the subsidiary food crops. I have in an early paragraph of this section adverted to the inquiries which were instituted in Sarun with a view to determining the outturn of this crop. The result of these careful inquiries was a report to Government from the Collector, estimating the yield of the rubbee crop of 1874 to be 96,782 tons. This is the most authoritative and authentic information which is forthcoming on the point, and I accept it without comment. I have found no statement of the outturn of the subsidiary food-grain crops in 1874, and it is but an estimate which places such outturn at 20,000 tons.

42. The total food-supply, therefore, which from local sources the district drew to meet her requirements during the nine months over which the scarcity lasted reached 300,000 tons in round numbers, or seven months' food supply. The deficit was made good by the efforts of private trade and of the Government. This brings me to the discussion of the extent and modes of action of those two agencies, to which the district owes its immunity from disaster.

43. The extent to which Sarun in ordinarily good years is dependent on the activity of private trade, if not for an absolute sufficiency of some kind of food, at all events for such a variation in diet as its inhabitants require, has already been pointed out. In 1873, however, the districts from which Sarun chiefly imported were themselves even more famine-stricken than she, and being situated far away from the highways of trade, were unable to spare any from a slender stock which private energy could not replace. With a failure, then, in supplies produced at home, and a cessation of all importations from wonted sources, Sarun was in the end of 1873 in a critical position, from which it could be completely extricated only by an activity in private trade such as had been hitherto unexampled in the history of scarcities of this district.

44. In the end of 1873 and beginning of 1874 it was very doubtful whether private trade would even approximately supply the large deficit of food which Nature had denied. Prices were everywhere in the district at double the usual rates, and exhibited a tendency to rise which was steady and well marked. The tightness which in January 1866 had characterized the markets was intensified in January

40 Sarun: Importation—(Continued)—Prices-Current in 1874.

1874; and this being so, it was but reasonable that grain dealers, mindful of the course of events in 1866, should hold back their stocks in the hope of reaping in the summer of 1874 a more enormous harvest of profit than they had reaped in the summer of 1866, when rice and Indian-corn sold at three hundred per cent. above normal rates.

45. That prices in Sarun during 1874 did not reach prohibitive rates is due to two causes: the primary cause was the unexampled activity of private trade in throwing supplies into the district; the subsidiary cause was the action of Government in so manœuvring with its comparatively small stores of grain as to impress them with, within certain limits, the character of arbiters of the market. It will be presently seen that although private trade did more for the district than the most sanguine could have expected, it could not manage to supply more than 65,000 tons, or one-half the deficiency. The absolute supply was thus less than the demand, and the consequence would, in the ordinary course of things, have been, sooner or later, that prices would have become prohibitive to all but the richer classes.

46. The policy of Government in selling grain at rates which, though exceptionally dear, were still not outside the purchasing capacity of those who had some means, or, having none, could earn it on public works, prescribed a price-current to the market. The price-current was so regulated as to have the effect of enforcing strict economy in domestic expenditure, and it was to the economy so enforced, aided by the material assistance afforded by the Government, that the district owes its immunity from the disasters which the incapacity of trade to perform all required of it imply. If Government had not, in the way indicated, influenced the markets, the grain stocks of the district might not have been consumed so soon; but then the people, too poor to buy them, would have been far more numerous, and the consequent distress more widespread and intense than was the case last year. That the action of Government in this direction did no more than stop the rise in prices at the point I have indicated, and keep it arrested at this point throughout the scarcity, will be manifest from the following statement of prices-current in Sarun during 1874:—

*Prices-current in the Sarun District in 1874.*

SUB-DIVISION.	Kind of grain.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
CHUPRA	Common rice	12	12	12	12	12	12	13	13	13	15	21	26
	Indian-corn ...	15	15	15	16	15	16	17	18	19	22	25	27
	Pulses ...	13	14	12	13	13	14	14	13	13	13	12	13
	Wheat ...	13	14	14	14	14	14	15	15	15	16	16	17
	Millet ...	17	17	17	16	15	15	18	19	21	23	25	27
SEWAN	Common rice	12	11	10	11	10	10	10	10	13	19	16	20
	Indian-corn ...	15	12	14	16	16	...	...	...	24	23	23	25
	Pulses ...	11	12	13	14	12	12	12	12	14	13	11	12
	Wheat ...	12	12	12	13	12	13	13	13	14	12	13	13
	Millet ...	16	15	16	17	11	...	...	22	26	25	25	27
DISTRICT AVERAGE...	Common rice	12	11'5	11	11'5	11	11	11'5	11'5	13	13'5	18'5	23
	Indian-corn ...	15	13'5	14'5	16	15'5	16	17	18	21'5	22'5	24	26
	Pulses ...	12	13	12'5	13'5	12'5	13	13	12'5	13'5	12'5	11'5	12'5
	Wheat ...	12'5	13	13	13'5	13	13'5	14	14	14'5	14	14'5	15
	Millet ...	16'5	16	16'5	16'5	13	15	18	20'5	23'5	24	25	27

47. I have stated the private importations into Sarun during the famine year reached 65,000 tons. Of this quantity Bengal supplied about 4,000 tons, the remainder came from the North-Western Provinces, &c. As the Collector maintained an efficient system of trade registration in the district throughout the scarcity, I have been able to collect and classify the figures he furnishes. They of course include the consignments to Sarun, which were registered *in transitu* at Sahebgunge. The following statement shows the grain trade of Sarun during the continuance of the scarcity. I have included in the first quarter's importations some consignments which reached the district in the end of December 1873.

*Statement of importation of Food-Grain into Sarun during  
the Famine of 1874.*

QUARTER OF THE YEAR.	Imported to Revel- gunge.	Imported to Dore- gunge.	Imported to Maha- rajgunge.	Imported to Gunduk ghâts.	Imported to small places.	Imported to Sewan sub- division.	Total im- ported.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Tons.
First quarter...	6,47,499	28,274	14,149	6,639	.....	57,444	26,928
Second „ ...	4,25,965	31,348	10,175	.....	6,322	2,58,401	26,150
Third „ ...	2,00,278	29,559	.....	1,515	30,721	64,980	11,680
<b>Total ...</b>	<b>12,73,742</b>	<b>89,181</b>	<b>24,324</b>	<b>8,154</b>	<b>37,043</b>	<b>3,80,825</b>	<b>64,758</b>

During the same period Sarun exported to the distressed districts of Chumparun and Tirhoot a total of 90,849 maunds, or 3,244 tons of food-grain.

48. I have shown, quarter by quarter, the importations of food-grain into Sarun during the continuance of the scarcity. My object in doing this is to bring to the test a statement to which I believe some credence has been given, that the action of Government in importing and, according to suitable methods, disposing of its importations of food-grain for the relief or prevention of distress was hostile to the free play of private trade. The question is one of practice, not one of theory. It is a question of degree.

49. If the question were to be solved by a comparison of the condition of private trade last year with private trade in 1866, then the conclusion will be that official action in 1874, so far from impeding, had rather the effect of galvanizing private enterprise into unwonted activity. If, however, with an admission of the beneficial effect on private trade of such official activity as concerned itself with the dissemination of knowledge regarding the actual state of things in the distressed tracts, and with encouraging and facilitating trade by reduction in railway freights, abolition of tolls, and such like administrative action, it still be objected that the executive action of Government in importing grain hindered private enterprise in Sarun without conferring commensurate advantages on the community, then I would invite attention to the following considerations.

50. The policy of Government was officially declared at the end of 1873, and effective measures to carry it into force were undertaken in the early days of 1874. Before this policy had been defined in action, and at a time when the trading community might not unreasonably harbour doubts of such action trenching on their province, private trade to Sarun was in a perfectly new channel, reaching a degree of development altogether unprecedented in the history of Bengal famines. Looking to the magnitude of its operations in the Sarun district alone during the first quarter of 1874, it cannot, I submit, be reasonably maintained that *then* it was hampered, impeded, or prejudiced by any action on the part of Government.

51. During the second quarter of the year the stream of private trade flowed into the district with but an insignificant decrease in volume, and this insignificant decrease is attributable rather to the effect had on prices by the addition of the produce of the rubber harvest to the available food-supply than to any more recondite cause. In the third quarter of the year private importations greatly diminished, the diminution dating from the first half of June; and then it was that Government stores were largely drawn upon. Until June the total quantity of Government grain consumed in Sarun was inconsiderable, not over 1,000 tons: thenceforward the consumption was on a much larger scale. To impute, however, the decrease of private importations to this increased consumption of the Government stores, seems to confuse effect with cause, and this for the following reasons.

52. The early commencement and copiousness of the rain in June throughout Behar made the general agricultural prospects much brighter than they had been, and everywhere brought forward, in payment of agricultural labor, stocks which had been reserved for that purpose. The consequence was that, in the markets, an easier tone became perceptible; and further, large importations of food-grain became a venturesome speculation. About this time also the prices of the more ordinary articles of food, such as wheat and bajra, were, throughout the Benares and Allahabad divisions of the North-Western Provinces, so dear, that it was very questionable whether the market there was not, all things considered, more favorable to sellers of food-grain than the more distant market in Sarun. A speedy termination to the scarcity was foreseen in the approaching bhadoi harvest, the prospects of which were satisfactory; and speculators may well have hesitated to embark in fresh enterprises, for the due development of which there was not time, and which did not hold out, even had there been sufficient time, an assured promise of larger profits than might accrue from less risky operations nearer home.

53. These various considerations combine to render sufficiently intelligible the decrease of private importations into Sarun from June, without at all introducing into the question the matter of the freer consumption of Government grain from that date. This freer consumption was begun when private importation had already slackened off. When once it did begin, it doubtless had the effect of reducing the demand for private grain; but that had it not begun at all, the



diminishing private trade would have supplied that demand without an overwhelming access of pressure on the already much-exhausted resources of the people, is very questionable.

54. The preceding observations, without pretending to be an exhaustive exhibition of the condition of things in Sarun in 1874, as far as local food-supply and trade is concerned, will, I trust, have furnished some definite ideas on those points, and indicated, with some approach to precision, the extent of the district's wants in that respect. It may well be said that private food-supplies in finding their way into Sarun eluded the Collector's vigilance, and that the total of such importations is larger even than I have stated it to be. If this be so, it is an additional reason for thinking that the extent to which private trade there was prejudiced by Government action was inconsiderable.

55. I have not in the preceding observations dwelt on the imperative necessity Government was under of providing for the safety of the people, irrespective of an agency which, on a previous less momentous occasion, had failed of success, and on which, therefore, no exclusive dependence could now be placed. It seemed to me that this necessity is so obvious as to stand in need of no comment.

56. I now proceed to tabulate the expenditure in cash and in grain incurred by Government in the relief of distress in Sarun, and to exhibit the numbers or proportion of the population to whom aid was given in one or other of the various modes prescribed for the administration of relief.

57. These modes may be classified under four heads—(1) distribution of grain or money in charitable relief; (2) advances of grain or money on recoverable loan; (3) sale of Government grain for cash at prices under prohibitive market rates; (4) employment on relief works, and payment of wages in money or grain. There were subsidiary modes of affording aid to the necessitous, but all such will properly fall under the general heads specified above.

58. I propose to exhibit the expenditure incurred under these heads of relief administration in two tabular forms. The first form will show the expenditure in grain duly classified, and the second form will show the expenditure in money. I conceive that this arrangement will best combine comprehensiveness with precision.

59. For the figures which appear in the two following statements I am indebted to the Assistant Controller-General having charge of the accounts of famine expenditure and to the Controller of Public Works Accounts. I am led to believe that these figures may be accepted as a correct and full statement of the various items of expenditure to which they refer.

*Statement of Grain Expenditure incurred in the administration of relief in Sarun during the Famine of 1874.*

				Tons.
Grain distributed in charitable relief	..	...	...	610
Ditto sold for cash	...	...	...	8,410
Ditto advanced on loan	...	...	...	17,894
Ditto paid away as wages on relief works	...	...	...	11,487
			Total	...
				<u>38,401</u>

60. It may be well to add here that the total quantity of grain imported by Government into Sarun\* (exclusive of grain retransferred to other districts) was 40,200 tons. Of this quantity, 36,401 tons are accounted for in the preceding statement; of the remaining 3,799 tons, 543 tons are debited under the head of miscellaneous expenditure recoverable, 772 tons were sold after relief operations had ceased, 229 tons were expended as fodder for Government transport trains, and 2,255 tons, or about 6 per cent., has been written off to wastage. This accounts for all the Government grain imported into Sarun.

61. The following statement exhibits the expenditure in money :—

*Statement of Cash Expenditure incurred in the relief of distress in Sarun during the Famine of 1874.*

	Rs.
Distributed on charitable relief ... ..	2,92,683
Advanced on loan ... ..	6,41,477
Paid as wages on relief works ... ..	15,06,412
Total ...	24,40,552

62. It will be observed that the above statements of expenditure exhibit solely the grain and money which found their way into the hands of those in need of relief. I have not considered it pertinent to my purpose to trench on the province of the account department, and exhibit the expenditure incurred by Government in buying grain, importing it into the district, or maintaining establishments for the administration of relief.

63. It now remains to show the numbers relieved by the expenditure of those 36,401 tons of grain and Rs. 24,40,552 in cash. For the people charitably relieved, and for those who on relief works earned the relief afforded, I am able to submit actual figures. For those relieved by sales of grain at reduced rates, or by recoverable advances, I can only present estimated figures: and in forming those estimates I have supposed that every 23 seers of grain relieved an individual for one month, and every anna in cash another individual for one day. It will be observed that these rates are, in effect, usual rates of consumption.

64. Commencing with those estimated figures, it will be observed that the quantity of grain sold and advanced was 24,304 tons, and the amount of money advanced was Rs. 6,41,477. A simple calculation will show that on the reduced rates of expenditure specified in the preceding paragraph, this quantity of grain will support 1,183,496 people for one month, and this amount of money will give an anna a day to 342,121 individuals also for one month of thirty days. Therefore the total expenditure of cash and grain by way of sale and of recoverable advance, sufficed for the support of 1,525,617 individuals for one month.

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\* I include the grain sold on the Gunduck embankment, even though the transactions may have occurred over the border in Chumparun.

65. I now beg to present two statements showing (a) the daily average numbers of those who, fortnight by fortnight, were charitably relieved, and (b) the aggregate numbers, with daily averages for each month, of those who received assistance in the shape of wages in money or grain on relief works.

*Statement of the average number of persons gratuitously relieved in the Sarun district during the Famine of 1874.*

Fortnight ending on the—		27th June	...	...	5,134
7th March...	...	14	11th July	...	7,011
21st " ...	...	619	25th " ...	...	7,888
4th April ...	...	1,016	8th August	...	9,240
18th " ...	...	3,928	22nd " ...	...	9,568
2nd May ...	...	3,252	5th September	...	4,348
16th " ...	...	6,750	19th " ...	...	2,853
30th " ...	...	6,852	3rd October	...	1,353
13th June ...	...	4,550			

*Statement of the average number of individuals employed in the Sarun district during the relief operations of 1874.*

Aggregate number of individuals employed	...	...	...	38,638,950	April 1874	...	...	...	166,683
Average daily attendance each month—					May	"	...	...	197,442
January 1874	...	...	...	20,180	June	"	...	...	228,991
February "	...	...	...	87,181	July	"	...	...	140,765
March "	...	...	...	106,850	August	"	...	...	119,262
					September	"	...	...	101,111

66. It is unnecessary to exhibit the steps of the calculation which shows that the figures in the former statement are equivalent to saying that 36,184 individuals were relieved for one month of thirty days, and that the figures in the latter statement are tantamount in effect to this—that 1,121,132 persons were relieved for a similar period of one month. The general result, then, of the administration of relief in Sarun may, as far as the necessitous poor are concerned, be expressed by saying that 2,682,933 individuals were supported for one month, or, with advertence to the census returns, that the total population of the district was supported for about 39 days.

67. In fine, the net result from one point of view of the entire preceding discussion may be thus briefly summed up.

The average annual local food-grain supply of Sarun is, in round numbers, 670,000 tons. This quantity is in average years increased by importation and decreased by exportation and wastage, the result being that never in the best years is the quantity of grain consumed and held in reserve greater than the local production of that year. In the year 1873 a deficiency of 14 inches in the rainfall succeeding a year of drought and short crops, produced a failure in the harvest to the extent of 368,000 tons of food-grain. The drought which caused this failure of the crops in Sarun produced a failure of even greater magnitude in the districts on which Sarun relies for its imports of food-grain, and which in 1874 could furnish none. The consequence was that prices rapidly rose to famine rates in Sarun, and notwithstanding that ultimately private trade, working in a new direction, did as much for the district as it does in ordinary years, those rates

maintained throughout the spring and summer of 1874 the exceptionally high level they attained in the winter of 1873. Those rates, conjoined with the dearth of home products, caused an extent of distress which necessitated the entire population having, to a greater or less extent, recourse to Government aid for 39 days.

68. The general observations that from the foregoing discussion suggest themselves regarding the over-populousness of, and need of emigration from, Sarun, I shall reserve for a later section.

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*Note.*—Since writing the above I have seen a statement in the Blue-Book submitted by Government to the House of Commons to the effect that Rs. 3,46,562 were spent on relief works by the Hutwah Raj in Sarun, which, at the rate of an anna a day, would afford relief to 188,166 individuals for a month. I note the matter here as an additional source of assistance afforded, if not by Government, at all events under Government auspices, to the district. The estate of the minor Rajah was under the care of the Court of Wards.





## SECTION III.

### DURBHUNGA.

ALTHOUGH the present district of Durbhunga had no separate existence during the famine relief operations, not having been constituted a district till January 1875, it is still advisable, for the purpose in hand, to treat it as if it had had an independent existence from the commencement of the famine.

2. The history of Durbhunga during 1873-74 justifies this course. It was in this district that the failure of the winter rice crop of 1873, and of the rubbee or spring crop of the ensuing year, was most complete; that private trade was least operative; and consequently that distress was most severe and wide-spread. This combination of adverse circumstances imparted to the administration of relief in Durbhunga a degree of complexity which did not to the same extent prevail elsewhere, and which imposed on Government the necessity of constituting North-East Tirhoot into a distinct charge for the purposes of relief administration. The consequent limitation in the Collector's responsibility extended, if not nominally, yet substantially, to other departments of district control, the revenue department excepted. As to revenue matters, I shall have in the following pages to make but few allusions; it will be therefore permissible and advantageous, both with reference to past events and to possible future requirements, that I should address my remarks to the condition of existing local divisions.

3. It would not, perhaps, have been possible to concentrate attention on a part of the old district of Tirhoot apart from the whole had the statistical information furnished for the whole district been of a trustworthy character. It would have been impossible to have brought that information to bear on the district piecemeal. The information, however (contained in the usual return, 41B.), cannot be accepted. Dating from a period antecedent to the famine, and before the subordinate executive service had been fully organized, the latest return, 41B., for Tirhoot, does not embody the results of the experience gained during the relief operations, nor are its estimates based on any other experimental basis.

4. Although complying in form with the preciseness of detail required of it, the return was probably meant to convey no more than such a general impression of the agriculture of his district as the Collector's own varied experience suggested to him. A general impression it does convey; but for my purpose here much greater precision is necessary.

5. Events have since transpired which, to a considerable extent, render possible an approximation to such precision, and chief among those events is the special census of the Durbhunga sub-division, which

was taken in October 1874. As the results of this census were at the time fully reported to Government, and published in the *Gazette*, I may assume on the part of Government an acquaintance with their purport. It will be remembered, then, that a prominent feature in the census operations was the collection for the whole sub-division, that is, for 40 per cent. of the present district of Durbhunga, of such agricultural statistics as I am now concerned with.

6. The agricultural statistics thus collected were not, however, quite accurate for the whole sub-division,—a point upon which I dwelt in my covering report. In that letter I attributed the error, which in the special census returns assumed the form of a diminution in the gross area of the sub-division, to the supposed exclusion from the statistical forms of the area covered by roads and rivers. I have since then seen reason to modify this view, and to hold that the error is mainly, if not altogether, due to defective information regarding the cultivated area furnished by putwarees and other zemindaree agents from whom our figures were collected. The motives actuating these persons in the submission of defective returns of cultivated land will be obvious to all who have had anything to do with settlement work.

7. I have been led to hold this modified view from observing that the understatement of cultivated land varied, if I may so express myself, inversely with the experience of the officer who locally presided over the census operations. The understatement was proportionately less in those circles presided over by experienced officers than in circles managed by gentlemen of less matured judgment; this variation being inexplicable on the ground of density of population or physical aspect of the country. In the subsequent discussions, therefore, I have credited the error in question to the head of cultivated land, and I am satisfied that in doing so I am acting in accordance with the probabilities of the case.

8. An analysis of the agricultural statistics for Durbhunga, so corrected and brought into harmony with the survey areas, will furnish a trustworthy groundwork for subsequent argument. Such an analysis I proceed to give, omitting, however, the details of the process, and merely indicating the results. The first result I work out is the following, omitting decimals :—

Area of sub-division	...	...	...	100
Cultivated area	...	...	76	
Uncultivated „	...	...	24	
			—	100
Cultivated area	...	...	...	100
Rice-growing „	...	...	63	
Up-land area „	...	...	37	
			—	100
Uncultivated area	...	...	...	100
Pasturage	...	...	33	
Groves, &c.	...	...	13	
Village sites	...	...	7	
Fallow waste	...	...	47	
			—	100



9. So far the results of the agricultural census of Durbhunga furnish me with necessary information; but to the elaboration of such a statement of agricultural statistics as I need one other step is still wanting, namely, the sub-division of the up-land area according as it produces a bhadoi or a rubbee food-crop, or is occupied with the sole production of non-food crops.

10. On this question I have to point out that the up-land area produces food-grain crops, edible crops other than food-grain, and crops which are not edible; and the same land, with certain exceptions, will within the year yield both edible and non-edible crops. As I am now concerned with ascertaining the land which yields food-grain crops only, the determination of what those exceptions are will limit the field of inquiry and so far serve my purpose.

11. Crops other than food-grain crops may be divided into three classes—those that grow simultaneously in the same field with food-grain crops; those that, growing alone occupy the soil for a season only; those that, growing alone, occupy the soil for a year. The last kind form the exceptions to which I have alluded, and with them I am immediately concerned.

12. Of those non-food crops which, growing alone, occupy the soil on which they grow for a full year, the chief example is sugarcane, but in Durbhunga and Behar generally indigo may be included in the category. It is necessary to determine the area of land occupied with their growth. In Durbhunga the area occupied by indigo cultivation is about 18,000 acres, rather less than more; sugarcane covers an area of about 10,000 acres. The quantity of land devoted to the chief non-food crops which monopolise for a year the land on which they grow is therefore 28,000 acres. To make allowance for other possible crops of the same kind and provide a percentage for under-estimates, say the area of cultivated land which annually never grows a food crop is in round numbers 35,000 acres; the subtraction of this quantity, (*i.e.*, 15 per cent.) from the cultivated up-land area will give the quantity of land on which a food-grain crop may be grown.

13. But a food-grain crop is not at each season grown on the total remaining area; although both seasons, rainy and dry, taken together, the acreage under food-crops will show a very considerable extent of double cropping. On this point I have had special inquiries made in an estate which I knew to be as fair a 'specimen area' for the sub-division as could be selected. The result is that of the available cultivated up-land area, efforts are made annually to sow the whole down with bhadoi, which is essentially a food-grain crop, and perhaps 90 per cent. of it is usually sown down; while of the same area it is usually sought to sow seven-eighths down with rubbee, which is to a large extent a non-food crop, and perhaps 75 per cent. is usually so cultivated.

14. I have already stated that some non-food crops growing alone on land monopolize it for the year, so other non-food crops monopolize the land on which they grow for the season. As a rule, however, oil-seeds, &c., grow perhaps more frequently along with food crops than separately; and the consequence is that it is quite impossible

to assign any specific area to the cultivation of rubbee food crops as distinguished from other rubbee products. In my estimates of average rates of produce, however, I shall contemplate the outturn per acre of rubbee food-grain only, making necessary allowances for the short produce caused by this system of simultaneous cultivation of various kinds of crops.

15. The result of the preceding remarks may be thus formulated in continuation of the percentages given in paragraph 8. The following proportions being on the gross up-land area available for cultivation differ slightly from, but expressed in terms of this area, are equivalent to the proportions noted in paragraph 13—

Up-land area	...	...	...	100
Non-food crops occupying soil for a year	...	...	...	15
Bhadoi food crops	...	...	...	80
Rubbee (mixed crops)	...	...	...	65
				— 100

16. These figures show that 60 per cent. of the high lands under cultivation in Durbhunga yield two crops in the year. Before expressing these proportions in terms of the area, it will be convenient to discuss the position of the Mudhoobunnee and Tajpore sub-divisions in respect to statistical information of the kind set forth in the preceding paragraphs.

17. The census was not indeed revised in Mudhoobunnee in the same manner as in Durbhunga, but I am indebted to the courtesy of Colonel Burn, the manager of the Durbhunga estate under the Court of Wards, for information which, as far as the western part of the sub-division is concerned, supplies to a large extent the want of official statistics. Portion of the Durbhunga estate is situated in the Jerail pergunnah, which is situated partly in Mudhoobunnee, partly in Seetamurhee; and for this portion of the estate Colonel Burn has placed agricultural statistics at my disposal which show that within an area of about 30,000 acres 74 per cent. is cultivated and 26 per cent. uncultivated land; they also indicate that of the cultivated area 65 per cent. grows rice and 35 per cent. the bhadoi and rubbee crops.

18. These statistics, which, I believe, represent with approximate correctness the conditions prevailing in the western tracts, I have been during my recent deputation to that part of Behar in conjunction with Mr. Geddes, c.s., enabled to supplement.\* In later sections of this

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\* The following account of my method in preparing agricultural statistics for Mudhoobunnee is extracted from a report I submitted recently to Government.

The Bahera thana of the Durbhunga sub-division (for which elaborate agricultural statistics exist) marches with the southern boundary of Mudhoobunnee for more than half its length: it exhibits the same predominance of rice land over up-land which is a distinguishing feature of the Mudhoobunnee landscape, especially towards the east. The staple productions of both regions are the same; the system of agriculture in each are identical; the people in each are purely agricultural; their standard of comfort is the same; and, judging by Mr. Beverley's census figures, the density of population per square mile is but 6 per cent. greater in Bahera than in Mudhoobunnee. The probability is, therefore, that the extent of cultivation in the former tract is a measure of that

report I shall have occasion to refer to valuable statistical information compiled for me by several Collectors from their records of cases under the butwara laws, or rent laws. Of the former class of cases, a survey of the land to be 'partitioned' is a necessary part of the procedure, and many measurements of land are made daily under the operation of the rent law. An examination of the record of such cases (care being taken to select cases referring to lands which from their situation are representative of the physical character of the surrounding

in the latter. In other words, it is probable that in Mudhoobunnee, as in Bahera, 75 per cent. of the land is cultivated, and that of the cultivated area the rice-growing area would be about 77 per cent., and the rubbee and bhadoi area 23 per cent.

It was also probable that in Mudhoobunnee, as in Bahera, the rubbee and bhadoi (up-land) area should be subdivided, allowance being made for double cropping, thus—

Rubbee ...	...	...	...	...	...	65 per cent.
Bhadoi ...	...	...	...	...	...	80 "
Non-food crops occupying soil for a year ...	...	...	...	...	...	15 "
						160
						160

showing 60 per cent. double cropping.

This was the state of things to be expected from the analogy between the adjacent sub-divisions. I now proceed to show how the probability has been strengthened to a remarkable degree by information I was fortunate enough to acquire in Mudhoobunnee.

In the Jerial pergutnah of the Baneepetty thana the Durbhunga ward has 29,054 acres of land. For this considerable property the manager of the estate, Colonel Burn, furnished me with detailed statistics which show that of these 29,054 acres, 74 per cent. is cultivated; that of the cultivated area, 64 per cent. is dhan land and 36 bhiti or up-land; and that of the up-land cultivated area, allowance made for double cropping, 72 per cent. grows bhadoi food-grain and 63 rubbee food and non-food-grain (mixed). It will thus be seen that these figures support to a large extent the Bahera percentages. The only difference of magnitude is in the proportion of dhan land and up-land, but as the west of Mudhoobunnee is higher than the east, just as the west of Bahera is higher than its eastern tracts, this inequality will redress itself over the whole sub-division.

The Jerial pergunnab is a fair "specimen area" for the western half of the sub-division, and I believe I should be right in extending the percentages representative of conditions there to this half.

Not content, however, with this mode of argument, I determined to secure, and succeeded in securing, other independent proof. I knew that the partition law had been largely called into operation in Mudhoobunnee, and that a necessary step in the partition of estates was a detailed measurement of the land with classification of the various sorts of land. I had all the butwara records in the Mudhoobunnee record-room examined, and from it the statistics of these detailed measurements compiled. I became thus possessed of definite

\* The Mudhoobunnee beeghas figures for 7,690 beeghas\* in the Baneepetty thana, 7,624 beeghas in the Hurlaki thana, 5,735 beeghas in the Khajouli thana, 1,728 beeghas in the Mudheypore thana, and 4,666 beeghas in the Mudhoobunnee (Bawareh) thana.

Examining these statistics more minutely, I found that the estates in the Baneepetty thana showed a cultivated area covering 73.3 per cent. of their area; the cultivated land being sub-divided in dhan land 64 per cent., up-land 36. I beg attention to the precise coincidence between these results and Colonel Burn's Jerial statistics.

The Hurlaki thana estates show a cultivation covering 71.5 on the area. The dhan area was 73 and the up-land area 27 per cent. on the cultivated land.

The Mudheypore thana estates show an extent of cultivation covering 75 per cent. on their area, the dhan land being 82 and the up-land 18 per cent. on this cultivated area. It will be remembered that Mudheypore includes much of the great Alapore rice tract.

Only for Mudhoobunnee and Khajouli did the butwara figures afford results somewhat at variance with my expectation, grounded on a knowledge of the state of agriculture there, the density of the population, and the analogy with surrounding tracts. In the Mudhoobunnee thana the butwara figures show the cultivated on gross area to be 68, and in the Khajouli only 63 per cent., both being purely agricultural thanas and the most densely populated in the sub-division. I have not had an opportunity of searching the butwara records for an explanation of this unexpected result. The result is, as representative of general conditions in these thanas, anomalous, and I reject it, extending, instead, to these thanas the percentages which prevail in the adjoining one of Baneepetty on the one side and Mudheypore on another, and Bahera on a third. On the fourth side is Nepal.

Average percentages based on the preceding thana percentages will show that 73 per cent. of Mudhoobunnee is cultivated, and that the dhan area is, to rubbee and bhadoi area, as 73 is to 27, which is very close to the conditions prevailing in Bahera thana.

The above sketch is both in illustration of my method and in support of the general trustworthiness of my figures.

neighbourhood) has furnished valuable data, on which I shall have frequent occasion to remark in this report.

19. On the occasion of my visit to Mudhoobunnee, the Sub-Divisional Officer, Mr. Marindin, had his butwara records carefully examined, and from them we were enabled to compile statistics for estates situated in nearly every thana in the sub-division, and covering, with the Jerail estate, 6 per cent. of its area. The effect of these statistics, corrected and modified by other pertinent facts within our knowledge, is to show that of the gross area of the sub-division 73 per cent. is cultivated, and that of the cultivated area almost precisely 73 per cent. is paddy and 27 per cent. bhadoi and rubbee land. This result is in accordance with the statistics for pergunnah Jerail; for in the western portion of the Mudhoobunnee sub-division there is a much larger admixture of high land than there is in the eastern portion. The large pergunnah Alapore is well known as almost altogether a rice tract: it is conterminous with the eastern boundary of Mudhoobunnee.

20. The statistics on which I have just dwelt afford no clue to the solution of the difficult point regarding double cropping. During my recent deputation to North Behar, however, I paid special attention to this point; and the conviction formed in my mind is this, that the extent to which the custom prevails in the 'specimen area' in Durbhunga is a measure of the extent to which it prevails throughout Tirhoot and North Bhagulpore. Wherever there is a great predominance of paddy land over high land, there double cropping is more extensively practiced than where the relative proportions of both sorts of land are more equal; but I have learnt of no considerable tract in my tour in which more than 70 or less than 50 per cent. of the up-land cultivated area was double cropped within the twelve months.

21. I am the less averse to accepting on this point for Mudhoobunnee the proportions prevailing in Durbhunga, because the lands in which I had special inquiries instituted are situated in the Bahera thana, which marches with the south-eastern boundary of Mudhoobunnee. Comparing the agricultural statistics of this thana as determined at the census in 1874 with those which I have shewn reason for accepting for Mudhoobunnee, I find a close coincidence; the slight difference which exists being explicable on the denser population in Bahera, which naturally causes a greater extension of cultivation. In the Bahera thana the cultivated land is 75 per cent. on the gross area, the rice-producing land is 77 per cent. on the total cultivated area, the up-land covering the remaining 23 per cent. If it be remembered that the eastern portion of Mudhoobunnee contains a far larger proportion of rice land than of up-land, then the similarity of the conditions prevailing in both regions will be manifest. This similarity justifies me in extending to Mudhoobunnee the proportions as to double cropping which obtain in Bahera, and of claiming for this mode of arguing from known conditions in one tract to the conditions of an adjacent tract similarly circumstanced the capacity of giving approximately correct results.

22. The preceding paragraphs, then, furnish materials for the construction of as accurate a statement of agricultural statistics for

Mudhoobunnee as it is possible for me, from the materials at present available, to deduce. I shall present this statement presently; meanwhile I invite attention to the condition of Tajpore in regard to the foregoing points.

23. For Tajpore no statistics for specimen areas exist, and the exceptional density of population in Tajpore precludes the extension to it of those percentages of cultivation which obtain in the adjacent tracts of Durbhunga. The only source of information regarding the agricultural condition of Tajpore which remains is to be found in the results of certain statistical inquiries instituted in November 1873 by the Sub-Divisional Officer, Mr. Wace, with a view to determining the extent of land which annually yields a crop of food-grain. I produce Mr. Wace's figures in the margin, but the result may be summed up by saying that of the gross area of the sub-

	Acres.
Rice land ... ..	100,500
Bhadoi ... ..	118,150
Rubbee ... ..	141,350
Potatoes ... ..	18,900

division 79 per cent. annually yields an edible crop or crops of food-grain or potatoes.

24. If Mr. Wace's estimates are meant, as would seem on the face of them to be the case, to exclude the land which throughout the year is occupied with the cultivation of non-food crops, then it seems to me that his figures require only a slight modification (to provide for the system of double cropping) in order to render them as close an approximation to the truth as we may hope to obtain.

25. It will be remembered that the non-food crops in question are mainly two—indigo and sugarcane. In Tajpore indigo cultivation covers about 17,000 acres and sugarcane about 5,000 acres. If these 22,000 acres, or, to make an allowance for other more insignificant crops of a similar nature, say 25,000 acres, be added to the cultivated area stated by Mr. Wace, the result will indicate the extent of cultivated land in Tajpore with as much accuracy as it is now possible to command. It will show the cultivated area to be 85 per cent. on the gross area of the sub-division, and this, I believe, will not understate the uncultivated margin.

26. I have suggested that Mr. Wace's figures seem to me to err in not making a sufficient allowance for the system of double cropping. The system is prevalent in Tajpore, though not to the same extent as in the heavier and richer soil of Durbhunga. The fact also that a considerable portion of the lands in Tajpore which yield a rubbee crop is during the bhadoi season submerged, diminishes the area within which double cropping is practicable. Still, that the system does prevail in Tajpore is a fact about which there can be no dispute; the extent to which it does prevail, however, is a matter on which there is no information whatever. It is but an estimate, though the best that on the whole case I can make, which adds to Mr. Wace's rubbee and bhadoi areas 15 per cent. for double cropping. I believe that such an addition, while falling short of the extent to which the system prevails in the rich soil of Durbhunga, will not understate the position of Tajpore in this respect.

27. The following proportions sum up the preceding discussion, and represent my opinion regarding the condition of Tajpore, as far as the cultivation of food-grain crops is concerned :—

Gross area	...	...	...	100
Cultivated area	...	...	85	
Uncultivated „	...	...	15	100
Cultivated area	...	...	...	100
Rice land	...	...	25	
Up-land	...	...	75	100
Up-land cultivated area	...	...	...	100
Rubbee	...	...	70	
Bhadoi	...	...	60	
Non-food crops occupying the soil for a year	...	...	8	—
Uncultivated area	...	...	...	100
Villages	...	...	14	
Orchards	...	...	20	
Pasturage, &c.	...	...	33	
Tanks, roads, waste	...	...	33	—
				100

28. I now throw into a tabulated form the final result of all the preceding discussion.

*Estimates of Agricultural Statistics for Durbhunga District.*

SUB-DIVISION.	Gross area.	Cultivated area.	SUB-DIVISION OF CULTIVATED AREA.				UNCULTIVATED AREA.			
			Rice area.	Up-land area.			Village sites.	Pasturage grass.	Orchard bamboos.	Roads waste.
				Bhadoi.	Rubbee.	Non-food crop occupying soil for a year.				
Sudder ...	860,090	654,128	412,100	193,621	184,104	35,000	14,469	68,166	26,853	97,089
Mudhoobunnee	820,480	600,862	437,813	130,428	105,973	24,454	15,373	72,477	28,551	103,227
Tajpore ...	478,000	406,300	101,505	182,835	215,907	25,000	10,038	23,661	14,340	23,661
Total ...	2,159,170	1,661,290	951,418	506,884	505,984	84,454	35,870	120,378	113,670	223,976

29. I now proceed to estimate the average annual produce in food-grain of the land specified in the preceding statement, and to this

a necessary preliminary step is the determination of the average produce per acre of each crop. In Durbhunga and Mudhoobunnee the average outturn in husked rice of an acre of paddy land is in good years 14 maunds, or half a ton. It seemed to some experienced residents that this average was a high one; but having during my recent deputation to Behar informed myself further on the point, I am satisfied it may stand as the average outturn of good years. It is highly probable that the average yield per acre in good and bad years would be less. It will, however, be always remembered that my normal year is not an average of good and bad, but an average good year, bad years on the one hand, and bumper years on the other being excluded.

30. For Tajpore the outturn is less. Mr. Otley, in the compilation already alluded to, puts it at 15 maunds of paddy, or  $9\frac{1}{2}$  maunds of rice per acre. The inquiries instituted in 1873 by Mr. Wace, the Sub-Divisional Officer of Tajpore, resulted in an average of 12 maunds. I myself doubt the capacity of rice land in Tajpore to yield an average of 12 maunds of husked rice per acre. This is certainly the utmost it can yield; and in accepting Mr. Wace's figures, I am satisfied I am placing a most favourable interpretation on the condition of the sub-division.

31. In Mudhoobunnee and Durbhunga there is a general agreement to the effect that the outturn of the bhadoi crop is not less than 12 maunds per acre on the average, and that the rubbee returns per acre about the same weight of produce.\* But the rubbee crop consists of edible and non-edible grain grown simultaneously in the same field, consequently a deduction from the gross weight must be made for that portion of the outturn which consists of non-edible grain. This deduction cannot obviously be other than conjectural; it will vary with the locality from 20 to 50 per cent. of the gross outturn; but there is a consensus of opinion to the effect that it averages about  $\frac{1}{3}$  of the gross weight of rubbee grain produced per acre. The net outturn of rubbee food-grain per acre in Durbhunga and Mudhoobunnee may be therefore approximately represented by 8 maunds.

32. For Tajpore the official papers furnish detailed information concerning the outturn of each crop. This is to the effect that the produce per acre of wheat is 10 maunds, of barley and peas 12 maunds, and of other rubbee grain eight maunds; while for the chief bhadoi food-grains the average outturn per acre is 12 maunds, and for the inferior kinds (but little sown) seven maunds. Looking to the proportions† in which the various kinds of crops are sown, I venture to fix 12 maunds of food-grain per acre as the average for both crops. It must be remembered that a considerable tract of land in the Tajpore sub-division is annually fertilized by the overflow of the Ganges, and that the land liable to such periodical inundation yields, without fail, most abundant rubbee harvests. Further, the land to which the overflow

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\* It would seem that in Mudhoobunnee the rubbee outturn per acre is somewhat less than in Durbhunga. There may be a maund difference, but the point is so uncertain that I shall assume the same average for both sub-divisions.

† See the second monthly crop report for South Tirhoot, dated December 7th, 1873.

of the river does not bring those fertilizing deposits is more favourable to the production of rubbee staples than the heavier soil of the northern sub-division.

33. I am now in a position to present estimates of the average outturn of food-grains of each crop in ordinary good years. This I do, sub-division by sub-division :—

*Durbhunga Sub-division.*

	Tons.
Aughani, or winter rice ... ..	206,050
Rubbee, or spring crops ... ..	52,601
Bhadoi, or autumn crops ... ..	82,980
	<hr/>
Total ...	341,631
	<hr/>

*Mudhoobunnee Sub-division.*

Aughani, or winter rice ... ..	218,906
Rubbee, or spring crops ... ..	30,278
Bhadoi, or autumn crops ... ..	55,898
	<hr/>
Total ...	305,082
	<hr/>

*Tajpore Sub-division.*

Winter rice crop ... ..	43,533
Rubbee crop ... ..	92,531
Bhadoi crop ... ..	49,786
	<hr/>
Total ...	185,850
	<hr/>

34. The total produce, therefore, of the rubbee, bhadoi, and aughani food-grain crops in the district of Durbhunga is in ordinary years 832,563 tons. To this total, however, an addition has to be made for the outturn of the subsidiary food-grains, such as the grain called "cheena," which are grown chiefly in the interval between the harvesting of the rubbee and sowing of the bhadoi crops. I have in previous sections adverted to the uncertainty which characterizes the cultivation of this crop, and the impossibility of fixing an average area for it. It may, however, be accepted with some confidence that in average years this cultivation never covers more than, if indeed, it covers as much as, 10 per cent. of the cultivated area. The average outturn per acre of the crop is five maunds.

35. Assuming, then, such an extension of cultivation and such a rate of produce per acre for those subsidiary crops, the gross outturn of



food-grain in each sub-division will be, in average years and in round numbers, as follows:—

			Tons.
Durbhunga Sudder sub-division	...	...	353,000
Mudhoobunnee	...	...	315,000
Tajpore	...	...	193,000
Total			861,000

36. I now proceed to compare this food-supply locally produced with the wants of the people. It is unnecessary to recapitulate what has been written on this head in other sections, or to do more than indicate results.

37. At the prescribed rate of daily consumption each sub-division will annually consume for food the following quantities of grain:—

				Tons.
Durbhunga	...	...	...	245,358
Mudhoobunnee	...	...	...	168,578
Tajpore	...	...	...	156,102
Total			...	570,038

38. The next necessary deduction to be made from the gross produce is the quantities of grain which at the prescribed rates per acre are required to replenish the stocks of seed grain. These are for—

				Tons.
Durbhunga Sudder sub-division	...	...	...	20,355
Mudhoobunnee	...	...	...	17,730
Tajpore	...	...	...	11,656
Total for the district			...	49,741

39. The surplus which remains over, therefore, after the necessary deductions on account of the subsistence of the people and seed-grain, stands thus:—

				Tons.
Durbhunga Sudder sub-division	...	...	...	109,749
Mudhoobunnee	...	...	...	128,700
Tajpore	...	...	...	25,357
Total surplus			...	263,797

This surplus is partly exported from the district and in part held in reserve as a provision against bad years and partly wasted.

40. Introducing the principle already laid down that the rent of land is defrayed either in whole or in part by the sale proceeds of food-grain, I have here to note that the proportion of rent so liquidated and consequently the quantity of food-grain thrown on the market, varies largely in the different sub-divisions of the Durbhunga district. In Tajpore, which produces tobacco and potatoes to the

annual value of about twelve lakhs of rupees, the proportion is a minimum one. In rice-producing Mudhoobunnee it reaches the maximum for all Behar. In Durbhunga the proportion is nearer the maximum than it is the minimum.

41. On this question of the quantity of food-grain ordinarily disposed of to meet demands for rent I have had inquiries made in Durbhunga. The result, in which I personally concur, is to the effect that 12 annas, or three-fourths of the annual rent of land are defrayed from the sale proceeds of food-grain in that sub-division.

42. The proportion in Mudhoobunnee is greater, being in all likelihood oftener over than under 14 annas, or seventh-eighths of the rent. I shall adopt this proportion, however, as generally prevalent.

In Tajpore, however, the proportion paid from the sale proceeds of food-grain is the minimum for Behar, being about 6 annas out of the 16, or three-eighths of the yearly rent. It will of course be understood that this matter is one on which I do not claim for my estimates anything more than approximate correctness; that the matter, however, does admit of being determined with approximate correctness is as clear to me as that when determined the knowledge gained thereby may be turned to much use for administrative and statistical purposes.

43. The next step in tracing the disposition of the surplus produce of Durbhunga is to ascertain the gross rental of each sub-division; a subsequent step will be to determine the quantity of food-grain sold to cover that fraction of the gross rental which, from the result of the first step, will admit of being stated in precise terms.

44. The Road Cess Act valuations have not yet been completed in Durbhunga; but as far as they have been made, they indicate that the rental of the revenue-paying estates in the district is nearly six times the revenue, which latter is Rs. 9,17,355. As there are also about 130,000 acres of revenue-free lands in the district, the gross "rental" of all the lands will be about fifty-five lakhs of rupees.

45. From my acquaintance with the rates of rent prevalent in each sub-division I would subdivide this rental thus:—

				Rs.
Durbhunga Sudder sub-division	...	...	...	19,50,000
Mudhoobunnee	...	...	...	21,00,000
Tajpore	...	...	...	14,50,000
Total				55,00,000

46. The share of this rental which is defrayed from the sale-proceeds of food-grain will then be in round numbers—

				Rs.
Sudder sub-division	...	...	...	14,60,000
Mudhoobunnee	...	...	...	18,40,000
Tajpore	...	...	...	5,40,000
Total				38,40,000

47. The total amount to be paid from the sale-proceeds of food-grain, therefore, is in round numbers Rs. 38,40,000, and the question now is how much grain must be sold by the rent-payers to realize this amount. With a view to solving this question, I here produce a statement of the average prices-current in Durbhunga for the chief sorts of food-grain :—

Statement showing the Average Prices-Current in the District of Durbhunga from 1868—72.

SUB-DIVISION.	KIND OF GRAIN.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
		Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
SUDDER	Common rice	26·5	25·5	27·6	26·8	22·7	20·5	19·2	20·1	18·4	19·1	20·2	24·2
	Indian-corn...	28·5	26·5	31	35·3	35·5	54·3	55·8	32·9	22	51·4	34·2	58·7
	Pulses	17·7	16·5	17	21·2	20·5	17·8	21·9	22·3	21·5	18·6	17·6	21·4
	Wheat	19	17·2	17	21	22·5	18	19·1	21·8	19·5	18·6	20·6	18·2
	Millet	...	...	...	...	...	...	...	...	...	...	...	...
MUDHOO-BUNNEE.	Common rice	30	28·5	29·5	27	27·5	25·5	24·5	26	26	22	28	39·2
	Indian-corn...	...	...	...	...	...	...	...	...	...	...	26	36
	Pulses	20	20	20	20	20	20	20	20	20	20	20	27
	Wheat	17	18	17	18	19	17·5	16·5	17	16·5	16	16	20·8
	Millet	...	...	...	...	...	...	...	...	...	...	30	36
TAJPORE	Common rice	22·3	21·1	20·9	19·9	19·3	17·6	17·6	17·5	18·2	18	19·6	21·8
	Indian-corn...	31·6	29·2	30	32	28·9	29·5	25	32	37·3	34·5	32	31
	Pulses	19·7	19·7	21·2	20·5	20·3	20·7	21·3	20·6	20·4	20·7	18·6	19·2
	Wheat	18·1	17·6	19	19·8	19·3	19·4	19·2	18·8	18·9	18·5	18·2	17·9
	Millet	...	...	...	...	...	...	...	...	...	...	...	...
DISTRICT AVERAGE.	Common rice	26·3	25	26	24·4	23·2	21·2	20·4	21·2	20·9	19·7	22·6	28·4
	Indian-corn...	30	32·8	30·5	33·6	32·2	31·9	30·4	32·4	34·6	33	30·7	35·2
	Pulses	19·1	18·7	19·4	20·6	20·3	19·5	21·1	21·2	20·6	19·8	17·4	20·5
	Wheat	18	17·6	17·7	19·6	20·3	18·3	18·3	19·2	18·3	17·7	22·9	34
	Millet	...	...	...	...	...	...	...	...	...	...	...	...

48. It will be seen from this statement that the retail market price of rice in the months during which it is thrown on the market—December, January, February—fluctuates about 26 seers for the rupee ; while in April, the time when rubbee is cheapest, the price of rubbee food-grains fluctuates about 20 seers for the rupee. It will also be seen that the price of bhadoi grain in September, when it are harvested, is much cheaper than either of the other two.

49. This variation in the market prices of the various sorts of food-grain rendered it necessary to determine the extent to which each crop was utilized in financing for the land rent.

On this point I have had inquiries made in Durbhunga, and the result is, as I had expected, that the rice crop, I might say, solely furnishes the means of liquidating that portion of the rent which is paid from the sale-proceeds of food-grain. The remainder of the rent is financed for by the sale of non-food staples, such as oil-seeds, tobacco, and sugarcane. If this be true of Durbhunga, which has a fair share of up-land cultivation, it must, *à fortiori*, be true of Mudhoobunnee, where up-land cultivation is less, and indeed not more than sufficient for the wants of the people in that direction.

50. For Tajpore my information on this point is incomplete; but as the rent must be financed for either by the sale of rice or of rubbee (the cheap bhadoi grains rarely forming an article of export), I think that the difference in the retail prices of these grains is not so great as to impose on me the necessity of adopting a different standard for each sub-division. The question does not admit of precise treatment, and I shall therefore assume that for the whole district the price of rice regulates all grain sold for the liquidation of rent charges.

51. I have stated that in January and February—that is, the time when the heaviest instalment of rent falls due—the retail price of rice fluctuates in the large markets about 26 seers for the rupee. The price at which the producers dispose of their produce must necessarily be under retail market prices, and in Mudhoobunnee and a large portion of Durbhunga they usually are very considerably under it. In the rice-producing tracts in those sub-divisions the cultivation is carried on on a system of advances made partly by mahajuns and local grain merchants, partly by merchants in Sarun and other importing districts. The crop is hypothecated and, as soon as reaped, exported from the district or stored in the local grain merchants' golas for exportation. It will be readily understood that under such a system local retail rates do not with precision determine the price at which the grain is disposed of at the cultivators' threshing-floor; but it may be considered as generally correct that this wholesale price is in ordinary years in or about 20 per cent. over retail\* rates. This would fix Re. 1.5 per maund as the average rate at which grain is sold in Durbhunga and Mudhoobunnee by the producers to wholesale dealers.

52. In Tajpore the average rate is much less, both because there is not such a surplus production, because the item of cost of carriage is largely eliminated, and because the grain is not primarily intended for export. I believe that 15 per cent. above market rates, or Re. 1.10 per maund, is about the rate at which in Tajpore producers sell the grain in financing for their rent.

53. At these rates, therefore, Re. 1.5 per maund in Mudhoobunnee and Durbhunga and Re. 1.10 in Tajpore, the following quantities of grain will be sold to defray rent charges in each sub-division:—

						Tons.
Sudder	...	...	...	...	...	39,728
Mudhoobunnee	...	...	...	...	...	50,068
Tajpore	...	...	...	...	...	11,868
				Total	...	101,664

This quantity of grain forms a fund which is at once available for export: is it all exported?

54. This brings me to the consideration of the district trade in ordinary years. It is a well-known fact that North-East Tirhoot is by far the largest exporting tract in Behar. This fact has been uniformly

\* The recent inquiries I have been, in conjunction with Mr. Geddes, c.s., engaged on with reference to the probability of scarcity in North Behar, have placed beyond doubt the moderateness of this estimate. In rural markets I found that in normal years rice is seldom dearer than 36 seers per rupee.

reported and dwelt upon by every officer who has administered the district; and although my own experience has not been a lengthened one, it has been sufficient to satisfy me of the correctness of the prevailing belief. The trade is almost entirely overland, and tends south-westwards towards Sarun and Southern Mozufferpore, and southwards to Monghyr and the Ganges. No effort has hitherto been made to gauge the magnitude of this traffic, but I believe it to be a perfectly safe estimate which makes it in average years 90,000 tons, or twenty-five lakhs of maunds. The traffic is almost altogether in rice, and it is therefore not surprising that, directed to other markets than those in rice-growing Bengal, it should escape registration at Sahebgunge. Indeed, I believe that no system of river trade registration can catch the trade in food-grain from Durbhunga, because such trade is only to an inconsiderable extent river-borne.

55. I produce the statistics of the Ganges trade downwards from the district and upwards to it during 1872, the only normal year for which they exist. I do so more for the purpose of illustrating the previous remarks and indicating the various articles of which the district trade consists than because of the little light they throw on the food-supply of the district.

*River Traffic Statement for the Durbhunga District for 1872.—(Registered at Sahebgunge.)*

	Rice.	Wheat.	Other grains.	Oil-seeds.	Fibres.	Tobacco.	Salt.	Sugar.	Hides.	Saltpetre.	Miscellaneous.
1	2	3	4	5	6	7	8	9	10	11	12
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Nos.	Mds.	Mds.
Imports ...	37,650	150	37,119	.....	2,496	44	2,94,559	.....	.....	.....	72,729
Exports ...	32	867	4,227	4,26,976	.....	15,546	.....	14,153	24,695	60,371	1,37,226

56. While the Mudhoobunnee and Durbhunga sub-divisions export food-grain largely without importing any, the Tajpore sub-division imports, without exporting more than is necessary to pay for the importations of food-grain it consumes, but does not grow, in sufficient quantity. Herein it resembles the Sarun district, and to the remarks which on this head were made in the section on that district I beg to refer as applicable in the present instance. It may be said that the exportation of food-grain from Tajpore, otherwise than in exchange for edible grain of a different kind, is so insignificant as to be almost inappreciable; and that such must be the case is evident from the fact that, due allowance being made for wastage of food-grain within the year, Tajpore produces barely enough to support its inhabitants and pay the share of the rent which is realized by the sale of food-grain. And this will appear the more forcibly if it be remembered that in calculating the annual produce in the preceding paragraphs I have adopted high average rates of outturn. In a year of short crops there is, I believe, in this sub-division a deficit of local production under consumption in good years. Outside of the quantity of food-grain sold to

pay rents, the sub-division produces no grain for a reserve to speak of. The circumstance of Tajpore being the part of the district which is most flourishing and least liable to suffer from vicissitudes of season is due to its valuable crops of tobacco and potatoes and to its large river frontage, which, besides conferring on the sub-division an advantageous commercial situation, possesses the additional advantage of being periodically inundated and rendered thereby less dependent on rainfall than the inland tracts.

57. The effect, then, of the district trade in ordinary years, I submit, to leave the district with a reserve of in round numbers—

				Tons.
Durbhunga Sudder sub-division	...	...	...	70,000
Mudhoobunnee	...	...	...	78,000
Tajpore	...	...	...	25,000
			Total	185,000

These figures are, however, inclusive of the wastage which during the year has taken place. Of course this wastage will be shown in the figures which represent the gross nominal surplus when all necessary expenditure has been made. I estimate this wastage so shown at 5 per cent. on the gross produce, exclusive of the grain sold, which, being exported early, bears its own wastage. The net surplus, then, would be for Durbhunga 53,000 tons, for Mudhoobunnee 63,000 tons, and for Tajpore 16,000 tons. Inasmuch as Mudhoobunnee has but little non-food crop staples on which to finance for its other wants, it may be assumed that it sells more food-grain proportionably than the other sub-division, and that the stock retained in ordinary years is never above 50,000 tons. It will be stating the condition of the sub-division in an unusually favourable light to attribute to it the possession in any year of 63,000 tons of reserve food-grain.

58. In a previous section I alluded to inquiries I made in Durbhunga regarding the practice which prevails among grain merchants on the question of keeping stocks in hand. Of course it will be understood that in such a matter no *universal* practice can prevail, and that the most we can ascertain is the general rule by which, amid varying circumstances, persons engaged in the grain trade endeavour to regulate their dealings. Now I have every reason to trust to the *bonâ fide* character of the information furnished me and to the competency of my correspondent, who is well known in native commercial circles, to furnish, as far as possible, correct information on a question within his province. When, then, I am told that native grain merchants never store more than a six months' supply for their constituents, and when it is implied that this is a maximum which is rarely reached, I am justified in abiding by the conclusion I have already arrived at, namely that the reserve in the northern sub-divisions is never over a four months' supply, and in ordinary years is not more than sufficient for three months' consumption. In Tajpore the want of an adequate reserve is supplied by an ever active private trade.

*Average Rainfall on Harvests preceding 1873-74.*      65

59. On this part of the subject I have no further observations to offer: I therefore present a statement of the average rainfall in the district, and pass on to its condition in 1874.

*Statement of Average Rainfall in the Durbhunga District from 1871 to 1874.*

SUB-DIVISIONS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Durbhunga ... ..	'30	'35	'51	1'05	1'18	8'02	16'11	9	12'14	2'39	...	'14	51'19
Mudhoobunnee ... ..	'89	'44	1'36	1'35	1'75	8'39	11'36	7'83	14'49	2'91	...	'04	50'81
Tajpore ... ..	1'06	'27	'60	'79	1'19	7'33	11'60	7'32	10'20	2'83	...	'12	43'31
District average ... ..	'75	'35	'82	1'06	1'37	7'91	13'02	8'05	12'28	2'71	...	'10	48'44

PART II.

60. I have already stated that the year 1873 was the last of a series of three years which, as regards the weather, were abnormal. In the year 1871 the rainfall was excessive; in the year 1872 it was deficient; while in 1873 it was dry beyond precedent. For purposes of ready reference, I throw into a tabular statement the rainfall during those years in the Durbhunga district:—

SUB-DIVISIONS.	Average rainfall.	Rainfall in 1871.	Rainfall in 1872.	Rainfall in 1873.
Mudhoobunnee ... ..	51'58	59'70	52'12	27'65
Durbhunga ... ..	52'25	78'70	42'13	23'88
Tajpore ... ..	42'4	48'93	43'33	30'99

61. The harvests of 1871, the unusual character of the weather notwithstanding, were on the whole excellent throughout Bengal; but this prosperity was not unattended by circumstances of local failure. In Tirhoot the winter rice crop of 1871 had been seriously injured by inundations, and this was especially the case in that portion of it which now constitutes the district of Durbhunga. The consequence was that during 1872 the price of rice and, to a less extent, the prices of all other edible grains were considerably above the normal rates. It was not till the excellent rice harvest of the winter of 1872 that the market showed signs of recovering its usual tone. The bhadoi harvest of 1872, the ensuing rice harvest, and the rubbee harvest of 1873, were full average crops; and the result was that although the previous dear year might have pressed on the resources of the people, there was in the autumn of 1873 as much grain in the country as there usually is at that time of the year. Whether there was more than there usually is, whether the abnormal weather may have warned an agricultural people highly sensitive to such warnings that more unpropitious weather was to come, against which it would be wise for

cultivators to accumulate a stock of food and for traders to contract their export operations in view of an impending dear market at home, is a question on which an affirmative conjecture would not be out of keeping with popular modes of action or of thought

62. The rains of 1873 commenced late, were insufficient to bring even the bhadoi crops to full maturity, or to permit of the usual rice area being sown down, and ceased in September with a deficiency under the normal fall varying from 11 inches in Tajpore to 23 inches in Mudhoobunnee and 28 inches in Durbhunga. The inevitable consequence was the failure of the rice crops in every sub-division, culminating in the almost total destruction of the winter rice crop in Durbhunga. The following statement shows the rainfall for each month of 1873 in each sub-division of the district :—

*Rainfall (in inches) in the District of Durbhunga in the year 1873.*

SUB-DIVISIONS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Durbhunga ...	·02	.....	1·43	·90	·16	3·89	7·04	7·24	2·73	.....	.....	·42	23·88
Mudhoobunnee ...	·18	·07	2·57	1·04	·25	4·38	8·60	4·93	5·59	.....	.....	·04	27·65
Tajpore ...	·25	.....	2·16	·79	.....	4·80	10·21	9·53	3·25	.....	.....	.....	30·99
District average...	·15	·07	2·05	·91	·21	4·36	8·62	7·23	3·87	.....	.....	·23	27·51

63. The failure in the bhadoi crops of 1873 varied in different portions of the district. In Mudhoobunnee and Tajpore the official reports record an outturn of half an average crop, while in Durbhunga the outturn is stated at five-eighths of an average crop. The failure in the winter rice crops was, however, much more complete than this, the official reports showing that in Tajpore only one-fourth, in Mudhoobunnee three-sixteenths, and in Durbhunga one-eighth, of an average crop was saved.

64. The result of the bhadoi and rice harvest of 1873 can now be stated in approximately precise terms. It stands thus in tons :—

	Bhadoi.	Winter rice.
Sudder sub-division ... ..	51,862	25,756
Mudhoobunnee ... ..	27,949	41,000
Tajpore... ..	24,893	10,883
Total ... ..	<u>104,704</u>	<u>77,639</u>

65. It will be gathered from paragraph 37 that in normal years the outturn of the bhadoi crop is for the whole district 188,663 tons, and of the winter rice 458,389. The deficiency of the bhadoi crop in 1873 was therefore 83,959 tons, and of the winter rice 380,570 tons. In other words, out of 647,052 tons, the normal produce of these two crops, there was in 1873 a deficiency of 468,709 tons.

66. Now, at the ripening of the bhadoi harvest of 1873 the only grain in the district was the reserves or stock in hand, which I take at the maximum stated in paragraph 57. The provision made for



consumption of the year which then terminated had been necessarily all expended. On those reserves, therefore (wastage excluded), and on the produce of the bhadoi crop, the people subsisted till the little grain which the rice harvest yielded was added to the stock. In the interval, that is, during the months of October, November, and December, the people consumed in round numbers in—

	Tons.
Durbhunga ... ..	60,000
Mudhoobunnee ... ..	42,000
Tajpore ... ..	39,000
Total ...	141,000

and the result was that, with the addition of the produce of the rice harvest, there were, in the commencement of January, in the different sub-divisions of the district, the following quantities of grain in round numbers:—

	Tons.
Sudder sub-division ... ..	68,000
Mudhoobunnee ... ..	90,000
Tajpore... ..	13,000
Total ...	171,000

or about three and half months' supply for Durbhunga, six and one-half months' supply for Mudhoobunnee, and one month's supply for Tajpore. It will be remembered that this was from the food-supply locally produced. It takes no account of importations: I shall come to them presently.

67. During the course of 1874 these stocks received a further addition from the produce of the rubbee crop of that year and of the subsidiary food-grains cheena, kurthee, &c. In the two northern sub-divisions the addition was inconsiderable, for the great drought of 1873 rendered it impossible to sow down the rubbee lands. To one traveling through Durbhunga or Mudhoobunnee in February and March last year (1874) the rubbee food-crops appeared scattered at distant intervals; and when they did occur, they were frequently hardly worth the trouble of harvesting. I do not believe that in Durbhunga they yielded more than 15,000 tons, or in Mudhoobunnee more than 10,000 tons. In Tajpore the case was different. In his special narrative of the 24th February, the Collector gives a not unfavourable account of the rubbee in that direction: the dearah land (those liable to inundation in the rains) yielded in 1874 a very good crop. On the whole, I interpret the report in the sense that all over the sub-division the crop was five-eighths, or perhaps even three-fourths, of an average crop, and yielded about 70,000 tons of food-grain. The total food-supply, therefore, which from local sources was in the district during the continuance of the scarcity was—

	Tons.
Durbhunga sub-division ... ..	83,000
Mudhoobunnee ... ..	100,000
Tajpore ... ..	38,000
Total ...	2,66,000

or over four months' supply for Durbhunga, seven months' supply for Mudhoobunnee, and nearly seven months' supply for Tajpore, at ordinary rates of consumption.

68. On this question of sub-divisional food-supply, however, I do not think that any real distinction can be made between Durbhunga and Mudhoobunnee. The latter stands to the former in the light of a rural to a metropolitan district. The chief mahajuns reside in Durbhunga, having agents in Mudhoobunnee; the stores in the latter district are always drawn on to supply the wants of the former; many of the Mudhoobunnee landlords, who are large storers of grain, reside in Durbhunga. Therefore I believe that it will be more correct to look on both sub-divisions as one tract as far as food-supply is concerned, and to say, in modification of the last paragraph, that to tide over the interval from January till September this tract drew from internal sources less than a six months' food-supply at ordinary rates of consumption. As Tajpore had internal resources to the same extent, the district as a whole drew from local sources less than a six months' supply of food-grain to last over nine months. It must not be forgotten, however, that food-grain forms only a portion of the rubbee crop in Tajpore; that it produces a highly valuable tobacco crop, which in 1874, though not a good crop, was still not much below the average; that it produces potatoes in abundance, and had a fair crop in 1874. Therefore these crops enabled it to draw largely on private trade for necessary supplies, and its position favoured the development of such trade. The northern sub-divisions had neither the same advantages of valuable non-food crops nor of a favourable commercial situation.

69. The deficiency in the food-supply was supplemented partly by private trade, partly by the grain imported by Government; but the combined efforts of both agencies failed to raise the stocks in the district to a level sufficiently high to obviate the prevalence throughout the year of general tightness in the markets of prices altogether abnormal, and of continuous pressure on all classes.

70. Private import trade reached its highest degree of development in Tajpore, where it rivalled the activity it displayed in Sarun; in Tajpore consequently Government action was least operative. On the other hand, this trade exhibited but a flickering vitality in Durbhunga, and this only in the south of the sub-division about the mart of Ruserah. It continued in this state during the early months of 1874, and then died away. In Mudhoobunnee, however, which is remote from the highways of traffic, and in ordinary years never imports food-grain, it never showed any signs of vitality from first to last. In Mudhoobunnee and Durbhunga, therefore, Government was compelled to put forth its full strength in its most organized form, and there were not wanting anxious days in March and April, when even sanguine men doubted whether the task was not too great for the resources of Government and the devotion of its officers.

71. In November 1873 Government declared that, whenever in any district the market price of common rice should rise to ten seers for a rupee, famine rates should be considered prevalent in that district. This very abnormal rate was not in Durbhunga reached in 1866 till the month of April; but in 1874 it prevailed from the commencement

of the year. By April 1874 it had risen twenty per cent. higher, and thenceforward the quotations for rice were merely nominal, for none owned by private dealers was to be had in the market.

72. The prevalence of higher prices in 1874 than those which prevailed at the corresponding period of 1866 was not restricted to the rice market only; it was also strikingly exemplified in the case of Indian-corn, which forms a staple article of food of the labouring classes. In January 1866 Indian-corn was selling at 18 seers for the rupee; in January 1874 the quotation was 13·9 seers; in April 1866 the price of this food-grain had risen to 14 seers; while in April 1874, when Government threw open its stores, the market price of Indian-corn was 12·9 seers for the rupee, that is, nearly three times the rate prevailing at that period in ordinary years.

73. The paucity of the existing data regarding the prices which for common food-grains prevailed in 1866 prevents my following the comparison further. What has been written is sufficient to show that at the juncture when in 1874 Government threw its stores on the market prices were everywhere higher than they were at the same time in 1866. Studying the prices-current of 1866 in this district by the light of contemporaneous official documents, I learn that those rates meant privation, deepening into great distress, and culminating in much mortality. Turning, then, to the prices-current in 1874, I should infer, even had I not been a witness to the truth of the inference, how inevitable last year would have been the occurrence, had not great precautions been taken, of a calamity far more ghastly than that which befel the district in 1866.

74. The following statement shows the prices-current in the district in 1874. From June the quotations for rice refer to the Government rice alone; none other was procurable, save a little table rice, which is never used by the people, and consequently not quoted in the official prices-current.

*Statement showing the Prices-Current in the District of Durbhunga in 1874.*

KIND OF GRAIN.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ... ..	10·3	10·1	9·1	8·9	8·3	10·2	13	14	14	15·7	19·2	23
Indian-corn ... ..	13·9	12·7	12·6	12·9	12·7	14·9	16	16	19·4	25·9	30	32·7
Pulses ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Wheat ... ..	11·3	11·7	11	10	10·5	11·5	12·3	13	13	13·9	14·5	15
Millet ... ..	18·5	16·5	14	15	14	14·6	16	22	24·3	27·3	31·4	37

75. I regret I am unable to furnish definite figures showing the extent of private importations of food-grain into Tadjore during 1874.

The official narratives regularly chronicle the fact that such private food-supplies found their way into the sub-division during the whole period of the scarcity, but there is no definite information regarding the quantity so imported. That it was, however, of very considerable magnitude, probably not under 30,000 tons, there is much reason to believe.

76. Into the Durbhunga sub-division the private importation of food-grains from *without the district* did not, during the continuance of the famine, reach a lakh of maunds in the aggregate, and probably were not much over 2,000 tons; while Mudhoobunnee, instead of importing, had to spare some of its stocks to Durbhunga and Nepal.

77. The following statement of traffic registered at Sahebgunge in 1874 is produced here chiefly with the view of showing how little the district last year was helped by private food-supplies sent from Bengal. The extent (if any) to which it benefited by the railway-borne private food-grain cannot for an obvious reason be shown separately from the similar traffic to the eis-Gangetic districts. It will, however, be included in the general trade statement for the division, which will be given later on.

*River Traffic Statement for the Durbhunga District for 1874 (in maunds).*

	Rice.	Other food-grains.	Oil-seeds.	Cotton.	Sugar.	Tobacco.	Salt.	Saltpetre.	Hides.	Others.
Imports ... ..	37,823	93,887	.....	.....	9	16	2,17,117	.....	.....	16,370
Exports ... ..	955	19,461	2,77,420	.....	4,565	38,076	12,510	83,270	20,355	1,31,354

78. I now proceed to exhibit in tabular statements the expenditure in grain and in money incurred by Government for the relief of the distress which resulted from the causes indicated in the preceding pages. I shall adhere to the plan followed in the preceding section, of showing the grain expenditure and money expenditure separately, but each in a complete form.

79. It will of course be understood that the statistics of expenditure which I proceed to tabulate have reference only to that portion of the gross expenditure debitable to famine which actually reached the hands of the indigent and distressed classes. I have excluded all other items, such as cost of establishment, transport charges, and the like, which, though important and necessary expenditure, were beyond the supervision of local executive officers. Those charges will more properly appear in the statements of the Comptroller of Famine Expenditure.

Trade in 1874.—Expenditure on Relief Operations. 71

Statement of Grain Expenditure incurred for the Relief of Distress during the Famine of 1874 in Durbhunga.

SUB-DIVISIONS.	Nominal quantity delivered, exclusive of transfers.	Grain sold for cash.	Grain distributed as wages.	Grain distributed in charitable relief.	Grain advanced on loan.	Fodder for Government transport.	Total grain expenditure.	Remainder.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Durbhunga ... ..	52,294	13,571	3,820	9,476	5,064	1,558	33,489	18,805
Mudhoobunnee ... ..	63,612	23,929	5,878	4,518	8,412	930	43,667	19,945
Tajpore ... ..	2,839	250	1,071	357	1,036	.....	2,714	125
Total ... ..	118,745	37,750	10,769	14,351	14,512	2,488	79,870	38,875

80. For the Mudhoobunnee and Durbhunga sub-divisions this nominal remainder is thus accounted for—

	Sold in disposal of surplus after close of relief operations.	Wastage on the nominal quantity delivered.
	Tons.	Tons.
Durbhunga ... ..	12,168	6,637
Mudhoobunnee ... ..	12,311	7,634

I am unable to distinguish the items which make up the inconsiderable surplus in Tajpore.

81. I have here to remark that the wastage in the district was not more than half what is here represented. The nominal deliveries were fully 5 per cent. greater than the quantity of grain actually delivered; this 5 per cent. representing the wastage which occurred from the time the grain was bought by Government till it was brought to the local store-houses. In the district the wastage was about 5 per cent. additional.

82. The next statement exhibits the expenditure in cash which reached the hands of those who stood in need of relief.

Statement of Expenditure incurred by Distribution, or Advance of Recoverable Loan, or Payment of Wages in Cash, to Distressed Persons in Durbhunga during the Famine of 1874.

SUB-DIVISIONS.	Distributed in gratuitous relief.	Advanced on recoverable loan.	Paid as wages on relief works.	Total cash expenditure as per columns 2, 3, & 4.	REMARKS.
	Rs.	Rs.	Rs.	Rs.	
Durbhunga ... ..	1,73,250	72,250	10,98,990	.....	The figures in column 3 for Mudhoobunnee and Tajpore are estimates.
Mudhoobunnee ... ..		35,000	20,19,123	.....	
Tajpore ... ..		10,000	70,716	.....	
Total ... ..	1,73,250	1,17,250	31,88,829	34,70,329	

83. I have now arrived at the final stage of my inquiry connected with Durbhunga. This stage is the exhibition of the numbers of distressed people who, by the expenditure specified in the preceding statements, were, in one way or another, relieved. For those relieved by gratuitous charitable distribution of grain or money, and by payment of wages in grain or money on relief works, the official documents before me furnish definite numbers. These numbers I reproduce; and for the rest I shall offer estimates based on the plan already laid down, namely, that of supposing that 23 seers of grain relieved an individual for one month, and one anna another individual for one day. The following statements, therefore, set forth actual figures:—

SUB-DIVISIONS.		FORTNIGHT ENDING ON THE—													Average daily number relieved during the continuance of scarcity.	
		6th April.	21st April.	4th May.	18th May.	1st June.	15th June.	29th June.	13th July.	27th July.	10th August.	24th August.	7th September.	22nd September.		6th October.
Durbhunga	...	14,563	74,132	53,000	72,027	107,643	111,178	123,465	133,941	124,852	112,489	98,890	60,397	27,660	14,275	81,110
Mudhoobunnee...	...	...	7,000	26,153	34,000	45,531	43,800	51,432	42,339	59,908	71,561	52,781	34,377	16,371	10,250	38,154
Tajpore	...	...	...	...	1,155	2,388	4,040	5,726	7,463	5,483	5,463	5,997	...	...	...	4,787
District average...	...	14,563	81,132	84,153	106,027	154,329	157,566	180,937	182,006	182,253	189,533	167,504	100,771	44,537	24,525	124,051

  

SUB-DIVISIONS.	Aggregate number of individuals employed.	AVERAGE DAILY ATTENDANCE EACH MONTH.											
		October 1873.	November 1873.	December 1873.	January 1874.	February 1874.	March 1874.	April 1874.	May 1874.	June 1874.	July 1874.	August 1874.	September 1874.
Durbhunga	...	20,175,159	...	...	1,500	25,000	107,053	220,299	192,168	76,183	24,688	21,628	3,996
Mudhoobunnee...	...	33,687,390	...	...	1,000	20,000	140,547	309,212	869,207	190,398	41,164	36,026	15,004
Tajpore	...	1,512,710	...	...	...	...	3,802	2,077	8,017	13,362	11,763	8,754	2,682
Total	...	55,375,259	...	...	3,500	45,000	251,402	531,578	1,669,402	279,943	77,615	66,408	21,682

Statement of Laborers employed in Durbhunga during the Relief Operations of 1874.

*Relief Expenditure—(Continued).—Extent of Relief.* 73

84. An analysis of these statements, and a calculation of the estimates referred to in the closing words of the penultimate paragraph, will give the following statement, which I think is calculated to give a precise and realistic idea of the effect of the famine expenditure.

*Statement based on the actual number of people assisted by Government during the Famine, but herein supposed to have exhausted such assistance in one month of 30 days.*

NAMES OF SUB-DIVISIONS.	Number charitably relieved.	Number relieved by wages.	Number relieved by advances.	Number relieved by sales of grain.	Total number relieved for one month.
Durbhunga ... ..	326,215	682,539	285,128	660,850	1,954,732
Mudhoobunnee ... ..	209,797	1,121,813	428,296	1,165,240	2,925,146
Tajpore ... ..	19,148	51,534	55,782	12,174	1,38,638
Total ...	555,160	1,855,886	769,206	1,838,264	50,18,516

85. A comparison of the totals in the last column of this statement with the population of Durbhunga sub-division as stated in the special census report and with the populations of the other two sub-divisions as recorded in Mr. Beverley's report would seem to show that in the Durbhunga sub-division relief was afforded for 58 days to people equal in number to the entire population of the sub-division; that in Mudhoobunnee relief was afforded for four months and seven days to people equal in number to the population of that sub-division; while in Tajpore the relief afforded was sufficient to support the population for less than one week. The total population of the district, therefore, could have existed on the assistance afforded for two months and five days.

86. It must, however, not be forgotten that a considerable portion of the grain sold in Mudhoobunnee found its way into Nepal, and also that a large portion of the cash expenditure everywhere returned to the Government treasury in the shape of sale proceeds of grain. I am unable to determine how much money found its way back in this way; but it is as obviously necessary to make allowance for this money as it is for the numbers of Nepalese who subsisted on the grain they bought and the money they received as wages in our territory. Having given the question as careful a consideration as its general and indefinite nature permits, I think that for the Mudhoobunnee sub-division a full month or more should be deducted from four months and seven days stated in the last paragraph as the time during which the inhabitants of that sub-division stood in need of relief, and that for Durbhunga the deduction should not be less than a fortnight. I would make no deduction on this head for Tajpore, for there the market

rarely stood in need of supplies of Government grain. The result, then, is that numbers of our own subjects, equal to the population of the district, received assistance for, in, or about, six weeks.

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NOTE.—Since the preceding went to press, I have been favoured by Colonel Burn, the manager of the Durbhunga Wards' Estate, with a detailed account of the expenditure incurred by the estate for the relief and prevention of distress in the districts in which it is situated. No division, however, has been made in Colonel Burn's accounts shewing the expenditure in the present Durbhunga or Mozufferpore districts. In 1874 both districts still formed together the district of Tirhoot. To the tenantry on the Tirhoot estate the manager advanced on loan 1,66,415 maunds of grain and Rs. 83,181 in cash.

In charitable and irrecoverable expenditure he distributed 10,516 maunds of grain and Rs. 30,017 in cash. In relief works on the estate under the immediate superintendence of Mr. H. W. Stevens, the Superintending Engineer, the wages paid amounted to Rs. 4,02,986 (value of grain paid as wages included); and in relief works carried out under the superintendence of Colonel Burn's administrative subordinates the wages paid consisted of 794 maunds of grain and Rs. 41,473 in cash.

The value of grain paid away in wages by the Superintending Engineer is rated at the cost it stood to the estate when delivered at the local store-houses: this I gather from the figures before me, varied from Rs. 4 to Rs. 5 per maund. The cost of the grain therefore to the estate is no criterion of the effects it had in relieving the people; but, making the fairest allowances I can on this head, I think the total expenditure incurred by the estate in Tirhoot sufficed for the support of its tenantry for a month.







## SECTION IV.

### MOZUFFERPORE.

It is unnecessary to repeat here what has been written in the preceding section regarding the character of the Statistical Return 41B., 1872, for Tirhoot; the objections urged against its employment in the case of Durbhunga apply with equal force to Mozufferpore, the other district into which Tirhoot has been divided. Failing that statistical return, there are no data having official authority that bear directly on the agricultural condition of Mozufferpore, except the estimates of cultivation contained in the Collector's reply to Circular No. 70.

2. Before dealing with these estimates, I must state that the Collector was careful to claim for them no statistical precision.

3. The estimates put the area of land bearing food crops at 510,080 acres in the Seetamurhee sub-division, 557,360 acres in the Sudder sub-division, and 254,080 acres in the Hajeepore sub-division. It is not possible, from the document under consideration, to make out how much land in each sub-division is cultivated with other crops than food-grain.

4. Now, comparing this acreage with the gross area of each sub-division, I find that in Seetamurhee 81 per cent., in the Sudder sub-division 66 per cent., and in Hajeepore 60 per cent. of the gross area is devoted to the cultivation of food crops. Introducing the element of population, I find that the Sudder sub-division, which has a population per square mile but 2 per cent. less dense than Seetamurhee, has, relatively to its area, 15 per cent. less land under cultivation of food crops; and I also find that Hajeepore, with a population per square mile 15 per cent. denser, has—the relation being to respective areas—21 per cent. less land under food crops. Now, it would be an obvious fallacy to say generally that density of population is an index to the extent of cultivation. It is manifest that of two areas with populations equally dense, one may be a manufacturing region with no tillage to speak of; one may grow in a smaller space valuable crops, and so command an equal or larger supply of food in the market; in one the standard of comfort may be lower and consequently production less brisk than in the other: the general proposition is misleading; but with certain restrictions and limitations, and under certain circumstances, it is in the main true. What those limitations and circumstances are has been stated at length in the section on Shahabad, and it is unnecessary to repeat them here. I assume the proposition that, given two rural areas with a population of the same density, and with soil, productions, advantages, and habits of the people similar to each other, then the area under cultivation in the one is a measure or index of the cultivated area in the other.

5. Now I propose to apply this proposition to the case of the Sudder sub-division of Mozufferpore, and having determined there the questions in issue regarding cultivation, I shall proceed to deal with Seetamurhee and Hajeeopore.

6. There is a marked similarity between the Ruserah thana of the Durbhunga head-quarters sub-division and the Sudder sub-division of the Mozufferpore district, which it adjoins. The similarity is not only one of physical aspect and the relative admixture of up-land and low-lands; it is also one of soil, climate, productions, natural advantages of river frontage, and other facilities for trade. The standard of comfort among the people seems to me to be identical, and the density of population per square mile exhibits the insignificant variation of 1.1 per cent. If the proposition I have enunciated in the penultimate paragraph be true of any two areas, and its relevancy to cases like the present has been demonstrated in the section on Shahabad, then it will be true of the Ruserah thana of the Durbhunga district and of the Mozufferpore Sudder sub-division.

7. Nowhere during the special census of October 1874 were agricultural statistics collected with more care and success than in this thana. The error which over the whole sub-division amounted to 10 per cent., reached on this area of 502 square miles only 6 per cent. The statistics collected therefore are, as they stand, accurate enough for practical purposes; but to secure absolute precision on this side of the question, I have allowed for the percentage of error referred to.

8. This being done, I find that in the Ruserah thana the proportion of cultivated to uncultivated land is as 72.7 is to 27.3; or, to put it in other words and round numbers, that the cultivated land is 73 per cent. and the uncultivated 27 per cent. on the gross area. I find further that of the cultivated area 36.7 per cent., say 37 per cent., are up-land, and 63.3, say 63 per cent., dhan land. Now these percentages will, I submit, represent with general faithfulness the proportions which in this matter prevail in the Sudder sub-division of Mozufferpore.

Applying them to that sub-division, which is 1,311 square miles, or 839,040 acres in extent, the following result declares itself:—

					Acres.
Cultivated area	...	...	...	...	612,500
Uncultivated „	...	...	...	...	226,540
					<hr/>
Dhan land	...	...	...	...	385,875
Up-land	...	...	...	...	226,625
					<hr/>

9. On the question of the relative extension of rubbee, bhadoi, and non-food-crop cultivation (the latter occupying the soil for a whole year), it has been stated in the section on Durbhunga that, allowance being made for double cropping, the first was 63, the second 75, and the third 15 per cent on the cultivated up-land area. In my recent deputation to Behar on the commission to inquire into the apprehended scarcity in the northern districts, I paid particular attention to this point of double cropping, and I am satisfied that the custom which prevails in Durbhunga, and

the extent to which the custom is carried, prevails generally throughout North Behar. In adopting the Durbhunga proportions here, I think, therefore, I shall reach approximately correct results.

10. The following statistics result from the preceding observations :—

	Acres.
Rice ... ..	384,875
Bhadoi crops ... ..	169,969
Rubbee ... ..	178,238
Non-edible staples occupying soil for a year ... ..	33,993

The uncultivated area, which is 27 per cent. on the gross area, will, when subdivided on the proportions which obtain in Ruserah, give the following results:—

	Acres.
Village sites 7 per cent. ... ..	15,857
Orchards 11 „ ... ..	24,919
Pasturage 34 „ ... ..	77,023
Waste ... ..	108,740

I shall throw these results into a tabulated form presently; first I shall deal with the other sub-divisions.

11. When I found myself confronted on the threshold of this inquiry by the dearth of precise statistical data for most of the districts, I ventured to suggest to Collectors that the records of recent butwara cases or recent land measurement cases might furnish trustworthy figures on which generalizations might be based. I believed that if, fortunately, the surveys essential to cases of that nature had been made in areas representative of the physical aspect of the country and of the character of its soil, the statistics of such surveys would be a valuable indication to, or a fair basis for, generalizations to the state of the whole region from an agricultural point of view. On my recent deputation to Behar, already alluded to, I obtained, through the courtesy of Mr. Worsley, the Officiating Collector of Mozufferpore, a mass of those valuable butwara statistics for the southern and central pergunnahs of Seetamurhee sub-division. For the northern tracts no such statistics were available. But here five pergunnahs belong to the Durbhunga estate; and for this large tract of country, covering 50,000 acres, I have been favored by Colonel Burn, the general manager of the estate under the Court of Wards, with definite figures of cultivation. The data available, therefore, for constructing a statement of agricultural statistics for Seetamurhee are fortunately wide and trustworthy. I may add that during my deputation, in conjunction with Mr. Geddes, c.s., to this sub-division, I lost no opportunity of verifying and correcting the results these data gave.

12. My present purpose does not demand the reproduction\* their entirety of the butwara statistics furnished me by Mr. Worsley or the zemindari figures supplied by Colonel Burn. Their general effect, or rather the result of an induction from them to the degree of extension of agriculture throughout the sub-division, is to show that of the gross area 76 per cent. is cultivated land, and that of this cultivated land nearly 60 per cent. is paddy land and 40 per cent. up-land, yielding rubbee and bhadoi crops. I beg to invite attention to the close similarity,

\* For an exemplification of my method of utilizing these butwara figures see note page 48.

as exemplified by these statistics and by those for Durbhunga, which is thus shown to exist between the state of agriculture throughout the whole district wherever the same, or nearly the same, density of population prevails; the slight increase in the relative extent of cultivation in Seetamurhee over the Sudder sub-division is doubtless due to, as it is in proportion with, the small excess of population in the former sub-division.

13. Neither the statistics compiled from the records of partition cases nor the statistics collected from the Durbhunga zemindari papers throw special light on the proportion of the up-land cultivated area which is usually sown with bhadoi crops or with rubbee crops, or which is occupied all the year round with non-food-crops. On this point I must adopt, as approximately correct, the proportions which, on special inquiry, I found to prevail in Durbhunga. I have already stated my recent inquiries have satisfied me these proportions are approximately correct.

14. The preceding observations embody sufficient data for the sub-division of the cultivated area in Seetamurhee; the uncultivated area I shall, in the absence of more definite information, subdivide on the basis of the proportions I have adopted for the Sudder sub-division.

15. It now remains to deal with the subdivision of Hajeeopore, for which, I regret to say, I can adduce no agricultural statistics founded on actual experiment. Mr. Worsley has favoured me with some butwara figures for estates in the sub-division; but, in the first place, the estates do not seem so scattered over the sub-division as to support a presumption that they give a fair indication to the state of the whole tract; and in the next place, the figures are in many respects defective. Mr. Worsley, who pointed out their defectiveness to me, will doubtless have them supplemented, and will utilize them in the statistical inquiries which he himself, in the small leisure spared him from his able administration of an important district, is successfully prosecuting. In the absence of definite information, I am compelled to suggest that the extension to Hajeeopore of the proportions which prevail in the adjoining sub-division of Tajpore, with, however, one modification, will give approximately true results. The situation of the two sub-divisions, the identity in kind of their staple productions, the predominance in each of up-land over rice land, would seem to justify such an extension; while the greater density of the recorded population in Tajpore would seem to preclude it. With a view to making allowance for the lesser density of population in Hajeeopore, and for the comparatively greater extent of pasturage land there than in Tajpore, I would increase the uncultivated margin in the former to 20 per cent. on the gross area, which is 5 per cent. more than the proportion I have adopted for Tajpore. In no other particular would I alter the Tajpore percentages on applying them to Hajeeopore, believing that they will be found generally true, and also believing that even if an error result from the application to Hajeeopore of the proportions elicited for Tajpore, it will be of a nature calculated to exhibit the former sub-division more highly cultivated than it is: for my purpose such an error will be on the right side. However the matter may be, I can think of no other plan more likely to give results approximately true. The following statement

of agricultural statistics for the district tabulates the results of the preceding discussion :—

*Estimates of Agricultural Statistics for Mozufferpore District.*

NAME OF SUB-DIVISION.	Gross area.	Cultivated area.	CULTIVATED AREA SUB-DIVIDED.				Uncultivated area.	UNCULTIVATED AREA SUBDIVIDED.			
			Rice area.	Upland area.				Village sites.	Orchards.	Pasturage; thatching grass.	Road; waste.
				Bhadoi.	Rubbee.	Non-food crop occupying soil for a year.					
Sudder ...	839,040	612,500	385,875	169,969	178,238	34,000	226,540	15,857	24,909	77,023	117,790
Seetamurhee	636,160	484,365	287,444	158,327	128,641	29,686	151,795	10,625	16,697	51,600	78,932
Hajepore ...	423,680	338,994	89,511	135,759	177,828	40,573	84,686	8,473	8,473	21,184	42,369
Total ...	1,898,800	1,435,859	762,830	464,055	484,707	104,259	463,021	34,955	50,079	149,807	239,091

16. I now proceed to estimate the average annual outturn of food-grain crops from this cultivated land. I am in possession of specific information regarding the average outturn per acre of each crop in 39 villages of the Jerail pergunnah which adjoins, and portion of which is situated in, the Seetamurhee sub-division. This pergunnah, however, is not quite so fertile as some other portions of the sub-division. In the 39 villages to which I refer, and which form portion of the Durbhunga estate, the outturn of rice land varies from 10 to 19 maunds per acre, the average being 13 maunds. I think, therefore, with reference to what I have stated regarding the soil of this pergunnah, that for the whole sub-division an average of 14 maunds, or say half a ton, of cleaned rice is a fair and proper one.

17. In these villages the average yield of wheat per acre is close on seven maunds; but for other rubbee and bhadoi grains the information on this head is indefinite and incomplete. I am, however, in possession of unofficial information from a most trustworthy source,\* which confirms my belief that for the bhadoi crops the Durbhunga average of 12 maunds per acre holds good for Seetamurhee, while the average produce per acre of the rubbee crops in this sub-division varies about 8 maunds of food-grain.

18. Turning to the Mozufferpore sub-division, I see no reason to think that the averages just stated should be materially altered. Certainly there is no ground for any alteration as far as the bhadoi and rubbee crops are concerned. Regarding the rice-crop, the lighter soil of Central and Southern Mozufferpore might suggest the propriety of

\* From Mr. Anderson, proprietor of the Kamptoul indigo concern, a gentleman of thirty years experience of Tirhoot.

adopting the Jeraïl average of 13 maunds to the acre in preference to any other; but as my averages are those of good years, I believe I shall be correct in accepting  $\frac{1}{2}$  ton of husked gram as the outturn per acre of winter rice land.

19. The yield per acre of rice land in Hajeeapore is under the average prevailing in the rest of the district, and may be assumed to be 10 maunds to the acre. The outturn of the bhadoi crop is not less than elsewhere, that is, it is 12 maunds to the acre, while the outturn of an acre of rubbee land is considerably higher than in the Sudder or Seetamurhee sub-divisions. It is not an unusual thing for an acre of the rich alluvial soil of the riparian tracts to return 16 maunds, and sometimes 20 maunds, of food-grain per acre. I think that as an average for the sub-division 12 maunds of food-grain is not above the mark.

20. I may observe here that the average rates of produce per acre of rice land accepted in the preceding remarks are in every case above those stated by Mr. Ottley in his note on rice statistics published in the first number of the *Statistical Reporter*. Mr. Ottley's averages, compiled for the Irrigation Department, are for—

Seetamurhee	... 19 maunds paddy	= 12 maunds cleaned rice per acre.
Sudder sub-division	19 " "	= 12 " "
Hajeeapore	... 12 $\frac{1}{2}$ " "	= 8 " "

These are the averages framed on a consideration of good and bad years together. My averages are based on a consideration of good years alone. I have no doubt that, from his point of view, Mr. Ottley's statistics are correct; they seem to have been carefully compiled from a wide basis of inquiry.

21. Now, applying the average rates of produce for ordinary good years which I have accepted to the estimates of agricultural statistics produced in paragraph 15, the following results will be obtained:—

	Sudder sub-division.	Seetamurhee.	Hajeeapore.
Rice (winter)	... 192,938	143,722	31,970
Bhadoi	... 72,844	67,854	58,168
Rubbee	... 50,925	36,750	76,212
Total	... 316,707	248,326	166,350

The gross annual outturn of food-grain from these crops will therefore be in an average good year 731,383 tons.

22. To this total an addition has to be made for the outturn of the subsidiary food-grain crops, such as "koorthee," "cheena," &c. The cultivation of these crops varies as to extent with the favourable or unfavourable character of the chief harvests, being inconsiderable when they have been abundant, and being more extensive when they have been deficient. It is evident, therefore, that the extent of this cultivation cannot be fixed with any approach to precision. The nearest estimate I can make of the outturn is to say that the cultivation of these subsidiary crops in no year covers more than 10 per cent. of the cultivated area, and that in average years it varies between five and ten per cent. In average years these crops (which yield about five



maunds to the acre) probably raise the gross produce from the totals already stated to 326,000 tons in the Sudder sub-division, to 255,000 tons in Seetamurhee, and in Hajeeepore to 170,000 tons.

23. I now proceed to compare this food-supply, locally produced, with the wants of the inhabitants of each sub-division of the district.

At the rates of average daily consumption laid down in the section on Shahabad (namely three-quarters of a seer per individual) the annual consumption will be in the—

					Tons.
Sudder sub-division	...	...	...	...	226,918
Seetamurhee	...	...	...	...	175,752
Hajeeepore	...	...	...	...	132,925
				Total	535,595

24. Now, subtracting these totals of sub-divisional consumption from the total production, the result will be, in round numbers, a surplus production of, in the—

					Tons.
Sudder sub-division	...	...	...	...	98,082
Seetamurhee	...	...	...	...	79,248
Hajeeepore	...	...	...	...	37,075
				Total	214,405

25. The next step in this discussion is to show how this gross nominal surplus is reduced or disposed of, and as I have nothing new to add here to the principles already laid down on this part of the subject, I shall omit recapitulation and merely indicate results.

26. In the first place, then, the surplus is liable to reduction by so much grain as may be necessary to replenish the stocks of seed. At the rates prescribed per acre for seed-grain in the section on Shahabad the deductions under this head will be, in the—

					Tons.
Sudder sub-division	...	...	...	...	20,000
Seetamurhee	...	...	...	...	12,569
Hajeeepore	...	...	...	...	9,500
				Total	42,069

27. The stocks still available for disposal will therefore be, in the—

					Tons.
Sudder sub-division	...	...	...	...	78,082
Seetamurhee	...	...	...	...	66,679
Hajeeepore	...	...	...	...	27,575
				Total	172,336

28. Out of this remainder a portion is sold to pay that portion of the land rent which is realized from the sale proceeds of food-grain.

The road cess valuations are not yet complete for the district, nor am I in possession of information sufficient to indicate what their probable result will be. I am therefore compelled to estimate the rental of the district by other means.

29. The special statistical inquiries in the Jerail pergunnah to which I have already referred furnish specific information regarding the rates of rent prevalent in Seetamurhee for each sort of land; and as the inquiries were made in an estate under the Court of Wards' management, it is to be understood that these rates include all *abwabs* or cesses which other zemindars may possibly levy under a different name than rent; for such contributions, therefore, I shall here have to make no allowance.

30. The special inquiries show that in 39 villages of this sub-division the rent of rice land varies from Re. 1-10-7½ to Rs. 6-12 per acre, the average being about Rs. 3-12-0 per acre; while for cultivated up-land the rates per acre vary from Re. 1-8-3 to Rs. 5-12-0, with an average of about Rs. 3. In the absence of more specific information, I shall adopt these average rates for the Sudder sub-division also, as well as for Seetamurhee. The Hajeeapore rates, it seems, assimilate to those prevalent in Tajpore.

31. At these rates of rent, then, the annual rental of the cultivated land will be, sub-division by sub-division, as follows:—

						Rs.
Sudder	...	...	...	...	...	21,26,906
Seetamurhee	...	...	...	...	...	17,89,648
Hajeeapore	...	...	...	...	...	12,66,435
				Total	...	<u>51,82,989</u>

32. Now, there is every reason to suppose that the portion of the rental financed by the sale of food-grain in this district agrees very closely to the portion so liquidated in Durbhunga; and I believe I am near the mark in assuming for Seetamurhee and the Sudder sub-division the Durbhunga proportion of three-fourths, and for Hajeeapore the Tajpore proportion of three-eighths.\* At these proportions, then, food-grain must be sold to realize in the—

						Rs.
Sudder sub-division	...	...	...	...	...	15,95,180
Seetamurhee	...	...	...	...	...	13,42,236
Hajeeapore	...	...	...	...	...	4,74,913
				Total	...	<u>34,12,329</u>

33. I now proceed to consider the question of how much grain is sold in each sub division in ordinary years to realize those shares of the gross rental. Obviously this depends greatly on the kind of grain sold. Wheat sells dearer than rice, and rice than millet or Indian-corn;

\* Since the above was written, I have received official information from the Collector of Mozufferpore which bears out fully the Hajeeapore proportion I have given, and which differs so little from what I have stated is the case in the other sub-divisions that I have not deemed it necessary to alter the text.

and if all three were sold indiscriminately, it would be impossible to estimate the quantity disposed of with any degree of accuracy. The difficulty thus shadowed forth, however, exists in only an inconsiderable degree. The same custom which prevails in one half of the Tirhoot district may be safely assumed to prevail in the other half; and the fact that the two heaviest kists, or periodical instalments of the annual rent, fall due at the ripening of the bhadoi and winter rice is an indication of the solution of the difficulty. This matter has been noticed in the section on Durbhunga. I introduce again here, mainly for the purpose of citing, in support of the evidence already offered, the opinions of two gentlemen very competent to express opinions on this and on cognate questions of rural economy, Mr. Metcalfe, the Officiating Commissioner of Patna, and Mr. Anderson, the very experienced and respected proprietor of the Kamptoul indigo concern in Seetamurhee. Mr. Metcalfe has stated his conviction that in Tirhoot the portion of the rent financed for by the sale of food-grain comes from the sale proceeds of rice "which," says Mr. Metcalfe, "is the zemindar's crop;" and Mr. Anderson states the fact, which besides was made abundantly evident last year, that the bhadoi crops, millet and Indian-corn, are mainly reserved for local consumption. I therefore consider that for all practical and statistical purposes I am safe in assuming that in Northern and Central Mozufferpore it is the price of rice which regulates the market for grain sold to defray the rent of land; for the practice in Hajeeapore I refer to paragraph 50 of the section on Durbhunga, where the custom in rubbee-producing Tajpore is alluded to.

34. In order to show what the price of rice in normal years is, I here produce a statement of prices-current in ordinary years:—

Statement showing the average prices-current in the district of Mozufferpore from 1868—72.

SUB-DIVISION.	Kind of grain.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
		Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
MOZUFFER- PORE.	Common rice...	21·2	21·4	20·8	20·4	19·6	19·2	18	18·1	18·2	19	20·6	21
	Indian-corn ...	30·6	30·2	30·6	29·8	28·2	27·8	26·5	25·5	31·2	31	31	31
	Pulses ...	16·6	15·2	16·4	16·4	16·6	17	17	16	16	14·8	15·2	15·2
	Wheat ...	16·2	16·2	16·6	18	18·6	18·4	18·2	17·3	16·8	16·2	15·6	16·2
	Millet ...	29·8	29·2	30·6	29·6	28·2	27·4	27	27	31	29·8	31·2	31·6
HAJEEPORE*.	Common rice...	...	...	...	17	16	15	14·5	15	15	16·5	16	16·5
	Indian-corn ...	...	...	...	...	...	...	...	...	...	...	...	...
	Pulses ...	...	...	...	...	...	...	...	...	...	...	...	...
	Wheat ...	...	...	...	20	20	20	17	16	15·5	15·5	16·5	17·7
	Millet ...	...	...	...	...	...	...	...	...	...	...	...	...
SEETA.* MURHEE.	Common rice...	...	...	...	...	21	19	21	21	22	22	23	25
	Indian-corn ...	...	...	...	...	25	25	27	27	40	42	46	46
	Pulses ...	...	...	...	...	25	23	25	25	34	34	25	25
	Wheat ...	...	...	...	...	27	25	25	23	21	20	20	20
	Millet ...	...	...	...	...	37	34	37	35	42	42	44	44
DISTRICT AVERAGE.	Common rice...	21·2	21·4	20·8	18·7	18·9	17·7	17·8	18	18·4	19·2	19·9	20·8
	Indian-corn ...	30·6	30·2	30·6	29·8	26·6	26·4	26·7	26·2	35·6	36·1	38·5	38·5
	Pulses ...	16·6	15·2	16·4	16·4	20·8	20	21	20·5	20	19·4	20·1	20·1
	Wheat ...	16·2	16·2	16·6	18	21·9	21·1	20·1	18·8	17·8	17·2	17·4	18
	Millet ...	29·8	29·2	30·6	29·6	32·6	30·7	32	31	36·5	35·9	37·6	37·8

\* Price current records are imperfect for these sub-divisions—see Appendix.

35. I gather that so much of the surplus rice produce as the cultivators dispose of to pay rents is sold cheaper in the more northerly than in the southerly tracts ; bearing this in mind, and making due provision for a margin of profit and for cost of carriage, I think a fair average rate for Seetamurhee would be Re. 1-6 per maund, for the Sudder sub-division, Re. 1-8 per maund, and for Hajeeapore Re. 1-10 per maund. Adopting these averages, I calculate that to pay that share of the rent which is realized from the sale proceeds of food-grain cultivators must sell in—

			Tons.
Seetamurhee	...	...	37,766
Sudder sub-division	...	...	37,980
Hajeeapore	...	...	10,438
		Total	86,184

This quantity therefore forms the grain fund which is at once available for export.

36. There will thus remain to the producers in the Sudder sub-division 40,102 tons, in Seetamurhee 28,900 tons, and in Hajeeapore 17,137 tons nominal surplus. The actual surplus, however, is less than that quantity by the wastage which has occurred during the year, and which may, I think, be estimated at a minimum of 5 per cent. on the gross produce. The result, then, will be a reduction of this nominal surplus to a net surplus for the district of about 60,000 tons in round numbers, or about five weeks' supply.

37. This result, viewed in the light of the considerations offered on the analagous circumstances prevailing in Sarun, will suggest that from the Mozufferpore district the exportation of food-grain cannot be considerable. The grain sold in liquidation of the rent will, in years of short crops, be in great part required for consumption in the district, and it is only in an average good year—such a year, in fact, as I have attempted to exemplify—that much of it can be exported. It may be unnecessary for me to add, by way of obviating a misapprehension of my meaning, that by exportation here I mean that quantity of food-grain which is removed from the district otherwise than in payment, directly or indirectly, of a corresponding quantity imported. I have stated in a previous section that such export transactions, broadly speaking, in the long run leave the food-supply of a district unchanged as regards quantity, and with them, therefore, I have no concern here.

38. Some exportation, however, in ordinary years does take place from this district. From the Seetamurhee and Sudder sub-divisions rice is exported (much Nepal rice passes through Seetamurhee to the south) and rubbee grains imported ; from Hajeeapore the exports are rubbee grains. The trade from the northern sub-divisions is an overland trade and tends south-westwards ; but seeing that not only no information exists separating it off from the general trade of Tirhoot, but also that for Tirhoot itself the trade statistics are more or less conjectural, it is not possible to do more than estimate the magnitude of the trade in question. It seems to me, then, all things considered, that it cannot exceed 40,000 tons in the most prosperous years, and probably in an average year does not reach 30,000 tons.

39. The Sahebgunge trade statistics do not throw much light on the subject, for the river-borne export trade in food-grain from Behar districts generally tends westwards up-stream, and not southwards or down-stream. I subjoin the statistics for 1872, compiled from the Sahebgunge registration returns, in illustration of what I state.

*River traffic statement for the Mozufferpore district for 1872.*

	Rice.	Other food-grains.	Oil-seeds.	Cotton.	Sugar.	Tobacco.	Salt.	Saltpetre.	Hides.	Other commodities.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Nos.	Mds.
Imports ... ..	91,878	10,690	.....	...	.....	...	1,12,147	.....	.....	5,535
Exports ... ..	.....	1,499	3,023	88	1,481	404	5,991	85,057	1,865	4,060

40. The following statement shows the average rainfall in each sub-division of the district :—

*Statement showing the average monthly rainfall in the district of Mozufferpore.*

SUB-DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Sudder ... ..	0·82	0·51	0·65	0·50	1·84	6·60	11·06	9·39	8·58	3·39	0·03	...	43·37
Hajeepore* ... ..	...	...	...	...	...	6·22	11·69	9·97	10·80	2·46	...	0·16	41·30
Seetamurhee ... ..	0·29	0·32	1·49	1·33	1·84	10·32	12·30	8·46	12·65	1·89	...	0·12	51·01
District average ... ..	0·55	0·42	1·07	0·92	1·84	11·57	11·68	9·27	10·68	2·58	0·03	0·14	45·23

PART II.

41. I now pass on to the condition of the district in the year 1874.

It is unnecessary to repeat here those introductory circumstances of weather and crops which have been dwelt upon in the section on Durbhunga, the only material difference in these respects between the districts during 1871 and 1872 being that the abnormal character of the weather was if anything more marked in the eastern than in the western half of the Tirhoot district. The outturn of the crops in those years, however, was all over the district substantially the same.

\* The statement from January to May for Hajeepore is evidently defective. No information exists regarding the average fall in these months.

42. The rains of 1873 were insufficient all over the Mozufferpore district, but nowhere except in Hajeeepore did this insufficiency supervene on a previously dry season. The fact that in Hajeeepore the previous season was unusually dry (the total fall during 1872 was only 34·90 inches) is of importance with reference to the yield of the bhadoi crop in 1873, and I beg that the fact may be borne in mind. I produce a statement of the rainfall in 1873:—

*Statement showing the monthly rainfall in the district of Mozufferpore in 1873.*

SUB-DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Sudder ... ..	2·20	...	2·20	0·60	...	3·99	10·11	7·11	2·82	...	...	0·03	27·06
Hajeeepore ... ..	0·15	...	0·80	0·18	0·80	5·19	14·60	12·40	1·24	...	...	0·18	35·54
Seetampurhee ... ..	0·20	...	2·30	0·45	0·40	9·35	11·90	8·00	3·50	...	...	0·50	36·60
District average ... ..	0·85	...	1·77	0·41	0·60	6·16	12·20	9·17	2·52	...	...	0·24	33·92

43. It will thus be observed that during the months of June, July, and August, that is, the months in which the bhadoi crop is sown and matures, the rainfall was abnormal to some extent. Fortunately, however, the excessive fall in Hajeeepore was counteracted by the hardened condition of the soil owing to the previous year's exceptional drought. The excessive fall in the summer of 1873 (like the similarly excessive fall in the summer of 1874 in Durbhunga) was therefore to some extent absorbed and rendered innocuous by the condition of the soil. The outturn of the harvest was various. In Hajeeepore it was three-fourths of an average harvest; in the Sudder sub-division the early or bhadoi rice and the millet crop fell (by one-fourth) short of a full average harvest; while the Indian-corn crop is said to have exceeded the average by  $\frac{1}{4}$ th. In Seetampurhee, however, the outturn was but one-half of an average harvest, that is about 34,000 tons of food-grain.

44. The extent to which the winter rice crop failed in this district is not recorded with as much precision as could be wished. In the reply to Circular No. 70, it is true, the extent of the failure is estimated in fractions of the rupee; but subsequent inquiries proved that these estimates, especially in the case of the Sudder and Hajeeepore sub-divisions, considerably understated the actual outturn. There seems to be now no doubt that in the Seetampurhee sub-division the yield of the winter rice of 1873 was not less than a four-anna crop, that is, one-fourth of an average crop; that in the Sudder sub-division the outturn was better than in Seetampurhee, that is to say, it was about three-eighths of an average crop; while in Hajeeepore the outturn was not less than a two-anna crop, or one-eighth of the average. On these

proportions the outturn of the bhadoi and winter rice crops for each sub-division stand thus:—

	Sudder sub-division.	Seetamurhee.	Hajeepore.
	Tons.	Tons.	Tons.
Bhadoi ...	70,000	34,000	43,627
Winter rice ...	72,352	36,000	3,996
Total ...	142,352	70,000	47,623

45. If to these sub-divisional totals be added two months' supply for each sub-division on account of stocks in hand,\* and from the gross quantities so calculated be subtracted the ordinary food consumption for October, November, and December, we shall get the following figures as approximately representing, in round numbers, the stocks of locally produced food-grain in the country in January 1874:—

	Tons.
Sudder sub-division ... ..	123,000
Seetamurhee ... ..	56,000
Hajeepore ... ..	36,000

or between six and seven months' supply for the Sudder sub-division, four months' supply for Seetamurhee, and over three months' supply for Hajeepore.

46. During the continuance of the famine these stocks received a further addition from the produce of the rubbee crop, which, as far as I can gather from the indefinite allusions to it in the various narratives, seems to have been in the Sudder sub-division half an average crop, in the Seetamurhee sub-division three-fourths of the average, and in the Hajeepore sub-division five-eighths of the average. The addition made to the supply of food-grain in the Sudder sub-division was therefore 25,462 tons, in Seetamurhee 27,562, and in Hajeepore 47,632 tons.

47. What further contribution was made to the local food-supply by the produce of the subsidiary food-crops "koorthee," "cheena," and such like, it is not possible to state in precise terms, it seems that these crops were sown largely, and although the parched condition of the soil was not favourable to their growth, the addition they made to the food-supply was appreciable. Assuming that the maximum quantity of land, 10 per cent. on the cultivated area, was sown down, the outturn would raise the gross food-supply to, in round numbers, the following quantities:—

	Tons.
Sudder sub-division ... ..	160,000
Seetamurhee ... ..	93,000
Hajeepore ... ..	90,000

\* With reference to the calculations whose result is expressed in paragraphs 23-26, I think it improbable that the stocks in hand in any sub-division of the Mozufferpore district are ordinarily more than sufficient for two months' consumption. They could only reach three months' supply by a paralysis of export trade during the preceding year.

or eight and a half months' food-supply for the Sudder sub-division, six and a half months' supply for Seetamurhee, and eight months' supply for Hajeeapore.

48. It will thus be seen that of all the sub-divisions of Tirhoot, the Sudder sub-division was the least jeopardized by the failure of the crops in 1873-74. Seeing that in times of scarcity prudent forethought combine with high prices to enforce economy in domestic expenditure, seeing also that in such times various substances are utilized as food which in easy times are not so used, it is probable that the head-quarters or Sudder sub-division would, if isolated, have weathered the storm unaided. But it was unhappily situated, with Nepal and Seetamurhee on the north, famine-stricken Durbhunga on the east, and Sarun and Chumparun on the west. The stocks in the Sudder sub-division, manifestly insufficient to withstand the numerous drains on them from all quarters, were soon reduced to a pitch of depletion that, at the prevailing market rates, placed them out of the reach of large numbers of the community. Private trade, which in the early months of the year showed much vitality, restricted itself to the southern portion of the sub-division as the year wore on; and the result of those combined influences was that a large section of the inhabitants of the sub-division became dependent on Government aid for subsistence. In the Hajeeapore sub-division, on the other hand, private trade was always equal to the demands made upon it. Situated on the left bank of the Ganges, opposite Patna, the great trade centre of Behar, from which the river only divides it, this sub-division was more approachable to private traders than almost any other region in the distressed districts. The result was that Government was relieved of almost all anxiety for the safety of the people in Hajeeapore, and found it necessary to incur there an expenditure which, as will presently appear, was inconsiderable.

49. The private trade which did so much for Hajeeapore and so little for Seetamurhee did something for the Sudder sub-division, though not near so much as might have been expected from its propinquity to Patna. That this result is in some degree due to Government having monopolized the means of inland transport is no doubt true; but the paramount necessity Government was under in acting as it did has been made so obvious in His Honor the Lieutenant-Governor's Famine Minute, and more recently in Mr. Stuart Bayley's Administration Report for the Patna Division (1874-75), that it is needless for me to offer any observations on the point. The result, however, was that private trade to the Sudder sub-division, though alive throughout the year, never showed that degree of briskness, or that power of expansion which was requisite to alleviate the pressure under which the people labored. It is a fact established by inquiries recently prosecuted by Mr. Metcalfe, the Officiating Commissioner of Patna, the results of which he has courteously communicated to me, that the large quantities of grain imported by private traders to Patna were never sent in large consignments to Tirhoot. The grain was sold from the railway godowns to petty dealers. Such of those dealers as generally trade north of the river took it in small quantities to the rural markets in Hajeeapore, Sarun, and Tajpore, and there sold it. The grain was consumed in



these regions, and there are excellent reasons for believing that none of it penetrated more than 30 miles from the river to the inland portions of Tirhoot.

50. I regret that the materials at my disposal do not enable me to present definite figures for the importation of private food-grain into the district in 1874. I can only show by the Sahebgunge trade returns how little of the grain so imported came by water from Bengal; and by the prices which prevailed throughout the year, how small a margin of supply there was above the demand even in the most favoured locality.

*River traffic statement for the Mozufferpore district for 1874  
(in maunds).*

	Rice.	Other food-grains.	Oil-seeds.	Cotton.	Sugar.	Tobacco.	Salt.	Saltpetre.	Hides.	Others
Imports ...	11,667	16,932	69,497	.....	10	.....	46,169	.....	.....	5,864
Exports ...	.....	4,224	.....	.....	7,549	5,504	8,512	1,24,266½	125	13,929

*Statement of the prices-current in the Mozufferpore district during 1874.*

KIND OF GRAIN.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Common rice ... ..	10·7	10	10	9	9	10·3	12	13·3	12·7	17	23·3	26·7
Indian-corn ... ..	14·7	13·7	14·3	14	13	13·7	16·7	18·5	22·7	28	32·7	35
Pulses ... ..	13	11	12	12	10·5	11·5	13·5	15	15	15	16·5	16
Wheat ... ..	11·7	11·7	11·7	11	11	12	13·3	15	14	13·3	15·3	16
Millets ... ..	15·5	14	14	14·5	13	13·5	17·5	19·5	23·5	28·5	36·5	38·5

51. These circumstances of failure in the crops (involving the denial of employment to the laboring classes), inertness of private trade, and consequent early prevalence of famine prices, imposed on Government the necessity of affording to Seetampurhee and the Sudder sub-division a very large measure of assistance. The same organization which worked so successfully in Durbhunga was, though in a somewhat less elaborate form, introduced into Mozufferpore, and the same methods of relief administration were also adopted. What this organization and these methods were will appear from the Lieutenant-Governor's Famine Minute of October 31st 1874.

52. Here I proceed to state the financial result of this relief administration as far as the expenditure which reached the distressed people is concerned, and to exhibit the numbers who by such expenditure were relieved. With this view I present two statements, the first showing the entire expenditure of Government grain, the second the entire expenditure of Government money, which reached the hands of distressed people during the continuance of the famine in the district.

*Statement of grain expenditure in the district of Mozufferpore during the Famine of 1874.*

NAME OF SUB-DIVISION.	Nominal total quantity delivered, excluding transfers.	Distributed in charitable relief.	Sold for cash.	Paid as wages.	Advanced on loan.	Total of columns 3, 4, 5, 6.	Remainder.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Sudder ... ..	28,512	1,062	6,090	5,800	6,912	19,804	8,708
Hajepore ... ..	1,483	12	164	300	600	1,186	297
Sectamurhee ... ..	30,357	2,202	12,860	3,400	7,555	26,079	4,278
Total ... ..	60,352	3,448	19,054	9,500	15,067	47,069	13,283

53. I am unable to state precisely the proportion of these remainders, which in each sub-division is to be written off to miscellaneous expenditure and wastage, and the proportion which was disposed of by sale after the relief operations had closed, because the grain accounts for Tirhoot have been kept by the relief divisions of North and South Tirhoot, not for the existing districts of Mozufferpore and Durbunga. I have consequently had considerable difficulty in compiling the foregoing figures, but I believe them to be correct. I also believe I am correct in stating that of the grain nominally remaining over when the relief operations had closed, not more than 5 per cent. is debitable to wastage, &c.; the rest was sold for cash. The following statement shows the cash expenditure:—

*Statement of cash expenditure incurred in the Mozufferpore district during relief operations, 1874.*

NAME OF SUB-DIVISION.	Cash expenditure on charitable relief.	Cash advanced on recoverable loan.	Cash paid away on wages.	Total cash expenditure.
	Rs.	Rs.	Rs.	Rs.
Sudder ... ..	20,000*	1,00,000*	5,68,783	6,88,783
Sectamurhee ... ..	116,711	1,11,255	4,99,660	7,27,626
Hajepore ... ..	5,000*	10,000*	32,242	47,242
Total ... ..	1,41,711	2,21,255	11,00,685	14,63,651

\* These figures are estimates, but may be considered as very close to the actual figures.

54. The preceding statements exhibit the total expenditure incurred; the succeeding figures represent the numbers of those among whom this expenditure was distributed. For those who were relieved by the gratuitous distribution of grain or money, and for those who were aided by wages on relief works, I am here, as in the case of other districts, enabled to produce actual figures. For the numbers relieved by advances of money or grain or by sales of grain I shall offer estimates at the prescribed rates of thirty annas in cash, or 23 seers of grain per month per individual.

Average number of persons charitably relieved in Mozufferpore during the Famine of 1874.

SUB-DIVISIONS.	FOURWEEK ENDING ON THE—													
	5th April.	21st April.	4th May.	18th May.	1st June.	15th June.	29th June.	13th July.	27th July.	10th August.	24th August.	7th Septem-ber.	22nd Septem-ber.	6th Octo-ber.
Mozufferpore ...	250	454	4,989	15,179	7,850	11,146	15,130	18,902	20,892	18,395	13,789	10,101	5,459	2,115
Seetamurhee ...	5,300	5,050	7,261	5,782	4,303	45,135	45,000	21,255	20,300	24,017	16,232	6,194	1,883	.....
Hajepore ..	.....	.....	1,668	2,354	3,921	2,501	2,398	2,964	3,632	3,342	3,034	1,800	1,367	.....
District average	5,550	5,924	13,918	17,563	16,074	58,782	62,628	43,122	44,424	45,754	33,055	18,095	8,719	2,115

Statement of laborers employed in the Mozufferpore district during relief operations in 1873-74.

SUB-DIVISIONS.	AVERAGE DAILY ATTENDANCE EACH MONTH.											
	1873.						1874.					
	Novem-ber.	Decem-ber.	Janu-ary.	Febru-ary.	March.	April.	May.	June.	July.	August.	Septem-ber.	
Mozufferpore ...	.....	.....	.....	2,890	25,126	93,475	174,925	158,172	101,068	84,242	34,381	
Seetamurhee ...	.....	851	973	10,802	39,715	80,569	144,876	103,682	23,270	16,205	4,976	
Hajepore ..	.....	.....	.....	.....	.....	8,194	7,447	8,343	4,440	2,736	.....	
Total ..	.....	851	973	13,692	64,841	177,233	327,248	266,177	128,778	102,183	39,654	

55. Now, an analysis of the statement of those charitably relieved will show that the statement is equivalent, as far as mere numbers are concerned, to saying that a daily number of 174,395 individuals were relieved for one month; and a similar analysis of the labor statement will reduce it in effect to a statement that 1,124,635 individuals were relieved by wages (in money or grain) for one month.

56 Turning now to the other methods of relief expenditure—advances on loan and sales of grain—it will be seen that on the allowances specified in paragraph 54 above, the expenditure incurred would

suffice for the support of a daily number of 1,779,546 individuals for one month. Seeing that the population of the district is 2,188,382 people, the final result of the relief expenditure in this district, as far as it reached the hands of those who stood in need of it, may be expressed by saying that subsistence was afforded to the population of the district for a period of one month and twelve days.

57. If, however, any of the money paid away as wages of labor or advanced on loan or distributed in charitable relief returned (as beyond all doubt some did return) to the Government treasury, then the numbers relieved would be under this total. What allowance should be made on this account can be only conjectured; but I should say that a reduction of the period during which the entire population was supported from a month and twelve days to one month would represent the effect on the Government resources of this reflux of expenditure.

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## SECTION V.

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### CHUMPARUN.

THE materials which a careful examination of official records furnished for the construction of a statement of agricultural statistics for Chumparun were of such an unsatisfactory and meagre character, that I was at an early stage forced to appeal to the Collector's courtesy for information regarding the economy of the district. With a degree of interest for which I beg to record my best acknowledgment, the Collector, Mr. Hewitt, entered into the question, and by a series of well-directed inquiries, prosecuted in various portions of his district, succeeded in collecting a mass of highly interesting and valuable statistics. The information with which Mr. Hewitt has now favoured me is only an instalment of what I am induced to expect from him; but time will not permit of my postponing the compilation of the facts and figures which are now available and bear on the economic condition of the district. Any further information from Mr. Hewitt which may reach me before the submission of this report shall appear as an appendix.

Chumparun :

2. The following statement sets forth the result of the inquiries instituted by the Collector. I reproduce the figures in their entirety ; they are probably well worth preserving in a permanent form :—

Agricultural Statistics for the District of Chumparun \*

Number.	Name of tuppah or local division.	Total area of tuppah.	Uncultivated area.	Cultivated area.	SUBDIVISION OF CULTIVATED AREA.				REMARKS.
					Rhadol food-crop area.	Angkhai food-crop area.	Bubbes food-crop area.	Non-food-crop area.	
1	Bahas	150,767	34,676	116,091	18,574	68,484	17,413	11,610	26 per cent. of the total cultivation double crops.
2	Docho Socho	36,709	8,454	28,255	4,935	16,718	4,252	2,830	ditto
3	Mahawet	86,788	20,820	65,968	25,065	10,553	24,405	5,636	ditto
4	Jufalbad	8,561	2,337	6,164	2,342	678	2,281	863	ditto
5	Soxagon	121,827	29,238	92,589	14,814	34,259	35,184	8,333	ditto
6	Belwa	35,503	8,166	27,337	10,115	3,007	10,115	4,100	ditto
7	Senrown	123,174	13,549	109,625	17,541	64,679	16,445	10,960	ditto
8	Myhsee	225,939	56,485	169,454	64,393	18,640	62,698	23,723	ditto
9	Mandoo	13,973	4,745	9,228	5,409	1,565	5,267	1,992	ditto
10	Dowita	112,112	22,522	89,590	34,062	3,811	5,332	2,757	ditto
11	Swiala	28,658	7,642	21,016	2,624	4,730	5,332	2,757	ditto
12	Swiala	28,658	7,642	21,016	2,624	4,730	5,332	2,757	ditto
13	Harnastaned	55,665	15,709	39,956	16,375	3,898	14,425	4,288	ditto
14	Khudda	12,705	3,812	8,893	3,735	889	3,291	978	ditto
15	Pujirwa	188,273	64,013	124,260	41,006	41,006	37,278	4,870	ditto
16	Bulooa	20,698	1,968	18,730	6,191	15,464	10,903	4,017	ditto
17	Bulthur	35,469	12,069	23,409	7,225	7,725	7,023	856	ditto
18	Sothura	50,407	30,246	20,161	2,419	14,114	2,419	1,209	ditto
19	Chanki	13,153	5,746	7,407	2,931	7,084	1,066	1,937	ditto
20	Deoraj	16,713	4,634	12,079	7,084	1,066	1,066	1,066	ditto
21	Changwambutsura	18,723	54,337	136,786	15,214	85,751	15,214	7,607	ditto
22	Yachear	85,860	24,058	60,802	42,562	13,768	608	4,864	ditto
23	Deoraj	92,494	73,993	18,496	2,219	12,949	2,219	1,109	ditto
24	Jeamhowli	86,295	43,103	43,192	5,172	30,172	5,172	2,586	ditto
25	Bhubita	7,618	2,285	5,333	640	3,733	640	320	ditto
26	Gondowli	11,402	3,421	7,981	2,634	2,634	2,394	319	ditto
27	Gopala	18,743	4,123	14,620	1,924	5,773	1,154	769	ditto
28	Sathie	28,191	19,733	8,458	6,618	5,612	5,920	789	ditto
29	Baangear	123,521	38,527	85,994	16,759	60,397	10,079	6,719	ditto
30	Total	2,119,325	681,993	1,437,332	408,584	877,511	323,201	129,086	

\* Since the above was in type, I have heard from Mr. Hewitt to the effect that the further statistical inquiries he has made, the results of which he is formulating, tend to confirm the general trustworthiness of the figures in the text. In some points the confirmation is precise.

3. Before I proceed to calculate the average annual outturn of food-grain from the lands set forth in the preceding statement, it may be well to indicate the manner in which those various areas have been determined, and the degree of confidence which may be reposed in their accuracy. Mr. Hewitt states,—“ I cannot pretend that the return is strictly accurate ; and though I have been for some time engaged in collecting the most accurate statistics I could obtain, I have only



succeeded up to the present in getting returns from estates having lands in twelve out of the thirty *tuppahs* of the district. A careful and minute examination of the details of these returns has shown me that in some cases even their accuracy is not altogether to be relied on."

"The *tuppahs* for which I have received returns are those which may fairly be accepted as representing the different characteristics of different parts of the district; and for one very important tract included in *tuppahs* Nos. 3, 4, 5, and 7, I have received exceedingly accurate and trustworthy returns showing the area cultivated in each village, with the aughani, bhadoi, and rubbee food-crops, with non-food-crops, and showing also the land which is double cropped."

"I have received returns nearly as good for an estate in *tuppahs* Nos. 6, 10, 11, 13, and 14; and although the others are not all that I could wish them to be, a very strict examination of them leads me to think that the errors are not of a kind to affect general statistical conclusions." From the preceding explanations I submit that Government may repose a considerable degree of confidence in the agricultural statistics furnished by Mr. Hewitt.

4. In compiling his figures for those *tuppahs* from which he had not received specific information, the plan adopted by Mr. Hewitt was similar to that adopted in like cases by myself. He says,—“Taking the *tuppahs* Nos. 3, 4, 6, 7, 10, 11, 13, 14, 15, 16, and 23, as fairly representative tracts, and making, with such necessary variations as my own local knowledge suggested, approximate calculations of the area of each class of crops in the other *tuppahs* at a percentage similar to that found from the returns received, I have calculated the whole cultivated area of the district as 1,437,393 acres—a total considerably below that given in the survey records, which make the cultivated area reach 1,716,345 acres.” In explanation of this difference, Mr. Hewitt states his opinion that the survey areas included fallow and thatching-grass lands and groves, all of which he himself has carefully excluded. With more certainty I can state that the survey records for the Patna Division, besides being untrustworthy, include in the “cultivated” area all lands not physically unculturable, or occupied by village sites, roads and rivers, tanks, trees, and jungle; thus the survey records would show “pasturage” as well as fallow under the head of “cultivated land.” This point will be more particularly referred to in the sections on Monghyr and Bhagulpore.

5. Out of the total cultivated area Mr. Hewitt calculates that about 30 per cent., or 431,217 acres, yield a double crop. From 83,000 acres of this total the second crop raised is opium, and from the remaining 348,217 acres it is a food-crop. As to how much, however, of this second food-crop is bhadoi and how much rubbee, Mr. Hewitt prefers not binding himself to a definite statement. He says that in order to do so he would need more accurate statistics than he has yet been able to obtain; and wanting them, he has thought it better “to offer a general average than to give returns showing an apparent accuracy much in excess of what they can really claim.” From his point of view the Collector’s hesitation is unexceptionable; but from

my point of view, and to preserve uniformity, it is necessary to divide this second crop land into bhadoi and rubbee while preserving unchanged its gross area. I shall accordingly take the liberty of dividing the land yielding a second crop between bhadoi and rubbee, according to the proportion which the already accepted cultivated area under the former crop bears to that under the latter. As far as the gross cultivated area of the district is concerned, the Collector's figures will be mine too.

6. It may be of use to throw into a short tabular form an abstract of the complete statistics which form the basis of the succeeding argument.

*Abstract Estimate of Agricultural Statistics for the District of  
Chumparun.*

Gross area of district.	Uncultivated area.	CULTIVATED AREA = 1,437,393 ACRES.			
		Area under aghani food-crops.	Area under bhadoi food-crop, including land yielding second crop.	Area under rubbee food-crops, including land yielding a second crop.	Area which does not grow food-crops within the year.
Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
2,119,410	682,008	577,528	603,600	475,429	129,049

These totals include fraction of acres omitted from the statement in paragraph 2.

7. From a series of experiments carefully conducted during several years by him when Settlement Officer of Raepore, and from a comparison of the results of those experiments with observations made in Chumparun, Mr. Hewitt believes that in the latter district the average yield per acre of cleaned rice is not above twelve maunds. The information I gather from other sources on this point suggests that twelve maunds is a fair average: I accept it on the Collector's authority.

8. In the calculations of gross produce for his district, with which Mr. Hewitt has favoured me, he has adopted the low average of four and five maunds per acre for some portions, and six maunds per acre for other portions of the bhadoi and rubbee-growing areas. On this point, however, I venture to be more liberal in the estimates I would ask Government to accept; and in doing so I am not altogether without even the Collector's sanction. He writes,—“The yield on which my calculations are based is, as I can state positively, from experiments made by myself, merely the bare average yield in a series of years, including years of drought. If famine years be excluded, at least one-sixth should be added to the total produce. Thus, in the present year, when the bhadoi crop was large, the (average) yield was about eight maunds per acre.”

9. Having regard to the average rates which prevail in surrounding districts (an index indeed not unfrequently of small value)

*Crop-yield—Local Food-grain Supply—Consumption.* 101

and adhering also to my plan of adopting a high rather than a low average when there is a doubt on the point, I resolve to adopt an average yield of seven maunds per acre for rubbee and bhadoi in Chumparun.\*

10. At the average rates of produce I adopt, the annual production of all sorts of food-grain in Chumparun is, crop by crop, as follows:—

	Tons.
Bhadoi or autumn crop ... ..	247,512
Aghani or winter „ ... ..	150,900
Rubbee or spring „ ... ..	118,857
Total ... ..	517,269

11. In order that the Collector's view on this subject of the gross produce of the district in food-grain may be borne in mind side by side with that stated above, I beg to add that his total is less than the preceding one by 55,170 tons.

12. On the question of the annual consumption of food-grain in the district, I find myself, unfortunately, compelled to dissent from the Collector's view. Mr. Hewitt states,—“There are about two-thirds of the people who never eat rice at all, but live on Indian corn, kodo (millet), and sattoo (ground peas, wheat, barley, or gram,) throughout the year; so that out of the total population of 1,440,815 persons, there are only 480,271 who eat rice habitually; and even of these latter there are very few who eat it more than once a day, making their second meal from Indian corn, wheat, or barley. Taking the consumption of the rice-eating classes at four maunds a head yearly, and allowing about 30 per cent. margin for error, the total quantity of rice consumed in the district will not be more than 25,00,000 maunds (nearly 90,000 tons). Of the bhadoi and rubbee food-grains, the quantity consumed daily by those who use them is much less than that eaten by the consumers of rice. The average annual consumption, then, will not be more than five maunds per head annually. This, with an addition of two maunds rubbee or bhadoi grain per head annually for those who make half their meal on rice, will make the total annual consumption of the district about 82,00,000 maunds (say 293,000 tons).” The effect of the preceding remarks is to make the daily average consumption of food-grain per head of the population about six ounces less than the average rate of 1½lb hitherto adopted. Obviously, in a matter of this nature precision is unattainable; but it may be fairly assumed that in years of ease and plenty people in domestic expenditure are more inclined towards self-indulgence than towards abstemiousness. The rates of daily consumption deducible from the Collector's figures are, I respectfully submit, strictly economical, and not such as generally prevail in years when high prices do not enforce a rigid practice of domestic economy. At the average daily rate of consumption (three-fourths of a seer, or 1½lb,) hitherto adopted, the annual

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\* Since writing the above, I have heard from Mr. Hewitt that, on a further review of the crops in Chumparun, he is not prepared to dissent from the average yield stated in the text.

consumption of the district will be 352,000 tons, or about one-sixth more than the Collector's total. With all deference to Mr. Hewitt, I feel myself bound to adhere to the larger provision. But I beg to note that if on this point, as well as on that of the larger average produce for the autumn and spring crops which I have adopted, I do not carry the opinion of Government with me, then both points may be treated as merely incidental or parenthetical, the available surplus in either case being almost the same.\*

13. This surplus will be, in my view, 165,269 tons (Mr. Hewitt would have it 4,000 tons more). From it, in the first place, the deduction necessary for the replenishment of the stocks of seed-grain must be made. In the absence of any specific information on this point for Chumparun, I assume that the average rates already computed in the section on Shahabad hold good. The deduction, then, will be in round numbers 41,000 tons. The surplus nominally available for sale or storing will in an ordinary good year be therefore 124,269 tons. I say nominally available: the actual quantity available will be less by the wastage which has occurred on the total production of the year. I have adopted a minimum of 5 per cent. for this wastage, but the deduction will be properly made from the nominal quantity remaining over after all actual expenditure within the year has been provided for. Following out the principle I have adopted as ruling the disposal of the surplus food-supply of a district, I proceed to consider how much of the Chumparun surplus supply is sold in financing the rent.

14. The road cess valuations are not yet complete, and I am in possession of no information based on them regarding the annual rental of the district; but from the latest statistical return (41B), I learn that in this district the average rent of rice land is Rs. 2-10, and of all other descriptions of land, except that which grows opium or sugarcane, Rs. 2-4 per acre. The average rent for opium lands is Rs. 3-8, and for sugarcane lands Rs. 6-8 per acre. In order, therefore, to calculate out the gross rental of the district, it is only necessary to add to the information contained in the preceding paragraphs the fact, as I find it, that about 50,000 acres are annually sown with sugarcane. I calculate, therefore, the gross rental of the district to be, in round numbers, Rs. 40,00,000; and allowing a reasonable percentage to cover those various other charges incidental to the tenure of land, which, though not called rent, resemble it in the certainty of demand and the period at which it is made, the gross contribution which cultivators have to pay for the use of land in Chumparun may be stated at 45 lakhs of rupees. How much of this rental is defrayed from the sale proceeds of food-grain?

15. The Collector has favoured me with a minute and exhaustive statement of the amount of each *kist* or periodical instalment of the

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\* Since writing the above, I have had the advantage of conferring with Mr. Hewitt, who adheres to his view of the average consumption. He believes that the average daily consumption per individual is brought under  $\frac{1}{4}$ ths of a seer by the fact that the people who eat food-grain other than rice require to eat less than people who live on rice alone, and that although some people eat two seers of rice in the day, the number who eat less than  $\frac{1}{4}$ ths of a seer of other grains brings down the average. I regret I cannot count Mr. Hewitt among those Collectors who concur in the estimate I have, after much careful inquiry, adopted for the average daily consumption of food-grain per head of the population in Behar.

rent, with the date on which it falls due, for each tuppah of his district. It will not be necessary to reproduce this statement, which is very elaborate. Substantially it amounts to this, that when indigo, sugarcane, or opium cultivation is not in question (and obviously the cultivation of these crops is small compared with the great food-crop cultivation of the district), the two main kists of the year are the August-September and December-January kists, which between them cover three-fourths of all the rent. Now, those kists or periodical instalments fall due when the crops harvested are nearly altogether food-grain crops. It may therefore be assumed, with as much certainty as I need care about, that, save in the exceptional cases of producers of opium, sugarcane, and indigo, three-fourths of the rent is paid from the sale proceeds of food-grain. If, making allowance for the effect of these more valuable staples, I assume that all over the district ten-sixteenths of the rent is financed by the sale of food-grains, I believe, on the evidence before me, I shall probably under-estimate the quantity of grain thus thrown on the market. To be on the safe side, however, I shall adopt the view that ten-sixteenths of the rent is paid from the sale proceeds of food-grain, and therefore grain must be sold to the value of Rs. 28,12,500.

16. With a view to determine how much grain is sold to realize this amount, I produce here a statement of average prices current in the district:—

*Statement of the Average Prices current in the District of  
Chumparun from 1868 to 1872.*

KIND OF GRAIN.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Common rice ... ..	25·7	25	24	23·6	22·6	21·1	20·8	20·9	21·9	23	24·1	25·8
Indian corn ... ..	34·1	37·6	37·3	36·1	35·1	34·4	35·6	34·2	39·5	37·6	35·1	35·6
Pulses ... ..	15·6	16	16·1	17·6	17·9	18·6	17·5	17·1	16·1	17·7	15·3	14·9
Wheat ... ..	20·2	21·2	22·1	22·6	22·9	22·7	21·9	21·9	21·2	21·2	21·1	20·2

17. It will be gathered from this statement that at the time when the autumn crop is reaped in August-September, and the winter crop in December-January, the price of each sort of grain then harvested fluctuates about 25 seers for the rupee, or (say) Rs. 1-10-0 per maund. This is the retail market price, which is necessarily dearer than the price at which the producers sold the grain to exporters, or to the retail vendors. Looking to the remoteness of Chumparun from the Ganges, the trade highway of Behar, I question if less than 20 per cent. under retail rates would allow for freight, give a margin of profit, and cover the other expenses incidental to the trade in grain. I think, therefore, it is a fair assumption on my part to make such an allowance, and to consider that the producers sell their grain at an average rate of say Rs. 1-6-0 a maund.\* At this price they must sell 73,000 tons to realize

\* The Collector thinks that this is too dear an average price, and that cultivators as a rule dispose of their grain for a price not over Rs. 1-3-0 per maund.



22. It is evident, therefore, that towards determining the extent of the trade in food-grain of Chumparun, the only facts I have to go on are first the recorded fact that such an (export) trade does largely exist; second, that there are 73,000 tons of grain in the district annually available for export. But as we have seen, if those 73,000 tons were exported, the district would be left at the end of the year with only 30,000 tons, or a supply for one month. In anticipation of what will appear later on, I may here say that it was manifest last year the district had more than this quantity in stock; that its reserves, before the harvesting of the autmun crop (which I assume as the commencement of my year) were at least 60,000 or 70,000 tons. If, then, the quantity in stock last year be a guide to the quantity in stock at the same time in ordinary years, one would conclude that the maximum of exportations of food-grain in good years would be about 40,000 tons, and that perhaps in ordinary years they are not more than 30,000 tons, or 8,00,000 maunds. This would leave the district with a normal reserve of about two and a half-months' supply, and this estimate is in full accordance with our experience of the district last year.

23. I now present a statement of the average rainfall, and pass on to the consideration of the district under the exceptional circumstances of 1874 :—

*Statement of Average Rainfall in the District of Chumparun.*

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
1869—72 ... ..	0'60	0'34	1'50	0'45	2'98	8'35	11'75	10'39	11'93	8'16	.....	0'35	56'80

Figures for sub-divisions not available.

PART II.

24. In Chumparun, as in other Behar districts, the year 1871 was marked by an excessive rainfall, the excess varying from 12 inches in the Bettiah to 18½ inches in the Motiharee or Sudder sub-division. This surplus rain fell chiefly in September, and was followed by inundations, which flooded the country, causing great damage to the bulk of the bhadoi crops, which had not been harvested. The alluvial deposits, however, brought down by the inundation seem to have benefited both the rice and the rubbee lands; but the satisfactory outturn of these crops was not effectual in keeping prices in Chumparun during much of the ensuing year 1872 from rising, in sympathy with the dear rates prevailing in neighbouring districts, to a level considerably above normal rates.

25. The year 1872-73 was on the whole favourable from an agricultural point of view; and were it not that in March 1873 violent hailstorms in the north of the district caused serious injury to the rubbee crops in isolated tracts of country, the harvest retrospect for the

year would have been decidedly satisfactory. As things happened, it may be said that the year preceding the year of failure was a fairly prosperous year,—neither above the average, nor below it. During the latter part of 1872 and early part of 1873 also, the grain market recovered in a great measure its normal tone.

26. The rains of 1873 were deficient all over the district, the deficiency being much more marked in the Northern or Bettiah sub-division than in Motiharee. I produce a statement of the rainfall during 1873; it affords a very clear explanation of the reason why the failure in the crops in Bettiah, and the consequent distress there, were much more marked than in the Sudder sub-division.

*Statement of the Rainfall in the District of Chumparun during 1873.*

SUB-DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Motiharee ... ..	0'90	.....	3'00	0'80	0'90	8'02	15'11	11'58	0'73	.....	.....	0'20	41'24
Bettiah ... ..	.....	0'25	3'00	.....	2'00	10'06	8'03	9'05	0'30	.....	.....	0'25	32'94
District average	0'90	0'25	3'00	0'80	1'45	9'04	11'57	10'32	0'51	.....	.....	0'22	37'09

27. It will be observed that during the months of June, July, and August, that is the months during which the bhadoi crop is sown and matures, the rainfall in the Motiharee sub-division was somewhat in excess of, while in the Bettiah sub-division it fell short of, the normal quantity. The autumn crop suffered from this capriciousness in the rainfall; but the injurious effect was more marked in the case of the maize than of any other grain-crops; and it will be remembered that in Chumparun maize forms a large portion of the bhadoi crop, which besides is chiefly composed of the early rice and of the millet called "kodo." The official report states that of the second and third of these, the crop harvested in September 1873 was three-fourths of an average crop, while of Indian corn only half an average crop was harvested. As Indian corn is perhaps more largely grown than any other bhadoi grain, it may be with confidence assumed that all over the district the bhadoi crop of 1873 was 10 annas, or five-eighths of an average crop.

28. The rain, however, which, as regards the bhadoi crops, was not as unpropitious as in other districts, totally failed in September, entailing the almost complete destruction of the winter rice crop. The outturn of this crop was in November 1873 estimated at two annas, or one-eighth of an average crop; but subsequent observation and experience seemed to throw doubt on the fact of even such an insignificant outturn having been secured. Assuming, however, that one-eighth was harvested, the produce of both crops, the bhadoi and rubbee, in 1873 stood as follows:—

	Tons.
Bhadoi or autumn crop ... ..	154,695
Aghani or winter ,, ... ..	18,862
Total ... ..	<u>173,557</u>



29. We have seen that in average years the produce of these two crops is 398,000 tons. In 1873, therefore, there was a loss of, in round numbers, 225,000 tons, or 60 per cent. of the ordinary yield.

30. From September 1873 till January 1874 the district subsisted on the produce of the bhadoi crop and on the stocks which were in the country from the previous year. The difficulty of estimating what the ordinary reserve of the district is, has already been dwelt upon, and it will be remembered that the question is one on which precision is unattainable. However, it is manifest from the preceding statistics of production and consumption that in an average year the reserve never could by any possibility exceed 100,000 tons, and that also it never could in ordinary years reach this total, save through a complete paralysis of trade stopping all exportation. We know that before the autumn of 1873 there was nothing abnormal in the state of the district trade. Food-grain, oil-seeds, and the other staple products of the district were, as usual, despatched to Patna and other marts; and if, as has already been stated, we are not in a position to say how much food-grain was exported, still there can be very little doubt indeed that some 8,00,000 maunds, or say 30,000 tons, left the district. This would leave a reserve of 70,000 tons in the district; and all things considered, I am of opinion that this is the maximum to which stocks in hand in Chumparun ever attain. I shall assume that this quantity, 70,000 tons of food-grain, was in the district in the autumn of 1873; in doing so I believe I am placing the district in the most favourable light possible.

31. With the produce of the bhadoi crop, therefore, the total food-supply in grain in Chumparun in September 1873 was in round numbers 225,000 tons. On this food-supply the people existed till January brought a further addition of 18,862 tons of rice; but in the meantime the district consumed 88,000 tons: therefore in January 1874 the food grain in stock amounted to, in round numbers, 156,000 tons. During the spring of 1874 this food-supply, locally produced, received a further addition from the produce of the rubbee crop; but I find much difficulty in determining the quality of this crop in 1874. In the special narratives from February to April, constant references are made to it. We are told that in some localities it gave promise of an abundant harvest, in others of an average harvest, while in many localities the crop was either very indifferent or wretchedly poor. The Collector has recorded no average for the whole district; but from his reports it is very evident that the crop was worst in the tract of Ramnuggur, which, being chiefly a rice-producing tract, had already suffered most severely.

32. Estimating the outturn of the crop from the descriptions of it in particular localities, combined with the probable areas to which those descriptions refer, I should say that for the whole district the crop was an average crop,\* and brought to the food stock an addition of, in round numbers, 60,000 tons of food grain from local sources; therefore the district drew 216,000 tons of food-grains, or nearly seven months'

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\* On further consideration I believe this estimate is too favourable. As, however, I write his note when the text is in type, I abstain from altering the figures.

supply at ordinary rates of consumption, to last from January till the harvesting of the bhadoi crops in September.

33. Towards supplementing this deficiency, private trade seems to have done much more than it did in similar circumstances in either northern Mozufferpore or Durbhunga. Doubtless this is a good deal due to the fact of the district's situation on the Great Gunduk River, which, being navigable all the year round, affords an easy and cheap means of commercial communication with Patna—the trade depôt of Behar. To whatever cause, however, it be attributable, the fact is recorded from time to time in the famine narratives that private trade was operative. It had its periods of depression and its periods of briskness; but never, as far as I can learn, during the whole period of the scarcity did it cease to exhibit some vitality, except in isolated tracts towards the frontier.

34. Although the fact of the existence of this private trade is thus recorded, it seems that its operations were always on a small scale. Grain came into the district by dribbles to meet pressing local demands, and the general insignificance of the individual importations seems to have exempted them from registration.\* If, therefore, I am unable from the materials before me to express in definite figures these importations, I am nevertheless impressed with the conviction that in the aggregate they must have been considerable.

35. Still, however considerable they may have been, they were insufficient to meet the local demand, or to raise the food-supply in the country to such a level that this demand could be satisfied without the speedy exhaustion of the resources of the great mass of purchasers. This will be manifest from the following statement of prices current in Chumparun in 1874, and from the remarks which follow it:—

*Statement of the Prices current in the District of Chumparun during 1874.*

KIND OF GRAIN.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Common rice ... ..	12·7	11·6	10·7	9·9	10·2	12	13	13·2	14·9	19·2	22·7	25·7
Indian corn ... ..	16·2	14·1	13·9	13·7	13·7	14·7	16·2	18·5	22	30·2	33·7	35·5
Pulses ... ..	11·5	11·2	11·1	10·5	10·2	11	11·2	11·5	10·9	11·1	11·7	12·7
Wheat ... ..	12·2	12·5	11·9	11·7	11	13	14	12·7	13	13	13·7	14·7

36. A comparison of these quotations with the average prices current already given will show that while the famine lasted the prices of the staple articles of food were always double, and often more than double normal rates; and a further comparison of these quotations with the market rates which, as reported by Mr. Cockerell, prevailed in the districts in 1866, will establish this further fact that notwithstanding the early and decisive action taken by Government last year, the prices of rice and Indian corn were, till Government sales prescribed

\* The Sahibgunge Trade Statistics for 1874 are absolutely silent regarding importation to, and only record the exportation of 42 tons of oil-seeds and miscellaneous goods from Chumparun.

a minimum rate, on a par with the prices which for these staple articles of food prevailed in 1866.\* In this latter year when official action, as far as relief administration went, busied itself mainly with stimulating and directing the efforts of private charity, those prices reached in June the prohibitive rate of eight and a half seers for the rupee for rice, and nine seers for Indian corn, and in August 1866 rice was not to be had for less than Rs. 6 a maund—that is, four times the usual price. The result was a mortality from starvation and disease engendered by want of food, reaching in this district alone to 56,000 people,—a total which admittedly understates the reality. The fact, therefore, that in 1873 the failure in the crops was much greater than in 1865, and the further fact that, notwithstanding all the aid given by Government till it commenced supplying the market, prices ranged as high in the first quarter of last year as they did in 1866, renders it manifest that it was the action of Government, and that alone, which last year saved the population of Chumparun from being decimated.

37. What this action on the part of Government was from a financial point of view, and what its effects were on the community, I now proceed to state, tabulating, according to the system I have adopted, the expenditure in grain and money separately. I beg to present, then, the following statements, which show the complete expenditure in grain and money which reached the hands of the distressed classes.

*Statement of Grain Expenditure incurred in Chumparun during the Famine of 1874.*

Total quantity of grain delivered, excluding transfers to other districts.	Grain distributed in charitable relief.	Grain sold for cash.	Grain paid as wages on relief works.	Grain advanced on recoverable loan.	REMAINDER.
Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
29,181	1,190	11,081	7,294	8,012	1,606

38. This “remainder” includes the grain which was sold after the cessation of relief operations, and also the wastage and loss on the whole quantity delivered. The following statement shows the cash expenditure:—

*Statement of Cash Expenditure incurred in the Relief of Distress in Chumparun during the Famine of 1874.*

Cash distributed in gratuitous relief.	Cash paid as wages on relief works.	Cash advanced on recoverable loan.	Total.
Rs.	Rs.	Rs.	Rs.
36,950	6,43,808	3,00,430	9,81,188

\* In portions of Chumparun the price of rice was, from January till April last year, from 10 to 15 per cent. dearer than in 1866. During the same months of 1866 the price of Indian corn was about 12 per cent. dearer than it was during the first quarter of 1874.

39. I now proceed to exhibit the number of persons who were relieved by the expenditure tabulated above. For those who were relieved by wages, the records furnish actual figures, which I reproduce in the following statement; but I regret to say that for this district I am unable to give the actual numbers of those charitably relieved. The official records frequently fail to distinguish between the fortnightly average and aggregate numbers of those who were aided gratuitously; and neither the Collector, Mr. Hewitt, whose aid I invoked, nor I myself have been able to make the distinction with any degree of approximate accuracy. I shall therefore give estimated figures on the basis of one anna per day in cash, and three-fourths of a seer per day in grain :—

*Statement of Laborers employed in the Chumparun District during the Relief Operations of 1873-74.*

Aggregate number of individuals employed.	AVERAGE DAILY ATTENDANCE EACH MONTH.										
	1873.		1874.								
	Novem-ber.	Decem-ber.	Janu-ary.	Febru-ary.	March.	April.	May.	June.	July.	August.	Sep-tember.
15,060,930	561	4,589	11,631	25,361	52,758	83,917	159,668	79,752	73,007	8,938	1,849

40. An analysis of this statement will show that it, as far as mere numbers are concerned, is equivalent to a statement that a daily average of 502,031 individuals received from wages a subsistence allowance for a period of one month. If, now, the money and grain advanced on loan and the grain sold for cash be regarded in portions of 23 seers for grain and Re. 1-14 for cash, each of which portions affords a subsistence allowance for an individual during one month, it will be seen that the grain and money so expended was a sufficient provision for 1,089,975 individuals for one month. If the grain and money distributed in charitable relief be treated in the manner indicated in paragraph 39, it will be seen that the relief afforded was sufficient to help 77,219 individuals for a similar period of one month. The total expenditure thus incurred by Government afforded subsistence allowance for a period of one month of thirty days to 1,669,225 individuals, or supported the total population of the district for about 36 days.\*

41. Inasmuch, however, as a considerable, though indefinite, share of the expenditure on charitable relief, on wages, and on cash advances, returned to Government in the shape of the sale proceeds of grain, the preceding conclusion overstates the effect of Government assistance by so much money as in this manner found its way back to the treasury.

\* It will be remembered that the Chumparun share of the Gunduk embankment expenditure is shown in the section on Sarun. This could not be helped, as I could get no accounts for each district separately. Had I done so, the probability is that the result would show a greater expenditure in Chumparun.

If, too, the question were concerned only with the effect of the aid afforded to our own subjects, some allowance would have to be made for those Nepalese who made use of our stores, or earned subsistence on our relief works. A conjectural allowance, however, can alone be made for one or other of those causes, which certainly, singly or combined, serve to show the extent which the relief operations of Government covered to be considerably more than it really was. I should say that an allowance should be made which would reduce the period during which the population was on the hands of Government from 36 days to less than a month.









## SECTION VI.

### GYA.

[*The statistics of agriculture in this section are not submitted with confidence; no special value is claimed for them; they are introduced to preserve uniformity in the method adopted.*]

THE materials available for constructing a statement of agricultural statistics for this district are few, and without claims to statistical precision. They consist of the estimates of cultivated areas furnished by the Collector in reply to circular No. 70, and of the Board of Revenue's statistical return 41B. for 1873-74. The process by which the Collector arrived at the estimates contained in the former document is not traceable—probably the process was not an experimental one; but the statistics contained in the latter document, return 41B., seem to have been based on some enquiries made by the subordinate executive establishment. I regret, however, to say that, as far as statistics of food-growing areas are concerned, the information furnished by both documents is wanting in precision.

2. Before I proceed to submit, in substitution for those estimates, others which appear to me nearer the truth, it may be well to indicate briefly the reasons why I think the existing estimates untrustworthy. My remarks on this head will also serve as a guide to the formation of other more accurate estimates.

3. An analysis, then, of the figures in the return 41B. shows that of the 3,019,520 acres in the district, 43 per cent. is cultivated, and 57 per cent. is culturable and unculturable waste land. The cultivated land, again, is shown to be made up of 7 per cent. non-food crop, 49 per cent. rice-growing, 15 per cent. bhadoi, and 29 per cent. rubber land. It will be observed that these percentages deny the prevalence in the district of the practice of double cropping, which, to a greater or less extent, exists in every district in Behar.

4. The reply to circular No. 70 indicates an extension of the cultivated area greater by one-half than that shown in the preceding paragraph; but regarding the extent of cultivated land devoted to the production of food-grain crops, there is a fortuitous coincidence between the estimates it gives and those contained in the return 41B. Any criticism on the latter document, based on a consideration of the produce of the food-growing area set forth in it, will therefore be applicable to the former.

5. I am in possession of no statistics for specimen areas in Gya, or of any information of a special character which might serve as a test of the correctness of the estimates in the two documents analysed in the preceding paragraphs. In the absence of such statistics, I beg attention to the following criticism, which is based on a comparison of the estimates with the census statistics of population.

6. The population of Gya is 1,949,750 people, who, at the average daily rate of consumption adopted for Behar, would require for their annual subsistence 476,507 tons of food-grain. Now, this quantity of food-grain, plus the requirements for seed, must be either wholly grown

within the district, or, if not wholly grown, must be in part grown there and in part imported.

7. The portion of it which is imported is insignificant. It is very doubtful whether any food-grain is imported save in exchange for food-grain of a different description which has been exported. This I conclude to be the fact from the local official reports which deny to the Gya district the possession of more than an inconsiderable trade in food-grain. This fact is recorded by the Collector in his annual administration report for 1872-73, and noted without dissent in the divisional report for that year. It is repeated by the Collector in his reply to circular No. 70, and is borne out by Mr. Bourdillon's registration of the traffic on the Patna and Gya road, which, from a commercial point of view, is the main artery of the district. As far, therefore, as a conclusion may be based on official information, it seems safe to conclude that for the absolute sufficiency of its food-supply Gya does not depend on importation; it produces sufficient food-grain for its own wants.

8. Now, the rates of produce in Gya are for the rice and bhadoi crop the same as in Shahabad, that is, 12 and 8 maunds to the acre respectively; the average yield of rubbee, however, is, I am informed by the Collector, only 10 maunds in Gya. At those average rates of produce, the gross outturn of the food-crop land stated in the estimates under consideration is 430,687 tons, or 45,000 tons less than the quantity requisite for the subsistence of the people, not to speak of the quantity necessary for seed-grain, or for the liquidation of a portion of the rent. It has been already shown that this deficiency is not supplied by importation; either the average rates of produce, then, are at fault, or the food-growing area has been under-estimated. There is no doubt whatever that the latter explanation is the true one.

9. The unavoidable rejection of these estimates leaves me with no facts or figures of local significance, with absolutely no information from sources intrinsic to the district, concerning its agricultural condition. Under these circumstances, I must either abandon the consideration of the food-supply of Gya, or assume that the condition of things in this district is analogous to the conditions prevailing in Shahabad.

10. The assumption is not gratuitous. I cannot, indeed, say that it is based on circumstances as full and definite as those which supported a similar assumption in the case of other districts; but still those confirmatory circumstances do to a considerable extent exist: for example, both Shahabad and Gya are agricultural districts; in both there is a large admixture of jungle and waste land; in both the agricultural productions are identical in kind, and the insignificant difference in the average yield of food-crops per acre would seem to indicate a nearly equal degree in fertility of the soil; the population per square mile in Gya is only between three and four per cent. denser than in Shahabad; and finally, the standard of comfort in the former district, as compared with the latter, is not lower than can be accounted for by the denser population and lesser fruitfulness of the soil in Gya, combined with the greater prevalence there of that system of land tenure known as the *danadundi* system, or payment of rents by division of the produce—a system which is prejudicial to the true interests of the producers, and about which I shall have something to say later on.

11. Notwithstanding the numerous points of similarity between the conditions of both districts, the points in which they differ preclude my hoping, from the plan I am forced to adopt, anything more than approximately correct results; and I would add that, from all I have learnt of the social and agricultural condition of both districts, the error, which I may not hope to exclude from my calculations, will probably have the effect of representing Gya in a more favorable light than perhaps the true state of things, if we knew them, would warrant. With these remarks, I proceed to extend to Gya the proportions adopted for Shahabad.

12. It will be remembered, then, that in Shahabad the cultivated land was shown to be 53 per cent. on the district area; the remaining 47 per cent. being occupied by waste land, culturable and unculturable. Of the cultivated area, dhan land was shown to cover 54 per cent., the remaining cultivated area was up-land, of which 12 per cent. were devoted to the exclusive cultivation of non-food staples, the food-grain staples, rubbee and bhadoi, occupying the remainder in the proportion of six to four. It was also shown that 12 per cent. of the total cultivated area yield a second crop of mixed food and non-food crops, and that of this second cropped land two-thirds yielded a food-crop. I shall deal with this two-thirds only, and consider it as a rubbee crop.

13. Now, an extension of these proportions to the Gya district will give the figures which I have tabulated below. I have, in the tabular statement, sub-divided the uncultivated area in the proportions adopted for Shahabad:—

CULTIVATED—		Gross area ... ..	3,019,520		
		Rice area ... ..	864,186	UNCULTIVATED—	
		Rubbee ... ..	388,692	Village sites ... ..	65,500
		Bhadoi ... ..	259,128	Pasturage ... ..	127,725
Up-land	...	Second crop, food-grain	128,000	Orchards ... ..	150,976
		Land yielding exclu- sively non-food crop	88,339	Fallow, waste, roads, &c. ... ..	1,075,175

14. I submit this statement as the most probable estimate I can form of the condition of the Gya district from an agricultural point of view, and it is a curious coincidence that the cultivated area as worked out on this statement is, I may say, a precise mean between the excessive estimate of cultivated land—19 lakhs of acres—contained in the reply to circular No. 70,\* and the insufficient estimate—13 lakhs of acres—contained in return No. 41B.

15. I now proceed to calculate the food-supply produced from this land. The average rates of produce for the district have already been given in paragraph 8, and before stating the results of the calculation, it is only needful to note that of the land which yields the rubbee crop, two-thirds only produce food-grain. The following, then, is the outturn in ordinary good years of these various crops of food-grain:—

Winter rice ... ..	...	...	...	...	Tons.
Bhadoi ... ..	...	...	...	...	370,365
Rubbee ... ..	...	...	...	...	74,036
					184,543
				Total ... ..	628,944

\* In this document the non-food crop cultivated area was given at 569,770 acres, which is quite excessive.

16. To the total of these crops an addition has, in Gya, as well as in all other Behar districts, to be made for the proceeds of the subsidiary food-grain crops—cheena, moong, &c., but for the reasons already in previous sections stated at length the magnitude of the addition can be only conjectured. I shall adopt for Gya an estimate which will raise the gross produce in food-grain of the district to 640,000 tons.

17. Of this gross produce 476,507 tons are annually consumed by the population: this matter was stated in paragraph 6 above. In addition to this annual consumption, there will have to be made a yearly provision for seed, which, on the rates per acre already prescribed, amounts to about 44,000 tons. Therefore the surplus which will remain after provision has been made for these necessary requirements will be 120,000 tons in round numbers.

18. The district of Gya is distinguished from other Behar districts by the fact that in it payment of rent by division of the produce is the rule, and payment of money-rents the exception. It is a proposition generally true of Gya that money-rents prevail only in respect of those lands which grow crops it would be difficult or impossible to divide, such as indigo, opium, and sugarcane; the instances in which money-rents are paid for any other sort of land are so rare that in general considerations they may be safely ignored.

19. Now, the portion of the produce appropriated by the zemindar is theoretically seven-sixteenths of the whole, and probably this theoretical proportion is not often modified unfavorably to the ryot when the division is made after the crop has been harvested. But when the zemindar's share is fixed on weight (as it often is) by a system of appraisement before the crop is harvested, then a corrupt appraiser often favors the rich zemindar at the expense of the impecunious ryot. For my purpose, however, I shall assume that the theoretical proportion is observed in practice.

20. The share of the gross produce of the district, then, which the zemindars and farmers of land appropriate annually is, in round numbers, 280,000 tons: their numbers, according to the census report, are 12,175; it is therefore manifest that the rest of the people retain an insufficient provision for their necessary wants. Hence it comes to pass that the zemindars and other rent-receiving classes are all large storers of grain, which they sell in the district direct or through the agency of the *bunneah*; and hence it is that the people of this district are the poorest in the division. The system of rent payment in kind denies them the chance of improving their condition in good years, because from their subsistence stock of food-grain so much is taken that the sale-proceeds of other non-edible products no more than suffice to fill up the void. It seems to me that if the condition of the Gya peasantry is ever to be materially improved, the earliest step on the path of improvement should be a sustained attempt to introduce into the district the practice of paying money-rents; and in this direction a commencement might be made in estates under Government management.

21. I have stated that in good years the surplus of production over the absolute requirements of the inhabitants for the year is no

more than 120,000 tons. This is the nominal surplus. To arrive at the actual surplus, allowance must be made for all kinds of wastage within the year, which allowance I have for other districts fixed at a minimum of 5 per cent. on the gross produce. The surplus, then, actually remaining would be something under 90,000 tons. If a famine supervened after a good year in Gya, it might probably find the district with 90,000 tons of grain in store, or with nine weeks' supply. But as the crops of even three continuous seasons are rarely all average crops, it will often happen that the surplus reserve will be under this figure, which has been elicited from a calculation based on the produce of fair average years. Hence it would seem unwise to hold that at the close of ordinary years the stocks in hand in Gya are ever over 75,000 tons of grain, or less than two months' supply. The tenor of the preceding observations will have rightly suggested that these stocks will be in the hands, not of the people, but of the zemindars.

22. The preceding pages will have suggested, in anticipation, the meagre character of the definite information at my disposal regarding the export and import trade of the district. An attempt was made by the Collector in 1872-73 to collect statistics on the point, but the result was not as successful as could have been wished. It is remarkable, however, that the result, such as it was, totally negated the existence of any trade, import or export, in food-grain.

23. In the year 1873-74 an attempt was made by Mr. Bourdillon, then Sub-divisional Officer at Jehanabad, to register the traffic on the Patna and Gya road, which is, I have said, the main commercial route of the district. The year was an exceptional one, and it is doubtful whether the estimated value (Rs. 4,33,040) of the goods registered both ways is above or below the value of the traffic of average years. I have not been able to procure any definite information worth reproducing regarding the actual quantities or nature of the commodities imported or exported. As far as such commodities form part of the importations to or exportations from the Patna division by rail or by river, they will be included in the trade statistics for the division as a whole. On this part of the subject, it only now remains for me to present statements of average prices current and average rainfall. With this I pass on to the condition of the district last year:—

*Statement of average prices current in the district of Gya from 1868—1872.*

KIND OF GRAIN.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Common rice ... ..	21'9	21'4	21'6	21	19'9	19'5	19'2	18'5	18'4	18'5	19	19'8
Indian-corn ... ..	27	26'4	27	28'8	25	31'3	27	27	29'4	27'4	29	29'1
Pulses ... ..	24'8	23'3	25'8	25'2	24'7	22'5	21'5	21'1	20'5	20'5	20'6	21'2
Wheat ... ..	18'4	18'9	19'8	20'7	20'4	20'3	20	17'4	17'9	18'3	18'1	18'2
Millet ... ..	36	35	32'5	30	22'5	19'7	11'5	23	24	25	30	40

*Statement showing the average monthly rainfall in the district of Gya.*

SUB-DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Sudder ... ..	0·81	0·63	0·55	0·50	0·73	6·53	12·49	10·52	6·83	2·89	0·04	0·07	42·59
Nowada ... ..	0·23	0·90	0·55	0·39	1·88	7·17	12·92	13·25	8·37	2·63	0·03	0·21	48·73
Aurungabad ... ..	0·84	0·47	0·32	0·49	0·70	5·05	13·12	13·08	7·17	2·75	...	0·29	44·28
District average...	0·63	0·67	0·47	0·46	1·10	6·25	12·84	12·28	7·52	2·76	0·03	0·19	45·20

## PART II.

24. The course of events in Gya during 1873 strikingly illustrates the principle that the seasonable distribution of the rainfall is of more importance, within certain limits, than its actual quantity.

25. In the sudder and Aurungabad sub-divisions only was the rainfall of 1873 under the average fall, and in each of these sub-divisions the deficiency was not over four inches. Thus one, judging of the harvests from the quantity of rain which fell in 1873, would have a difficulty in believing there could have been an extensive failure in the crops in Gya.

26. Though not greatly insufficient in quantity, however, the rainfall was very unseasonably distributed. The September rains especially, which for the rice crops are perhaps the most important, were greatly deficient everywhere, except in the head-quarters sub-division; and the consequence was a failure in the rice crop, which was of varying degrees of intensity in various portions of the district. I produce a statement of the rainfall of 1873 by way of illustrating the preceding remarks:—

*Statement showing the monthly rainfall in the district of Gya in 1873.*

SUB-DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Sudder ... ..	0·17	...	0·94	...	0·30	1·52	18·44	10·01	4·13	...	...	0·06	35·57
Nowada ... ..	0·32	...	0·42	...	0·80	1·02	27·31	10·02	3·32	...	0·13	0·15	43·29
Aurungabad ... ..	0·12	...	0·62	0·16	1·36	0·32	20·52	8·05	1·89	...	...	0·11	33·15
Jehanabad ... ..	0·10	...	0·68	...	0·98	2·69	24·69	8·46	1·43	...	...	0·12	38·75
District average...	0·18	...	0·64	0·16	0·73	1·39	22·74	9·13	2·69	...	0·13	0·11	37·69

27. It is difficult to gather from the official reports and narratives a distinct idea of the outturn of the bhadoi crops for 1873. In one of the monthly crop reports an incidental mention is made of the bhadoi crop in the Aurungabad sub-division being only one-fourth, and in the Jehanabad sub-division only three-eighths, of an average crop; but I feel bound to add that, with respect to other estimates submitted from those sub-divisions, the Collector expressed himself

much more hopefully than his subordinates did, and that he has not, so far as I can learn, adopted these estimates of the bhadoi outturn.

28. I can nowhere find an estimate of the bhadoi outturn for 1873 in the rest of the district: looking, therefore, to the fact that in the sudder and Nowada sub-divisions the preceding tabular statement shows the early rainfall to have been more propitious than elsewhere, it is not improbable the outturn in those sub-divisions was not greatly under the average; on the whole, I should fix the outturn of the bhadoi crops of 1873 for the district at not less than half of an average crop.

29. The reports on the winter rice crop, which in the end of 1873 were very gloomy, assumed, as the harvest progressed, a much more hopeful tone; so that when, in February 1874, the crops had been gathered on the threshing-floors, the Collector reported that all over the district the outturn of the great winter rice crops had been three-eighths of an average crop; the yield in parts of Aurungabad and Nowada sub-divisions being characterized as particularly fine. On this evidence I submit the following statement of the probable outturn of the bhadoi and winter rice crops of 1873:—

							Tons.
Bhadoi ...	...	...	...	...	...	...	50,000
Winter rice...	...	...	...	...	...	...	180,000
					Total	...	<u>230,000</u>

30. I have already stated that portion of the winter rice comes into consumption in December, but that in ordinary times the new crop is not generally used till January; doubtless last year it was brought into use as soon as reaped, and hence the pressure in December was not so great as would have been the case had the consumption of the new crop been postponed till January. But for my purpose it will be better to adhere to the rule already adopted, which fixes January as the time on which the new grain comes into use.

31. In the commencement of January, then, there were in the district (consumption for October, November, and December being allowed for and 75,000 tons being added for stocks in hand) about 185,000 tons, or four and a half months' supply. The stock of food in the country was therefore sufficient for present wants, and for those of the near future; while the peculiar land tenure already adverted to, conjoined with abstention on the part of zemindars from enforcing their full claims, left none, except the impecunious laboring people or artizans, who did not happen to hold land, without some share of this stock of food. This explains the reason why the gloomy anticipations formed regarding this district in the end of 1873 were happily not realized.

32. Towards March the district was providentially favored with an abundant fall of rain, which, combined with the judicious utilization of the canal water, secured to it an average rubbee food-crop and a good outturn of opium. Thus the requirements of the district for the nine months over which the scarcity lasted were supplied from local sources, but with nothing to spare; even the provision

necessary for seed-grain must have been made up by curtailing the consumption of home-grown produce, and having recourse to imported grain to make good the void.

33. This brings me to the question of importations during 1874, and I regret to say I cannot offer much more definite information on the point than I could when viewing the district under normal aspects. The impossibility of maintaining an accurate registration of

Reported importations of food-grain chiefly to Gya town during scarcity of 1874:—

First quarter ... ..	610 tons.
Second " ... ..	1,885 "
Third " ... ..	964 "
Total ... ..	3,459 "

traffic in a district with no frontier depôts of note, and with very few highways, is readily conceivable. Still the few facts summarized in the margin, which were collected regarding the import trade last year into Gya, show that it was more active than usual, and also that it was most active in those months when the Government stores were also utilized. The operations of Government, however, in Gya were naturally inconsiderable, as will appear presently. The close equilibrium which, as I have shown, obtained last year between the absolute supply of food in Gya and the requirements of the people had the natural effect of keeping prices, all the time the scarcity lasted, at an exceptionally high level. This fact cannot be cited as a proof that during that time the people as a whole suffered from the hardships which high prices import, because the great mass of the people, retaining under the peculiar circumstances of the district a sufficient share of the food-produce of the year, were under no necessity of having recourse to the markets. With many, however, this necessity did exist. It existed in case of those members of the laboring classes who had no land of their own to till, and in the case of the artizan class, who are numerous in the district. To many members of these classes, therefore, the high prices that prevailed meant serious hardship and ultimate distress, and it was in relief of these meritorious classes that Government action in Gya was principally exerted. That the current prices were such as tended to cause great distress to such people will be evident from the following statement of prices in the district during 1874. It is necessary to add that in Gya, as elsewhere, the beneficial effect of the sales of Government grain is traceable more in the fact of its having arrested the upward tendency of prices to prohibitive rates than to the actual quantity sold:—

*Statement of prices current in the district of Gya during the year 1874.*

KIND OF GRAIN.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Common rice ... ..	10'8	10'8	10'5	10'2	10'8	12'5	11'8	12'2	13'2	14	18	22'3
Indian-corn ... ..	12'8	13	13	14'2	14	15	14	17'5	24'5	21'7	20	25'3
Pullows ... ..	18	14	14	18	15	16	16	15	17	17	20	19'5
Wheat ... ..	12	12	12'5	12	12'5	12'8	12'5	12'5	13'8	13'5	15	16'8
Millet ... ..	16	15	15'0	17	16'5	14'5	15	15'5	...	12	18	24



34. I now proceed to exhibit the extent to which it was found necessary to afford Government aid to the people of this district last year. The aid afforded was so inconsiderable that it seems unnecessary to introduce the figures which set it forth by any explanatory preface. I therefore present the following tables, the first of which shows the total expenditure in grain, and the second in money, which was incurred in the relief of distress during the whole period of the scarcity in Gya.

*Statement of grain expenditure in the Gya district during the year 1874.*

	Tons.		Tons.
1. Total delivered in district, exclusive of re-transfer ...	3,073	4. Grain advanced on loan ...	85
2. Grain distributed in charitable relief	220	5. Grain paid in wages ...	117
3. Grain sold for cash ...	2,433	6. Total grain expenditure ...	2,855

N.B.—The difference between item 1 and item 6 of this statement, that is, 218 tons, is due to wastage. This is at the rate of 7 per cent. on the nominal quantity delivered.

*Statement of cash expenditure incurred in the Gya district for the relief of distress during 1874.*

	Rs.
Money distributed in charitable relief ...	11,522
Money paid as wages ...	40,648
Money advanced on recoverable loan ...	40,503
Total money expenditure ...	92,673

35. I now proceed to exhibit the numbers of distressed people who were relieved by the expenditure tabulated above. The numbers of those relieved by the gratuitous distribution of grain or money, and by payment of wages in grain or money, are given with precision, and are set forth in the following statements:—

*Statement of the daily average number of persons charitably relieved in the district of Gya during the famine of 1874.*

DISTRICT—GYA.

Fortnight ending on the 7th March ...	183	Fortnight ending on the 27th June ...	1,724
" " 21st " ...	192	" " 11th July ...	1,760
" " 4th April ...	284	" " 25th " ...	1,866
" " 18th " ...	335	" " 8th August ...	2,120
" " 2nd May ...	480	" " 22nd " ...	1,720
" " 16th " ...	497	" " 5th September ...	1,278
" " 30th " ...	570	" " 19th " ...	1,039
" " 12th June ...	1,070	" " 3rd October ...	542

*Statement of laborers employed in the district of Gya during the relief operations of 1874.*

Aggregate number of individuals employed ...	296,040	April 1874 ...	1,334
Average daily attendance each month—		May " ...	2,488
January 1874 ...	142	June " ...	2,758
February " ...	454	July " ...	1,198
March " ...	764	August " ...	377
		September " ...	383

36. It will be evident from a cursory examination of the first of these statements that it is equivalent to saying that 7,816 people received charitable relief for one month; and in like manner the figures in the second statement are tantamount to saying that 9,888 individuals received wages on relief works for one month.

37. If now the quantity of grain advanced on loan and sold for cash be divided into portions of 23 seers, and it be supposed that every such portion afforded subsistence to an individual for a month, and if again the money advanced on loan be likewise divided into portions of 30 annas each, and it be supposed every such portion of 30 annas afforded subsistence to an individual for a month, then the result will be that, by means of advances in cash and grain and of sales of grain, Government supported 144,217 individuals for one month.

38. Summing up the result of the two preceding paragraphs, it will be seen that the assistance in money and grain, distributed by various methods among the people of Gya last year, sufficed for the support of 161,921 individuals, or less than 9 per cent. of the population for one month. If any of the money so advanced on loan or paid as wages was utilized in paying Government grain, then is the number aided by the Government less by the measure of every 30 annas, contained in the money which so found its way back into the Government treasury. But whether any did or did not find its way back it is not possible to state with certainty, though the great probability is that there did.





## SECTION VII.

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### General observations on population in the Patna division in its relation to land and to food-grain supply.

I HAVE thus far considered the normal condition of each lately distressed district of the Patna division as regards food-grain supply and the various questions of rainfall, prices, and trade, which are germane thereto. I have attempted to define the position of each such district in regard to those questions during the year 1873-74, and to realize the difficulties with which, during that period, each had to contend; and, finally, I have exhibited the extent and effect of the action taken by Government in those districts with the view to the relief or prevention of actual or impending famine. I now proceed to note such points, pertinent to this enquiry, as could not be conveniently introduced at an earlier stage, and such general considerations regarding the population in its relation to local food-supply as the preceding discussions have suggested to me.

2. I shall, in the first place, summarize the general results of what has been already written with a view to emphasizing some, and adding a few additional facts to other points. It will be understood, however, that, as far as trade is concerned, I continue to be chiefly occupied with the trade in food-grain, and that I abstain from entering on the consideration of the various other sources of agricultural wealth intrinsic to each district, and which commercial transactions touch. Still, it will be observed that, in the trade statistics I have reproduced for each district, those other sources of wealth and commerce are indicated with some precision; and it will be seen that the provision which has been made for the more primary class of wants, marks out the wants of a secondary nature, and to some extent defines the sources from which they are to be supplied. Upon these latter wants I have not touched, nor, in the sequel, shall I do so; neither have I referred, nor shall I refer otherwise than incidentally, to the sources of wealth which supply them. I have already explained how inevitable it is that the view of district economy I present should be incomplete; but I trust I have not failed in so arranging my materials that additions can hereafter be made without altering the framework of what has been done.

3. The Patna commissionership—with an area one-fourth less, but with a population three and one-third times denser, than that of Ireland, and 20 per cent. denser than that of Belgium, the most populous country in Europe—is divided by the Ganges into two not very unequal portions. Differing from each other in physical aspect and character of soil, these two portions, from an economic point of view, exhibit also much mutual divergence. As far as mere numbers of people living in each go, the difference is obvious and well marked.

The north Gangetic region has an area of 12,528 square miles, with a population of 8,025,311 souls; while the region south of the river has an area of 11,204 square miles, inhabited by 5,233,362 souls. Thus the northern portion, which is not 10 per cent. larger, is 35 per cent. more populous.

4. The distribution of the population, also, into urban\* and rural, differs in the one portion from what it is in the other. In the northern districts the urban population forms only 3 per cent. of the total; there is no town with a population over 50,000, and but 11 towns each with population over 5,000.

5. In the southern districts, on the other hand, the urban is 10 per cent. on the gross population; there are four towns with from 30,000 to 140,000 inhabitants, 10 towns with populations between 10,000 and 30,000, and 12 towns with populations between 5,000 and 10,000 each. The following statement, extracted from the Census Report, will place this point in a clearer light :—

DIVISION.	District.	Villages less than 200 inhabitants.	From 200 to 500.	From 500 to 1,000.	From 1,000 to 2,000.	From 2,000 to 3,000.	From 3,000 to 5,000.	From 5,000 to 10,000.	From 10,000 to 15,000.	From 15,000 to 20,000.	From 20,000 to 50,000.	Above 50,000.	Total.
		PATNA.	Patna ... ..	1,454	1,225	502	173	36	10	5	4	...	2
	Gya ... ..	3,587	1,956	727	207	34	12	4	1	...	...	2	6,530
	Shahabad ... ..	2,677	1,509	619	227	48	14	4	...	...	2	...	5,110
	Tirhoot... ..	2,007	2,485	1,688	883	183	66	20	2	...	3	...	7,337
	Sarun ... ..	1,316	1,693	919	347	52	19	2	1	...	1	...	4,350
	Chumparun ... ..	627	789	512	256	63	40	11	...	1	...	...	2,299
	Total ... ..	11,678	9,657	4,967	2,063	416	161	46	8	1	8	3	29,038

6. These statistics of themselves suggest what is the fact—that, generally speaking, the commissionership is an agricultural region; but if regard be had to the north Gangetic portion alone, it may be said that manufacturing industries are altogether unknown. Of course there are certain trades or handicrafts which are restricted by immemorial usage to certain classes of the people, and there are indigo factories supported mainly by European capital; but most handicraftsmen are also cultivators, and the manufacture of indigo is, as far as the people are concerned, an insignificant incident connected with that industry. Therefore it may broadly be said that all the people north of the river, and the great majority of the people south of it, live as best they may on the produce of the soil. It may further be stated generally of the commissionership, but absolutely of the country north of the Ganges, that it is barren of mineral wealth.

7. Now, looking into this question more closely from the stand-point of population in its relation, first, to land generally, secondly, in its relation to culturable land, the divergence between the economic

\* The population of no town is in this report called urban unless it reaches 5,000 souls.

conditions of both portions of the division assumes greater prominence ; and the divergence is still more pronounced if regard be had rather to the future than to the present time.

8. I have stated that throughout the Patna division, which has no manufacturing industries, no mineral resources, and no large towns to speak of, the density of population is greater than it is in the most populous country in Europe, which has flourishing manufactures, much mineral resources, many cities, and numerous large towns\*. Concentrating attention, however, on each portion of the commissionership in turn, it will be seen that north of the river the excess assumes such grave proportions that thereby the figures for the southern districts are dwarfed and reduced within, comparatively speaking, moderate bounds.

9. Throughout the whole tract north of the river the average density per square mile of the population is 631, but in large areas in Sarun it is 984. Throughout the Sarun, Mozufferpore, and Durbhunga districts, with an aggregate area of 9,000 square miles, the average density of the population is 751 per square mile. It is the large uncultivated tracts in Chumparun (on which I shall have something to say presently) that reduces the average for the whole north Gangetic tract.

10. I have stated that the excessive figures for the north Gangetic districts reduce within comparatively moderate limits the averages for the districts south of the river. Thus we find that for these districts the average density of population per square mile is 467, while the maximum density is reached in the Patna district, with 671 to the square mile. It will be understood that when I speak of maximum density I refer to rural areas exclusively—to areas in which no town with 5,000 inhabitants exists.

11. It cannot be said that the condition of the population in either the northern or southern districts is at present satisfactory ; but the future holds out brighter prospects to the people of Gya and Shahabad than it does to the inhabitants of Sarun and Tirhoot. The two great obstacles to the improvement of the former districts lie in the want of water for irrigation and in the prevalence of the *bhaouli* and *danabundi* systems of land tenure, which, differing in detail, agree in enforcing payment of the rent by a nearly equal division of the produce between cultivator and rent receiver. The former obstacle is being surmounted, the latter continues unabated.

12. It has been stated that these systems are not without their good points ; that although they enable the landlord in good years to appropriate a larger share of the produce than he could buy with the money-rent of an equal quantity of land of similar situation and fertility, still that he shares with the cultivator the chances of bad years, the profits and losses being thereby equally divided. This seems to me a questionable view to take. Regarding the landlord's advantageous position in good years as compared with that of the ryot, there is no question ; to establish the asserted equality I combat, his position in bad years should be proportionally disadvantageous. But it will be seen that although in bad years a landlord receives absolutely (not relatively to the cultivator's share) less than in good years, the

\* With reference to European countries, it is observed in the Report on the Census of England and Wales for 1871.—“ Any density of a large country approaching 200 to a square mile implies mines, manufactures, or the industry of cities.”

limitation in supplies, which bad years connote, enhances the price of this lesser quantity, if not to a par with the money value of his share in ordinary years, yet to a degree generally sufficient to save him from loss. Thus it is that these hurtful systems of land-tenure confer on the rent receiver a monopoly of gain ; while, on the other hand, depriving the cultivator of those means of permanently bettering his condition, which good years or dear prices bring, they saddle him with all the loss.

13. It is easier to point out the evil than to suggest the cure ; the first step, however, towards a remedy is the clear perception of the evil. For my own part, I am convinced that much may be done by local influence and by the example of Government in estates which come under its management. Until, however, the change is introduced, until money-rents in Gya and Shahabad supplant payment of rents in kind, there cannot be, I fear, much material improvement in the condition of the cultivating classes who compose the mass of the people.

14. Turning now to the districts north of the river, I beg to present the following tabulated estimates (abstracted from the statistics in the preceding sections) as a basis for my subsequent remarks :—

*Abstract estimates showing the relation of population to the gross and to the cultivated area in those districts of the Patna division which were lately distressed.*

NAME OF DISTRICT.	Population.	AREA OF DISTRICT.		Proportion of gross area per head of population.	Proportion of cultivated area per head of population.
		Cultivated.	Uncultivated.		
		Acres.	Acres.	Acres.	Acres.
Sarun ... ..	2,063,860	1,499,829	198,731	'82	'73
Chumparun ... ..	1,440,815	1,437,393	682,008	1'47	1'0
Mozufferpore ... ..	2,188,382	1,435,859	465,020	'87	'65
Durbhunga ... ..	2,332,254	1,661,280	491,890	'92	'71
Gya ... ..	1,949,750	1,600,344	1,419,176	1'54	'82
Shahabad ... ..	1,723,974	1,480,030	1,326,370	1'6	'85

*Abstract estimates showing the relation of population to local supply of food-grain in the distressed districts of the Patna division.*

NAME OF DISTRICT.	Gross annual production of food-grain.	Annual requirements for consumption and seed.	Quantity available for export and storing from one year's production.	Wastage on gross production.
	Tons.	Tons.	Tons.	Tons.
Sarun ... ..	671,385	547,430	90,886	33,569
Chumparun ... ..	517,269	395,000	98,406	25,863
Mozufferpore ... ..	751,000	577,664	135,736	37,550
Durbhunga ... ..	861,000	619,779	198,171	45,050
Gya ... ..	640,000	520,507	87,493	32,000
Shahabad ... ..	870,000	455,000	181,500	33,500

15. Now, the former of these two statements will show that in the Sarun district the pressure of population on the soil has reached that extreme point, which is evidenced by the cultivation of every available acre of land. There is now only 12 per cent. of the area in this district uncultivated, and it is physically impossible that this margin should be reduced further. There is no hope, therefore, of the condition



of Sarun being benefited by any scheme which has for its object the further extension of agriculture.

16. In the Mozufferpore and Durbhunga districts matters have not reached, from one point of view, the state they have attained in Sarun; but I think it can with safety be said that they have reached a pass which, in the present state of affairs, is inconsistent with any extension of cultivation. It will be observed that the proportion of cultivated land per individual in Mozufferpore is less, and in Durbhunga the same as it is in Sarun.

17. Now, seeing that the pressure of population on the soil of the two former districts is less than on the soil of the latter district, one would expect to find less cultivated land per head of the population in the latter than in the former. This is not so; and I submit that this reversal of the usual rule points to a degree of infertility in the uncultivated land of Mozufferpore and Durbhunga which renders it unprofitable to till it. In the absence of means for artificial irrigation, this infertility will naturally continue; and therefore, although those districts have a possibility, under altered circumstances, of an amelioration in their condition, they are no better off to-day than Sarun is; indeed, they are in one point of view not quite so well off, for the larger portion of them is more dependent than Sarun is on the winter rice, which is the crop most sensitive to abnormalities of weather. The entire northern portion of those districts, too, produces no opium, and but inconsiderable quantities of those non-food crops which render Sarun to some extent independent of minor vicissitudes of season.

18. It is not to a redundant population alone, or to its dependence on one crop, that North-East Tirhoot owes its present unsatisfactory condition.

Partly owing to customs of immemorial origin, partly owing to recent enhancements of rent, partly owing to a succession of unpropitious seasons, the result seems to be that the profits of agriculture, in ordinary years not more than sufficient to cover expenses and give a small margin of profit, fall below this low level in years but slightly adverse. They seem to be insufficient to enable the cultivator to save anything.

19. I attribute this unsatisfactory state of things in a very large degree to insecurity of tenure and to the high rates of rent which prevail; and these high rates of rent are due, in my opinion, less to the ordinary working of economic laws than to the mischievous system of farming out estates and villages which also largely prevails.

20. A proprietor in immediate want of money, or disinclined to perform by his property those duties which are correlative to his rights, assigns to a middleman the right of collecting and appropriating the rents payable by the ryots, on consideration of the present payment of a bonus (salami), and a future periodical payment of rent, not always less than what the proprietor had managed to collect direct. The farmer, or 'thikadar,' as he is called in the vernacular, having no interest in the permanent well-being of the estate, has to recover within a stated time (usually nine years) the bonus, the rent he pays, and a profit; he enhances the ryot's rent, not always by the expensive method of an appeal to the courts. The ryots have thus to contend with the farmer backed up by the

zemindar, and in those parts of Tirhoot which, till recent changes, were under-officered, and therefore under-administered, the ryot always was worsted in the struggle. He paid an enhanced rent while the seasons were good; when a bad one came, he paid it by borrowing, or avoided payment by absconding. I do not of course say that all thikadars act, or have acted, as stated above; there are doubtless exceptions, but the rule is, I believe, as I have stated, and the result is that 'thikadar' is not a word of good omen to the ryot in Tirhoot. There can be no doubt the system is radically and essentially bad, and should be discouraged; discreetly, it is true, but still with all the power of the administration.

21. Turning now to Chumparun, I find that a larger proportion of cultivated land per individual is, as usual, coincident with a lighter pressure of population on the gross area. There is an acre of cultivated land to each individual of the population in Chumparun, and it is to be hoped that the completion of the Gunduk embankment will throw into the cultivable area land which has hitherto lain waste, and that thereby the wants of a not over-populous district may be amply satisfied. The districts south of the river are, in respect to this question of population in relation to land, in much the same position as Chumparun.

22. There is one great advantage in which the north-eastern portion of the Patna division does not share with the remainder, and that is, in the cultivation of the poppy for opium manufacture. The benefits which this industry in 1874 conferred on the ryots in the south Gangetic and western portion of the north Gangetic districts can hardly be overrated. A highly valuable cold-weather crop, grown in limited areas, and brought to maturity by artificial irrigation, the poppy is to a large extent independent of the rainfall; and last year the disbursements for opium came most opportunely to the assistance of the people.\*

\* I have been favored with some interesting statistics regarding this industry in the Patna Agency, and as the question is not unconnected with the agricultural position of the division, I reproduce the statistics I have received from the Agent at Patna :—

*Statement showing the Area of Land, Average Annual Produce, Average Cost, and Average Profit in each Sub-Division of the Behar Opium Agency in respect of the cultivation of Opium.*

DISTRICT.	Sub-Division.	Average area of land usually under cultivation.	Average annual produce.	Average cost per seer to Government.	Average gross profit per acre to the cultivators.
		Bgs.	Mds.	Rs A. P.	Rs. A. P.
Tirhoot	Tirhoot	35,800	2,300	} 5 14 0	18 14 0
	Hajeepore	27,000	2,400		24 5 0
Sarun	Chuprah	33,200	5,100		24 0 0
	Allegunge	45,700	5,500		20 0 0
Chumparun	Moteharee	80,000	5,300		20 0 0
	Bettiah	53,500	4,400		19 4 0
Shahabad	Shahabad	37,600	7,500		34 0 0
	Gya	74,400	10,000		25 0 0
Gya	Tehtah	46,000	7,000		24 0 0
	Patna	41,000	7,200		31 11 0
Monghyr	Monghyr	40,000	4,800	35 9 0	

The "average profit per acre to the cultivator" is the gross profit, from which is to be deducted the rent of land and wages of labor; both are covered in some districts by Rs. 8, in others by Rs. 12 per beegha. I believe they never go above Rs. 15.

23. It is a well known fact that within recent times the prices of food-grains have risen considerably ; but it does not appear that the wages of labour have undergone any corresponding increase. A clear conception on this point is obscured by the prevalent custom of paying agricultural labour in grain ; as far, however, as I can learn, no rise in wages has taken place commensurate with the ascertained rise in prices.

24. The wages of agricultural labour vary in each district and at each season. They are highest at harvesting time, when in Tirhoot a labourer gets one sheaf out of every sixteen he reaps ; or in Shahabad, one sheaf out of every twenty-one in addition to his midday meal. These may be considered average rates for the division. At other seasons the agricultural labourer is paid in cheap grain, of which he gets from three to four seers a day. It may be broadly assumed that the money value of his daily grain wages does not exceed in Tirhoot and Sarun one and a half anna, while in Chumparun and Gya it is perhaps scarcely as much. In Shahabad the Soane Canal works seem to have raised the rate of wages slightly above the level of the neighbouring districts. In Shahabad, however, the rate does not exceed, if, indeed, it always reaches, two annas per day for an able-bodied labouring man. Women and children get 30 and 60 per cent. less.

25. This custom of paying wages in kind had a marked effect on the course of relief operations in 1874 ; not only were the Government stores not drawn upon by the labourers who left our relief works for the fields, but grain-dealers also found the demand fall off. The result was a decrease in importations into the several distressed districts, and a contraction in the Government relief operations.

26. What further effects of a general nature this custom of paying wages in kind may have, whether it in any way discourages the development of retail trade in grain, and thus adds to the difficulties of meeting scarcities in India, are obscure points in district economy on which the papers before me throw no light. They are questions, however, of high importance, worthy of careful enquiry and thought.

27. Apart from the question of agricultural labour, it seems to me that, as matters now promise, the prospects south of the river are not unsatisfactory. The same, though in a much more modified form, may be said for the district of Chumparun, north of the river, if the irrigation scheme advocated by the Lieutenant-Governor in his minute of the 30th July 1874 be carried into execution. It seems to me that sooner or later the execution of this scheme, or some similar one, will be a matter of necessity. Population in North Behar is now pressing so close on the means of subsistence that every slight deficiency in the rainfall causes a failure in the food-supply, and every failure in the food-supply becomes inevitably an occasion for invoking the aid of Government. I am aware of the proposals to extend the State Railway system in Tirhoot. I recognize the excellence of the project, and I believe in its ultimate financial success ; particularly in the success of an extension from Durbhunga to Partabgunge in North Bhagulpore, *via* Jhingarpore and Narayeh. Still I submit that this extension of the railway line—this opening up of the country to the movements of private trade—will not of itself free Government from the constant liability to expenditure consequent

on drought. You may afford every facility to private enterprise; it may answer your expectations, and, on emergencies, flood the country with grain; but people reduced to indigence by the loss of their crop cannot if unassisted buy grain thus provided for them; the burden on Government is postponed and perhaps lessened; it is not removed.

28. Besides the obvious importance of this subject of irrigation in connection with the prevention of famine in those north Gangetic districts, and of scarcity in the districts they partially supply; besides its utility in preserving the crops from floods in years of inundation, and from incidental losses in normal years; it also has no insignificant bearing on the introduction of better varieties of seed, the development of new industries, and perhaps on the continuance of some old established ones. This is not the place to discuss the indigo question, but it is worth while to consider whether the increasing pressure of population on the soil, and the precariousness of the subsistence afforded by it, except in fair years, will ultimately admit of a large quantity of land being devoted to the growth of a staple which, though undoubtedly beneficial to the country, does not confer as directly tangible advantages on the people as other industries do. In these four northern districts of the Patna division there are about 220,000 acres of the most fertile up-land devoted annually to the cultivation of indigo. In average years the subtraction of this quantity of land from the food-growing area, or from the area occupied with the production of those staples over the disposal of which the cultivator has entire control, does not cause inconvenience from a food-supply point of view. But in adverse years the retention for indigo cultivation of this land, which at a moderate calculation would yield 150,000 tons of food-grain, causes inconvenience to the people. I will not say that this inconvenience is not counterbalanced by advantages. I am not considering the general question: I am merely anxious to point out that the want of irrigation makes the inconvenience perceptible; and that if the want remain unsatisfied, an increased perception of the inconvenience, or a decay of the indigo industry, will probably result.

29. Before I pass on to the question of divisional trade, I shall briefly review the exact position of these districts as regards the sufficiency of the present food-supply locally produced, as far as this supply can be, or has been, determined by the statistical method I have followed. For this purpose I shall treat the four districts north of the river as one tract. This I am compelled to do, because of the close interdependence of these districts one upon the other,—an inter-dependence which, I believe, has already been illustrated sufficiently. I shall subsequently introduce the question of the effect of private trade moving from or to places external to this tract, but for the present I shall restrict myself to the local food-supply in grain.

30. It will be seen from the second statement produced in paragraph 14 of this section that the gross annual production of food-grain in this trans-Gangetic tract in ordinarily good years is, in round numbers, 2,800,000 tons. It will be also seen that the annual requirements of the people for absolute wants (that is, subsistence and seed-grain) reach, in round numbers, 2,137,000 tons. The nominal surplus of food-grain

locally produced in an ordinary good year is, in round numbers, 663,000 tons, that is to say, less than one-fourth of the quantity annually produced and less than one-third of the *minimum* quantity annually consumed. But reason has been shown for thinking that not less than five per cent. on the gross quantity produced is lost by wastage within the year of production ; therefore the net surplus of any one year's production will be 523,000 tons, which is an adequate provision for the population for three months, if none of it were exported out of the districts.

31. It has been shown, however, that of this surplus 432,000 tons are annually sold to meet rent charges, and there is no doubt that although much of this grain does not leave the entire tract, much of it is exported to other provinces. It is very doubtful whether from an average year's local production there is at the end of that year a sufficient stock of grain in those four north Gangetic districts to supply the population at their ordinary rates of consumption for more than two months.

If the statement be examined in a similar manner in reference to the condition of Gya and Shahabad, it will be found that, as regards the supply of food-grain locally produced, they, taken together, are *at present* no better off than the northern districts. Their prospects, however, are, as I have pointed out, much more satisfactory. It must, however, be remembered that my agricultural statistics for Gya are estimates built on no certain basis.

32. I now proceed to consider, as far as my imperfect information will allow, the effect of external trade, in food-grain, in modifying the position which I have defined. On this question I can limit my remarks to no smaller area than the division as a whole, for the railway-borne trade statistics do not indicate the district from or to which goods are consigned. I produce two statements showing the import and export trade of the Patna division in the most normal years for which they exist. I regret I cannot give the Government the same confident assurance regarding the railway-borne that I can give regarding the river-borne trade, that imports have never been shown as exports also. It is possible that goods conveyed by rail from Arrah may have been delivered at Patna, and so on ; but I believe that the inter-divisional transactions of this sort are very few and inconsiderable. However, I feel bound to note that there is certainly this unavoidable element of confusion in the statement.

PATNA DIVISION.

*River-borne Imports registered at Sahebgunge.*

YEAR.	Rice.	Other food-grains.	Oil-seeds.	Cotton.	Sugar.	To-bacco.	Salt.	Hides.	Salt-petre.	Miscellaneous commodities.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Nos.	Mds.	Mds.
1872 ...	13,96,461*	1,15,706	220	.....	125	82	8,25,401	213	.....	1,77,973
1873 ...	15,42,536	2,64,587	100	.....	.....	25	6,94,216	80	.....	1,17,246‡

\* Paddy mixed.

136 *General Observations : Trade of the Patna Division in food-*

*River-borne Exports registered at Sahebgunge.*

YEAR.	Rice.	Other food-grains.	Oil-seeds.	Cotton.	Sugar.	To-bacco.	Salt.	Hides.	Salt-petre.	Miscellaneous commodities.
1872	Mds. 1,426	Mds. 3,04,763	Mds. 13,25,869	Mds. 534	Mds. 1,19,462	Mds. 50,437	Mds. 69,350	Nos. 32,120	Mds. 2,43,615	Mds. 2,71,517
1873	200	2,93,667	13,36,717	1,226	1,13,626	57,987	1,44,046	16,567	3,13,987	3,10,840

*Statement of Railway Traffic for the Patna Division for 1872.*

	FIRST QUARTER.				SECOND QUARTER.				
	Food-grains.	Indigo.	Seeds.	Others.	Food-grains.	Indigo.	Seeds.	Others.	
Imports	Mds. 4,77,570	Mds. ....	Mds. ....	Mds. 5,50,859	Mds. 2,07,255	Mds. ....	Mds. 1	Mds. ....	Mds. 5,80,731
Exports	94,833	390	56,392	3,52,079	1,18,167	.....	1	4,11,678	4,36,585
	THIRD QUARTER.				FOURTH QUARTER.				Total food-grains.
	Food-grains.	Indigo.	Seeds.	Others.	Food-grains.	Indigo.	Seeds.	Others.	
Imports	Mds. 1,45,694	.....	Mds. ...	Mds. 4,04,622	Mds. 79,301	.....	Mds. ...	Mds. 5,51,992	9,09,820 mds.
Exports	42,870	.....	76,516	1,76,969	97,593	62,751	28,938	3,31,218	or 32,493 tons.
									or 3,53,463 mds.
									or 12,624 tons.

33. In giving the river-borne trade statistics for both years, my object is to secure an average unaffected on the one hand by the crudeness of the registration system, which in 1872 was in its infancy, and on the other by a possible increase in trade due to an enhanced demand in the end of 1873. The statistics for both years give, I think, a fair mean; and comparing the figures for imports and exports of food-grain, I learn that there is, in average years, a surplus importation from Bengal of 50,000 tons. What quantity of grain in addition to this is annually imported from the North-Western Provinces, or whether the balance of trade in that direction leans towards exports, cannot be definitely stated. But although there are no figures available on this point, it may be confidently accepted as a fact that the Patna division exports by river to the North-West very much more food-grain than it imports from the same quarter.

34. Turning now to the railway-borne trade statistics for the year 1872, which is the most normal year for which data could be supplied me, I gather from them that about 20,000 tons of food-grain were imported into the division in excess of the quantity exported; therefore, as far as these statistics go, the surplus importations of food-grain into, over exportations of food-grain out of, the Patna division reach annually a total of 70,000 tons.

35. It has been noted in the sections on Sarun and Chumparun that those districts annually receive much food-grain from the Nepal Terai. The portion of this grain that Sarun receives it appropriates, but it is more likely that Nepalese exports merely pass through Chumparun. It is not possible to state the quantity of food-grain the division receives from this quarter; but making the fairest allowance I can for it, for such grain as in ordinary years North Bhagulpore sends, and for such grain as finds its way in through the many petty channels of interprovincial communication, I believe I am quite safe in stating that the Patna division does not import more than 130,000 tons of food-grain annually, and that it exports a much larger quantity. On the whole, taking both local production and trade into consideration, I am of opinion that it will be a favorable conception of the condition of the division which imputes to it the possession at the end of any year of a two months' supply of food-grain for the population. It would, in this connection, be interesting to examine those trade statistics more minutely, with a view to estimating whether the balance is for or against the division; whether they suggest the probability that, supposing an absolute failure of the food-grain crop *alone* in any year, and granting the ability of external private trade to supply the internal demand to the full, the division possesses resources by which its food-supply could be raised from a two to a six months' supply. I have grave doubts upon the point.

36. It seems unnecessary to supplement the remarks I have in each section offered on the events of 1873-74 on any other point save the question of private trade. A just conception of the extent to which private trade was operative in the Patna division in 1874 cannot be formed from the trade statistics embodied in each section, because they ignore the trade of Patna, which is the great commercial centre of Behar. As Patna was not a distressed district, it did not enter into my plan to deal with its economy; but now I propose to present consolidated statements of the registered trade of all the districts of the division, and thus I shall include the Patna trade. It will be evident that the consolidated statements will repeat, in a great measure, results already given, when I mention that Patna is the centre from which food-grain, consigned to it, is distributed over the surrounding districts. In some respects, however, the consolidated statements will not be a mere repetition. In the case of Sarun, for instance, much of its importations seem to have come direct, and never to have been registered in the Railway traffic returns or in the Sahibgunge trade statistics. In fine, the consolidated statements I now give exhibit the trade of the division as a whole as far as that trade was railway-borne, or being river-borne was registered at Sahebgunge. It is not an exhaustive statement of divisional trade during the period in question, because it ignores all overland trade and all river-borne trade with the North-West, &c. It will be obvious, therefore, that the result shown understates the reality; yet in the item of food-grain the statements show a balance of importations over exportations of more than 78 lakhs of maunds, or 285,000 tons. I am satisfied that if we had before us accurate returns of the food-grain imported by private enterprise into the Patna division during the whole period of the famine, the total would not be

under 350,000 tons; and that if a balance on such accurate returns were struck between imports and exports, the excess of the former would not be less than 300,000 tons. I now present the statements I have thus introduced—

*River Traffic Statement for the Patna Division for 1874.*

	Rice.	Other food-grains.	Oil-seeds.	Cotton.	Sugar.	Tobacco.	Salt.	Saltpetre.	Hides.	Others.
Imports	4,01,934	1,63,558	.....	.....	61	131	4,79,547	.....	.....	1,34,589
Exports	1,420	4,06,710	11,11,442	1,479	47,654	65,481	62,467	2,73,280	20,605	3,82,741

*Statement of Railway Traffic for the Patna Division for 1874.*

	FIRST QUARTER.				SECOND QUARTER.			
	Food-grains.	Indigo.	Seeds.	Others.	Food-grains.	Indigo.	Seeds.	Others.
Exports	Mds. 1,72,361	Mds. 5,383	Mds. 1,37,975	Mds. 3,56,383	Mds. 2,70,986	Mds. 5	Mds. 2,57,095	Mds. 3,59,717
Imports	57,20,984	.....	.....	9,45,398	61,30,854	.....	.....	10,13,548

	THIRD QUARTER.				FOURTH QUARTER.				Total food-grains.	
	Food-grains.	Indigo.	Seeds.	Others.	Food-grains.	Indigo.	Seeds.	Others.	Mds.	Tons.
Exports	Mds. 1,82,238	Mds. 16	Mds. 1,82,413	Mds. 2,31,349	Mds. 1,43,080	Mds. 1,41,229	Mds. 19,406	Mds. 3,55,270	Mds. 7,68,695	
	Add exports in the fourth quarter of 1873 ...								1,51,106	
									9,19,801	or 32,850
Imports	12,67,555	.....	.....	5,23,631	1,22,195	.....	.....	6,34,537	1,32,41,588	
	Add imports in the fourth quarter of 1873 ...								15,06,913	
									1,47,48,501	
	Deduct Mr. Toynbee's despatches of Government grain ...								52,52,090	
									94,96,411	
	Deduct deliveries of Government grain from North-West, Punjab, &c. ...								9,32,604	
	Remainder								85,63,806	or 305,850

37. I have added to the railway-borne trade statistics for 1874 the quantities of food-grain imported during the last quarter of 1873. It was in this quarter that private enterprise was stimulated by the reduction in railway freights, dissemination of accurate knowledge regarding the condition and state of the markets in the distressed tracts, and the facilitation of internal transport by the suspension of the levy of ferry dues, &c. It would obviously be an incomplete view of the operations of private trade, induced by the scarcity, which would omit the operations that took place in the last quarter of 1873.

38. I have also in the synopsis of railway-borne trade exhibited the quantity of grain despatched to the distressed districts by Government (a) from Calcutta, (b) from the Central Provinces, Punjab,



North-Western Provinces, &c. The railway traffic returns or invoices do not distinguish grain carried for Government from grain carried for private parties; it needed, therefore, a tedious process to eliminate the one from the total of both. I believe, however, that the figures I now give are complete and accurate.

39. It must not be deduced, however, that all the Government grain shown in this statement as carried into the Patna division was expended there during the scarcity. This is not so; there was a margin, and the despatch weight was the nominal weight of the bags as delivered in Calcutta, their real weight, no doubt, as delivered by the sellers. To prevent a misconception on this point, and to sum up the general effect of the relief operations in the division, the moment seems opportune for the submission of the following statement compiled from the statistics already given. I need not introduce it by any explanatory remarks, or insist on the perilous state of affairs it discloses to have existed in the division during 1874. I will only say that no labor and no care has been wanting on my part to render the figures on which it is based trustworthy, and that if my efforts have been in any way successful, it shows that, notwithstanding all the efforts of private trade and of Government, the people of the five districts, as a whole, suffered from an absolute deficiency of food-grain during 1874. I have already had occasion to report officially that "had not the Government strained every nerve to meet the emergency, I believe (and in this I speak with full knowledge of the subject, and with due deliberation) that in this (Durbhunga) sub-division one lakh of people must have died of want." Endorsing this assertion, Mr. Steuart Bayley, c.s.i., the Commissioner of Patna, says, "for the whole division, these figures may be multiplied, in my opinion, by four or five." I would only add that if in 1865, when the failure in the rice harvest was in every district considerably less than it was in 1873-74, and when, as far as they can be compared, cheaper prices generally prevailed, Mr. Cockerell had to report for these five districts a mortality from famine reaching 132,307 (a number which confessedly much understated the reality); then the correctness and moderation of Mr. Bayley's estimate of the calamity which has been averted will be manifest to all.

Average annual production of food-grains.	Average annual consumption for food and seed.	Surplus annually exported, stored, and wasted.	Gross production of food-grain from August 1873 to September 1874.	Stocks in hand, reserve from 1872-73.	Estimated gross importations by private trade.
Tons. 4,110,654	Tons. 3,120,380	Tons. 990,274	Tons. 1,925,056	Tons. 666,000	Tons. 300,000

Assistance actually distributed by Government (exclusive of wastage, sales after relief operations had ceased, &c.)

IN GRAIN.				In money.
Sales.	Advances recoverable.	Wages.	Gratuitous relief.	
Tons. 79,881	Tons. 55,728	Tons. 50,486	Tons. 15,228	Rs. 86,97,757

40. It will thus be seen that the estimated local production in 1873-74, supplemented by maxima allowances for stocks in hand and by large importations, *while undiminished by wastage*, shows an absolute deficiency of 227,000 tons, under ordinary absolute requirements. If the usual allowance for wastage be imported into the question, the deficiency reaches 370,000 tons. To make good this deficiency Government expended 205,323 tons of grain and, say, 87 lakhs of rupees in cash, nearly three-fourths of which sum was recovered or made good by the sale-proceeds of grain. The remainder is the measure of the people's abstinence, or, to put it in other words, of the inevitable hardship they underwent during the continuance of the famine in this division.

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**BHAGULPORE DIVISION.**



## SECTION VIII.

### BHAGULPORE.

THE Ganges, running in an easterly direction through this district, divides it into two well-marked and nearly equal portions. With the exception of 247 square miles of riparian country, which, though belonging to the sudder sub-division, lies on the left bank of the river, all north Gangetic Bhagulpore is comprised in the sub-division of Muddehpoorah, which has an area of 872 square miles, with a population of 391,086 people, and in the Soopool sub-division, which, stretching to the frontier of Nepal, covers 1,275 square miles, inhabited by 565,747 people.

2. South Gangetic Bhagulpore is composed of the remainder of the sudder sub-division and of the sub-division of Banka, the area of this tract being 1,933 square miles, and the population about 869,000.

3. For the Bhagulpore district generally there is a great dearth of statistical information concerning agriculture, but for South Bhagulpore this dearth is more marked than it is for the trans-Gangetic portion. For the former division of the district there is no statistical information forthcoming beyond certain estimates with which the Collector, Mr. Taylor, has favoured me, and for which he does not claim precision; but for the latter there are, besides similar estimates framed by the Collector, some additional sources of information which, if not satisfactory in themselves, at all events furnish some test of the correctness of the Collector's figures.

4. The Collector has compiled his estimates separately for each pergunnah of the district, but it will not be necessary for me to reproduce them in other than an abstract form for each sub-division. I think it will be better to present such an abstract statement in the first instance, and then offer such criticisms on it as seem relevant to the matter in hand:—

*Abstract Statement of Estimated Agricultural Statistics for the District of Bhagulpore.*

NAME OF SUB-DIVISION.	Gross area.	Aughani food-crop.	Bhadoi food-crop.	Rubbee food-crop area on which, owing to inundations, bhadoi cannot grow.	Fallow, indigo, thatching grass, jute, garden cultivation, &c. Uncultivated.
	Acres.	Acres.	Acres.	Acres.	Acres.
Sudder ... ..	631,040	183,400	217,200	130,000	67,280
Banka ... ..	754,160	401,700	130,000	18,000	204,460
Mudheypoora ... ..	558,080	300,000	153,000	40,000	65,000
Soopool ... ..	816,000	288,000	212,500	.....	335,200
District Total ...	2,769,280	1,183,100	712,700	188,000	672,930

5. I must premise the criticisms I have to offer on these estimates by stating distinctly that the Collector does not place much reliance on them himself: he puts them forward as figures which may be made use of, not as figures which possess any definite intrinsic value. If, therefore, by the use I shall make of these estimates I can approximate to more probable results, even at the cost of discrediting the figures I start with, I shall be only acting as Mr. Taylor desires I should act.

6. The heading of column five of the statement indicates the reason why the figures representing the rubbee area are so small; they are meant to exhaust, not the area on which rubbee is generally grown, but the area on which it is grown to the exclusion of a bhadoi crop. This is the area within the inundation line, on which a rainy season crop, if sown, would be submerged.

7. In Bhagulpore, as elsewhere in Behar, the distinction of rubbee and bhadoi is one of season and species of crop grown, not of land on which it grows. The land which grows bhadoi crops—early rice, millet, Indian-corn—is capable of producing rubbee crops—wheat, barley, pulse, oil-seeds, &c.—within the twelve months. The point of difficulty is, how much of the area so capable of yielding two crops in the year is actually double cropped.

8. On this question the Collector of Bhagulpore writes as follows:—  
 “Aughani rice lands are not, and cannot be, double cropped; bhadoi crop lands almost always are. As soon as the bhadoi crops are reaped, the lands are prepared for the cold-weather crops. You may safely put it down that all bhadoi lands are double cropped. There are inundated lands on which bhadoi crops cannot grow; these of course make the best cold-weather crop lands.” I shall in a later paragraph demur to the Collector’s view that *all* the bhadoi crop lands in his district yield also a rubbee crop within the twelve months. I here merely wish to set forth what his view is.

9. Having thus set forth the statistical data which the Collector has supplied to me regarding the agriculture of his district, I proceed to discuss the degree of confidence which may be reposed in the accuracy of these data. Beginning with Soopool, which is the most northerly sub-division, and that in which last year distress chiefly prevailed, I have in the first place to invite attention to the light thrown on the question at issue by the survey statistics. It is known to Government that these statistics were not compiled on the basis of a field-to-field measurement of the country, and that the object of the survey was more to define the area and boundaries of villages and estates than to collect and record such statistics of cultivation and agriculture as I am now concerned with.

10. The object of the revenue survey of Behar being such as I have stated, the indefinite nature of the classification of land adopted in the survey reports becomes intelligible. This classification, based on the more salient aspects of the country operated in, was a tripartite one, the classes being “culturable,” “unculturable,” and “cultivated.” The “culturable” land was composed of ‘jhils,’ tree jungle, grass

jungle, mango groves, and roads"—in fact, uncleared land: the "unculturable" area was composed of 'hills, rocks, ravines, and stony ground,' 'rivers or nullahs,' 'tanks, ponds, or reservoirs,' and 'village sites;' in fact, such areas as in the nature of things cannot be brought under the plough. Lastly, the "cultivated" lands comprise everything not specially mentioned under the two preceding classes, and thus come to include all cleared land, pasturage, fallow, and cultivated waste, as well as land which is actually under tillage. From this it will be manifest that even did the survey statistics record facts now existing, and not, as they do, conditions prevailing twenty-five years ago, they would still be of moderate value for my present purpose. In one respect, however, these survey statistics are still of importance, indefinite and old though they be. Showing under the head of "cultivated land" all pasturage, fallow, and cleared waste; in fact, all that land which, in the progress of agriculture, is first brought under tillage, this "cultivated land" of the survey report furnishes a *maximum* area which it may be assumed the lands now actually under tillage have not yet reached. This, I think, may be assumed with complete safety, for it would be very unreasonable to maintain that, in addition to the land which twenty-five years ago was in cultivation, all the land which then was fallow, or in pasturage, or cleared waste, has since been brought under the plough, and now yields a crop every year.

11. If, therefore, an estimate be found which, within a certain area, puts the land in actual cultivation as high as, not to say higher than, the "cultivated land" of the survey report for the same area, then it may, I submit, be assumed that the estimate is excessive. To this use, then, and to only this, can I put the survey statistics; *they will furnish a test of estimates which are excessive, but they will do no more.*

12. Having thus far dwelt on the general character of the survey statistics of cultivation, I now invite attention to such portions of them as bear on the condition of the Soopool sub-division. For all the pergunnahs of which the Soopool sub-division is composed, survey figures are not forthcoming; but for more than half the sub-divisional area figures are available, which show that at the time of the survey the land classed as "cultivated" was 77 per cent. of the area surveyed. The extent and physical character of this area justify the extension of this percentage to the whole of the sub-division.

13. An examination, now, of the Collector's estimates for Soopool will show an extent of cultivation covering 73 per cent. on the gross area. With reference, therefore, to what has been stated in the penultimate paragraph, it is evident that, as far as the test afforded by the survey statistics is concerned, the estimates are not open to a really valid objection. One may think that the difference between the estimate and the maximum attainable is too small; a doubt of this kind would be countenanced by the further evidence I shall now produce.

14. The further evidence to which I have alluded is contained in a report from the manager of the Durbhunga ward's estate,

concerning that fraction of the estate which lies in the Naridigur pergunnah of the Soopool sub-division. The report says that this fraction of the Durbhunga property contains 124,440 acres, of which 83,643 acres, or 68 per cent., are on an average cultivated every year. It would seem, therefore, that in this estate, which may be looked on as a "specimen" area, though a favorable one for the sub-division, the proportion of cultivated land is less than the Collector would make it for the whole sub-division. This, as I have stated above, supports a belief that the Collector's estimates overstate the cultivated area. During my recent deputation on special duty to Behar, I travelled through the Soopool sub-division, and enjoyed advantages in the way of making enquiries, examining documents, and inspecting the country. I came into contact with residents, Native and European, who had an intimate knowledge of the sub-division and of its agriculture. The conviction impressed on my mind by my own observation is to the effect that the Naridigur pergunnah, specified in the district official records as the most fertile portion of the sub-division, is also the most extensively cultivated. This conviction was borne out by the testimony of those whom I met, and who, from their intimate knowledge of the region, were fully competent to judge. Mr. Taylor, the Collector, also concurs in this view.

15. Now, if Naridigur be the most extensively cultivated part of the sub-division, and if in this part the cultivated area be only 68 per cent. on the gross area, it will follow that the extent of cultivated land in the sub-division as a whole will be something under 68 per cent. on the sub-divisional area. I have adopted 65 per cent. as representative of the extent of cultivation in the sub-division as a whole; and Mr. Taylor, whose criticisms I had an opportunity of inviting, agrees in thinking the result likely to be true; of course it is but an estimate, but I trust I have shown it has not been hastily formed.\*

16. If it be considered that Soopool does not grow any specially valuable non-food grain crop (except chillies and potatoes to a small extent), then this extension of cultivation will be in keeping with its, for Behar, comparatively sparse population of 444 to the square mile.

17. Basing my enquiries into the sub-division of this cultivated area, on the statistics collected from the records of the Durbhunga ward's estate in Naridigur, and modifying the results according to the information collected from other sources, I finally reached the following result expressive of the condition of the sub-division as a whole:—

Gross area of sub-division	...	...	...	100
Cultivated area	...	...	...	65
Uncultivated area	...	...	...	35
			—	100

\* I could find in the Soopool official records no butwara statistics.



Cultivated area	...	...	...	100
Rice area	...	...	60	
Up-land area	...	...	40	
			100	
Up-land cultivated area	...	...	...	100
Bhadoi crops	...	...	63	
Rubbee (mixed food and non-food)	...	...	53	
Kurthee (sown on land specially reserved for it and called "jungla")	...	...	12	
Non-food crops growing alone	...	...	15	
			143	

18. Thus 34 per cent. of the up-land cultivated area in Soopool yields two crops within the twelve months. Kurthee seems to be the only subsidiary food-grain which is usually sown in this sub-division. The cultivation of 'cheena' (which Buchanan mentions as a favourite crop in Bhagulpore) had almost altogether disappeared till Mr. Duff, of Semra, the agent of the court of wards in Naridigur, strove to re-introduce its culture in 1873. His attempt was attended with a considerable measure of success, and he is laudably resolved to persevere in it.

19. Turning now to the Mudheypoorah sub-division, I have in the first place to point out that, inasmuch as it consists of fractions of two pergunnahs, it is not possible to precisely identify its area with the survey areas. Still the identification can be made with sufficient closeness for all practical purposes, and when made, the result is that twenty-five years ago the "cultivated" land of the survey report covered 78 per cent. of the present sub-divisional area. With reference then to my remarks in paragraph 11, it will follow that in every probability the area at present in actual cultivation will give on the gross area a smaller percentage than this.

20. I find, however, that the local estimates infringe this probability by showing the cultivated land as occupying 88 per cent. on the gross area of the sub-division, leaving therefore only 12 per cent. for pasturage, village sites, groves, fallow, waste, &c. Now, for no other tract in Behar, except over-peopled Sarun, was the uncultivated margin so small as this. We have seen that for the neighbouring sub-division of Soopool, in which the density of population is, I may say, precisely the same as in Mudheypoorah,\* the uncultivated margin is much greater; and in the portion of Durbhunga which, adjoining Mudheypoorah, has a population one-fourth more dense than Mudheypoorah has, the uncultivated margin is 24 per cent. on the area. The infringement of the test laid down in paragraph 11, the inconsistency of the estimates with the conditions prevailing in the adjoining tracts, and the impossibility of believing, with reference to what we have learnt of other districts, that so sparse a population is compatible with an extension of cultivation which may be called extreme, compel me to submit a modification of the estimates for Mudheypoorah. The modification I propose will reduce the cultivated land to 65 per cent. on the gross area, which is the percentage adopted for Soopool,

\*The density of population per square mile in Soopool is 444, and in Mudheypoorah 443, according to Mr. Beverley's census report.

and which, reference being had to neighbouring Durbhunga, will in all probability still place the sub-division, from an agricultural point of view, in a more favourable position than it deserves.

21. For south Gangetic Bhagulpore the survey report furnishes no statistics of cultivation, nor am I in possession of any independent information of a specific character regarding the agriculture of this tract. There are therefore no means of testing the accuracy of the estimates for South Bhagulpore, save such as are afforded by a comparison with the census statistics of population, and by a consideration of the rates of rent which, according to the Collector's exhaustive report in reply to the Government statistical circular No. 33 of the 4th July 1872, prevail there. Both of these are indirect and inconclusive methods of verification, but still they are not without a considerable share of value, and as they are the only tests I can think of, I beg attention to the results they give. Of the former or population test the result is briefly this, that in the Banka sub-division, with a population of only 320 to the square mile, the cultivated land is according to the estimates 73 per cent. on the area; while for the sudder sub-division, with a population of 495 to the square mile, the estimates show an extent of cultivation covering 90 per cent. on the area of the sub-division. Now, no tract for which we have figures at all reliable shows anything like this enormous disproportion between the extent of cultivation and the density, or, I might more appropriately say, comparative sparseness of the population which these figures disclose.

22. It is doubtless the fact that infertility of soil necessitates an extension of cultivation. To support a certain number of people in an unfruitful country, more land must be tilled than need be in a country whose soil is fruitful. The question here is this, whether South Bhagulpore is so much more unfruitful than the country north of the river, or than any other district whose condition has been reviewed, as to render likely that most exceptional extension of cultivation presented by the estimates. The solution of this question will introduce the second or rent test to which I have alluded in the paragraph before the last. I must here anticipate, to some extent, a calculation which will be introduced more conveniently at a later stage. This calculation (which is based on the Collector's reply to the statistical circular No. 33 of July 1872) will show that in north Gangetic Bhagulpore the average rent per acre for aughani or winter rice land is about Rs. 2-8, and for all other cultivated land about Rs. 2 per acre. In south Gangetic Bhagulpore the greater variation in local rates prevents as true an average being struck as for the northern sub-divisions. The averages which the recorded rates give are Rs. 4-3 for rice and Rs. 3-10 for other lands; and although these averages doubtless overstep the mean, the true average, if we knew it, would in all likelihood not fall under those which prevail in Soopool and Mudheypoorah. So far, then, as rent paid for land is an index of fertility of soil, and in the absence of competition it is, to some extent, an index, the soil of South Bhagulpore is not on the evidence inferior to that north of the river.

23. Now, knowing the rates of rent which prevail for land in Soopool and Mudheypoorah, I have calculated the rental of those

sub-divisions to be 24 lakhs of rupees. The road-cess valuation statistics, which for Bhagulpore are complete, give the gross rental of the district to be Rs. 6·2 times the revenue, or 43 lakhs of rupees. The rental of south Gangetic Bhagulpore must therefore be 19 lakhs of rupees; and, consequently, if the rates of rent prevalent in this portion of the district be equal to, or greater than, the rates which prevail in the northern portion, then the cultivated area of the former must be less than that of the latter. But it has been shown in the last paragraph that the rates of rent prevalent in South Bhagulpore are, if not greater, certainly not less than those prevailing north of the river. It therefore follows that the estimates which make the cultivated area of South Bhagulpore greater than the cultivated area north of the river are inaccurate.

24. I do not, however, propose to submit any modified estimates; for the methods of criticism I have adopted, though powerful to destroy, are powerless to build up. I could only suggest estimates on purely conjectural grounds, such as that nowhere in Behar have we found under cultivation an acre per head of the population; and that there is no reason to believe there is more than an acre per head of the population cultivated in South Bhagulpore. On such conjectural bases alone an argument can no more be built than on the estimates as they stand. I feel bound to repeat here that the Collector himself puts forward the estimates tentatively more as figures which "may possibly be found of some value," than as figures to which he attached any determinate value. I believe I shall be acting in accordance with his wishes if I now abandon them. I therefore abandon the attempt to construct a statement of agricultural statistics for South Bhagulpore, or to estimate its average annual production of food-grain. It is fortunate that this relinquishment of my purpose occurs in case of that portion of the district where last year the effects of the drought were least felt, and where the expenditure incurred by Government was insignificant. As far as this report is concerned with the consideration of the famine expenditure in Bhagulpore, the elimination from the question of the events which happened in the south Gangetic tract may be safely permitted.

25. The following statement therefore presents those estimates of cultivation for North Bhagulpore which form the basis of the subsequent remarks:—

*Estimates of Agricultural Statistics for the Soopool and Mudheypoorah Sub-Divisions of the Bhagulpore District.*

SUB-DIVISION.	Gross area.	Uncultivated.	Rice area.	Bhadoi area.	Rubbee food and non-food mixed.	Subsidiary food-crop area.	Rubbee non-food crops growing alone.
Soopool ... ..	816,000	285,800	318,240	135,252	111,808	25,459	31,824
Mudheypoorah ...	568,000	195,800	217,620	914,001	76,892	17,400	21,762

26. I now proceed to calculate the average outturn of food-grain from the areas specified in this statement. In the statistical report on the Soopool portion of the Durbhunga estate to which I have referred, average rates of produce per local beegha are given for each crop. The local beegha in that part of the country is 5,625 square yards, or about one-sixth larger than an acre of statute measurement. Reducing, therefore the rates of produce per local beegha to rates per acre, I find that the average rate of produce for aughani or winter rice is put at about 13 maunds cleaned grain; of bhadoi or autumn rice at about 9 maunds; and of murwah at about 7 maunds to the acre. No rate of produce for rubbee food-crops is given.

27. The Collector, however, is of opinion that much higher averages prevail. He thinks that the average yield per acre of the winter rice land is 32 maunds dhan, or 20 maunds of husked rice; of the autumn rice land, 20 maunds of dhan, or 12½ maunds of husked grain; and of murwah he estimates the average outturn to be 16 maunds per acre. These averages are, I beg to observe, much in excess of any which, on the information before me, prevail in the most fertile portions of Bengal or Behar.

28. The most fertile portion of North Bhagulpore, according to the Collector, is the pergunnah Naridigur. But the soil of the Naridigur pergunnah differs in no special manner from the soil of the Alapore pergunnah of Tirhoot, which adjoins it. It is most unlikely therefore that the average rate of produce in the one pergunnah differs from that current in the other.

29. In the Alapore pergunnah 14 maunds of husked rice is a liberal average outturn for an acre of winter rice land; and I would respectfully submit that the outturn in Naridigur cannot possibly be more. Half a ton of cleaned grain per acre is a higher average than the manager of the Durbhunga estate is willing to admit; it is a higher average than during my recent visit to Naridigur I was told prevailed there; but it is not so high as the Collector's estimate. The rest of Soopool not being as fertile as Naridigur will yield less than this outturn. I submit that 12 maunds of cleaned rice is a fair average for the sub-division. During my recent tour through the sub-division I found no one estimate the outturn per acre at a higher figure.

30. It is a general rule that a country which produces prolific crops of winter rice does not yield rich bhadoi crops. The latter require a higher and lighter soil than the former. It may therefore well be that in Naridigur the millet crop yields but a poor outturn. I am, however, unwilling to accept the Naridigur low average as that which prevails in the sub-division as a whole; I think that on this point the Durbhunga estimate of 12 maunds to the acre will be a fair mean between the Durbhunga manager's average of 7 maunds on the one hand and the Collector's high estimate of 16 maunds on the other. The average outturn of rubbee food-grain per acre, allowance being made for the non-edible crops grown with it, is locally estimated at 7 maunds. The estimate has to some extent official sanction, for I find it recorded—"The rubbee there (in Soopool) is nearly always very poor."

*Rates of Crop-yield—Local Food-supply—Consumption.* 151

31. In the absence of definite information, I adopt for Mudheypoora the Soopool average of 12 maunds rice per acre. For the bhadoi crop I accept the Soopool and Durbhunga average of 12 maunds to the acre. The rubbee average I would, as in the alluvial lands of South Tirhoot, raise from 10 to 12 maunds, because of the extra productiveness of the inundated lands. At those rates the outturn of the three great food-grain crops of the year stands as follows :—

<i>Soopool Sub-Division.</i>		<i>Mudheypoora Sub-Division.</i>	
	Tons.		Tons.
Aughani or winter rice crop	136,390	Aughani or winter rice crop	93,266
Rubbee ... ..	27,952	Rubbee ... ..	32,954
Bhadoi ... ..	57,965	Bhadoi ... ..	39,171
Subsidiary food-grain crop	6,865	Subsidiary food-grain crop	4,352
Total ...	228,672	Total ...	169,743

32. I now proceed to consider the sufficiency of this estimated food-supply, locally produced, for the wants of the inhabitants of each sub-division. At the prescribed rates of average daily consumption per individual (three-fourths of a seer) the annual consumption of the Soopool sub-division will be 138,283 tons, and of the Mudheypoora sub-division 95,586 tons. At the rates per acre of seed-grain laid down in the section on Shahabad, the requirements under this head will be for Soopool 12,600 and for Mudheypoora 8,400 tons, therefore the total deductions on account of food and seed-grain to be made from the gross produce will be 150,883 tons for Soopool and 103,986 tons for Mudheypoora. The surplus then remaining over in the latter sub-division will be 77,789 tons, and in the former 65,757 tons.

34. This surplus is in part exported, in part stored as a reserve against bad time, and in part destroyed by wastage. I proceed to consider in the first instance how much is exported. At this point I have to introduce the calculation referred to in paragraph 22. In his reply to the Government circular letter, the Collector furnished an exhaustive statement of the rates of rent prevailing for every kind of land in every pergunnah of the district. I have carefully examined this statement, and I find from it that in the Soopool sub-division, except in the Naridigur pergunnah, the average rate per acre for aughani or winter rice land is Rs. 2-6-6, for all other sorts of land under cultivation the average rate is Re. 1-12. In Naridigur pergunnah the average rates are Rs. 4-3 for rice and Rs. 2-14 for other lands.

35. In Mudheypoora sub-division the rates are more uniform, being on an average Rs. 2-6-9 for winter rice and Rs. 2-2-4 per acre for all other sorts of cultivated land. Taking into account the non-food crop cultivated land, and making an allowance for orchards, I calculate the gross rental of Soopool to be 14½ lakhs and of Mudheypoora 10½ lakhs annually.

36. Of this gross rental, the portion realized from the sale-proceeds of food-grain is usually about 12 annas in the rupee, or three-fourths of the whole. I gather this from the report of the manager of the Durbhunga estate, to which I have already referred; it is there stated that the rent is collected in three instalments, one-fourth at the harvesting

of the bhadoi, half at harvesting of the winter rice, and one-fourth at the harvesting of the rubbee crop. As the bhadoi and winter or aughani crops are essentially food-grain crops, the conclusion obviously is that cultivators pay the rent due at these times by selling some of the produce. It will follow, therefore, that food-grain must be sold to realize in Soopool say eleven lakhs and in Mudheypoorah say eight lakhs of rupees. With a view to determining the average rate at which food-grain is sold to realize these sums, I here produce a statement of the average prices current in the district :—

*Prices Current in the District of Bhagulpore. Number of seers of 80 tolahs retained for a rupee.*

Sub-Division.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Bhagulpore ...	Common rice	24'8	24'8	25'2	24	23	20'2	21	20	19	20'2	20'6
	Indian-corn	34'2	33'2	34	36'2	36'4	35'7	29'7	35'2	34	33'6	33
	Pulses ...	21	21'2	24'2	24'4	23	23'4	21'6	21'6	21'8	21'8	21'4
	Wheat ...	18'8	19'6	18'6	22'4	21	20'4	20'6	19'6	18'4	17'4	17'8
	Millet ...	...	...	...	...	...	...	...	...	...	...	...
Banka ...	Common rice	24'3	25	25	22	22	20'8	21'4	20'2	21'2	23	23'8
	Indian-corn	31'7	35	35'2	33'3	33	30'7	32	45	34	43'8	36'2
	Pulses ...	14'7	17	16	18'5	18'7	17'5	16'2	16	18	18'2	19'8
	Wheat ...	14'3	14	19'5	18	18	16	16'8	19'2	15'2	16	17'2
	Millet ...	...	...	...	...	...	...	...	...	...	...	...
Mudheypoorah ...	Common rice	21'7	24'7	21'7	22	21'5	23	22'8	22'8	22'8	26	20'6
	Indian-corn	...	...	...	...	...	...	...	...	...	...	...
	Pulses ...	16'3	15'7	17'5	15'7	16'3	19'4	18'4	18	21'2	17'2	15'8
	Wheat ...	18'3	17'7	19	23'5	27'5	26'2	25'6	25'4	23'8	23'8	22'6
	Millet ...	...	...	...	...	...	...	...	...	...	...	...
Soopool ...	Common rice	25'7	26'7	27'5	25'5	24'2	27	25'6	24'8	24'4	22'4	22'6
	Indian-corn	...	...	...	...	...	...	...	...	...	...	...
	Pulses ...	18'3	14'3	14'7	14	13'8	19'5	15'2	20	15	15'5	16
	Wheat ...	19'7	18'7	21	22'2	25'2	28	26'2	26'8	24	23'6	22
	Millet ...	...	...	...	...	...	...	...	...	...	...	...
District average (1868-72)	Common rice	24'1	25'3	24'8	23'4	22'7	22'7	22'7	21'9	21'8	22'9	21'9
	Indian-corn	39'1	37'4	39'5	39	38'5	39'3	38	42'1	39'8	45'2	41'7
	Pulses ...	16'3	17	18'1	18'1	18	20	17'8	18'9	19	18'4	18'2
	Wheat ...	17'8	17'6	19'5	21'5	22'9	22'7	22'3	22	20'7	20'2	19'9
	Millet ...	...	...	...	...	...	...	...	...	...	...	...

37. In North Bhagulpore, as in Durbhunga, it may be safely assumed that the rent is realized mainly by the sale of rice, and that it is the price of rice which regulates the quantity sold by the producers for this purpose. The price of rice fluctuates at the periods when the instalments of rent are due from 22 to 25 seers for the rupee in the retail market. It will therefore be a fair assumption which fixes the rate at which the producers sell it to the wholesale dealers at some 20 to 25 per cent. under retail rates.\* The producers therefore sell their grain at an all-round rate of Re. 1-5 per maund as in the rice-growing tracts of Durbhunga and Mudhoobunnee. At this price the Soopool producers must sell 29,930 tons and the Mudheypoorah producers 21,770 tons. There will therefore still remain in Soopool a surplus of, in round

\* This I have now reason to believe to be under the mark. In good years producers, in financing for rent, are, owing to bad communications and distant markets, forced to sell their grain at from 35 seers to a maund cleaned grain per rupee.

numbers, 48,000 tons and in Mudheypoorah a surplus of 44,000 tons. This is, however, inclusive of wastage; due allowance being made for wastage at the rate and in the manner indicated in previous sections, the net remainder will be reduced to 38,000 tons for Soopool and to 36,000 tons for Mudheypoorah.

38. On the principles I have adopted as explanatory of the disposal of the surplus, these 50,000 tons or 14 lakhs of maunds sold to meet rent charges are, in ordinary years, available at once for export, and as they are not wanted at home, as in the foreign market they will give a good profit, they are probably always exported. The grain thus sold to pay rent is chiefly rice; but wheat is largely exported from Bhagulpore, and as Mudheypoorah produces wheat largely on its inundated land, it is probable the sub-division exports a portion of what she produces. Her production of wheat I estimate at about 15,000 tons, of which probably 10,000 tons are exported.

39. There is in ordinary years a very considerable export trade in food-grain from the Bhagulpore district. From North Bhagulpore it is partly an overland trade to Nepal and to the western districts, but it is also in a large part river-borne; it is doubtful whether much of the produce of North Bhagulpore, save perhaps some of the wheat grown on the riparian lands, is exported by rail. The chief depôts of the river traffic of North Bhagulpore seem to be Moorleegunge, Pertabgunge on the river Koosi, and the town of Bhagulpore, from both of which large shipments of the produce of Soopool and Mudheypoorah are annually made direct to Revelgunge in Sarun and the North-Western Provinces, or first to Kagureah, the large entrêpot on the Ganges opposite Monghyr. In Soopool a very active trade with Nepal goes on, chiefly at the marts of Kandoolee, Beerpore, and Bullooah Bazar.

40. The down-stream export trade of Bhagulpore, which is registered at Sahebgunge, seems to be a trade in wheat or rubbee food-grain rather than a trade in rice; and this will be obvious if it be remembered that only in Calcutta could there be a market for rice, while up-country markets for that commodity are usually more remunerative. It may therefore be safely assumed that the export trade of the district in rice does in no part appear on the Sahebgunge registers.\*

41. I shall produce the Sahebgunge statistics for 1873 for this district. They seem to be fuller than those for 1872; but the statement of railway traffic which I present is for 1872, as that is the only year for which I possess complete figures:—

*River Traffic Statement for the Bhagulpore district for 1873.*

	Rice.	Other food-grains.	Oil-seeds.	Cotton.	Sugar.	To-bacco.	Salt.	Salt-petre.	Hides.	Others.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Nos.	Mds.
Imports ...	26,402	6,379	150	.....	80	48	1,26,273	.....	.....	35,312½
Exports ...	2,246	3,41,957	4,06,942	2,223	2,990	2,331	508	1,025	3,954½	50,579

\* In the Administration Report for 1872-73 the Commissioner says—"Rice is rarely, if ever, sent to Bengal from the districts of Bhagulpore or Monghyr, because, I believe, the quality of the produce in these districts is superior, and because the difference in price generally is so small that the margin of profits to traders is a mere trifle."

*Statement of Railway Traffic for Bhagulpore in 1872.*

	1ST QUARTER.				2ND QUARTER.				
	Food-grains.	Indigo.	Seeds.	Others.	Food-grains.	Indigo.	Seeds.	Others.	
Imports	Mds. 912	Mds. ...	Mds. ...	Mds. 96,558	Mds. 8,342	Mds. ...	Mds. ....	Mds. 95,159	
Exports	1,39,525	630	37,463	86,220	1,54,641	5	1,00,031	45,990	
	3RD QUARTER.				4TH QUARTER.				Total of food-grains.
	Food-grains.	Indigo.	Seeds.	Others.	Food-grains.	Indigo.	Seeds.	Others.	
Imports	Mds. 10,054	Mds. ...	Mds. ....	Mds. 45,168	Mds. 4,158	Mds. ....	Mds. ....	Mds. 77,761	18,466 mds. or 660 tons.
Exports	56,515	6	14,881	30,973	80,216	8,521	10,711	41,935	4,30,898 mds. or 15,389 tons.

42. Now I venture to state that, be our system of river registration even more effective than it is, still we may not hope to catch every boat that passes our registering station, and that therefore our statistics do in no case exhibit the maximum of the trade passing over the route they deal with. This consideration apart, the figures for food-grain in the above statement of river-borne trade set forth only a portion, and that a small portion, of the trade in food-grain of the district, for it takes no note of the large overland trade nor of the large river-borne trade to the North-West.

43. The railway statistics are trustworthy, for they have been compiled from the actual invoices filed in the Traffic Manager's Office; and seeing that Bhagulpore stretches away from the railway to Nepal on one side, and to the sterile regions of the Sonthal Pergunnahs on the other, it may be assumed that the returns for the Bhagulpore district stations register the export traffic in food-grain produced in the district alone.

44. It has been stated that the railway has failed to supersede the ordinary river and land transport of the country through which it passes, and there is no doubt much truth in the statement. If, then, we have an annual export traffic of 28,000 tons of food-grain, registered in the statements given above, and if it be understood that those statements ignore the largest trade routes, then I believe I shall not be considered as over-estimating the export trade in food-grain for the whole district if I put it at from 60,000 to 80,000 tons annually. The import trade in food-grain seems to be altogether inconsiderable.



45. I now present a statement of the average rainfall in the district and pass on to the events of 1873-74 :—

Statement of the average rainfall in the District of Bhagulpore

STATIONS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Bhagulpore ...	0.42	0.46	0.43	1.17	1.91	7.26	10.66	8.08	7.41	4.77	0.04	0.09	42.70
Mudheypoorah ...	0.50	0.92	0.48	1.84	3.40	7.65	12.59	9.66	12.40	7.29	.....	.....	56.73
Banka ...	0.62	1.24	1.35	0.55	6.68	6.60	11.18	7.97	11.27	3.72	.....	.....	51.18
Soopool ...	0.33	.....	.....	.....	3.80	7.57	18.49	13.52	12.82	3.07	.....	.....	59.60
District average	0.47	0.87	0.75	1.19	3.95	7.27	13.23	9.81	10.97	4.71	0.04	0.09	52.55

PART II.

46. The general unseasonable character of the weather during 1871, 1872, and 1873 was illustrated everywhere, except in Soopool, in accordance with the rule which prevailed throughout the province generally. The rainfall was excessive in 1871, deficient in 1872, and very deficient in 1873. In Soopool, however, the weather varied, the year 1871 being there unusually dry, and the year 1872 an unusually wet year.

47. Notwithstanding the abnormal weather, the crops throughout the district during these years seem to have been average crops. "All things considered," says the Commissioner in his Administration Report for 1872-73, "the season was generally prosperous." The summer of 1873 therefore found the district in its normal condition.

48. The rains of 1873 were not only deficient in quantity, they were also unseasonably distributed, and this unfavorable character of the rainfall seems to have been most strongly marked north of the river in Soopool than elsewhere. The following statement shows the rainfall in each sub-division during 1873 :—

Statement of the average rainfall in the Bhagulpore District in 1873.

STATIONS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Bhagulpore ...	0.40	.....	0.60	0.60	0.15	5.37	11.07	6.68	3.67	.....	0.06	0.32	28.92
Mudheypoorah ...	.....	.....	1.00	0.75	0.50	6.34	9.15	13.50	3.30	.....	.....	0.10	34.64
Banka ...	0.70	.....	0.37	0.80	1.16	5.55	14.20	6.76	6.74	0.14	.....	0.17	36.59
Soopool ...	.....	.....	1.67	1.08	0.15	4.47	6.74	8.03	4.59	.....	.....	0.21	26.94
Sanborsā ...	0.10	.....	0.58	1.18	2.20	3.51	5.45	13.11	1.99	0.33	.....	0.04	23.49
District average	0.40	.....	0.84	0.88	0.83	5.05	9.32	9.62	4.06	0.23	0.06	0.17	31.12

49. A marked difference between the *bhadoi* crops north and south of the river in Bhagulpore is, that north of the river they consist chiefly of *murwah*, while in the south the principal *bhadoi* product is Indian-corn. South of the river the outturn of the *bhadoi* crops was only six annas or three-eighths of an average yield. It was much better in the northern sub-divisions. In the Soopool sub-division the *bhadoi* yield was

in two pergunnahs three-fourths, in four pergunnahs five-eighths, and in one pergunnah one-half of an average crop, that is to say, regard being had to the relative areas of the pergunnahs, the yield for the whole sub-division was five-eighths of an average yield. The *bhadoi* harvest in Mudheypoorah was slightly better, the official estimate making it eleven-sixteenths of an average harvest. The failure of the winter rice, which is the staple crop of the country, was, however, much more complete, as might have been expected from the early cessation of the rains, and the failure was most complete in Soopool. In no pergunnah throughout this sub-division did the "outturn exceed two annas of an average crop, oftener it was only one anna, while in pergunnah Kubkund total failure resulted." On this evidence I think I am justified in fixing the outturn of the winter rice crops in Soopool in 1873 at one-twelfth of an average crop.

50. The harvest in Mudheypoorah was much more favorable than this, the outturn of the *ughani* rice being estimated at six annas in pergunnah Nursingpore Coorah and 12 annas in Chye, the other pergunnah which makes up the sub-division. The Collector estimates that the proportion of *ughani* rice land in the former pergunnah is to the *ughani* rice land in the latter as three is to one. The average outturn of the winter rice crop for the whole sub-division therefore was about one-half of an average crop.

51. In the sudder and Banka sub-divisions, or South Bhagulpore generally, the *ughani* or winter rice crop was half an average crop.

52. The outturn of the *bhadoi* and winter or *ughani* crops in North Bhagulpore stood therefore as follows:—

				Tons.
Soopool sub-division—				
Bhadoi	...	...	...	36,228
Aughani	...	...	...	11,366
Total				47,594
Mudheypoorah—				
Bhadoi	...	...	...	27,000
Aughani	...	...	...	46,633
Total				73,133

53. At the ripening of the *bhadoi* harvest, the only grain in the district were the stocks in hand or reserves, which in the Soopool sub-division may reach, we have seen reason to believe, to 38,000 tons, and in Mudheypoorah to 26,000, these totals being exclusive of wastage. There seems to me reason to think that in no year are the stocks in hand in North Bhagulpore more than this; but that, on the contrary, they rarely ever are so great, and I believe that in assuming them to have been so great in the autumn of 1873, I am representing the condition of these sub-divisions in perhaps too favorable a light. I am of this opinion more especially as regards Mudheypoorah; for the sub-division is favorably situated from a commercial point of view, and has therefore no difficulty in disposing of its surplus produce.

54. When, therefore, the *bhadoi* was harvested, that is, according to the dates I have fixed, on the 1st of October 1873, there were in the Soopool sub-division in round numbers 75,000 tons, and in Mudheypoorah 53,000 tons of food-grain, and on these stocks the people lived till they were supplemented by the produce of the rice crop in January 1874. Deducting the consumption in the interval and to the remainder adding the produce of the rice harvest, it will be found that in January 1874 the food-supply in Soopool was in round numbers 52,000 tons and in Mudheypoorah say 76,000 tons, or nearly five months' supply for Soopool and more than nine months' supply for Mudheypoorah. It is not, of course, possible to state in figures the food-supply of the other sub-divisions, but from the fact of the winter rice crop being half an average crop, I conclude that their position though, owing to the short *bhadoi* crop, not so good as that of Mudheypoorah, was not critical; that they must have had about a nine months' supply in store.

55. The position of these south Gangetic sub-divisions and of Mudheypoorah was sensibly improved by the produce of the *rubbee* harvest, which, abundant in the inundated tracts of the sudder and Mudheypoorah sub-divisions, was generally all over the district an average harvest. In Soopool also the food-supply was raised from a four months' to a six months' supply, or 70,000 tons. In Mudheypoorah the supply was raised to a sufficiency for the year. It is remarkable, however, that the surplus produce from Mudheypoorah, instead of being attracted to the dear market near home, found its way out of the district by the accustomed trade channels. There is perhaps no more curious phenomenon than this in the history of the famine—the tenacity with which regions that usually export held to accustomed trade routes, and the incapacity of local grain merchants to grasp their opportunity. When, in November 1873, severe scarcity and ultimate famine in Soopool were no longer a matter of doubt, the Collector, whose prescient insight into the situation and forcible representations of its probable consequences secured early attention to the wants of his district, had to call the attention of Government “to the great exportation of rice that has been, and is, going on” from the sub-division. The same reversal of ordinary practice, the removal of grain from a dear to a cheap market, was noticed at the same time in Seetamurhee. The explanation of the phenomenon has been already suggested.

56. A large portion of the rice crop is from year to year hypothecated for payment of advances made. When this portion of the crop has been harvested, it is at once exported from the country or stored for exportation. The exporters or importers, as the case may be, have no adequate agency in the producing districts which would enable them, even if they wished, to distribute the grain for sale there, and the contracts they are under from time to time prevent them, even had they such an agency, from disposing of the grain in the producing tract. The consequence is an apparent reversal of the law of supply and demand,—grain leaving a dear market for a cheaper one.

57. I offer these brief observations in introduction of the following trade returns for Bhagulpore for 1874. Without them the fact would be unintelligible that the inhabitants of Soopool were in distress while

those in the rest of the district, having food-grain to spare, sent it, not to Soopool, but to its accustomed destination. Doubtless the people of the western districts benefited at the expense of Soopool.

*River Traffic Statement for the Bhagulpore District for 1874.*

	Rice.	Other food-grains.	Oil-seeds.	Cotton.	Sugar.	Tobacco.	Salt.	Hides.	Others.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Nos.	Mds.
Imports ... ..	34,098	14,436	29	.....	165	187	1,02,065	.....	34,915
Exports ... ..	11,704	2,76,933	4,01,050	2,584	2,826	751	482	6,308	1,02,276

*Railway Importations to the Bhagulpore District for 1873-74.*

DISTRICT.	4th Quarter, 1873.		1st Quarter, 1874.		2nd Quarter, 1874.		3rd Quarter, 1874.		Total of columns 2, 4, 6, and 8.
	Food-grains.	Others.	Food-grains.	Others.	Food-grains.	Others.	Food-grains.	Others.	
1	2	3	4	5	6	7	8	9	10
Bhagulpore...	Mds. 1,68,535	Mds. 94,705	Mds. 7,03,498	Mds. 75,254	Mds. 5,07,468	Mds. 81,855	Mds. 1,12,164	Mds. 1,12,745	Mds. 14,91,665
Deduct Mr. Toynbee's despatches ... ..								...	9,33,206
Balance ... ..								...	5,58,459
Deduct deliveries of Government grain imported from North-Western Provinces.								...	59,528
Remainder ... ..								...	4,98,931 mds. or 17,819 tons.

*Railway Exportations from the Bhagulpore District for 1873-74.*

DISTRICT.	4th Quarter, 1873.				1st Quarter, 1874.			
	Food-grains.	Indigo.	Seeds.	Others.	Food-grains.	Indigo.	Seeds.	Others.
Bhagulpore ...	Mds. 2,17,041	Mds. 5,289	Mds. 24,345	Mds. 53,510	Mds. 1,02,288	Mds. 183	Mds. 26,019	Mds. 3,58,921

  

DISTRICT.	2nd Quarter, 1874.			3rd Quarter, 1874.			Total of food-grains.
	Food-grains.	Seeds.	Others.	Food-grains.	Seeds.	Others.	
Bhagulpore ...	Mds. 1,72,340	Mds. 1,31,910	Mds. 25,064	Mds. 68,929	Mds. 28,772	Mds. 41,127	5,60,598 mds. or 20,021 tons.

58. A comparison of these statements with those produced in paragraph 41 will show that, as far as the trade of the district is railway-borne, or being river-borne is registered at Sahebgunge, it exhibited an

increase, and not a decrease, in the year 1874. These statements show an exportation of nearly 30,000 tons of food-grain, and they ignore the quantities of that commodity which passed up the river to regions where scarcity and high prices prevailed. It is a moderate statement that the quantity of food-grain thus exported was in all probability not less than half the registered exportations; and that therefore the diminished food-supply of the district last year was still further reduced by an exportation of some 45,000 tons. This furnishes an intelligible explanation of the facts that exceptionally high prices prevailed throughout the whole district [I do not now refer to the prohibitive rates which prevailed in Soopool], and that consequent on such high prices there was, during the first three quarters of the year, sustained pressure on all classes. The pressure, however, in South Gangetic Bhagulpore, though severe, did not reach that pitch at which active interference on the part of Government would have been absolutely needed. Private trade in this locality was ever active; indeed, it altogether confined itself to South Bhagulpore and the riverine tracts of Muddehpooora, never extending to Soopool, and it was (rightly as the event proved) judged unnecessary to supplement its efforts. The following statement of prices current in each sub-division during 1874 will, if compared with the average prices, illustrate the foregoing remarks:—

Statement of the average prices current in the Bhagulpore district in 1874.

Sub-Division.	Kind of grain.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Bhagul- pore.	Common rice	12'	12'	11'5	11'3	10'	11'3	18'7	12'7	12'	13'	15'	25'
	Indian-corn	15'	14'	15'	15'	15'	15'	15'	19'	22'	25'	25'	30'
	Pulses	19'	15'	17'	17'	16'	16'	17'	19'	20'	18'	19'	19'
	Wheat	13'	13'	14'	15'	14'	14'	15'	15'	15'	16'	17'	17'
	Millet	...	...	...	...	...	...	...	...	...	...	...	...
Banks.	Common rice	14'	13'	12'	12'	11'	11'	12'	12'	12'	12'	25'	27'
	Indian-corn	17'	16'	14'	15'	14'	14'	15'	22'	28'	30'	32'	30'
	Pulses	12'	14'	13'	15'	14'	14'	13'	15'	18'	16'	15'	15'
	Wheat	12'	13'	12'	15'	13'	12'	14'	12'	15'	14'	15'	15'
	Millet	...	...	...	...	...	...	...	...	25'	26'	...	...
Muddeh- pooora.	Common rice	11'	8'	8'	13'	13'	13'	16'	16'	16'	16'	28'	32'
	Indian-corn	...	...	...	...	...	...	...	...	...	...	...	...
	Pulses	13'	10'	9'	9'	9'	12'	12'	12'	12'	12'	12'	12'
	Wheat	10'	9'	10'	11'	11'	11'	11'	12'	14'	12'	13'	13'
	Millet	17'	13'	15'	14'	15'	15'	15'	15'	30'	32'	40'	45'
Soopool.	Common rice	11'	10'	10'	9'0	9'5	10'	10'	11'	19'	25'	26'	26'
	Indian-corn	...	...	...	...	...	...	...	...	...	...	...	...
	Pulses	...	...	...	10'	12'	12'	12'	12'	13'	14'	14'	14'
	Wheat	11'	11'	11'	13'	11'	11'	11'	11'	14'	12'	12'	13'
	Millet	14'	13'	13'	12'	12'	12'	13'	13'5	32'	35'	35'	35'
District average.	Common rice	12'	11'	10'4	11'3	10'9	11'3	14'2	12'9	14'7	16'5	23'5	27'5
	Indian-corn	16'	15'	14'5	15'	14'5	14'5	15'	19'	25'	27'5	28'5	30'
	Pulses	14'7	13'	13'	12'7	12'5	13'2	13'7	14'5	15'8	15'	15'	15'
	Wheat	11'5	11'5	11'7	13'5	14'2	12'	13'	12'5	14'5	13'5	14'2	14'2
	Millet	15'5	13'	14'	13'	13'5	13'5	14'	14'2	29'	31'	37'5	40'

59. Having thus indicated the origin and the magnitude of the necessity for the aid afforded by Government to the people of North Bhagulpore last year, I now proceed to exhibit the extent to which this aid was afforded and its effects as far as the numbers relieved are

concerned. I regret I cannot present a distinct statement of the operations of Government in each sub-division separately; my materials will not allow of my doing this consistently with the submission of correct figures. I can only say that by far the largest portion of the expenditure tabulated in the following statements was incurred in the Soopool sub-division. Those portions of Muddehpooa which, bordering on Soopool, suffered as severely from the drought of 1873 as it did, partook equally with Soopool of the Government assistance. But those tracts were limited; and, as I have stated, it may be said that the share of the following expenditure incurred out of Soopool was inconsiderable:—

*Statement of grain expenditure incurred in the relief of distress in the Bhagulpore district in 1874.*

NOMINAL QUANTITY DELIVERED.	Grain sold for cash.	Grain advanced on loan.	Grain distributed in charitable relief.	Grain paid as wages.	Remainder wastage.
Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
26,318	10,118	4,276	4,232	1,474	6,218

*N.B.*—Of the remainder, 1,671 tons (6 per cent. on nominal deliveries) are due to wastage, and 4,547 tons were sold after the relief operations had ceased.

*Statement of cash expenditure in the Bhagulpore district during the famine of 1874.*

CASH DISTRIBUTED IN CHARITABLE RELIEF.	Cash paid as wages on relief works.	Cash advanced on loan.	Total cash expenditure.
Rs.	Rs.	Rs.	Rs.
1,28,064	1,85,498	1,47,050	4,60,612

60. The next and final stage of this enquiry on this part of the subject is to exhibit the number of distressed persons who, by the expenditure tabulated above, were relieved. The numbers of those relieved by gratuitous distribution of cash and money, or by wages in grain or money on relief works, are precisely known. I reproduce the actual figures in the two following statements:—

*Fortnightly number of persons charitably relieved in the Bhagulpore district during the famine of 1874.*

DAILY AVERAGE FORTNIGHT ENDING ON THE															
16th March.	24th March.	7th April.	21st April.	5th May.	21st May.	3rd June.	18th June.	1st July.	17th July.	30th July.	13th August.	26th August.	9th September.	22nd September.	7th October.
...	1,340	1,688	1,148	1,565	12,261	12,788	44,448	50,714	55,959	18,475	31,305	44,186	60,806	38,469	10,658

*Statement of laborers employed in the Bhagulpore district during the relief operations of 1873-74.*

DISTRICT.	Aggregate number of individuals employed.	AVERAGE DAILY ATTENDANCE EACH MONTH.											
		November 1873.	December 1873.	January 1874.	February 1874.	March 1874.	April 1874.	May 1874.	June 1874.	July 1874.	August 1874.	September 1874.	
Bhagulpore	...	5,335,414	1,351	4,166	7,485	3,639	7,956	22,234	32,637	27,528	29,556	29,424	12,002

61. Now, an analysis of the statement of persons charitably relieved will show that, as far as mere numbers are concerned, it is equivalent to a statement that 194,085 persons were charitably relieved for one month; and an analysis of the labor statement will show that it is equivalent to an expression that 177,847 were daily employed on relief works for one month. If now the quantity of grain sold or advanced on loan, and if the money advanced on loan, be divided into portions of thirty annas in cash and 23 seers in grain, and if it be considered that each portion of thirty annas or each 23 seers of grain afforded relief to an individual for a month, then it will be seen that in these ways 779,351 were relieved for one month. The consolidated result will be that 1,151,283 individuals were assisted for a month, or that the entire population of the two sub-divisions was supported for about thirty-six days.

62. These numbers, however, probably exceed the actual numbers, because there is no doubt that much of the cash paid away by Government returned to it in the shape of sale-proceeds of grain. The numbers represented by the cash which so returned should be eliminated from the preceding calculation; and if this were done, it would probably be found that the entire population of the sub-divisions was not supported by Government for more than a month, or to limit attention to Soopool, that the expenditure incurred there was about sufficient to support the population for about six weeks. The preceding makes no allowance for the grain bought by Nepalese subjects. No materials are available to enable me to distinguish Nepalese from British subjects.









## SECTION IX.

### MONGHYR.

THE agricultural statistics which exist for this district are perhaps even more vague than those with which we had to deal in the case of Bhagulpore. They consist of the Revenue Survey statistics compiled in 1845-46, in the Board of Revenue's statistical return XLIB, in the data on agricultural matters collected during the relief operations and embodied in famine narratives, and in estimates of cultivation with which the Collector has favored me. But of these figures none have a basis in actual experiment or enquiry except the survey statistics, and of the latter the very limited value has been pointed out in the section on Bhagulpore.

2. With reference, however, to the existing agricultural statistics, it is right, I should add, that no precision, no value other than a very indefinite value, has been claimed for them; and therefore I feel myself at liberty to point out such difficulties in the way of accepting them as the leisure of the present time enables me to discern. It is only by pointing out these difficulties, by a criticism of existing data, that I can hope to define the ground within which efforts to construct a statement of agricultural statistics should be restricted.

3. I have in the preceding section defined the bounds within which the survey statistics may be utilized. Within these bounds, and for the specific purpose there stated, these statistics are trustworthy and valuable; and I therefore propose, in the first instance, to analyse those which exist for Monghyr, with a view to such subsequent use of them as may be called for.

4. The sub-divisional system did not prevail at the time of Captain Sherwill's survey; but I identify six pergunnahs measured by him, and having an area of 492,526 acres, with the present Begoo Serai sub-division. I further identify eight other pergunnahs, with an area of 795,520 acres, as *part* of the sudder sub-division; and lastly, I identify five pergunnahs, with an area of 843,520 acres, as forming part of the Jamooee sub-division. This exhausts Captain Sherwill's list for the Monghyr district as it now stands.

5. For the Begoo Serai sub-division Captain Sherwill's "cultivated" area\* is 78 per cent. on the gross area; for the North Gangetic portion of the sudder sub-division (that is, the present Gogra police

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\* It will be remembered that the "cultivated" area of the survey included "fallow," "pasturage," &c.; in fact, all cleared land, as distinguished from uncleared land, which was called "culturable," and land physically incapable of being cultivated, which was called "unculturable."

jurisdiction) the cultivated area is 35 per cent.; and for the portion south of the river 71 per cent. on the gross area; the average for the whole sub-division being 50 per cent. : lastly, for the portion of the Jamocee sub-division, for which figures are given, the percentage of "cultivated" land on the total sub-divisional area is 63. Since the completion of the survey, however, a considerable portion of South Bhagulpore has been transferred to the Monghyr district. The sudder sub-division was increased by the addition of the pergunnah of Khurruckpore, while the hilly and sterile pergunnah Parbatpara was included in Jamocee. These additions materially alter the proportion of "cultivated" land to gross area which then obtained in these two sub-divisions. What modification in these percentages ought to be allowed on account of these additions can only be conjectured; but from all that I have been able to gather regarding the state of agriculture in the pergunnahs I have mentioned, I believe it to be a safe estimate which declares that, by the addition of Khurruckpore, the sudder sub-division had its "cultivated" area increased 10 per cent., and that the Jamocee sub-division had its "cultivated" area decreased 10 per cent. by the addition to it of pergunnah Parbatpara.

6. It may then be assumed that, in or about 30 years ago, 78 per cent. of the Begoo Serai sub-divisional area, 60 per cent. of the sudder sub-divisional area, and 53 per cent. of the Jamocee sub-divisional area were occupied by village, fallow, pasturage, and cleared waste land; the rest of the land in those sub-divisions was either uncleared jungle or orchards, or river beds, tanks, and the like.

7. Now, in the comments I made on the similar survey statistics for North Bhagulpore, I expressed my belief that, in the interval between the survey there and the present time, agriculture had not so far progressed as to have absorbed in tillage all the cleared uncultivated land of twenty years ago. It was seen that this opinion was borne out by the deductions furnished by the statistics of cultivation in Naridigur, and by such analogies as existed between the condition of North Bhagulpore and the adjoining district of Durbhunga.

8. I believe, looking to the comparative sparseness of the population of the Monghyr district, that of it a similar opinion might with much safety be predicated; but as the survey in Monghyr took place 30 years ago, I shall modify the opinion somewhat and say that while in case of Bhagulpore the survey statistics furnished a *maximum* which the area actually under tillage has not yet reached, those for Monghyr furnish a *maximum* which the area under tillage in this latter district has not exceeded.

9. Before proceeding to test, by these survey statistics, the correctness of the estimates I have referred to in the first paragraph, it may be well to add here that in the Begoo Serai sub-division, 30 years ago, the "culturable" area was 7 and the "unculturable" area 15 per cent. on the gross area; in the sudder sub-division the "culturable" area was 40\* per cent. and the "unculturable" 7 per cent. on the area; and in Jamocee there were 15\* per cent. "unculturable" and 22 per cent. "culturable" land. It will be remembered that the

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\* Modified afterwards by the additions made from Bhagulpore.

terms "culturable" and "unculturable" are used in the sense attached to them by the Revenue Surveyor.

10. I am now in a position to examine the estimates. The most recent and authoritative of them, which is also in many respects the least remote from the real facts, shows, when analysed, the cultivated area of the Begoo Serai sub-division to be 90 per cent. on the gross area, the cultivated area of the sudder sub-division to be 73 per cent. on the gross area, and the cultivated area of the Jamooee sub-division to be 66 per cent. on the gross area of that sub-division. Now, with reference to what has been written in the penultimate paragraph, I beg to point out in the first place that the land under tillage in Begoo Serai, as shown in these estimates, is not only greater than the "cultivated" area of the survey report—it is greater than the "cultivated" and "culturable" land put together by one-third of that area which at the time of the survey was physically "unculturable." This is a manifest impossibility, for I have met with nothing to suggest the idea that within the last 30 years the face of the country has so changed that the portion of the district area then physically incapable of being cultivated has since become culturable land. It may, therefore, be accepted as absolutely certain that, apart from engineering and reclamation schemes which have not been undertaken, under no circumstances can more of the Begoo Serai sub-division than 85 per cent. of the area be brought under tillage.

11. It may be accepted with equal certainty that there is nothing like 85 per cent. of the area under cultivation. There are *jhils* or lakes in the sub-division, fallow lands, groves, orchards, roads, pasture, and thatching-grass lands, which reduce the percentage of cultivation considerably below 85. The question is one on which there is no definite statistical information forthcoming; but we know that now, as at the time of the Revenue Survey, the country is well wooded; that it is now, as then, studded over with numerous small lakes or *jhils* rich in a variety of fish; that there are now, as then, in the sub-division high roads and by-ways and village paths. I venture to submit that these cover an area now of 7 per cent. on the gross area, as they did 30 years ago. We are thus brought to the question whether the rest of the sub-division is at the present time under tillage. On this point, it is manifest, the answer must be in the negative, because we know there are still pasturage lands in the sub-division, because there is the waste land taken up by the boundaries and corners of fields, and because there are fallow lands. The real difficulty is to determine the area these pasturage, fallow, and waste lands cover. I submit they do not cover less than 5 per cent. on the sub-divisional area, and my reason for this is that in that portion of the Durbhunga district adjoining Begoo Serai for which we have accurate statistical information, which much resembles Begoo Serai in many of those points referred to in the section on Shahabad as justifying an analogical argument, and which has a population denser, though not much denser, than Begoo Serai, the cultivated area is 73 per cent. on the gross area. For all these reasons I resolve to adopt this percentage as that which represents, with greatest approximate accuracy, the cultivated area in Begoo Serai. The sub-division of this area will be considered when the

extent of cultivation in the other parts of the district has been approximately determined.

12. Turning with this purpose to the sudder sub-division, I beg to point out that if in Begoo Serai [which, when surveyed, had 78 per cent. of its area "cultivated" in the Surveyor's sense of the word, and which now has 699 people to the square mile] the land actually under tillage at present be only 73 per cent., it would be altogether unreasonable to hold that the sudder sub-division [which about the period of the survey could only have 60 per cent. at the outside of its area "cultivated," and which has now only 481 people to the square mile] should also have 73 per cent. of its extent under tillage. It must necessarily be less than this, and that it is so is borne out by the Collector, who states that in this sub-division, both north and south of the river, there are large tracts covered with jungle. How much less, however, it ought to be is a question on which I can but conjecture; and in this position I feel bound to adopt, as far as my principles will allow, the liberal tone of the local estimates. I will therefore assume that at the present time the cultivated area in the sudder sub-division has reached the maximum it could have covered since the survey, and is now 60 per cent. on the gross area. This will give  $3\frac{1}{2}$  roods of cultivated land to each individual in the sudder sub-division, as against  $2\frac{1}{2}$  roods to every individual in Begoo Serai. The unquestionable infertility of the sudder sub-division, as compared with Begoo Serai, has thus been very amply compensated for in the wider extension of the cultivated area.

13. Lastly, in case of the Jamooee sub-division, the complete absence of trustworthy statistical data obliges me to adopt the same course as that indicated in the last paragraph. If the preceding observations be just and moderate—if I have succeeded, as far as my *data* go, in demonstrating the excessive character of the local estimates, it will follow of necessity that the Jamooee sub-division, with its extensive waste and jungle tracts, and its sparse population of 331 to the square mile, cannot have as much land under tillage as there is reason to believe the sudder sub-division has. I will allow it the widest limit I consistently can, that is, 53 per cent. on its area, for cultivation; and such a limit will give to each individual of the population something over an acre of cultivated land, which is a most ample provision for such an extension of cultivation as the comparative barrenness of much of the soil may necessitate.

14. Although I have thus allowed for cultivation in these two sub-divisions the full quantity of land which I believe it possible might be now under tillage, I do not wish to be understood as meaning that I am quite satisfied all this land is cultivated. I doubt there is as much as an acre per head of the population of cultivated land in any sub-division of this district.

15. Viewed from the point of view of the whole district, and having regard to the various areas in which the various percentages prevail, the result of the preceding discussion is that 60 per cent. of the district area is cultivated. Seeing that the density of population per square mile in Monghyr is only 463, this percentage is in keeping

with our most trustworthy information for Behar. It represents the cultivated area of the district to be 5 per cent. less than it is estimated in the latest statistical return (XLIB).

16. I now come to the question of the sub-division of this cultivated area according to the crops grown on it. For the information which enables me to resolve this difficulty as far as food-crops are concerned, I am glad to acknowledge the obligations I am under to the Collector. His estimates seem to be as near the mark as one can expect on a matter where absolute precision is attainable only by means of that great desideratum for Bengal—a cadastral survey. Before, however, I reproduce the Collector's views on this point, there are two preliminary questions to be solved, namely, the proportion of the cultivated area devoted to the production of non-edible crops, and the proportion of land which yields two crops in the twelve months. The information on the first question is unfortunately as meagre as it is necessary. Its necessity will be manifest from the fact that the Collector's statistics, "showing ordinary proportions of harvests to food-supply," necessarily presuppose the elimination from the cultivated area of the land producing non-edible crops alone. I gather from the various references to agricultural matters in the district narratives that, comparatively speaking, more land is devoted to non-food-crop cultivation north of the river than south of it. I apprehend the remarks on the point to mean that, of the cultivated land north of the river, two-thirds are devoted to the sole cultivation of food-crops, the remaining one-third being occupied by edible and non-edible crops, either together or separately. South of the river the production of non-edible crops seems more limited; but, generally beyond such indefinite information as these references furnish, and beyond such knowledge as can be gleaned from the fact that oil-seeds are largely produced in Monghyr, that indigo is grown to some extent, that opium and tobacco cover between them some 40,000 acres, and that sugarcane is a staple product of the district, there are no data for deciding the extent of non-food crop cultivation. Having regard to the land so occupied in the majority of the districts in the Patna division, I should, however, say that an estimate fixing the non-food crop area at one-tenth of the cultivated land, while falling under the local estimate, will still be as liberal an allowance as there is reason to think prevails generally.

17. On the question of double-cropping, the Collector is of opinion that about 50 per cent. of the upland cultivated area yields two crops in the twelve months. This is a very high proportion for so thinly inhabited a district as Monghyr; but having no specific objection to make, I accept it. It is not possible to determine from the materials before me how much of this second crop is a rubbee food-grain crop, or how much is a non-food grain crop. I can therefore only estimate that at least one-third is non-food grain crop; and, as in the case of Chumparun, I shall assume that the second crop is bhadoi or rubbee in proportion to the ratio the bhadoi or rubbee food-crops bear to the total food cultivation; and, as far as this question is concerned, I shall assume that the subsidiary food-crops come under the general class of rubbee. This may not be strictly accurate, but as the gross food-supply is concerned an error on the point is immaterial. I am

now in a position to give those proportions, which, according to the Collector, are as follows :—

Aughani crop	...	...	...	35	per cent.
Spring or boro rice	...	...	...	2	„
Rubbee	...	...	...	32	„
Bhadoi	...	...	...	25	„
Subsidiary food-grain crops	...	...	...	6	„
			Total	...	100

18. The following statement therefore expresses, in terms of the area, the above proportions, compiled with the modifications of them suggested by the preceding discussion :—

*Estimate of agricultural statistics for the district of Monghyr (in acres).*

GROSS AREA OF THE DISTRICT.	Uncultivated area.	CULTIVATED AREA.					Non-food crops.
		Rice area.		Upland area.			
		Winter.	Spring or boro.	Rubbee.	Bhadoi.	Subsidiary food-grain.	
2,504,320	1,002,240	473,155	27,037	601,000	470,000	81,112	150,208

19. The next step is to estimate the annual outturn in food-grain from these areas. In his annual report for 1872-73 the Commissioner of Bhagulpore expresses a modified concurrence in the opinion of the Collector of Monghyr, which was to the effect that “the land in the district was poor owing to the want of moisture, and that the productions were miserable.” In view of such high authority vouching for the infertility of the soil and the poorness of the produce in this district, the average rates of produce recorded in the latest statistical return (XLIB) seem high. These are between 12 and 13 maunds of cleaned rice, and 11 maunds of all other kinds of food-grain, per acre. These averages are nearly as high as the highest we have had reason to adopt for the most fertile regions in Behar; and in a communication with which the Collector has favored me, an opinion is expressed that still higher averages would be in accordance with the facts.

20. In deference to the Collector's opinion, I shall follow his rates recorded in the statistical report, assuming an average of 12 maunds cleaned grain per acre for rice, 11 maunds for rubbee,\* and 11 maunds for bhadoi; but I would respectfully submit that under no possibility can 11 maunds be a fair average for the inferior kinds of subsidiary grain crops, and for these I shall adopt an average of six maunds to the acre.

\* The Begoo Serai sub-division is a rubbee country, being to a large extent annually fertilized by the inundations of the Ganges. The same remark is true of pergunnah Furkya (Gogva Thana) and all the riparian tracts of the south Gangetic portion of the district.



21. At these rates the average gross outturn of food-grain for the district is as follows. I class the crops according to the season they are reaped, and I stretch the term rubbee so as to embrace the subsidiary food-grain crop and the boro rice :—

			Tons.
Bhadoi or autumn food-grain crops	...	...	184,643
Aughani or winter food-grain crops	...	...	207,780
Rubbee or spring food-grain crops	...	...	265,088
		Total	...
			657,511

I submit this total as a probable estimate of the gross annual food-supply of the Monghyr district locally produced; less than this it may, more than this it cannot, be.

22. I next proceed to discuss the sufficiency of this food-supply for the wants of the inhabitants. The population of the district is 1,812,986, and at the prescribed rate of three-fourths of a seer per head daily, the annual consumption of food-grain will be 443,110 tons. This is the first deduction which must be made from the gross food-supply.

23. The next deduction is that quantity of grain which is required for seed. This will be, at the prescribed rates per acre specified in the section on Shahabad, 41,430 tons. The total deductions under these two heads will consequently be 484,540 tons, and the remainder will be 172,971 tons.

24. This surplus over actual necessities of living forms the grain fund, from which the stocks in hand are annually replenished, and the export grain trade supplied. This export trade has available to draw upon, in the first place, the grain which the cultivators are forced to sell at cheap prices in order to pay their rents. I shall, in the first place, estimate the quantity so sold, for in ordinary years, it is probable, so much at least is exported.

25. The road-cess statistics are complete for Monghyr, and they show that the annual land rental of the district is Rs. 33,79,596, or 3·9 times the revenue. I add to this 15 per cent. for those various other expenses incidental to the tenure of land in rural Bengal, which, though not called rent, are realized at the same time and with as certain regularity. The gross contribution, therefore, the cultivators have to pay for the land they till is, in round numbers, 39 lakhs of rupees.

26. I have no definite information as to the amount of each kist or periodical instalment of the rent in this district; but, in the absence of such definite information, I think I am justified in assuming that cultivators pay at least ten annas or ten-sixteenths of their rent by the sale-proceeds of food-grains. This is a low average for a country like Monghyr, which, besides poppy and oil-seed cultivation, has no other industry except the growth of food-grain.

27. Accepting the position, then, that five-eighths of the rent in Monghyr is financed in the way I mention, I calculate that food-grain must be sold to the value of about 24½ lakhs of rupees. How much grain must be sold to realize that sum? With a view to solving this

question, I present the following statement of average prices current in the district:—

*Statement showing the average prices current in the district of Monghyr from 1868-72.*

Sub-Division.	Kind of grain.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
		Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Sudder.	Common rice ...	22.7	22.7	21.8	19.2	19.4	18.4	17.6	17	16.6	18.2	20.2	22.2
	Indian-corn ...	30.2	30.2	30.6	29.4	27.4	26.6	25.4	30	31.3	30.8	31.2	34.6
	Pulses ...	14.8	15.5	17	16.6	16.5	15	14.9	13.5	13	12.7	12.8	13.2
	Wheat ...	19.3	18.6	21.8	21.6	21	21.3	19.8	18.5	17.2	16.6	16.8	18.4
	Millet ...	...	...	...	...	...	...	...	...	...	...	...	...
Begoo Serai.	Common rice ...	20	20	20	20	20	18.2	18.5	17.5	18	18	21	22.5
	Indian-corn ...	25	27.5	32.5	32	32	27.5	31	33	30	28	29.5	35.2
	Pulses ...	23	23	23.2	23.5	23.5	23.7	23.5	23.5	25	24.5	22	30.7
	Wheat ...	22	23	23	23	24	24.5	24.5	25	22.5	21.5	20	20
	Millet ...	...	...	...	...	...	...	...	...	...	...	...	...
Jamoee.	Common rice ...	25	25.2	23.3	20.1	19.5	18.5	17.8	17.1	17.9	20.4	19.6	22.6
	Indian-corn ...	35.5	35.2	30.7	24.5	27.8	24.5	25.4	24.8	35.7	37.8	34	33.8
	Pulses ...	19	23	19	22.5	16.8	20.7	20.5	19.2	21.8	24.1	18.9	21.8
	Wheat ...	21.2	22.4	22.3	21	21.2	20.5	20.1	19.8	20.2	21.6	17.8	20
	Millet ...	...	...	...	...	...	...	...	...	...	...	...	...
District average.	Common rice ...	22.6	22.6	21.7	19.8	19.6	18.4	18	17.2	17.5	18.9	20.3	22.4
	Indian-corn ...	30.2	31	31.3	28.6	29.1	26.2	27.3	29.3	32.3	32.2	31.6	34.5
	Pulses ...	20.6	20.5	19.7	20.9	18.9	19.8	19.6	18.7	19.9	20.4	17.9	21.9
	Wheat ...	20.8	21.3	22.4	21.9	22.1	22.1	21.5	21.1	20	19.9	18.2	19.4
	Millet ...	...	...	...	...	...	...	...	...	...	...	...	...

28. In this district the food-grain from the sale-proceeds of which rents are paid is rice and wheat; and it will be observed that when these grains are cheapest, that is, at the harvest time, when rents fall due and exporters buy, the price of both fluctuates about 22 seers for the rupee, or Re. 1-13-0 per maund. This is the retail rate, and being so, is necessarily dearer than the rate at which the producers sell the grain to a wholesale or a retail dealer. I venture to suggest, having regard to the proximity of Monghyr to the river and to the railway, that four annas per maund, or about 15 per cent. cheaper than retail market rates, is a reasonable estimate of the price at which the producers dispose of their grain; and I shall adopt this estimate. In order to pay their rents, therefore, producers in Monghyr must sell 56,000 tons of food-grain; and there will thus remain over to them a surplus of, in round numbers, 117,000 tons.

29. It will be remembered that my speculation, developed in the Introduction to this report and in the section on Shahabad, imports that these 56,000 tons are in ordinary years at once available for export, and if exported give the largest margin of profit. Needless as a provision for present, superfluous as a reserve for future wants, they must either be exported or perish.

30. Their exportation still leaves in the district a reserve for future contingencies, over and above the provision for the current year,

of nominally 117,000 tons. But this quantity is never in stock at the end of the year. Wastage has been going on, and this wastage, calculated on the gross production, *minus* the quantity sold before wastage, had become effective, but shown against the nominal balance remaining over at the end of the year, is not, according to my estimate, under 5 per cent. The actual remainder in the district, then, at the end of an ordinary year does not exceed 87,000 tons, or about ten weeks' supply.

31. The exports of food-grain from Monghyr are wheat, gram, and barley, which go southwards to Calcutta, and rice, which goes north-westwards.\* The chief trade route is by the river; the railway-borne traffic in food-grain, though considerable in itself, being small in comparison with the river-borne traffic, whose depôts are at Kagaria, opposite to the civil station of Monghyr, and Surujgurha, some few miles higher up.

32. The north Gangetic portion of the district, especially the Begoo Serai sub-division, produces rubbee and bhadoi crops more largely than it does rice. The local production of rice, indeed, is insufficient to supply home consumption, and consequently this tract imports it. There is a well established rice trade between the rice-producing tracts of Durbhunga (and of North Bhagulpore) and the Begoo Serai sub-division, the latter locality importing annually about 15,000 tons of rice from Durbhunga alone.

33. The up-stream traffic from, and the down-stream traffic to, the district has hitherto escaped registration; but a considerable portion of the down-stream trade from, and up-stream trade to, Monghyr has been registered at Sahebgunge. I produce those Ganges trade statistics for 1872; they have been compared with those for 1873, and seem to represent more than the latter do the condition of the district trade as far as it passes Sahebgunge. The difference between the returns for both years is, however, very inconsiderable.

34. I also present a statement of railway-borne traffic during 1872 for this district. Looking to the peculiar position of Monghyr, stretching away on both sides of the river, and with railway stations not so conveniently situated for other districts than other stations in or near those districts themselves, I think it may be fairly assumed that the traffic returns from the Monghyr stations do not record much more than the transactions of that district alone.

*River Traffic statement for the Monghyr district for 1872.*

	Rice.	Other food-grains.	Oil-seeds.	Cotton.	Sugar.	Tobacco.	Salt.	Saltpetre.	Hides.	Others.
Imports	35,202	9,293	.....	...	..	53	1,32,017	...	13	42,681
Exports	...	3,10,546	3,51,728	1,422	2,452	10,522	3,581	5,220	497	42,136

\* *Vide* Divisional Administration Reports for 1872-73 and 1874-75.

*Statement of Railway Traffic for Monghyr in 1872.*

	1ST QUARTER.				2ND QUARTER.				Total of food-grains.
	Food-grains.	Indigo.	Seeds.	Other commodities.	Food-grains.	Indigo.	Seeds.	Other commodities.	
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	
Imports ... ..	9,230	.....	.....	54,373	6,577	.....	.....	69,698	
Exports ... ..	28,813	170	11,159	65,832	1,53,304	.....	58,954	84,617	

  

	3RD QUARTER.				4TH QUARTER.				Total of food-grains.
	Food-grains.	Indigo.	Seeds.	Other commodities.	Food-grains.	Indigo.	Seeds.	Other commodities.	
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	
Imports ... ..	23,983	.....	.....	52,069	6,860	.....	.....	68,730	46,650 mds. or 1,668 tons.
Exports ... ..	49,696	7	10,435	97,951	69,869	3,483	9,709	45,589	3,04,682 mds. or 10,881 tons.

35. These statistics show an export trade in food-grains reaching a total of 22,000 tons, and, as I have stated, they ignore the chief trade route from the district, and they ignore all those petty channels of inter-district communication which always exist, or are always used, the aggregate of the transactions flowing through which is doubtless considerable.

36. With the following statement of the average rainfall in this district, I pass on to the condition of Monghyr during 1873-74:—

*Statement showing the average rainfall in the district of Monghyr from 1868—1872.*

STATIONS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Monghyr ... ..	0'46	0'66	0'42	0'85	1'46	4'76	13'03	15'82	8'53	2'98	.....	0'40	49'37
Jamoeoe ... ..	.....	0'96	1'43	1'86	2'32	5'43	12'95	10'12	8'91	3'83	.....	.....	48'31
Begoo Serai ... ..	2'00	1'23	0'21	0'39	3'32	5'07	12'76	8'38	8'72	4'74	.....	.....	46'82
District average	1'23	0'95	0'69	1'03	2'53	5'09	12'91	11'44	8'72	3'85	.....	0'40	48'17

## PART II.

37. As in other districts of Behar, so in Monghyr the rainfall of 1871 was above the average, but I do not gather from the official reports that the crops suffered. In 1872 the rainfall, normal as far as quantity is concerned, was not, in the Begoo Serai and sudder subdivision, happily distributed; while in Jamoeoe the fall was deficient. The consequence was that nowhere in the district were the crops above the average; while in Jamoeoe they were decidedly below it. The Commissioner, in his administration report for 1872-73, though not fully concurring in the Collector's opinion that only three-eighths of an

average crop had been harvested there, still admits that the harvest had not been good.

38. On the whole, I conclude that the seasons preceding the summer of 1873 had not been as prosperous in cis-Gangetic Monghyr as in the rest of Behar; and although these seasons had not been one of actual scarcity, still I gather from the prices current in the latter half of 1872 and first half of 1873 that the food-grain market was from 10 to 20 per cent. dearer than it ordinarily is. This antecedent period of pressure must have had, to some extent, an exhausting effect on the district resources.

39. The rainfall of 1873 was not in Monghyr as greatly deficient in quantity as it was unequally distributed: in July and August it was in excess; in September, when heavy rain is necessary, it was under the normal fall of that month; in October there was no rain at all. The character of the year's rainfall therefore was excessive, when excess was likely to be most injurious, and deficient, when a copious downpour was wanted. The following statement gives the rainfall for each month of 1873:—

*Statement showing the rainfall in the district of Monghyr in 1873.*

STATION.	January.	February	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Monghyr ... ..	0'34	0'02	1'07	0'18	1'12	2'63	13'30	15'32	3'68	...	0'02	0'04	37'72
Jamooee ... ..	0'73	...	0'50	...	0'70	4'20	23'50	10'05	3'49	...	...	0'11	43'28
Begoo Serai ... ..	0'34	...	0'20	0'76	0'83	1'98	11'22	16'11	4'01	...	0'10	0'03	35'58
District average ...	0'47	0'02	0'59	0'47	0'88	2'94	16'01	13'83	3'73	...	0'06	0'06	38'86

40. The consequence of this unseasonable excess and abnormal deficiency was that, of the bhadoi crop but six annas, or three-eighths, are reported to have been saved; while of the winter rice crop, the outturn in the sudder and Begoo Serai sub-divisions was but one-eighth, and in the Jamooee sub-division but one-fourth of an average crop. The Jamooee sub-division is, however, the great rice-producing region of the district. I gather from the Collector's reports and figures that, in his opinion, it contains one-half again as much rice land as the other two sub-divisions put together. For the whole district, therefore, the proportion of the rice crop saved was not less than one-fifth of an average crop.

41. The outturn of both harvests in 1873 was therefore in round numbers:—

Bhadoi	...	...	...	...	Tons.
Winter rice	...	...	...	...	70,000
					42,000
Total	...	...	...	...	112,000

42. At the ripening of the bhadoi harvest the provision for the previous year's consumption had been all expended. There remained the district reserves, which in the preceding part I made out to be 87,000 tons. They probably, in the autumn of 1873, were not so high, owing to previous bad years; and in assuming them to have been so

high, I am placing the district in a favorable light. On those district reserves, then, and on the proceeds of the bhadoi crop, the district subsisted till January added the produce of the winter rice crop to the store. But in the interval the people had to live, and consumed 110,778 tons; therefore, in January 1874, this stock of grain, locally produced in the country, was, in round numbers, 90,000 tons, or about two and a half months' supply.

43. It is therefore not surprising to find that in January 1874 the prices of the two staple articles of food, rice and Indian-corn, were double normal rates at that time of the year; and it is a fact pregnant with meaning that they were dearer than the prices which prevailed in January 1866. In this latter year the high prices of January rose to famine rates in April, and all through the summer and well into the autumn those famine rates prevailed. The result was a mortality which Mr. Cockerell's figures do not pretend to measure, and scenes of ghastly misery, of which I retain a vivid recollection, my first experience of famine relief service having been in Monghyr in the autumn of 1866.

44. Whether the rubbee crop in Monghyr in 1866 was, in exception to the rule which prevailed elsewhere in Behar, a bad crop, I am unable from existing documents to determine,\* and my own knowledge of the district does not go further back than the July of that year. But if it were no worse than the crop of last year, that is, if it were about three-fourths of an average crop, then, judging from the experience gained in Monghyr in 1866, there is no doubt whatever that, had it not been for the interference, actual and potential, of Government last year, the scenes of 1866 would have recurred with increased intensity in this district.

45. The following statement of prices current in Monghyr last year is produced in support and in illustration of the preceding remark:—

Statement showing the prices current in the district of Monghyr in 1874.

SUB-DIVISION.	Kind of grain.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
		Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Sudder.	Common rice ...	12'6	12'3	12'6	12'6	10'5	12	11'5	10'5	13'6	14'6	14'7	21
	Indian-corn ...	14'1	14'7	14'7	14'7	15'7	15'2	18'9	23'1	22	26'2	26'2	27'7
	Pulses ...	14	14	12	12	12	12	13	15	14	15	14	15
	Wheat ...	13'6	14'7	14'7	15'7	15'2	15'7	15'7	16'8	17'3	16'8	16'8	19'9
Begoo Sorai.	Millet ...	...	...	...	...	...	...	...	...	...	...	...	...
	Common rice ...	12	12	12	12	15	11	12	12	12	15	21	21
	Indian-corn ...	17	17	21	17	17	18	28	19	19	19	19	19
	Pulses ...	14	16	17	17	17	18	19	19	19	19	21	22
Jamooc.	Wheat ...	13	12	14	14	18	14	13	15	14	14	15	17
	Millet ...	...	...	...	...	...	...	...	...	...	...	...	...
	Common rice ...	11'5	12'6	12'6	11'5	11'5	10'5	12'6	12'6	12'6	15'7	22	24
	Indian-corn ...	14'7	14'7	15'7	14'7	14'7	16'8	17'8	42	42	31'5	25	30
District average.	Pulses ...	15'7	16'8	17'8	15'7	15'7	17'8	18'9	24'2	24'2	28'3	22	24
	Wheat ...	13'6	13'6	13'6	13'6	13'6	14'2	14'7	14'7	14'7	15'7	16	18'7
	Millet ...	...	...	...	...	...	...	...	...	...	...	...	...
	Common rice ...	12	12'3	12'4	12	12'3	11'2	12	11'7	12'7	15'1	19'2	22
District average.	Indian-corn ...	15'3	15'5	17'1	15'5	16	17	20'9	28	28	28'8	23'4	25'8
	Pulses ...	14'6	15'6	15'6	14'9	14'9	15'9	17	19'4	19	20'1	19	20'3
	Wheat ...	13'4	13'4	14'1	14'4	13'9	14'6	14'5	15'1	15'2	15'7	16	18'5
	Millet ...	...	...	...	...	...	...	...	...	...	...	...	...

\* Generally, throughout Behar, the rubbee of 1866 was not unfavorable. For the Monghyr district specially I can get no definite information. Mr. Cockerell does not refer to the point.

46. During the spring of 1874 the district food-supply received a large addition from the produce of the rubbee crop, which, though not up to the average, was still three-fourths of an average crop all over the district. The favorable outturn of this crop in Monghyr is doubtless largely due to the fact that much of its soil being liable to inundation, is independent of the rainfall to a considerable degree.

47. The produce of this harvest, therefore, was, in round numbers, 200,000 tons, and therefore the district drew from local sources 290,000 tons, or eight months' supply, to last over the period from January to September.

48. This was not all. The moisture in the soil, which brought the rubbee to, if not full, at least nearly full maturity, enabled the people, herein far more fortunate than their neighbours to the north, to sow down a large crop of subsidiary food-grain. This crop is estimated by the Collector to have covered 10 per cent. of the cultivated area of the district, and therefore must have yielded some 32,000 tons of food-grain. It may therefore be said that the district, from internal sources, drew a supply of food-grain sufficient, had it been freely available, and had none been exported, to have supported the people in their usual state for nine months, or sufficient to have supported them in straitened circumstances over the whole period of the scarcity. But inasmuch as the local food-supply could have done no more than this, inasmuch as the prices current show it was by no means freely available, and, as we shall see presently, inasmuch as it was largely exported, the consequence was a continuous pressure which, at times and in particular localities, deepening into actual distress, necessitated the interference of Government.

49. This interference, however, never assumed anything like the pronounced character which marked it in districts which had not the advantage of both railway and river communication, and which were not, therefore, readily open to the operations of private trade. It will be presently seen that the assistance afforded by Government to the district was, comparatively speaking, inconsiderable as far as material aid went. The moral effect, however, of the position it assumed—its readiness to throw grain on the market, exemplified when the prevalence of excessive rates rendered this extreme step a necessity, and its avowed intention of adopting any other step the crisis might, in the interests of the people, demand—rendered much material expenditure unnecessary.

50. I now come to the question of private trade in this district during 1874, and it is one which presents some features of peculiar interest. Before I comment upon them, I beg to submit two statements—one showing the trade of the district as registered at Sahebgunge in 1874, and the second showing the railway traffic to and from the district during the year. Much trouble has been expended in dividing off the grain carried for private traders from the grain carried on Government account, the railway traffic returns not distinguishing between consignors; but I believe that the figures I present show, if not with absolute precision, at all events with a close approach to precision, the

total of private importations to, and exportations from, the district by rail in 1874 :—

*River Traffic Statement for the Monghyr district for 1874.*

	Rice.	Other food-grains.	Oil-seeds.	Cotton.	Sugar.	Tobacco.	Salt.	Saltpetre.	Hides.	Others.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Nos.	Mds.
Imports ...	13,199	13,559	...	530	125	54	95,005	.....	...	29,941½
Exports ...	665	2,34,459	3,15,141	530	533	16,123	1,380	909	308	40,289½

*Railway Traffic Return for the Monghyr district for 1873-74.*

	4TH QUARTER OF 1873.				1ST QUARTER OF 1874.					
	Food-grains.	Indigo.	Seeds.	Others.	Food-grains.	Indigo.	Seeds.	Others.		
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.		
Exports ...	1,23,173	4,354	32,286	1,26,299	1,19,851	847	71,825	54,731		
Imports ...	3,96,044	.....	.....	95,484	8,95,945	.....	.....	74,757		
	2ND QUARTER OF 1874.			3RD QUARTER OF 1874.			Total food-grains.			
	Food-grains.	Seeds.	Others.	Food-grains.	Seeds.	Others.	Mds.	Tons.		
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Tons.		
Exports ...	3,24,481	1,06,266	92,257	1,64,398	19,107	1,64,289	7,31,903, or 26,139			
Imports ...	10,67,992	.....	1,22,238	4,21,851	.....	1,66,574	27,81,832			
Deduct Mr. Toynbee's despatches ...							13,41,750			
Deduct deliveries of Government grain purchased in the North-Western Provinces, Central Provinces, Punjab, &c. ...							33,212			
							14,40,082			
Deduct importations by the Court of Wards managing Durbhunga minor's estate (about) ...							1,91,528			
							14,06,870			
Remainder ...							12,15,342 or 43,400 tons.			

51. Now, it will be observed that the statement of river traffic registered at Sahebgunge in 1874 presents two salient points of interest as regards the food-supply of the district; *first*, that the aid received by the district from Lower Bengal was inappreciable; *second*, that the district in 1874 exported but 25 per cent. less food-grain than it did in the year 1872, which is the nearest approach to a normal year for which we have statistics. It is unnecessary to dwell on the former point, having attracted attention to it. The latter point is only another illustration of the fact, pointed out in the case of Bhagulpore, that the export trade in grain from a district sets with steady current in one direction or another; and that the current, if supplied at its source, is



not retarded, nor still reversed, by local exigencies. There was in Monghyr in 1874 a good rubbee harvest, comparatively speaking. So impecunious are the people that a considerable portion of the produce of this harvest was, even in such a year, sold. Once in the hands of the grain-dealer, who doubtless had his engagements to fulfil, and who, because of these engagements, and also possibly because of his want of preparation for such an emergency as a local scarcity, could not afford to part with his grain on the spot, the grain was exported.

52. A still better example of this incapacity of local trade to suit itself to circumstances is afforded by the statement of railway traffic which is given above. Here we have two streams of food-grain crossing each other, one entering, the other leaving the district; the large volume of the export stream—fuller than in ordinary years—being doubtless due to the reduction in railway freights, which, making railway carriage cheaper than river transport, aggrandized the former at the latter's expense. The harvest in Monghyr not having been such a failure as elsewhere, some surplus over immediate wants remained, and of this surplus, some, or all, was disposed of according to previous agreement or to meet pressing wants. Once in the dealer's hands, it is, for the reasons noticed in the preceding paragraph, exported. It would seem that in bad years the extreme necessities of the people are the only limit to the export of food-grain from a district which ordinarily produces a surplus, and therefore has a well-established export trade.

53. I am not, however, to be understood as deprecating the existence of such exportation even in the worst of years. It has disadvantages and it has advantages which are obvious to any one thinking the matter over, and between whose relative claims to predominance it is no easy matter to decide. One thing is certain, that inter-district trade, owing to increased facility of communication, increased security of life and property, and increased credit and confidence, due to spread of knowledge and general enlightenment, is acquiring an expansion it did not know before. Any interference with its natural development, any obstacle to its usual course, interposed in times of difficulty, which for it as well as for the administration are, as it were, a touchstone, will most probably result injuriously. Even if the full bearings of the question, both as regards the trade itself, and regarding the true interests of the particular district from which it tends, were known, interference would be of doubtful advantage. In the absence of such knowledge it will not fail of being mischievous.

54. Notwithstanding the large railway and river exportations, it will be observed that on the whole the balance is in favor of importations (even as far as those trade routes go).

55. Having thus far dwelt on the extent and causes in the failure in the harvest, having realized the quantity of available food-grain in the country, and having exhibited the effect on this food-supply of the private trade to the district during the year; having also shown the height to which prices had risen in the beginning of the year, and suggested the probable consequences of such a state of things had not the Government interfered, I now proceed to exhibit the extent and effects of the action of Government.

56. Following the plan adopted, I present two statements—one showing the expenditure in grain, and the second the expenditure in money, incurred in the relief of distress in this district :—

*Statement of expenditure in grain incurred in the relief of distress in Monghyr during the famine of 1874.*

Nominal quantity delivered.	Grain distributed in charitable relief.	Grain sold for cash.	Grain paid in wages on relief works.	Grain advanced on recoverable loan.	Remainder.
Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
8,158	360	1,900	486	5,009	403

*N.B.*—The remainder, 235 tons, is to be written off to wastage, and 168 tons sold after relief operations had ceased. This is at the rate of about 3 per cent. on nominal deliveries. It will be understood that Monghyr being on the line of railway, the wastage due to distant inland transport was to a large extent eliminated.

*Statement of cash expenditure incurred in the relief of distress in the Monghyr district during the famine of 1874.*

Cash expended in charitable relief.	Cash paid as wages of labor.	Cash advanced as loan recoverable.	Total cash expenditure.
Rs.	Rs.	Rs.	Rs.
83,865	1,32,993	1,86,464	4,03,322

57. I now show the numbers of people who were relieved by the cash and grain expenditure tabulated above. It will be observed that I deal with so much only of the expenditure debitable to famine which actually reached the hands of those in need of relief.

58. The figures in the two following statements have been taken from the official records, and those for charitable relief have been verified and corrected in communication with the Collector.

*Statement of the average number of persons charitably relieved in the Monghyr district during the famine of 1874.*

DISTRICT.	FORTNIGHT ENDING ON THE—								
	24th January.	7th February.	21st February.	7th March.	21st March.	4th April.	18th April.	2nd May.	16th May.
Monghyr ... ..	70	848	1,072	2,658	1,008	3,880	3,750	4,501	3,301

*Statement of the average number of persons charitably relieved in the Monghyr district during the famine of 1874.—(Continued.)*

DISTRICT.	FORTNIGHT ENDING ON THE—								
	30th May.	13th June.	27th June.	11th July.	24th July.	8th August.	22nd August.	5th September.	19th September.
Monghyr ... ..	3,402	3,744	4,824	3,775	4,650	5,150	2,125	2,084	100

*Statement of laborers employed in the Monghyr district during the relief operations of 1873-74.*

DISTRICT.	Aggregate number of individuals employed.	AVERAGE DAILY ATTENDANCE EACH MONTH.										
		November 1873.	December 1873.	January 1874.	February 1874.	March 1874.	April 1874.	May 1874.	June 1874.	July 1874.	August 1874.	September 1874.
Monghyr ... ..	1,522,614	...	4,210	5,227	4,240	4,460	4,631	10,596	11,148	3,912	1,972	332

59. Now, an examination of the former of these statements will show that it is equivalent, as far as mere numbers are concerned, to saying that 25,587 people received gratuitous relief for one month; and the latter or labor statement, treated in like manner, may be understood to state that 50,753 individuals received wages in money or grain for one month also of 30 days. There then remain the advances made of money and grain, and the cash sales of grain, to be taken note of. I have assumed, of the grain so advanced or sold, every 23 seers supported an individual for one month; and that every 30 annas advanced in cash supported another individual for one month. An easy calculation will now show that the relief thus afforded by sales of grain or by advances of grain or cash sufficed for the support of 435,885 people for one month.

60. Therefore the expenditure of cash and grain incurred by Government in the Monghyr district during the famine of 1874 sufficed (with the exception I shall notice presently) to support 512,225 individuals for a month, or the whole population for about eight days.

61. The exception I have alluded to is this. Some of the money expended in charitable relief, paid away as wages and advanced on loan, doubtless found its way back to the Government treasury in payment of Government grain. By so many sums of 30 annas each, as found

their way back, should this total be reduced. The price of the grain sold in the district was about Rs. 1,70,000. If all this sum were money which Government had distributed beforehand, the number relieved for one month would be reduced by a daily average of about 90,000. It may, however, be considered certain that the sale-proceeds of grain do not all represent money previously advanced: some of it doubtless does; and although there can be no precision on the point, still I should say that on this head it would be a fair allowance which would reduce the daily number of persons relieved for one month from 28 per cent. of the population, as above, to about 20 per cent.

62. This, then, was the extent of the Government relief administration in Monghyr.

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## SECTION X.

### SONTHAL PERGUNNAHS.

THE remarks I have to offer on the Sonthal Pergunnahs lose all the interest which a discussion regarding the normal condition of agriculture and production in the district might confer on them. For the Sonthal Pergunnahs it may be said that no agricultural statistics exist; none were compiled when the region was surveyed; and if, since then, estimates have been submitted to the Board of Revenue, they are incomplete, devoid of precision, and founded on no basis of actual inquiry or experiment. The impossibility, indeed, of finding in such a barren, sparsely populated country a "specimen area" in which to prosecute statistical inquiries is obvious; and in a communication with which Mr. Boxwell, the Officiating Deputy Commissioner, has favored me, this impossibility is clearly pointed out.

2. Although, however, no one area representative of the physical aspect of the district and of its agriculture can be selected, Mr. Boxwell thinks that five or six pergunnahs or special tracts might be found, each of which would represent, in a rough way, one of five or six great divisions of the district. The selection of such special tracts and the subsequent prosecution of the necessary inquiries in them are obviously matters of time; and, although I beg to thank Mr. Boxwell for the courteous interest he has taken in furthering my object, the limited time at my disposal will not allow me to postpone any longer the compilation of the facts and figures of which I am already in possession.

3. The Deputy Commissioner states that, broadly speaking, the district may be divided into three parts—the *hilly portion* which covers three-eighths of the entire area, the *rolling country* covering one-half of the entire area, and the *flat country* which occupies the remainder. The hilly part of the district stretches continuously 100 miles from Sahebgunge to the Nowbil river, 15 miles south-west of Doomka; it contains some cultivated valleys, notably the Burhait Valley, but for the most part it is uncultivated and sterile, and therefore it would be obviously difficult, if not impossible, to estimate with any precision the extent of the cultivated clearings which at wide intervals dot its expanse.

4. The rolling country, again, is in places rocky, and in places covered with jungle, so that the proportion of uncultivated land varies from 90 per cent. in the Jamtara sub-division to 10 per cent. on the area of other definite portions of it. This rolling country includes all Deoghur, Pabbia, part of Kandabel, Hendai, South Godda, and Belpetta,—an area of over 2,500 square miles.

5. Another reason which renders impracticable an estimate of the cultivated land in this rolling country is to be found in the system

of agriculture prevalent there. The food-grain crops grown are (a) rice, (b) janera or maize, (c) other grains, such as millet and pulses; and of the food-grain supply locally produced, rice forms the eleven-sixteenths, janera the three-sixteenths, and other grains the one-eighth part. The rice crop in this rolling country is sown in the hollows or ravines which intervene between two mountain ridges. These ridges serve as the watershed for a dam from which the rice fields, stretching away, each field of lower level than the preceding one and widening as they recede from the dam, are irrigated. It is not every mountain hollow at whose gorge, failing a natural spring, a dam can be made; and this, taken in conjunction with the wide barren expanse of hills which rise between these oases of rice cultivation, renders it almost impossible to estimate the area covered by the latter.

6. The food-grain staples other than rice grow on cleared high land in the vicinity of villages; but as the area of these clearings are not to be known from the number, size, or populousness of the villages, it is as difficult to estimate the aggregate area of all such clearings as it is to estimate the area of rice lands in the ravines.

7. The flat country in which rice is largely cultivated is a narrow strip, almost continuous, of about 170 miles long, and lying for the most part of its length about the loop line. Beginning about Godda, and running from left to right, it follows the boundaries of the district to Nalla, near Moyam on the chord line, and its area may perhaps be about 650 square miles.

8. It might not be impossible to estimate the cultivated area in this flat country; but as it forms a small portion of the district, and as such an estimate, even if precise, would afford no sufficient indication to the food-supply of the district as a whole, the elaboration of an estimate of cultivation there would be of no great practical utility.

9. So far, then, as the realization of the normal local production of food-grain is concerned, the plan hitherto adopted must be abandoned. It is not possible to estimate the local food-supply of the Sonthal Pergunnahs.

10. It is equally impossible to exhibit the effect of private trade in increasing or decreasing that supply. Putting out of sight those general remarks in administration reports which, descriptive of the tendencies of trade, have no definite statistical value regarding its action or effects, our sole information on the subject is derivable from the returns of river-borne or railway-borne traffic. The trade movements, however, shown in these returns cannot be localized to the Sonthal Pergunnahs even for stations within its limits; and I doubt much whether they can be localized even to the division.

11. Sahebgunge is a great depôt of railway-borne and river-borne trade; but it would be an error to suppose that the supply from, or the demand in, the Sonthal Pergunnahs has conferred such importance on Sahebgunge. The place is favorably situated on the deep channel of the Ganges, which at all seasons runs close under the town and contiguous to the railway station. Thus advantageously placed, Sahebgunge has, of late years, attracted to itself the trade which before was localized at Bhagulpore, at Peerpointee, at Colgong, and other riverine marts of lesser note, and it has become the entrépot of some



of the import and export trade of Purneah and the adjacent trans-Gangetic regions. Therefore, trade movements registered in the river or railway traffic returns for Sahebgunge have but little bearing on the food-supply of the Sonthal Pergunnahs; and this little is indistinguishable from the trade with other and richer parts.

12. What is true of Sahebgunge is also not inapplicable to those stations of the East Indian Railway which, lying between the river and the Damin-i-koh, are shut off from the rolling up-lands to the westwards. Those stations, doubtless, are points of export from, and import to, the flat rice-producing tract along the line of rail; but it is very doubtful whether they are supplied from beyond the high lands lying west of them, while it is highly probable that much of the traffic registered in their books appertains to the rich districts lying immediately across the river. The traffic, however, from or to those stations on the chord line which lie within the Sonthal Pergunnahs may be fairly looked on as appertaining to this district. This traffic is inconsiderable.

13. The Sonthal Pergunnahs in ordinary years neither export nor import food-grain largely. Such exportation as does take place, seems to be mostly of janera or maize to the neighbouring districts of Bhagulpore, Monghyr, and Beerbhoom; and the importations are rice from the latter district. The magnitude of the food-grain trade to or from the district by overland routes has never been measured; it might possibly be found impracticable to register the exportations, but a registration of the traffic on the Sooree and Doomka road might give some indication to the extent of the importations from the south.

14. The following statements of river and railway-borne trade have been compiled with special reference to the points noted in the preceding paragraphs. I believe that the Sahebgunge railway and river trade returns embody some of the Bhagulpore, Purneah, and north Gangetic country traffic; I also believe that the trade returns from the railway stations between the Damin and the river show some of the Maldah and Dinagepore traffic; I therefore have shown the trade to and from each of these places or sets of places separately. I abstain from hazarding a conjecture as to the portion of the traffic shown in these returns which appertains to the Sonthal Pergunnahs alone:—

Railway Traffic Return for the District of Sonthal Pergunnahs for 1872.

	1ST QUARTER.				2ND QUARTER.				3RD QUARTER.				4TH QUARTER.				Total food-grains.						
	Food-grains.		Indigo.		Seeds.		Others.		Food-grains.		Seeds.		Others.		Food-grains.			Indigo.		Seeds.		Others.	
	Mds.	Tons.	Mds.	Tons.	Mds.	Tons.	Mds.	Tons.	Mds.	Tons.	Mds.	Tons.	Mds.	Tons.	Mds.	Tons.		Mds.	Tons.	Mds.	Tons.	Mds.	Tons.
<b>SAHEBGUNGE</b>	{ Imports ...	1,107		20,670		.....		17,069		3,118		22,855		1,482		22,412		.....		22,412		266	
	{ Exports ...	10,206		50,829		55,476		36,959		9,526		20,837		13,526		21,690		35,853		49,395		1,764	
<b>STATIONS ON THE LOOP LINE.</b>	{ Imports ...	63		28,935		.....		21,551		135		35,681		147		35,843		.....		513		18	
	{ Exports ...	52,976		27,718		31,821		44,284		39,580		16,091		42,624		16,319		4,087		1,849		6,006	
<b>STATIONS OF THE CHORD LINE.</b>	{ Imports ...	778		15,639		.....		22,134		2,477		14,108		1,308		13,112		.....		6,400		228	
	{ Exports ...	25,222		6,234		.....		7,905		2,847		132		4,908		1,234		.....		10,352		45,149	

River Traffic Statement for the Sonthal Pergunnahs District for 1873.

	Rice.	Oth r food-grains.	Oil-seeds.	Cotton.	Sugar.	Tobacco.	Salt.	Hides.	Others.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Nos.	Mds.
Imports	51,427	21,178	3,436	.....	234½	113	2,15½	42	13,748½
Exports	4,716	3,64½	7,365	412½	809	314	5,088	.....	67,585½

15. I now beg to present the following statement of average prices current in the district; and this brings to a close the few remarks which on this part of the subject my materials enable me to offer:—

Statement showing the Average Monthly Rainfall in the District of Sonthal Pergunnahs.

STATIONS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Nya Doomka	0·09	0·94	0·97	1·02	3·36	8·86	14·39	12·27	10·75	3·27	0·01	0·04	55·97
Deoghur	0·18	0·90	0·81	1·03	2·28	6·92	12·51	9·65	8·90	5·97	0·00	0·02	49·17
Rajmehal	0·44	0·62	0·91	1·55	8·14	10·56	7·94	14·12	3·48	3·48	0·04	0·04	48·20
Average	0·13	0·76	0·80	0·99	2·40	7·97	12·49	9·95	11·26	4·24	0·21	0·03	51·11

Statement showing the Average Prices Current in the District of Sonthal Pergunnahs.

SUB-DIVISION.	Kind of grain.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Doomka.	Common rice	27½	25·7	24·2	24·3	24·9	25·3	22·8	21·7	22	20·4	23·8	26·5
	Indian-corn	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Pulses	16·8	15·5	16	16	16·9	16·9	16·1	16·2	15·3	15·2	15	14·9
	Wheat	14	14	13	13·5	16·1	16·6	14·8	14·9	14·4	16·4	15·1	14·7
	Millet	48	42·5	43	40·5	45·6	42·6	41·4	38	60·2	63·8	52·8	49·3
	Common rice	25·8	25·7	25·6	23·9	22·5	22·1	21·2	20·6	20·6	21	21·4	23·3
	Indian-corn	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Pulses	18·6	20	18·2	19·7	21·7	22·5	21·2	20	18·7	17	18	18·8
	Wheat	20·2	21·7	20·7	22·3	21·1	20·5	19·8	19·1	18·9	16·8	17·3	14·1
	Millet	39	38	37·3	38·1	37·9	37·9	40·6	40	42·4	31·8	38	36·8
	Common rice	25·3	24·2	23·8	23·3	21·4	20·5	19·9	19·7	19·2	18·3	24·1	23
	Indian-corn	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pulses	16·7	17·3	18	17·2	17·3	15·9	14·5	14·6	15·1	12·7	13·8	14·8	
Wheat	17·7	16·3	16	16·7	17·1	16·7	15·9	16·1	16·4	14·1	15·3	15·4	
Millet	34·5	33·3	26·6	28·5	31·7	29·1	33·5	29·9	33·9	31·4	36·2	33·2	
Common rice	29·3	30·2	22·8	28·7	26·1	24·8	23·9	22·9	22·7	22·9	24·4	27·7	
Indian-corn	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Pulses	20·5	21·7	22	19·3	17·1	18·7	17½	17	20·4	18·8	18·1	16·6	
Wheat	17	16·2	18·7	21·1	20·5	19·4	16·5	17·2	17·9	18·2	16·9	14·3	
Millet	44·2	44·3	43·5	42·3	42·5	42·2	41·3	36·5	44·3	47·6	42	38·3	
District average.	Common rice	27	26·4	24·1	24·5	23·7	23·2	21·9	21·2	22·1	20·6	23·4	25·1
	Indian-corn	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Pulses	17·9	18·6	18·5	18	18·2	18·5	17·3	16·9	17·4	15·9	16·2	16·3
	Wheat	17·2	17	17·1	18·4	18·7	18	16·7	16·8	16·0	18·4	18·1	14·6
	Millet	41·4	39·5	37·6	37·3	38·4	37·9	38·2	36·1	45·2	43·6	42·2	39·4

## PART II.

16. The rainfall in the Sonthal Pergunnahs during 1873 was most unequally distributed, varying from 52 inches, or 4 inches under the average, at Doomka, to 24 inches, or half the normal fall, at Rajmehal; and the harvests exhibited degrees of variation corresponding to the capriciousness of the rainfall. The following statement shows the rainfall in each sub-division of the Sonthal Pergunnahs during 1873:—

*Statement showing the Rainfall in the Sonthal Pergunnahs in 1873.*

STATIONS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Nya Doomka ...	0·26	...	1·54	0·14	2·14	5·47	19·95	13·70	9·64	...	0·06	0·01	52·91
Deoghur ...	0·29	...	1·70	1·60	0·11	4·71	20·95	7·69	7·87	0·02	...	0·04	44·98
Rajmehal ...	...	...	0·20	1·75	...	1·98	9·25	6·90	4·00	...	...	0·20	24·28
Average ...	0·27	...	1·15	1·16	1·12	4·05	16·72	9·43	7·17	0·02	0·06	0·08	40·72

17. I have stated that the food-grain staples of the district are rice, which forms eleven-sixteenths of the total food-supply, janera, which forms three-sixteenths, and millet and pulses, which compose the remaining one-eighth. The janera, millet, and pulse crops are less sensitive to abnormalities of weather than rice is, and consequently we find that in 1873 those crops yielded three-fourths—rather more than less—of an average outturn. It will, however, be remembered that taken together they form less than one-third of the district food-supply.

18. The rice crop, which is the main food staple, suffered much more than they did, but it is no easy matter to determine the exact extent to which it did suffer. This is somewhat owing to the peculiar nature of rice cultivation in the Sonthal Pergunnahs. Many varieties of rice suitable to the varying character of the soil are grown there, one variety ripening earlier than another. The result is that the rice harvest goes on from early autumn till mid-winter; and drought has a more injurious effect on the outturn of one species of rice than on that of another. The result, however, of careful and repeated examinations of the various crops of rice in each sub-division showed that the average outturn was worst in the flat rice-producing lands of Rajmehal, where also the rainfall was most deficient; here only one-fourth of an average crop, or *less than half the outturn in 1865*, was harvested. In the Deoghur sub-division half an average crop was saved, while in Doomka the outturn was nine-sixteenths of the average. Finally, the Deputy Commissioner, summing up the results of his information, enquiries, and extensive personal observations, states that “roughly, in one-eighth of the district there had been three-eighths of an average crop; in one-eighth of the district there had been seven-eighths of an average crop; while in the remaining three-fourths of the district there had been nine-sixteenths of an average crop.”

19. It may therefore be accepted as a fair statement of the result of the bhadoi and winter crop in the Sonthal Pergunnahs in 1873

that the former was three-fourths, and the latter one-half of an average crop all over the district. The bhadoi crop in this district in 1865 was, according to Mr. Cockerell, "not generally below the average," and, according to the same authority, the "late rice crop, which is the mainstay of the people (as their credit with the mahajuns depends upon it), failed to an extent varying from half to three quarters of the average produce of ordinary seasons." The failure, therefore, in both crops taken together did not differ materially in 1873 from the state of things in 1865 in this district.

20. Mr. Cockerell, in his report on the famine of 1866 in Behar, notices, in speaking of the Sonthal Pergunnahs, "the high level of prices which obtained in other districts, and which induced an extraordinary exportation" of the produce of the bhadoi crop in the end of 1865. I have here to note the occurrence of a similar extraordinary exportation of the produce of the bhadoi crop in the end of 1873. In October and November this exportation was "very general and heavy," and even in February 1874 it is recorded that "export of janera (the chief bhadoi food produced) continues." The precise effect of this exportation in depleting the already short stores of grain in the district cannot, of course, be ascertained; but that it had a sensibly injurious effect on this district (no matter how beneficial it may have been to others) can no more be doubted than that the adverse circumstances of 1874 would have, had not timely remedial measures been taken, reduced the district to as pitiable a condition as that from which, according to Mr. Cockerell, it did not in 1866 emerge without great suffering and some mortality.

21. If it were my object to quote the experiences of 1866 as a justification of the measures adopted in 1874, and not, as I do quote them, in illustration of the evils which the future rejection of analogous measures will entail, I might point to the following statement of prices current in the Sonthal Pergunnahs last year, and invite a comparison between it and the prices for corresponding months of 1866 recorded by Mr. Cockerell.\* Such a comparison will show that the short harvest of

*Statement showing the Prices Current in Sonthal Pergunnahs in 1874.*

KIND OF GRAIN.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Common rice ... ..	13·5	12·5	11	11·5	10·4	10·5	11·5	10·8	10	10·6	12·5	20
Indian-corn ... ..	20	16·5	16	16	14·1	13	12·2	12	34·7	33	32	35
Pulses ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Wheat ... ..	11	11	11·8	12·5	11	11·1	10·1	11	11·8	12·7	12	14
Millet ... ..	22·5	17·7	17	18	15	14	16·5	23·5	29·2	22·8	21·2	32

\* *Statement of prices current in Sonthal Pergunnahs in 1866. (Extracted from Mr. Cockerell's Report.)*

	January.	February.	March.	April.	REMARKS.
Rice ... ..	16	13	13	11	In July the price of common rice was 7½ seers and in August 6½ seers for the rupee.
Indian-corn ... ..	20	14	14	11	
Pulses ... ..	18	16	16	14	

1873 was reflected in a price current dearer during the first quarter of 1874 than were prices during the corresponding period of 1866.

22. It was the action of Government which steadied the market in April 1874. Had no action been taken by Government it is manifest that, if in 1866 the price of rice rose to 6½ seers for the rupee, in 1874 the rise would have been as pronounced.

23. As in 1866, so in 1874, the assistance derived from the spring crops by the Sonthal Pergunnahs was inappreciable. In December, when the crop had been sown and had already given promise of what it would ultimately prove to be, it was reported that "less than a quarter of the usual rubbee area had been sown down;" that the "only rubbee food-grains, wheat and barley, were quite below figures;" that "the other rubbee products were very bad, certainly not above two annas," that is, one-eighth of the average. Subsequent reports, though more hopeful, were always qualified by a statement that, although the rubbee was improving, "there was very little of it;" and those subsequent more hopeful statements must be always read with the qualification that not one-fourth of the usual area had been sown. It may be fairly assumed that the aid in food-grain given to the district by the rubbee of 1874 was of no material account.

24. What Nature denied to agricultural skill and industry, she to some extent granted unsolicited. The mohwa tree, which studs the Sonthal hills and up-lands, yielded a bounteous crop of edible blossoms and seeds; the mango fruit, though less abundant last year in Sonthalia than in more northern regions, was still plentiful, and brought a sensible addition to the food-supply of a simple people who live much on wild fruits and herbs. Abundant crops of wild fruit, Nature's efforts, as it were, to cure the evil she had wrought, seem to be invariable concomitants of famine years. They are not always beneficent concomitants. In 1866 the people in this district, as elsewhere in Behar, were forced by want to use this fruit while still unripe. What might have been—as last year it was—a beneficent gift of nature, became a fatal gift, entailing sickness and death. The numbers of those who during the famine of 1866 died from cholera induced by eating unripe fruit are counted by thousands. Last year there was no outbreak of sickness, and the fact that, in the worst tracts, the mango fruit was allowed to ripen before being plucked, is at once a proof of the efficacy of the relief afforded, and some explanation of the absence of disease.

25. In the early portion of 1874 the local authorities in the Sonthal Pergunnahs were more alarmed for the safety of the flat rice-producing country, than for the hilly portions inhabited by Sonthals, or yet than for the rolling country stretching to the southwest. In April the Deputy Commissioner reported that he considered this "rolling" country out of danger; and acting on his belief, he seems to have concentrated his attention elsewhere where he deemed it more needed. Left to itself, the south and south-western portions got along till the middle of May, and then there was a collapse; the belief that it was out of danger was over-sanguine. Prospects "became a good deal worse than anywhere else in the district." The Deputy Commissioner became aware that there were "many people

there whose bodies show signs of want of food," in other words, that they were in distress; and energetic measures, rewarded with success, had to be at once adopted to retrieve lost ground. Famine is an enemy likely to generate false trust.

26. I refer to this episode in the famine administration in the Sonthal Pergunnahs with a view of suggesting that private trade can have done but very little for the district last year. If, in the immediate vicinity of the chord line, a state of things which in April was satisfactory could within a month have become alarming, private trade there cannot have been largely operative, and if it was not operative in the vicinity of the railway, it cannot have been very active in the interior.

27. The remarks I made in an early paragraph of this section, illustrative of the small bearing the trade returns from this district have on its food-supply, are as applicable to the district in 1874 as they were in 1872. It is quite impossible to say how much of the trade shown in the returns for 1874 was directed to or from this district in the first instance. One thing, however, is, I think, certain, that most of the large exportations of food-grain from Sahebgunge did not come from the Sonthal Pergunnahs; more likely they represent private grain consigned to the north Gangetic districts, and carried, in great part, by rail to Sahebgunge, whence it was shipped for its destination. I now submit statements showing the import trade to, and the export trade from, the district in 1874, as it is recorded in the returns of the river and railway traffic offices:—





*River Traffic Return for the Sonthal Pergunnahs District for 1874.*

	Rice.	Other food-grains.	Oil-seeds.	Cotton.	Sugar.	Tobacco.	Salt.	Salpêtre.	Hides.	Others.
Imports ... ..	Mds. 46,610	Mds. 36,497	Mds. 1,69,001	Mds. 1,007	Mds. 8,712	Mds. 8,291	Mds. 7,163	Mds. 1,734	Nos. 30,593	Mds. 63,460½
Exports ... ..	5,00,942	68,952	8,280	1,239	5,484½	201	12,543	...	.....	3,54,823½

28. I now proceed to exhibit the expenditure in money and in grain incurred by Government in the district for the relief and prevention of distress.

29. The tabular statements will explain themselves, and I need only add that the expenditure I exhibit is only that which reached the hands of those who stood in need of relief:—

*Statement of Grain Expenditure incurred in the relief and prevention of distress in the Sonthal Pergunnahs in 1874.*

Normal quantity delivered.	Grain distributed in charitable relief.	Grain sold for cash.	Grain advanced on loan.	Grain paid as wages of labour.	Remainder.
Tons. 7,419	Tons. 121	Tons. 643	Tons. 3,334	Tons. 1,970	Tons. 1,351

*N.B.*—The remainder is to be written off to wastage, and sale after close of relief operations, 148 tons to the former and 1,203 tons to latter head.

*Statement of Cash Expenditure incurred in the relief and prevention of distress in the Sonthal Pergunnahs in 1874.*

Distributed in Charitable Relief.	Paid as wages on relief works.	Advanced on loan.	Total.
Rs. 224	Rs. 1,79,959	Rs. 7,800	Rs. 1,87,983

30. I next proceed to show the number of persons who were relieved by the expenditure tabulated in the preceding statements. The two following statements, exhibiting actual figures, have been collated from the official reports:—

*Statement of average number of persons charitably relieved in the Sonthal Pergunnahs District during the famine of 1874.*

DISTRICT.	FORTNIGHT ENDING ON THE									
	31st May.	14th June.	28th June.	12th July.	26th July.	9th August.	23rd August.	6th Septem-ber.	20th Septem-ber.	4th October.
Sonthal Pergunnahs ... ..	116	1,007	1,007	942	3,208	3,365	3,511	2,944	1,845	903

*Statement of laborers employed in the District of Sonthal Pergunnahs  
during the relief operations of 1873-74.*

SUB-DIVISIONS.	Aggregate number of individuals employed	AVERAGE DAILY ATTENDANCE EACH MONTH.										
		1873.		1874.								
		November.	December.	January.	February.	March.	April.	May.	June.	July.	August.	September.
Doomka ...	756,480	...	...	...	...	20	1,559	4,389	8,010	4,537	3,864	2,837
Deoghur ...	15,860	...	...	...	...	54	35	82	75	37	154	35
Rajmehal ...	1,336,740	...	...	400	540	2,501	10,896	13,771	8,455	5,936	2,923	2,036
Godda ...	938,940	...	...	...	...	.....	.....	6,141	10,499	8,616	4,870	1,172
Total ...	3,107,820	...	...	400	540	2,575	12,490	24,383	27,039	18,226	11,811	6,130

31. Now, an examination of the former statement will show that, as far as the numbers relieved and the relief distributed are concerned, the statement is equivalent to saying that 9,420 individuals were relieved for one month of 30 days; and treating the second statement in the same way, it will be found tantamount to a statement that 103,594 individuals received relief for a similar period. Now, turning to the remaining modes in which relief was administered, namely, sales of grain and advances of cash or grain, it will be seen that on an allowance of 23 seers of grain per individual for a month, and 30 annas for another individual for a similar period, the relief distributed under these heads sufficed for the support of 197,822 individuals for one month.

32. It follows therefore that the entire expenditure of Government in grain and cash sufficed for the maintenance of 310,836 individuals for one month. As the population of the district is said to be 1,259,287, the effect of Government expenditure may be expressed by saying that about 24 per cent. of the population of the district was maintained for a month, or that the whole population was maintained for about one week.

33. These numbers, however, probably overstate the reality. Doubtless some of the cash distributed by Government returned to it in the shape of the sale proceeds of grain. The inclusion in the numbers given above of the people represented by the cash which so returned is obviously incorrect; and by the number of such people should the total be reduced. It may be said with approximate correctness that Government aided 20 per cent. of the population for one month.





## SECTION XI.

### PURNEAH.

THE materials available for constructing a table of agricultural statistics for the Purneah district, though in many respects important and interesting, are devoid of precision. No agricultural statistics have been collected from 'specimen areas' in Purneah; and indeed it would be highly difficult to find in a district so sparsely peopled, and having such large expanses of uncultivated land, a limited number of definite areas representative of the general condition of agriculture in the whole district. In the absence of definite figures for specific areas, I am compelled to fall back on the reports of the revenue survey (which was completed in 1852), on the Board of Revenue's statistical return XLIB for 1872-73, and on the information on agricultural subjects contained in the famine literature.

2. The survey records are to be found in the Purneah Collectorate; and the Collector, Mr. Kemble, has been to much trouble in compiling the statistics of measurement, extracting from them all the information which was valuable and pertinent to my purpose, and putting this information into an easily intelligible form.

3. I find, however, that the information which may be gathered from those survey statistics is of very moderate value for the immediate purpose of this report. In itself the information is valuable and interesting, and in the prosecution of future statistical inquiries may be found useful; but from it, as it now stands, I gain but little help. I shall briefly analyse those survey statistics, more with regard to their possible future than to their present value.

4. The Purneah district contains twenty-five pergunnahs and part of a twenty-sixth. When surveyed, its area was larger by about 100 square miles than the area shown in Mr. Beverley's Census Report, the diminution being due to transfers of territory to other districts made since the completion of the survey. Thirteen out of these twenty-five pergunnahs cover an area of 1,935,817 acres, and in 14 per cent. of this area the revenue survey took the form of 'kusreh,' or field-to-field measurement. The survey records therefore embody a trustworthy statement of the quantity of land which thirty years ago was cultivated, fit for cultivation, or unculturable, in the area so measured by 'kusreh.'

5. I have analysed the Collector's abstract of the survey statistics of 'kusreh' or field-to-field measurement, and I find they show 75 per cent. of the gross area operated in to have been at the time under

cultivation, 11 per cent. fit for cultivation, and 14 per cent. unculturable. Now, in the absence of any better evidence, I submit it is probable that the proportions of cultivated, culturable, and unculturable land which prevailed in 14 per cent., assimilate to the proportions which prevailed throughout the whole of thirteen pergunnahs, and I shall assume this to be the fact.

6. In the remaining 13 pergunnahs the survey was not made by 'kusreh,' but in the year 1845 estates in 7 out of the 13 pergunnahs were divided under the partition laws. The aggregate area of those 7 pergunnahs is 1,223,294 acres, and the lands which were 'partitioned' covered 40 per cent. of this area. The detailed measurements which, previous to partition, were made showed that in these estates there was 59 per cent. cultivated, 22 per cent. uncultivated, and 11 per cent. culturable land. Now, if in the case of the pergunnahs partially measured by kusreh survey it was allowable, failing better information, to extend to the whole the conditions prevailing in the part, *à fortiori* it is allowable here, where the larger proportionate size of the part affords a truer index to the state of the whole. I assume therefore that thirty years ago these percentages did prevail throughout the whole 7 pergunnahs.

7. The preceding remarks account for the present district area as far as mere extension goes; for the excess area surveyed, no statistics are available of more weight than those whose character was criticised in the section on Bhagulpore. Those statistics go to show that out of the remaining 77,158 acres, nearly 60,000 acres are absolutely barren or uncleared jungle. On the whole it may, expressing the above percentages of cultivated and culturable land in terms of the present district area, be said that thirty years ago there were in Purneah of—

Cultivated land	...	...	...	2,173,603	acres.
Culturable land	...	...	...	503,439	"
Unculturable land	...	...	...	495,538	"
			Total	...	3,172,480

8. Now, looking to the sources from which the above result has been deduced, these figures seem to deserve a considerable share of confidence. Doubtless, the extension to the whole of conditions known only to prevail in a part attaches a degree of uncertainty to them; still, making due allowance for this, I venture to claim for the above result a considerable share of confidence. It will be observed, however, that it refers to circumstances existing thirty years ago. Is it probable it reflects with accuracy present circumstances? Has there been within a generation no advance or no retrogression in the agricultural condition of Purneah?

9. The statistical return XLIB says there has been a retrogression, 20 per cent. of the then cultivated land having since become waste. The famine literature says there has been an advance, measured by about 5 per cent., on the then cultivated area. Our two sources of recent statistical information are thus in hopeless conflict.

10. It seems to me the latter is more likely to be true. I start with the assumption, already defended, that the survey and butwara statistics represent things as they were a generation ago. Since then Purneah has not been visited by pestilence or famine decimating the people, nor has there been such excessive emigration that one-fourth of the tillage land has been thrown out of cultivation. As far as probabilities go, the likelihood is that if there be not a greater, there is not a less area under tillage now than there was at the time of the survey.

11. Now, acting on this probability, and assuming that the figures in paragraph 7 represent with approximate correctness existing conditions, how is this cultivated land to be sub-divided into the land which grows the aughani or winter, the rubbee or spring, and the bhadoi or autumn crops? How is the quantity of land occupied all the year round by non-edible crops, and the quantity which yields two crops in the year, to be determined? For the solution of these questions the available information is, I regret to say, inadequate and vague.

12 In his reply to circular 70, the Collector, expressing in fractions of the rupee the relative proportions of the various crops produced, says:—"I consider that of the crops grown, twelve annas are food-giving staples, and four annas other staples, such as mustard, jute, and tobacco: of the edible crop, twelve annas again is rice, and the rest wheat, pulses, and other grains." It will be observed that these proportions refer to the quantity of the produce, not to the extent of the land on which that produce is raised.

13. Being unable from records and official documents to elicit any satisfactory clue to the solution of the questions noted in the penultimate paragraph, I addressed the Collector on the point, placing my difficulties before him. In reply he states:—"I find it quite impossible to give you the information you ask for, based on definite figures. I cannot in the kusreh or any other papers find such." Mr. Kemble then proceeds to give on the points submitted to him approximate estimates, which, however, even his varied experience cannot save from being conjectural. These estimates are to the effect that of the whole cultivated area, three-fourths grow rice; that of the rice-producing lands, six-sixteenths grow the early or bhadoi rice; that other bhadoi food-grain crops cover no more than one-sixteenth of the cultivated area; that five-sixteenths of the total cultivated area yield a rubbee food-grain crop, such as wheat, pulse, &c., and that the area occupied by the growth of toori (rapeseed), indigo, jute, tobacco, &c., is probably as large, if not larger than that occupied by rubbee food grains.

14. According to these estimates the cultivated area of the district should be thus sub-divided:—

	Acres.
Winter rice ... ..	1,018,876
Autumn rice ... ..	611,326
Other bhadoi food-grain ... ..	135,850 -
Rubbee food-grain ... ..	679,250
Non-edible crops (maximum quantity of land available for such) ... ..	475,477

15. It will be seen that these estimates give a large area to the cultivation of rubbee food-grain, an area larger than is consistent with the reference to this crop in the Collector's special crop report for December. There it is stated "the area cultivated in food-grains other than rice is probably half as much again as in ordinary years. \* \* \*

I do not think that more than 100,000 acres have been sown down with cold weather (*i.e.*, rubbee) food-grains." It will be obvious, therefore, that any calculation of the food-supply of the district, based on a statement of agricultural statistics derived from these proportions, would lack all claims to certainty, and would, by reason of the apparent precision attaching to figured statements, be misleading. I therefore abstain from making any such calculation, and the subsequent remarks will accordingly be wanting in such interest as an approximate statement of local food-grain supply would give them.

Before passing from this portion of the subject, however, I beg to reproduce from the Collector's reply to circular 70 the following remarks descriptive of the agriculture of the Purneah district:— "The greatest rice-producing tract is the northern part of the Arrareah, and the west and south part of the Kissengunge sub-division, and the thanas of Bulrampore and Kusba Amour in the north-east corner of the sudder sub-division. I should think twelve-sixteenths of the entire area of these tracts is rice land. In the north-west part of the Kissengunge, and in Kallygunge thana much tobacco and jute are grown. In the south and south-east of the district, thanas Monihari, south Gondwara, and south Damdaha, in the land subject to the Ganges floods, one cold weather crop only is produced, such as mustard or wheat. In the west of the district, all along the banks of the Koosi, rice is again the principal crop; in fact little else is there sown. This tract of country embraces nearly the whole of the Damdaha thana, and parts of Raneegunge and Motihari, in the Arrareah sub-division. Unfortunately, compared with the large extent of country, but a small area is brought under cultivation here, owing to the dread in which the ryots hold the Koosi floods, which nearly every year wash away all their sowings. In the centre of the district there is not so much land taken up by rice as on the extreme north and in the neighbourhood of the Mahanadi. I should think about half the cultivated area there (in the centre of the district) is under that crop."

16. On the question of the trade of the Purneah district, the Commissioner of Bhagulpore, in his last annual administration report, states that the "principal articles exported from Purneah are rice, oil-seeds, jute, and hides. The great mart in the district is Kusbah, where dhan is husked and cleaned, and exported to Calcutta. From the large golahs on the Koosi it is generally exported to the North-Western Provinces. Next to rice the most important crop is mustard, which is exported to Bengal. Kissengunge is the great country for jute, and its cultivation is steadily extending. It is exported principally in its raw state, though a small portion is used for rope and gunny-bag manufacture. The trade in hides is carried on by the Mussalman females living in Kissengunge, who have agents all over the district. The trade is steadily increasing. Wheat, barley, oats, and tobacco are also





Statement showing the average monthly rainfall in the district of Purneah.

SUB-DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Sudder ... ..	0'39	0'65	0'31	2'45	1'57	12'17	15'64	13'35	15'94	4'41	...	0'07	66'95
Kissengunge ... ..	...	...	...	...	...	...	21'18	14'84	14'34	3'28	...	0'17	53'79
Arrareah ... ..	...	...	...	...	...	...	16'02	13'28	16'84	3'12	...	...	49'26
District average...	0'39	0'65	0'31	2'45	1'57	12'17	17'61	13'82	15'71	3'60	...	0'12	56'67

## PART II.

19. The district of Purneah seems to have escaped that antecedent period of unfavourable harvests which I had occasion to note in the section on Monghyr as having preceded the year 1873. In the divisional administration report for 1872-73 special mention is made of Purneah's having enjoyed good harvests in that year.

20. The rainfall in the year 1873, however, was not only deficient in quantity, it was also unfavourably distributed. But half the usual quantity fell in June, when abundant moisture usually softens the ground to the plough; and although the fall in July was up to the average, it fell under it by four inches, or 30 per cent., in August, and in September the rain ceased with a fall 65 per cent. less than the average in that month. The rain, then, which is essential to the development of the rice plant, the September and October rains, was in 1873 in Purneah markedly deficient. The following statement of the monthly fall in 1873 in this district, if compared with the average fall as given in the preceding table, will justify these remarks:—

Statement showing the monthly rainfall in the district of Purneah in 1873.

SUB-DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Sudder ... ..	0'27	...	0'82	2'56	0'44	6'34	10'98	10'60	6'75	...	...	0'37	39'13
Kissengunge ... ..	...	0'03	0'86	1'55	1'37	8'81	15'12	6'96	3'48	...	...	0'69	38'88
Arrareah ... ..	...	...	2'00	2'16	0'51	5'75	7'99	10'60	5'19	...	...	0'02	34'33
District average...	0'27	0'03	1'23	2'09	0'77	6'97	17'05	9'39	5'14	...	...	0'36	37'41

21. The effect of this deficient and unseasonable rainfall on the bhadoi or autumn crop was to reduce it to one-half the average. The great winter rice crop in 1873 yielded only three-sixteenths, or at the most one-fourth of the average.

22. The failure in the winter rice was severest all down the east, in the lands usually flooded by the Mahanadi and Panar rivers.



25. I have stated that the district narratives regularly record the fact of private importations finding their way into the district. The magnitude of these private importations cannot be learned from the narratives; they have, however, been registered to some extent at our river registering stations commanding the traffic of the Ganges and Mahanudi, the two main river trade routes of the district. I reproduce these trade statistics for 1874 in a consolidated form. They show incidentally, by the quantity of oil-seeds and tobacco exported in 1874, that Purneah must have had a fair rubbee crop.

*River Traffic Return for the Purneah District for 1874 (in maunds).*

	Rice.	Other food-grains.	Oil-seeds.	Cotton.	Sugar.	Tobacco.	Salt.	Saltpetre.	Hides.	Others.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Nos.	Mds.
Imports ... ..	3,51,312	23,361	1,720	4,586	11,667½	116	2,31,914	.....	.....	1,00,843½
Exports ... ..	38,961	64,649	5,34,932	169	4,565	1,27,823	2,028	48	4,100	4,40,719

26. I now proceed to exhibit the expenditure in money and in grain incurred by Government in the district for the relief and prevention of distress. As the tabular statements are uniform with those given for other districts, I need not introduce them by any explanatory remarks.

*Statement of Grain Expenditure incurred in the Purneah District during the Famine of 1874.*

Normal quantity delivered, exclusive of transfers.	Grain distributed in charitable relief.	Grain sold for cash.	Grain advanced on loan.	Grain paid as wages of labor.	Remainder.
Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
24,802	1,897	10,762*	4,583	5,366	2,194

\* NOTE.—I have been unable to determine how much of this quantity was sold after relief operations had ceased.

Of the remainder, 45 tons were expended as fodder for the Government transport trains, the remainder, 2,149 tons, are to be written off to wastage at the rate of about 8 per cent.

*Statement of Cash Expenditure incurred in the Purneah District during the Famine of 1874.*

Distributed in charitable relief.	Paid as wages on relief works.	Advanced on loan.	Total.
Rs.	Rs.	Rs.	Rs.
1,92,000	2,17,584*	1,13,125	5,22,709

\* These figures are taken from the statement presented to the House of Commons. I am unable to separate the cash from the value of grain expenditure as given by the Controller of Public Works Accounts.

27. I next proceed to exhibit the numbers of people who were relieved by the preceding expenditure. The following two statements have been collected from the official reports:—

*Statement of the Number Charitably Relieved in the District of Purneah during the Famine of 1874.*

From	To	Average daily number of persons relieved.
25th January ...	24th February ...	7
25th February ...	24th March ...	797
25th March ...	24th April ...	3,844
25th April ...	24th May ...	8,233
25th May ...	24th June ...	16,538
25th June ...	24th July ...	36,180
25th July ...	24th August ...	33,331
25th August ...	24th September ...	3,572

*Statement of Laborers employed in the District of Purneah during the Relief Operations of 1873-74.*

DISTRICT.	Aggregate number of individuals employed.	AVERAGE DAILY ATTENDANCE EACH MONTH.										
		1873.		1874.								
		November.	December.	January.	February.	March.	April.	May.	June.	July.	August.	September.
Purneah ... ..	38,28,420	.....	356	945	3,640	10,231	20,264	31,029	28,763	21,746	9,626	1,014

28. An examination in the manner already indicated of the former of those two statements will show that, as far as mere numbers are concerned, it is equivalent to saying that 102,502 individuals were charitably relieved for a period of one month; and a similar examination of the second statement will show it to be tantamount to saying that 127,614 individuals were relieved with wages for one month.

30. If now the grain advanced on loan or sold for cash and the money advanced on loan be looked on as capable of supporting so many individuals for one month, as there are portions of 23 seers each in the grain so sold or advanced, and of 30 annas each on the money lent, then the amount of relief thus distributed will be found sufficient for the sustenance of 807,567 individuals for a month.

In fine, the effect of such Government expenditure in cash and grain as reached the hands of the distressed classes was to support for one month a daily average of 1,037,683 individuals, or 60 per cent. of the population. In other words, the expenditure would suffice to support the whole population of the district for 18 days.

31. As, however, a considerable portion of the cash expenditure must have returned to the treasury in the shape of the sale proceeds of grain, a corresponding diminution must be made either in the number supported for a month or in the period for which the whole population might live on the expenditure incurred. The allowance to be made on this account can only be conjectured. In all probability it would, were it actually known, reduce the period during which the whole population might be supported on the expenditure incurred to say 12 days.

**RAJSHAHYE DIVISION.**





## SECTION XII.

### DINAGEPORE.

It will have been observed that hitherto the basis of my inquiry into, and attempts to construct statements of, the agricultural statistics of each district has been the survey reports where such existed; the results of special statistical inquiries where these had been made; the estimates of cultivated areas furnished Government by Collectors in reply to circular No. 70; and finally, the Board of Revenue's statistical return XLIB. It has been pointed out that for many districts, notably for those in the Patna division, the survey reports contained no definite statistics of cultivation, and were therefore, for my purpose, almost, if not altogether, useless; while for those districts of the Bhagulpore division for which statistics were given, the indefinite nature of the information recorded greatly impaired its value.

2. The survey report on the Dinagepore district resembles those for the Patna division in presenting no statement showing the areas under cultivation; therefore, interesting as are the general remarks it embodies on the customs, agriculture, and industrial resources of the district, the report, as a record of definite agricultural statistics, possesses an inconsiderable value.

3. Failing any assistance from the survey report, and as Dinagepore was not one of those districts in which special statistical investigations had been prosecuted, as they had been in Shahabad, in Rungpore, in Beerbhoom, and in Jessore, I was forced to fall back on the Collector's estimates and on the statistical return XLIB. This return for Dinagepore, however, had been compiled in 1874, when official knowledge of the agricultural condition of the district had been, in the course of the relief administration, largely widened. In its preparation also the results of certain local statistical inquiries seem to have been utilized, so that on the whole the estimates it presents are of a less indefinite character than those of any other return [not even excepting that for Sarun] which I have hitherto examined.

4. Believing, however, that it would be well to reduce still further the element of indefiniteness which attached to the estimate, or, as the case might be, to strengthen its claims to precision, I was induced to apply to the Officiating Collector, Mr. Westmacott, for such specific facts and figures as he might have at hand, representing actual conditions within defined areas. I took the liberty of suggesting that such agricultural statistics as I stood in need of might be gathered from the record of a recent partition case, or of a case of land measurement under the rent laws. I believed that from the statistics of cultivation in definite areas judiciously selected, so as to represent the varying physical aspects of the country, conclusions concerning the agricultural condition of the whole district might be drawn with as

much likelihood of being true to facts as if they had been based on special statistical inquiries.

5. In reply to my application the Collector has favored me with *data* compiled from the partition records of seven estates situated in as many pergunnahs lying in various portions of the district,\* and with areas aggregating over 100,000 acres, which is about 4 per cent. on the district area. These *data* may to a certain extent be accepted as quite trustworthy; as far as they show the land actually under cultivation in the areas to which they refer, they *are* trustworthy; but Mr. Westmacott thinks that possibly the figures make no allowance for river beds nor for roads, while he believes much land is entered as unculturable which is reclaimable jungle. In fact, it may be said with certainty that these butwara statistics for specific and representative areas state with precision the quantity of land actually under tillage; but overstate the unculturable, while understating the culturable, waste land.

6. Now an analysis of these statistics gives the following result:—

Gross area measured	...	...	...	100
Cultivated land	...	...	...	64
Culturable	...	...	...	17
Unculturable	...	...	...	19
				— 100

This is all the assistance I can extract from these partition figures, as no sub-division of the cultivated land according to the soil or crops grown is given. These percentages, however, enable me to test the Collector's estimates embodied in his latest return, XLIB, and this I proceed to do.

7. I beg, in the first place, to reproduce the estimates of the latest statistical return, XLIB, for Dinagepore.† While preserving the various areas intact, I have thrown the estimates into a shape more or less uniform with preceding statistical statements. The sub-division of the rice area into early and late has been made on the authority of Mr. Robinson, now Commissioner of the Chota Nagpore Division, to whose extensive knowledge of Dinagepore I shall presently have occasion to refer.

*Statement of Agricultural Statistics for the District of Dinagepore.*

Gross area of district.	UNCULTIVATED = 952,462 ACRES.		CULTIVATED AREA = 1,688,177 ACRES.						
	Culturable.	Unculturable.	Rainy season crops.					Dry season crops.	
			Rice.		Other food-crops.	Non-food-crops.		Food-crops.	Non-food-crops.
			Early.	Late.		Jute.	Other crops.		
Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
2,640,640	607,894	284,768	165,585	1,150,089	17,758	117,629	80,691	9,596	136,844

\* One pergunnah lies to the south, another to the north, two to the east, and two to the west of the district; the position of the seventh estate is not given.

† It bears the signature of Mr. Lewis, the permanent incumbent in the collectorship.

Now an analysis of these figures will give the following result, which bears out what I have said in the penultimate paragraph :—

Gross area of district...	...	...	...	100
Cultivated area ...	...	...	...	64
Culturable „ ...	...	...	...	25
Unculturable ...	...	...	...	11
				— 100

8. It will thus be seen that the partition statistics confirm and support the estimates of cultivation precisely; and it will further be seen that the estimates of culturable and unculturable land in this statistical statement are exactly what one would expect from Mr. Westmacott's criticism of the partition statistics on these heads. So thorough is the confirmation given to the estimates of the return XLIB by these "partition" statistics that one unacquainted with the explanation given in paragraph 4 above might reasonably believe the former were based on the latter. It is needless, however, to say there is no ground for such a belief. As far, therefore, as I can bring any light to bear on this question, the statistics set forth in the preceding statement are unexceptionable.

9. Accepting these statistics as representative of the existing state of agriculture in the district, and comparing them with the condition of Dinagepore when Dr. Buchanan visited it,\* I have been struck with some salient points of difference which are not without much interest and it may be high importance. They seem to suggest that in Dr. Buchanan's time somewhat more land was under cultivation than there is now. Introducing the element of population into the question, I further deduce from this comparison the fact that the district 70 years ago was somewhat more populous than it is at present. Inasmuch as Government desires to know from me whether emigration from Behar, if necessary, might not advantageously be directed to the waste tracts of North-Eastern Bengal, it may be well here to examine briefly the deductions which a comparison of the present state of Dinagepore regarding agriculture and population with its condition in these respects 70 year ago may suggest.

10. Nowhere in Bengal have the police jurisdictions or thana sub-divisions of districts undergone less change within the last three-quarters of a century than in Dinagepore. The district itself is smaller than it was in Dr. Buchanan's days; what he knew as "zilla Dinagepore" being known to us as Dinagepore, Maldah, and parts of Bogra and Julpigoree; but the thanas which form our district of Dinagepore are in name and in gross area the same thanas in which Dr. Buchanan pursued those inquiries which are a mine of information regarding the country and its inhabitants. This being so, I am able to extract without any difficulty from Dr. Buchanan's work *his* statement of agricultural statistics; and I include in it the number of mouzals or

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\* Dr. Buchanan's survey began in 1807, was terminated in 1814.

villages which then existed in each thana. The following is the statement in question :—

*Dr. Buchanan's General Statistical Table of the District of Dinagpore.—[The figures represent square miles.]*

Number.	DIVISION OR THANA.	Extent in square miles.	MANNER OF OCCUPATION.								Mouzahs.
			Waste.				Clear land not let on lease, but occasionally cultivated.		Lands let on lease.		
			Rivers, &c.	Inundated.	Woods and bushes.	Steep barren places, roads, and burial-grounds.	Inundated.	Not inundated.	Stiff clay.	Free soil.	
1	Rajarampore ...	340	63	10	15	10	10	20	127	85	851
2	Birgunge ...	340	32	6	12	10	6	44	76	154	477
3	Thakurgram ...	400	25	5	...	20	...	50	...	300	398
4	Ranisongkol ...	210	10	...	...	16	...	26	...	158	213
5	Birgunge ...	320	13	7	14	20	...	28	...	138	373
6	Hemtabad ...	300	17	20	...	38	...	38	...	187	355
7	Kaliyagunge ...	310	15	15	10	10	25	20	85	130	566
8	Bongsihari ...	240	10	5	...	15	...	30	180	...	853
9	Purusa ...	260	12	18	10	16	6	8	190	...	677
10	Gongarampore ...	320	20	22	2	12	8	16	220	20	615
11	Potiram ...	280	18	7	...	35	10	17	153	35	983
12	Potnitola ...	240	15	...	5	10	...	8	182	20	843
13	Chintamon ...	200	12	5	15	8	...	34	75	50	568
14	Howra ...	180	10	14	11	4	6	22	68	45	234
15	Nowabgunge ...	150	6	6	16	6	4	18	47	47	417
16	Ghoraghat ...	140	5	2	12	4	2	10	70	35	619
17	Dinagpore ...	4	1	...	1	1	...	...	...	2	16
	Total ...	4,134	284	142	123	235	78	389	1,478	1,406	8,328

11. Whether or not the lands specified in columns 8 and 9 of this statement should be looked on by me as cultivated land I am at a loss to determine. I am inclined to think that they would by many people be classed as cultivated land; to reduce, however, the chance of error as much as possible, I assume that the lands shown in columns 8 and 9 of the statement would now be classed as uncultivated. The cultivated area of the present district, therefore, in Dr. Buchanan's time was, in his opinion, 2,884 square miles, that is, 247 square miles greater than it is represented to be in the statistical table produced in paragraph 17.

12. Now it is an obvious objection to this conclusion that neither did Dr. Buchanan in 1814 nor do we now know with certainty what the actual quantity of land under tillage was then or is at present. I admit the objection, but I rejoin that if there is, as I submit there is, reason to trust to the general correctness of the statistics of agriculture I have reproduced, then there will, in the opinion of those who, like myself, have followed Dr. Buchanan's inquiries and marked the extreme care and local knowledge which characterize them, be greater reason to trust to the correctness of his figures.

13. If more land within a given area was under tillage seventy years ago than there is within the same area now, the suggestion is that the population of that area was greater then than it is now, and this suggestion is confirmed and borne out by the preceding statement. Since Dr. Buchanan's time the word "mouzah" has undergone no change of meaning. It means now, as it did then, a certain area which appertained to a village and was known by its name. Within this area there might be several collections of houses, each of which a stranger new to the country might erroneously call a mouzah, but all of which, save one, a native of the place would call a 'tola' or 'para'—a ward or dependant village of the excepted one which was the "mouzah" or hamlet whose name was, as it were, generic; a name which each dependant village bore, besides having, by way of *differentia*, a name of its own.

14. It was in the sense of the term I have indicated that the mouzah was made the unit of our enumerational system in 1872, and Mr. Beverley's census report shows that there are now 7,108 mouzahs within the area which in Dr. Buchanan's time contained 8,828. The objection that possibly the lesser number of to-day contains as many inhabitants as the greater number of sixty years ago will find no favour with any one possessing a knowledge of the system of land tenures and of the customs of rural Bengal.

15. The diminished number of mouzahs still more than the lesser area estimated to be under tillage suggests the deduction of a decrease in the population, and when both premises seemingly co-exist, they have a cumulative force in suggesting the deduction; but of course the conclusion is not free from the uncertainty which I do not deny attaches to the premises. For my own part, however, I believe the deduction to be probably correct; and that owing to some cause unascertained population has decreased and land has been thrown out of cultivation in this part of Bengal within the last two generations. Before an effort is made to re-people the country and reduce the uncultivated land once more to tillage, it would be well to know the exact nature of the causes to which I refer.

16. It would be beyond the scope of my duty to continue the comparison between the present and past conditions of Dinagepore; but before passing on to my especial subject, I may be permitted to notice the extension which within the last sixty years the growth of fibrous plants in this district has attained. I gather from Dr. Buchanan that in his time the cultivated area of this district comprised food-crop cultivation to the extent of 90 per cent., cultivation of *fibrous* plants (jute, hemp, &c.) to the extent of *one* per cent., and cultivation of sugarcane, oil-seeds, and non-edible products to the extent of 9 per cent. on the area. Now food-crops cover 80 per cent., jute and other fibres 7 per cent., and non-edible products, oil-seeds, &c., 13 per cent. of the cultivated area. The comparison of the past and present conditions of agriculture in Dinagepore as reflected in those figures suggests a train of thought which it would be interesting and instructive to pursue.

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\* See paragraph 16 of the succeeding section on Rungpore.

17. Reverting to the point from which I digressed into the foregoing remarks on Dr. Buchanan's statistics, I now address myself to the task of calculating the average annual supply of food-grain produced in Dinagapore.

18. The average produce per acre, according to the Statistical Return XLIB, which in other points is so trustworthy, is 880lb. or eleven maunds of clean rice, 348lb. or  $4\frac{1}{2}$  maunds of wheat, and 450lb. or  $5\frac{1}{2}$  maunds of all other sorts of grain. This rate of average produce per acre of rice land is a modification of an earlier estimate of the Collector's fixing the average at twelve maunds of clean grain.

19. The estimate of 11 maunds of clean rice per acre in this district is fully borne out by the figures given in a "Note on Rice Statistics" published in the November number of the *Statistical Reporter*. In this note, compiled by Lieutenant Otley, of the Irrigation Department, from *data* furnished by official and non-official inquiries of an extensive character, the average yield per acre from rice land in Dinagapore is stated to be from 15 to 18 maunds of unhusked grain (paddy). As there are 15 seers of husk in every maund of paddy, the coincidence between these two estimates, the estimate of the Statistical Return and Lieutenant Otley's, is complete.

20. Nevertheless I am disposed to adopt the Collector's earlier average of twelve maunds of cleaned rice per acre. This question of average rates of produce is to me the most perplexing of any with which I have to deal. One maund more or less per acre will materially alter the complexion of my conclusion, will sometimes make a district look prosperous while it really gives a bare sufficiency to its people, or sometimes make it look poverty-stricken while it is the reverse. I believe that hitherto writers on statistics have had a tendency to underestimate the rates of produce; therefore, though I recognize the danger of the opposite course, I have hitherto striven to avoid over-cautiousness in the estimates of average produce I have accepted whenever it was open to me to exercise a discretion on the point.

21. On this question of average rates of produce for rice lands Dr. Buchanan's opinion is of high value, though unfortunately it is nowhere in his book, as far as I have seen, definitely expressed. I have, however, ascertained from his statistics of prices-current, and from his estimates of average profits of rice cultivation in Dinagapore, what his opinion was regarding the average rate of produce per acre. Allowing for the element of uncertainty which the indirect nature of the procedure cannot altogether exclude, but which is inconsiderable, I gather that in his time 13 maunds of clean grain or thereabout was a fair average yield for an acre of rice land. Now, if we were certain of both averages, if we could state with certainty that 12 maunds now, and in Buchanan's time 13 maunds clean grain were fair average rates of produce per acre, then the complaint of cultivators old enough to compare past and present would be vindicated—*the land yields less than it used to yield*.

22. Adopting for rice land an average rate of 12 maunds clean rice, and following the Collector's averages in case of other food-grain,

I calculate the total food-supply of the district to be in round numbers 574,000 tons. The sub-division is into—

	Tons.
Early rice ... ..	70,974
Other autumn food-grain crops ... ..	3,488
Late rice ... ..	497,847
Dry season food-grain crops ... ..	1,452
Total ... ..	573,761*

23. The next step is to compare this food-supply with the wants of the people.

24. For the Behar districts I adopted three-fourths of a seer of food-grain as the average daily consumption per head of the population. This rate of daily consumption was based on the statistical inquiries of the Special Deputy Collector in Shahabad, and on the minimum subsistence allowance which, in consultation with the medical authorities, I found it necessary to fix during the relief operations in Durbhunga.†

25. In Bengal Proper, however, it seems the average daily consumption among a less robust population is something under the rate prevailing in Behar. The statistical report on Rungpore, which I shall analyse in the next section, is very minute on this point, and makes, when read by the light of the census statistics, the average consumption of food-grain per head of the population to be between nine and ten chittacks daily, or five-eighths of a seer. This estimate, however, shows manifest signs of having been framed in a decidedly economical, if indeed not a parsimonious spirit. The statistical report on Jessore (in a passage, however, not free from obscurity) states that “the ryot and his wife each between them consume a seer of rice throughout the day and night, and the children consume half that quantity.” If the meaning be that each adult consumes a seer, and each child half a seer daily, then, having reference to the proportion of children to adults in the district, as recorded in the census report, the average daily consumption per head would be two ounces over three-fourths of a seer. But if—which is the more rational supposition—the quotations do not contemplate the consumption of half a seer daily by each child, but rather one seer per day between all the children,‡ then the result will be as nearly as possible an average daily consumption of two-thirds of a seer per individual.

26. This average of two-thirds of a seer per individual daily is, I think, the closest approximation to the truth that can be made, and I shall adopt it henceforward. It may not be out of place to observe that it is also the average deducible from the estimates of domestic expenditure framed by such a competent judge and careful observer as Dr. Buchanan. It would of course be unwise to say that in two generations no change in domestic economy has occurred; but it is currently believed that such change as may have transpired tends

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\* It will be observed that this total excludes the produce of land which yields a second crop. I have no information as to the quantity (if any) of such land in Dinagepore.

† *Vide* paragraph 37 of the section on Shahabad.

‡ The Jessore average household contains 6·8 individuals; and the census statistics showing the proportion of children to adults preclude the supposition that more than three in the household are children.

towards a freer, not to a more economical mode of living. At all events, it may be fairly urged that as the diet of the people, prescribed by their religious tenets, has remained in substance absolutely unchanged since Dr. Buchanan's time, it is not likely an average man consumes less in the day now than an average man did sixty years ago.

27. At the average rate of two-thirds of a seer per head per individual daily, the annual consumption of the Dinagore district will be 326,310 tons, which, deducted from the annual production, leaves a surplus of 247,451 tons.

28. From this surplus the necessary requirements for seed-grain has in the first place to be deducted, but the deduction must be calculated on a basis different from that hitherto adopted for the districts in Behar. To determine what this new basis must be I have recourse to the statistical reports on Jessore and Rungpore.

29. The former report says that a beegha (one-third of an acre) of rice land requires for seed one maund of paddy; an acre, therefore, requires three maunds. The report of Rungpore on this point as well as on that of average consumption, more minute and less liberal than the former, gives in great detail the various quantities of seed required for each crop. The allowances, however, may be summed up in something over a maund for rice land and one-fourth of a maund for all other food crop land.

30. Hitherto all my calculations have dealt with husked or clean grain. Even in case of seed-grain, *which is never husked*, I have considered what its quantity would be when cleaned. I shall follow this plan here; and I submit that as both statistical reports, differing as to the quantity of seed required for an acre of rice land, agree in making the quantity more than is required in Behar, it will be a fair assumption which fixes the quantity of paddy at so much as will give one maund of cleaned grain. I adopt this rate of one maund of cleaned grain per acre for rice seed. For all other sorts of seed the Rungpore average of one-fourth of a maund seems unobjectionable.

31. To the quantity of seed calculated on those rates I shall add 15 per cent. for bad seed, wastage, loss before germination, and so forth, and these allowances shall be adhered to throughout the rest of this report.

32. Calculated on the preceding plan, the seed-grain required in Dinagore will be 56,640 tons; the quantity of surplus grain from an ordinary year's produce available for sale or storing will be (inclusive of wastage) 190,811 tons.

33. I now address myself to the question of determining the proportion of this surplus which is sold to defray rent charges, and thus, getting into the hands of the grain dealers, becomes at once available for export.

34. The officer in charge of the road cess valuations in Dinagore estimates the gross rental of the district to be twenty-five lakhs of rupees, or  $1\frac{1}{2}$  times the revenue. The Collector, however, informs me that in his district zemindars and middlemen receive so much as rent for land, though under various other names than rent, that in his belief the gross annual rental is not less than 45 lakhs or 50 lakhs of rupees. The Collector's belief on this point receives strong confirmation



from the facts and figures regarding rent rates recorded in the statistical report on Rungpore.

35. The average rate of rent for cultivated land in Rungpore is Rs. 5 per acre. If even half that rate be generally prevalent in the adjoining district of Dinagepore, which, to some extent in character of soil, resembles Rungpore, then the Collector's estimate is borne out. I adopt the estimate which fixes the rental of Dinagepore at 50 lakhs of rupees. If we knew the exact truth, we should probably have to raise the total higher still.

36. Mr. Westmacott, the Officiating Collector, states that "the proportion of this rent which the ryots generally pay from the sale proceeds of food-grain differs greatly in different parts of the district. In the north 12 annas or even more are paid from jute, while in the south nearly the whole is paid from rice." A small portion of the rent is paid from the sale of sugar and cold-weather crops, but it may be assumed as certain that seven-eighths or even fifteen-sixteenths of the entire rent is paid from the sale proceeds of rice and jute.

37. Now, if I can show how much of the rent people finance with their jute crops, I shall know how much of it they pay from the sale proceeds of rice. The area under jute cultivation is reported by the Collector to be the same now as it was at the time of the jute commission, 117,629 acres. It is not impossible that the depressed state of the jute trade may have had its effect in lessening the area under the crop; merchants have told me that the supply is not what it was; but these figures doubtless are approximately correct. The average yield per acre is reported to be 12 maunds; the gross produce consequently in an average year will be 14,11,348 maunds.

38. Now, all this produce is not exported: some of it is wanted for home consumption. There are in round numbers 250,000 homesteads in the district, of which say one-fifth or 50,000 are too poor to buy or keep any portion of the jute produce. The remaining homesteads will require, on a very moderate calculation, half a maund each yearly. If it be remembered that jute is used at every turn of the peasant's daily life, in yoking his bullocks, in binding together the materials of which his hut is composed, and in innumerable other ways, half a maund annually for each well-to-do householder will be considered a very moderate calculation. However, adopting this provision and allowing 5 per cent. for wastage, the quantity available for sale and export is reduced to, in round numbers, 12½ lakhs of maunds. It is not all exported in its natural state. Much of it is worked up into gunny-cloth in the district; but whether exported in the fibre or in the manufactured material, it is not sold at less than Re. 1-12-0 the maund.\* The sale proceeds, therefore, of jute produced in, and sold out of, the Dinagepore district amount to 22 lakhs of rupees. This sum is the maximum sum which from the sale proceeds of jute goes to pay rent. But as the gross rental is 50 lakhs of rupees and as fifteen-sixteenths of this gross rental are paid from the sale proceeds of jute

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\* The Statistical Report on Rungpore gives Re. 1-8 as the average rate at which producers sell their jute. My information, derived from gentlemen engaged in the jute trade, induces me to fix the higher rate.

and rice, the amount realizable from the latter source is in round numbers 25 lakhs of rupees.

39. With a view to determine the quantity of rice which in average years must be sold to realize 25 lakhs of rupees, I present a statement of average prices-current in the district:—

*Average of Prices-Current in the Dinagepore District from 1868—72.*

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Common rice ... ..	32.1	33	32.9	31.5	31	29.7	28.8	28.1	30	31.8	32.9	31.6
Indian-corn ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Millets ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Pulses ... ..	17.7	17.3	16.1	17.4	17.2	16.4	16.8	17.1	17.5	18	17.9	17.9
Wheat ... ..	14.8	16.2	16.4	17.3	18.1	14.9	15	15.6	14.8	14.7	15	13.4

40. It will be seen that the average retail price of rice in this district varies but little all the year round, and may be said to fluctuate about Re. 1-6 per maund. Now, the retail market rate is dearer than the rate at which the producers dispose of their grain; this is obvious. How much dearer it is, however, is a question on which it is impossible to speak with precision. I shall assume that the producers exact a high price and that they leave the wholesale or retail dealers a margin of only 10 per cent. under retail local rates. This would be an inadequate margin if the rice were to be resold in the cheap local markets, but as it is exported, a matter to which I shall presently come, to dearer markets, the margin seems to me a fair one. The producers, then, sell their grain at Re. 1-4 per maund, and at this rate, in order to realize 25 lakhs of rupees, they must sell in round numbers 71,000 tons, and they will therefore still retain 120,000 tons nominally. Actually the reserve will be less than this by the wastage which has taken place during the year, and which I see no reason to estimate at a lower rate for Bengal than for Behar. Deducting, then, on account of wastage 5 per cent. on the gross production (minus the quantity sold, which bears its own wastage) the actual reserve in the district is reduced to in round numbers 95,000 tons or 3½ months' supply.

41. Of this quantity, 95,000 tons of food-grain, how much is clear profit to the cultivator it would be difficult to say. From it the capital expended must be replaced, and when all items debitable to that head are deducted, it is probable that but little will remain over as clear profit from the cultivation of food-grain. Dr. Buchanan says "we ought not to allow that on the whole cultivation of grain the farmers (*i.e.*, cultivators) have more profit than the amount of the rent, nor can we allow that they have less." Now-a-days, however, notwithstanding the great advantages conferred on the district by the expansion of the jute industry, the cultivator's profit seems to be very much less than the rent; and this would appear to be

due either to a decrease in the fertility of the soil, or to an increase on the rate of rent more than commensurate with the rise in price of agricultural produce, or to a depreciation in the value of silver, or perhaps to all three causes.

42. At all events, if there be truth in my premises, and I invite a rigorous examination of them, they seem to suggest a reconsideration of the popular view that in this part of Eastern Bengal the people are better off than their grandfathers were. They excite a reflection as to what condition Dinagepore would be in now had not the demand for jute sprung up, and what condition it will tend to should the demand for this staple product fail, and yet rents and public demands suffer no decrease.

43. The result, then, of an average year's food-grain harvest in Dinagepore is that a sufficiency of food-grain is produced to supply the absolute wants of the people; to replenish the stock of seed-grain; to pay so much of the rent as the people pay by sale of food-grain; and to leave a surplus of 95,000 tons to replace exhausted capital, give the ordinary profits of labour, and be held in reserve against bad times. Therefore, in any one year the quantity of grain the producers may hold in reserve cannot exceed and will rarely reach 95,000 tons. In ordinary years much of this quantity swells the export grain fund. But if they reserve so much, and if the ensuing year be also an average year, will these 95,000 tons reserve, which have not been drawn upon, be added to the reserve the ensuing year furnishes afresh? And, if so, where is such accumulation to stop? In answer to these questions I repeat what I have said in the introduction to this report. If the ensuing year be an average year, there is no doubt the previous year's reserves partly swell the export grain fund. Such of them as do not swell the export grain fund are partly utilized by a freer consumption, and partly they are wasted, food-grain being a very perishable article. It must be remembered, moreover, that the average year I contemplate is an average of good years, short years on the one hand and bumper years on the other being excluded from the calculation of the average. But short years are of far more frequent occurrence than bumper years; and those often recurring short seasons are great solvents of surplus accumulations, whose *raison d'être* is the knowledge, begotten of experience, that bad seasons will come.

44. I now come to the trade in food-grain of the Dinagepore district. It is commonly believed that Dinagepore exports more rice than any other district north of the Ganges, and this belief is a correct belief. But it is an error to think that all the grain exported from Dinagepore marts is produced in this district. Struck by the startling inconsistency between the results of my inquiry into the economic condition of the Rungpore district and the statistics we possess regarding its trade—a point which shall receive due attention in the next section—I was led to think that possibly much of the Rungpore trade gravitated towards the long-established depôts on the navigable Dinagepore rivers, which afford a direct and cheap means of communication with Calcutta on the one side and the markets of the North-West on the other. I thought that, gravitating to these depôts, the Rungpore rice was thence exported in Dinagepore bottoms; and coming from Dinagepore created a false

impression regarding the largeness of the exports from the latter district and the paucity of the exports from Rungpore. This idea was confirmed by the results of inquiries made by the statistical officer in Dinapore in 1873-74, which are to the effect that in 1873 67 lakhs of maunds, or 240,000 tons, of grain had been exported from the Dinapore district.

45. To bring the idea to the test I wrote to the Collector of Rungpore, placing before him my difficulties, and requesting him to ascertain whether grain was exported from his district *via* Dinapore. The Collector, Mr. Glazier's reply confirms the idea I had entertained, and places the fact beyond doubt that a very large portion of the Rungpore exports, which we shall see are larger than those of Dinapore, swells the total of exports which Dinapore nominally supplies. Mr. Glazier writes: "The surplus produce all along the west of the district (*i.e.*, Rungpore) is largely stored in the marts, which lie within the Dinapore boundary on the Atraye and Kurataya, such as Habrah, Fulbari, and Ghoraghât. Thus, pergunnah Surooppore runs into both districts, and its surplus is bought up by the Habrah mahajuns. The same occurs more or less all down the boundary. We have no large rice marts in this district, and our supplies to the head-quarters market all the year round come regularly from Habrah and Fulbari." This is conclusive on the point that the surplus produce of at least the western part of Rungpore is in the first instance concentrated at Dinapore depôts. Whether the surplus produce of the eastern part goes we shall see in due time and place.

46. The export trade in food-grain from Dinapore follows two great routes. According to the Commissioner's Administration Report for 1872-73, where the question is referred to, the trade from those depôts situated on the Purnababha and Mahanade with their affluents, is altogether with up-country or western districts; while the trade from the depôts on the Atraye, Kurataya, and Jamna or Jamoona (*not* the Brahmaputra, which in this portion of its course is called the Jamoona also, but a smaller river, an affluent of the Ganges) is with the south and Calcutta. This diversion of the district trade into two great channels, one going westwards and the other to the south, is adopted in the comprehensive resolution on the boat traffic of Bengal, under date of October 18th, 1875; and one has only to glance at the map and see the direction the rivers take to apprehend why this should be.

47. I have stated that from statistical inquiries made in Dinapore in 1873-74 it appeared that during the year 1873 67 lakhs of maunds, or 240,000 tons, of rice were exported from the district. This large exportation—not much larger, however, than on my calculations and deductions it ought to be, a point which will be made clearer later on—is but to a small extent registered in our trade returns. I ventured in a former section to say that be our system of river traffic never so perfect, it would fail to exhibit the whole trade or anything near the whole trade of the routes with which it deals. I appeal to the present instance as a case in point. In the resolution on the boat traffic referred to in the last paragraph, it is stated that "a quantity of Dinapore rice is shipped from Maldah, and there is an element of confusion in the returns owing to several marts that actually belong to

Dinagopore being described as in the Maldah district." This is most true, as we shall see in the section on Maldah. But even were the whole registered exportations from Maldah (in 1873 they were nearly 16 lakhs of maunds, or 57,000 tons) credited to Dinagopore, the exports from this district, as shown in our trade statistics, would still not be one-half what they really are. Grain finds its way out of the districts in driblets, and by the innumerable river channels with which, as with a net work, Eastern Bengal is covered. So far as the trade working through these channels expends itself before reaching Calcutta on the one hand or Behar on the other [and no one can doubt that much trade does so expend itself] it escapes the possibility of being registered. I respectfully submit, we indulge in a delusive hope if we think that, by any means at our disposal, without extraordinary expenditure, we can *precisely* measure the inter-district traffic of this country. I make these remarks with the sole intention of deprecating an undue degree of expectation of results from the comprehensive scheme of trade registration now established. This scheme will doubtless give us most valuable results from which we can more approximately guess at the truth, but the truth itself it cannot give.

48. Qualified by the preceding observations, the following statement of trade statistics for 1873 may have a diminished interest, still it has some interest, and I present it. The returns before 1873 are very imperfect :—

*River Traffic Statement for the Dinagopore District for 1873.*

	Rice.	Other food-grains.	Oil-seeds.	Cotton.	Sugar.	Tobacco.	Salt.	Saltpetre.	Hides.	Others.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Nos.	Mds.
Imports ... ..	650	100	100	...	.....	.....	1,08,602	...	...	20,091
Exports ... ..	10,93,520	6,039	43	...	1,455	3,862	.....	...	100	3,09,245

49. With the following statement of average rainfall in the district I pass on to its condition in the famine year 1874 :—

*Statement showing the Average of Rainfall in the District of Dinagopore*  
~~from 1868-72.~~

January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
0'57	0'78	1'28	1'52	5'08	23'88	17'12	15'46	13'13	5'61	.....	0'05	84'48

## PART II.

59. The great drought of 1873 in Dinagapore was heralded by a year of deficient moisture. In 1872 the rainfall was  $5\frac{1}{2}$  inches under the average, but this deficiency had not a material effect on the harvests of that year, which were on the whole average harvests. In 1873, however, there was a deficiency of  $43\frac{1}{2}$  inches, that is more than half the normal quantity; and the September and October rains, without which the great winter rice crop cannot reach maturity, were almost wholly wanting. The following statement shows the rainfall in 1873 in Dinagapore:—

*Statement showing the Rainfall in the District of Dinagapore in 1873.*

January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
0'50	0'28	0'61	0'66	0'41	18'27	8'24	12'62	1'62	...	.....	0'32	43'53

51. The inevitable result of this extraordinary deficiency in the rainfall of 1873 in Dinagapore was the complete loss of the rice crop wherever recourse could not be had to artificial irrigation, or wherever the natural basins which stud the country did not retain moisture from the early rains.

52. The Collector, Mr. Robinson, who possessed an intimate knowledge of this portion of Bengal, gives a minute estimate of the results of the early and late rice harvests of 1873. The gist of his report is that the early rice and other minor rainy season crops "were in the best parts one-fourth and generally one-eighth of an average crop, while in many parts the outturn was *nil*." The areas in which the various proportions prevail are not given; but I think I may assume that on the whole the autumn harvest in Dinagapore was not more than one-eighth of an average harvest.

53. Mr. Robinson is very minute in his estimate of the extent to which the winter rice failed, summing up the results, however, of his careful inspection of the country in the statement that the "crop would certainly not yield more than three-eighths of an average crop in any part, in most parts not one-fourth of the average, and in very large tracts nothing at all." In these estimates of the condition of the winter rice of 1873 in Dinagapore Mr. Robinson is to a large extent supported by the examination of the district subsequently made by his successor, Mr. Lewis, who reported that in one-half of the district scarcely one-sixteenth of the crop had been saved, while in the remaining half the outturn varied from one-sixteenth to seven-eighths of an average crop. On these *data* I submit that not more, if indeed so much as one-fourth of an average harvest was saved from the winter rice of 1873 in Dinagapore.

*Rainfall and Harvests in 1874—Deficient Food-supply.* 225

54. We have seen in paragraph 23 what the average outturn of each crop is. It will follow, then, that in 1873 the outturn in this district of the—

			Tons.
Autumn crops was	...	...	9,308
Winter rice crop	...	...	124,462
Total	...	...	133,770

There was consequently a deficiency reaching the enormous total of 438,000 tons of food-grain.

55. I have hitherto assumed that the late or winter rice does not come into general use till January, nor the autumn crop till October. In times of pressure the produce does perhaps come into consumption earlier; but I think these dates hold generally good for Bengal as well as for Behar, and may be advantageously adhered to. Of course it will be understood that as far as the actual quantity of food consumed is concerned, it makes no matter what date is fixed on as that on which a particular food stock is first drawn upon.

56. The district of Dinagepore, therefore, subsisted, during October, November, and December, on the produce of the autumn harvest supplemented by the stocks in hand, which I have shown cannot in all probability ever exceed in an ordinary year 95,000 tons, a total which it is highly improbable they reach. In the end of 1873, however, the stocks in hand are said to have been more than they usually are, because the insufficient rainfall, by not filling the rivers with the normal body of water, impeded navigation and the movements of trade. This opinion, put forward at first with much confidence for this district, was afterwards less insisted upon, though it was never withdrawn. I do not see my way, however, in the absence of any specific data, to making a definite allowance for this alleged stagnation in the export trade, but I note the point for such consideration as it may deserve. During the months of October, November, and December the district consumed 80,460 tons of grain;\* therefore in January 1874 there remained over from the combined stocks of grain held in reserve and of the produce of the autumn harvest 23,848 tons. In January 1874 this quantity was supplemented by the produce of the rice harvest and thereby raised to 148,310 tons.

57. During the spring this quantity received a further addition from the produce of the dry season crops, which I assume gave an average outturn in 1874. The total food-supply in grain, therefore, which the Dinagepore district drew from local sources to meet its requirements from January till September was 150,000 tons, or about six months' supply at ordinary rates of consumption. If weight be given to the proposition that river navigation being difficult trade last year was impeded, the supply may possibly have been enough to last seven months.

58. How far this deficiency in the food-supply of the district was made good by the efforts of private trade it is very difficult to say. I gather from the official narratives that although private importations

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\* See section on Shahabad.

never reached anything like the magnitude I have had to notice in the case of some Behar districts near the line of railway, still some importations were made. They do not seem, however, to have come from a distance; their fluctuating character supports the statement expressed in the official reports that they came mostly from the neighbouring districts, particularly from Bogra. Those neighbouring districts also had, as we shall see, suffered severely from the drought themselves, though not so severely as Dinagapore; the grain which the high prices and greater necessities of this district drew from them depleted their stores, enhanced their market prices, and thus added to the difficulties they had to contend with.

59. As some proof that Dinagapore was not much helped by private trade from distant places in 1874, I produce the following statement of river traffic:—

*River Traffic Statement for the Dinagapore District for 1874.*

	Rice.	Other food-grains.	Oil-seeds.	Cotton.	Sugar.	Tobacco.	Salt.	Others.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Imports ... ..	1,121	918	25	1,348	295	195	78,690	24,567
Exports ... ..	20,059	3,461	441	.....	2,647	17,806	.....	2,23,417

60. It will be remembered that rice is the staple article of diet in Dinagapore, and that its normal rate in November, December, and January is about 32 seers for the rupee. The price of common rice, however, in November and December 1873 had risen to 14½ seers for one rupee, and in January 1874 it was two and a half times as dear as it usually is in that month. I produce the following statement of prices-current in the district in 1874:—

*Prices-Current in the Dinagapore District in 1874.*

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Common rice ... ..	12'5	13'8	12'1	9'5	8'3	8'9	10'4	12'5	16	19	24'9	28
Indian-corn ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Millets ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Pulses ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Wheat ... ..	11	9'9	10'8	11'8	10	11	11	11'2	13	12'8	13'5	13'5

61. Now, the almost total failure of the autumn crop of 1873, and the consequent necessity people were under of drawing at once on their reserves, threw the poorest portion of the population, who had no reserves to draw upon, and in the dearth of harvest employment could earn nothing, into immediate want. It is therefore not surprising to find the Collector reporting the existence of distress among this class so early as November. When drought is so great as it was last year, it would seem its consequences are more speedily felt in Bengal with its two great crops than in Behar with three.



62. This distress widened its circle as the new year wore on, staying its expansion only for a time in February, when the new rice coming into the market imparted to it a slightly easier tone. But prices grew rapidly dearer, and during April, May, and June, ranged from three to four times the normal rates of those months, thus placing the staple article of food altogether out of the reach of the unassisted poor. The fact that the prohibitive rates for food which prevailed in Dinagepore and Rungpore prevailed to the same extent in no other quarter of the country except the most famine-stricken tracts of North Behar, where private trade was never operative, would seem to suggest that to Dinagepore private trade gave but little help during the worst period of the famine.

63. There can be no doubt, then, that this district owes its immunity from great disaster to the efforts made by Government and to the abstinence and economy of the people. The extent to which this abstinence and economy was operative can be estimated when the extent and effect of the aid afforded by Government is set forth. I now proceed to do this, tabulating separately, as I have hitherto done, the expenditure of grain and of money which reached the distressed people, and then exhibiting the extent to which this expenditure was effective in relieving and preventing distress.

*Statement of Expenditure of Government Grain in Dinagepore during the Famine of 1874.*

Nominal quantity delivered.	Distributed in charitable relief.	Sold for cash.	Paid as wages on relief works.	Advanced on loan.	Remainder.
Tons. 39,874	Tons. 2,732	Tons. 13,516	Tons. 2,934	Tons. 12,531	Tons. 7,961

64. Of the remainder, 2,803 tons are to be written off to wastage, which is at the rate of 7 per cent. on the nominal quantity delivered. The Government is already in possession of the satisfactory reasons given by the Collector that not more than, if so much as, half the wastage should be debited to wastage within the district. The residue, 5,158 tons, were sold after relief operations had ceased.

*Statement of Cash Expenditure incurred in the Dinagepore District during the Famine of 1874.*

Cash expended on charitable relief.	Cash paid as wages of labor.	Cash advanced on loan.	Total cash expenditure in columns 1, 2, and 3.
Rs. 87,638	Rs. 11,61,492	Rs. 23,300	Rs. 12,72,425

65. I next proceed to exhibit the number of persons relieved by the expenditure tabulated in the preceding statements. The numbers of those relieved by charitable distribution of grain and money or by payment of wages are actual numbers, and are reproduced from the official reports.

*Statement of the average number of persons charitably relieved in the Dinagapore District during the Famine of 1874.*

DISTRICT.	FORTNIGHT ENDING ON THE													
	6th April.	20th April.	4th May.	18th May.	1st June.	16th June.	29th June.	13th July.	27th July.	10th August.	24th August.	7th September.	21st September.	6th October.
Dinagapore	1,791	7,175	12,678	19,869	19,112	27,149	54,693	82,512	84,307	63,881	34,845	26,147	17,190	9,831

*Statement of Laborers employed in the Dinagapore District during the Relief Operations of 1873-74.*

DISTRICT.	Aggregate number of individuals employed.	AVERAGE DAILY ATTENDANCE EACH MONTH.											
		November 1873.	December 1873.	January 1874.	February 1874.	March 1874.	April 1874.	May 1874.	June 1874.	July 1874.	August 1874.	September 1874.	
Dinagapore	...	11,923,680	1,808	6,055	21,179	29,696	60,516	93,208	94,797	63,259	25,742	8,653	2,543

66. An examination of the charitable relief statement will show that it is equivalent, as far as mere numbers go, to saying that 225,590 people was relieved for one month; and the numbers given in the second statement is in effect equivalent to saying that 397,456 persons were aided by wages for a period of one month. Now, turning to the other methods in which relief was administered, namely, sales of grain and advances of grain and money, and assuming that each 20\* seers of grain relieved an individual for a month, and each thirty annas another individual for a similar period, it will be seen that 1,471,059 individuals was relieved in these ways. Therefore, viewed in this light the expenditure exhibited sufficed for the support of 2,094,105 people for one month, or, to put it in another way, for the support of the population of the district for one month and twelve days. In Dinagapore, as elsewhere, doubtless some of the relief afforded in cash returned to the Government treasury in the shape of sale proceeds of grain. It is impossible, however, to say how much returned in this way, but as there is no reason to doubt the statement that some did so return, the figures above overstate the numbers relieved. Probably the effect of the expenditure incurred may be expressed by saying that the population received daily assistance from Government for one month.

\* NOTE.—The rate of consumption assumed for Bengal districts.





## SECTION XIII.

### R U N G P O R E .

THIS is one of the four districts to which Deputy Collectors were deputed for the purpose of prosecuting special statistical inquiries. These inquiries have not been in Rungpore, as in Shahabad, restricted to specimen areas alone: they dealt also with the district as a whole; and the report which embodies their results is consequently more connected and comprehensive than that on Shahabad was found to be. It is annotated throughout by the Collector, whose observations frequently supply a necessary explanation, and sometimes a corrective, of statements and figures contained in it. A rigorous analysis of the report may still detect some statements and some figures which are open to criticism; but on the whole the book is a valuable addition to our knowledge of the resources of the district, and an explicit source of statistical information regarding its agriculture.

2. It is unnecessary for me to summarize here the plan pursued by the statistical officer in collecting the information he has compiled. This plan is stated in detail in the commencement of his report, and was adopted in accordance with the principles laid down by the Board of Revenue. It was carried into effect under the supervision of the Collector, who has also reviewed and checked the statistics it furnished, and who, in their corrected form, has adopted them in his latest statistical return, XLIB. This return, therefore, may be looked on as the most trustworthy statement of agricultural statistics for Rungpore which, by any means short of a cadastral survey, it is now possible to submit to Government. I reproduce it in substance; in form I have, in order to preserve some uniformity with the statistical statements already given for other districts, slightly modified it.

3. It is necessary, however, briefly to call attention to the fact that the gross area of this statistical statement differs from the district area as recorded in Mr. Beverley's census report. It appears the latter area was prepared in the survey office on incomplete data, due probably to the fact of the fiscal and criminal boundaries of the district not being conterminous. The area I now give has been made out by the Deputy Collector from the areas of estates borne on the revenue roll and registers. Even this area is not quite correct, being more than it ought to be by some 20,000 acres. It is not possible, however, to eliminate this error from the calculation.

4. An analysis of this statement will show that 73 per cent. of the district area is under cultivation, and there is still remaining a margin of five per cent. culturable waste and fallow land. In no district whose condition we have reviewed, and in which the density of population

does not exceed 750 to the square mile, has the cultivated area been found to be greater than 75 per cent., or three-fourths of the district area.

*Statement of Agricultural Statistics for the District of Rungpore.*

CULTIVATED AREA 1,737,950 ACRES.

Gross area of the District.	AREA OF RAINY SEASON CROPS.							AREA OF DRY SEASON CROPS.				
	RICE AREA.				Fibres, jute, hemp, &c.	Sugarcane.	Vegetables, garden produce.	Indigo.	Wheat.	Other food-grain, such as pulses.	Oil-seeds.	Tobacco.
	Single crop land.	Land yielding a second crop.	Land growing rice with other staples.									
Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	
2,360,294	1,222,517	40,749	275,069	117,569	13,302	20,464	15,224	35,110	49,242	73,145	71,204	

UNCULTIVATED AREA 457,544 ACRES.

Pasturage.	Village sites.	CULTURABLE WASTE.		Unculturable.
		Fallow.	Never cultivated or cleared.	
Acres.	Acres.	Acres.	Acres.	Acres.
52,093	79,417	26,098	86,617	378,127

*N.B.*—In the cultivated area allowance has been made for land growing two crops in the twelve months: hence the aggregate totals will not agree with the total acres of cultivated land.

5. The Deputy Collector in his report dwells on the insufficiency of the pasturage for the number of cattle in the district.\* If the number of horned cattle be, as he says, 1,765,264, there is no doubt the pasturage is insufficient, and that the culturable waste land, which always affords some pasture ground for cattle, besides growing shrubs whose leaves cattle eat, is barely adequate to supply the deficiency. If the Deputy Collector's information on this point be correct (the Board of Revenue, on a comparison of his report with the statistical report on Jessore, have questioned its correctness), then it may be assumed that the Rungpore district is cultivated to the last acre. Whether reclamation schemes might render culturable the land now unculturable is a question on which I have no definite information.

6. In calculating the supply of food-grain annually produced in the district, the Deputy Collector adopts 21 maunds of paddy as the average produce of an acre of rice land which yields one crop in the year, 30 maunds of paddy as the produce of an acre of land which yields two crops, and 15 maunds of paddy as the average produce of an acre of rice land which grows rice and other crops simultaneously. Those averages of unhusked grain he very properly converts into clean grain on the basis of 25 seers of clean grain to a maund of paddy.

\* It must be remembered, however, that cattle of all kinds are largely stall-fed in Bengal, and do not depend on pasturage so much as cattle in England.

7. I have no exception to take to the average for double cropped land or to the average produce of land which yields rice and other staples simultaneously, but I believe 21 maunds of paddy or 13½ maunds of clean grain an inadequate average outturn for an acre of single crop rice land in Rungpore, which in this respect is notoriously not less fruitful than any district north of the Ganges.

8. In Mr. Otley's "Note on rice statistics," published in the *Statistical Reporter*, the average outturn of an acre of rice land in Rungpore is stated to be from 25 to 30 maunds of paddy. It will be observed that the higher limit here agrees with the Deputy Collectors, while the lower limit is more liberal. My estimates of average outturn, as I have already said more than once, exclude bad harvests on the one hand and bumper harvests on the other; and most probably the Deputy Collector's average has been calculated on the basis of good and bad harvests taken together. This would be unobjectionable were bumper harvests as frequently recurrent as short ones, which is not the case.

9. The Collector in his latest statistical return states the average yield per acre of rice land varies from 21 to 30 maunds (of paddy), which, if it be a reproduction of the Deputy Collector's statement, does not help us, but which, I think, may be interpreted as giving a greater latitude than the statistical officer has given. In all matters of estimates, the latter officer, in my opinion, haunted by a fear of being over liberal, falls into the opposite error of being over cautious.

10. On the whole evidence, I submit that 15 maunds of clean grain is a fair average outturn from an acre of single crop rice land in Rungpore in an ordinarily good year. In a bumper year, and from the best sort of land; the yield might be 18 to 20 maunds to the acre; in a bad year it might not be 12; the mean is, I believe, as I have given it.

11. There is no valid objection to the Deputy Collector's average rates of produce for dry weather crops, which are seven maunds for wheat, and ten maunds for all other sorts of food-grain.

12. At the rates of average produce, then, laid down above, the average annual production of food-grain in Rungpore in ordinarily good years will be as follows. In the division of the rice crop into autumn and winter rice, I have adopted the Deputy Collector's proportions—

	Tons.
Autumn, or aous rice ... ..	154,861
Winter, or amun rice ... ..	619,444
Dry season food-grain crops ... ..	26,300
Total ... ..	800,605

13. In the preceding section on Dinagepore I referred to the statistical report on Rungpore on the question of the average quantity of food-grain which each individual consumes in the day. I there gave at length my reasons for adopting two-thirds of a seer as the average rate of daily consumption per head of the population in preference to five-eighths of a seer, which is the rate deducible from the Deputy Collector's various allowances for children and for adults. It is needless to repeat those reasons here, nor, I venture to observe, to strengthen them by any further consideration of the question. I adopt for Rungpore the

average rate of two-thirds of a seer of food-grain per day for each individual. The annual consumption of food-grain in the district will then be 441,102 tons.

14. The surplus produce remaining over after deduction of the requirements for the people's subsistence will be still further reduced by the provision to be made for seed grain. The rates per acre according to which this provision should be made have been examined and determined in the preceding section, and to it I beg to refer. Applying those rates to the areas given in the statistical table, the result will show that Rungpore requires in round numbers 60,000 tons of seed grain. Subtracting, then, from the gross produce these various necessary provisions for seed and for subsistence, the nominal surplus available for sale and exportation and for storing is in round numbers 300,000 tons.

15. On the question of export trade the observations in the statistical report are not valuable, nor have any facts been recorded by the statistical officer which can here be utilized. I therefore on this point adhere to the method acted upon hitherto. The statistical inquiries regarding the rates of rent prevalent in Rungpore and the amount of the rental derivable from the land have been made with care and recorded with fullness. The result fixes the land rental of the district at Rs. 86,89,750, or say, 87 lakhs of rupees, and this high total the Collector passes without comment. The land revenue of the district is Rs. 9,74,088; the rental is therefore nearly nine times the revenue.

16. In no other district of Bengal whose condition has been reviewed is there such a great disproportion between the revenue and rental as in Rungpore; and, thinking over this matter, it seemed to me that possibly the cause of this disproportion might not be unconnected with that retrograde condition of agriculture in Dinagepore which I reviewed in the preceding section. This retrogression in agriculture, and that decrease in the population of Dinagepore, in which I showed reason for believing, could only be due to excessive mortality, or to the growing infertility of the soil compelling emigration. I have failed to discover mention of disease or famine having decimated Dinagepore within the last sixty years; but, comparing the great density of population in Rungpore with the sparseness of the population of Dinagepore, I form the idea that a migration from the latter to the former district may have taken place. It seems a not unreasonable explanation of the facts that to such a migration Rungpore owes its dense population of 619 to the square mile and Dinagepore its sparse population of 363. If this be so—if people driven by the growing infertility of the soil in Dinagepore to migrate, settled in Rungpore—then the competition for land, which in an agricultural country attends on the growth of population, may afford some clue to the reason why such exceptionally high rents prevail in Rungpore to-day. It would, however, be an imperfect view of the case which would not attribute in some degree the existence of those high rents to more artificial causes. It is not improbable that to absenteeism, which may be predicated of Rungpore landlords more than of any other district proprietors in Bengal, and which, I believe, is a fertile source of rack-renting, the result is in some part due.



17. I have striven to institute a comparison between the Rungpore of to-day and its condition when Buchanan visited it. Owing, however, to the fact that sixty years ago the "district of Ronggpooor" included portion of what now is Assam, owing to alterations in some local names and boundaries, and, not the least, owing to the imperfect view of Dr. Buchanan's survey which his editor has given us, the results of the comparison are not of definite importance.

18. Returning to the question of rent, I have to state that I am in the receipt of special information from the Collector as to the proportion of it which in this district is paid from the sale proceeds of food-grain. The result of his minute exhibition of the various times at which the periodical instalments are paid, and of the various means by which the people finance it, is this, that two-thirds of the rent is paid from the sale proceeds of food-grain. Therefore food-grain in Rungpore must be annually sold to the value of 58 lakhs of rupees. In order to determine the quantity of grain sold to realize this sum, I produce here the following statement of average prices-current:—

*Average of Prices-Current in the Rungpore District from 1868 to 1872.*

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ... ..	26	26·5	26·7	26·6	24·8	24·2	21·9	23	22·9	24	26·2	27·4
Indian-corn ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Millets ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Pulses ... ..	17·7	18·4	17·6	20·6	22·1	21·4	19·8	19·2	18·1	18·6	15·6	18
Wheat ... ..	21·6	19·3	20·9	21·8	20·7	20·8	19·8	18·5	17·7	18·3	18·3	18·9

19. Thus it will be seen that at the time when the heavier instalments of rent fall due (*i.e.*, from September to March), the price of the staple food-grain rice fluctuates about Re. 1-8-0 a maund. This is the retail market rate, which is dearer, of course, than that at which the cultivators dispose of their produce. What this latter rate is cannot be precisely stated, but very probably the Deputy Collector in fixing it at Re. 1-6 per maund is as near the mark as I need care for. At this rate, Re. 1-6 per maund, the producers must sell 150,000 tons in round numbers to realize 58 lakhs of rupees. Having sold this quantity of grain, the nominal surplus will be thereby reduced to 150,000 tons, which, at the end of the year, will be still further reduced by wastage, calculated at 5 per cent. on the gross production (minus the quantity sold, which bears its own wastage), to a net surplus of 117,500 tons.

20. The definite statistical information we possess regarding the trade of this district is of the most meagre character; the largest exportations of food-grain from Rungpore shown on our river trade returns are for 1873, and these do not reach 4,000 tons. Indeed, these

statistics for Rungpore may be summed up in the statement that they show an exportation of less than 4,000 tons of food-grain, about 600 tons of tobacco, and 800 tons of miscellaneous goods; while on the import side they show only nine tons of food-grain, 230 tons of salt, and 100 tons of miscellaneous goods. It is obviously needless to reproduce in a tabulated form such statistics as these.

21. I have already stated in the previous section that, struck with the paucity of the data bearing on the trade of Rungpore, I was led to think that much of it was carried on from Dinagepore depôts, and thus passed as trade from Dinagepore. It is unnecessary to repeat here how this turned out to be the case, and I beg to refer to the section on Dinagepore for explanations on this head. While the surplus produce of the western half of Rungpore finds its way to those grain depôts on the Dinagepore rivers, which even in Buchanan's time were numerous and flourishing, the surplus produce of the eastern half goes for the most part northwards to Cooch Behar and to Assam. Some portion of it, however, goes southwards to Serajgunge and the marts of the Dacca division, and but a very small portion, finding its way to Calcutta, passes our registering stations. The dearth of statistical information in the returns of those registering stations is, therefore, intelligible.

22. It will be remembered that the statistical officer in Dinagepore reported to the Collector in the end of 1873 that during the year about 240,000 tons of grain had been exported from the district. We have seen reason to believe that it is not possible all this rice could have been grown in Dinagepore; and assuming the approximate correctness of the figures, this in itself would be ground for believing that Dinagepore was the trade *entrepôt* of those eastern districts. Even if the figures overstep the mark by 20 or 25 per cent., still so large exportations could not have been made from the district unless a quantity of grain equal to the grain sold to defray rent charges in both Rungpore and Dinagepore had been all exported. We shall see in the case of Rungpore, as we have seen in the last section, that if more than that quantity of grain was exported, if the surplus in the hands of the people were also drawn on, the district could not have managed to bear the difficulties of 1874 as well as it did. I now proceed to show what these difficulties were, first giving a statement of the average rainfall in Rungpore.

*Statement showing the average Monthly Rainfall in the District of Rungpore.*

SUB-DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
Sudder ... ..	0'38	0'35	0'99	3'24	9'34	22'55	17'36	12'90	12'23	5'30	0'28	0'13	85'56
Bhowanigunge ...	0'27	0'32	1'28	3'80	4'81	15'19	13'34	7'71	14'82	4'91	...	0'18	67'13
District average ...	0'81	0'84	1'13	3'52	7'07	18'89	15'85	10'30	13'52	5'10	0'28	0'15	76'34

## PART II.

23. In the year 1872 the district of Rungpore suffered from no vicissitude of season. On the contrary, the rice harvest was one of the finest on record; so luxuriant, indeed, was it that the cheapness in prices which naturally resulted from the abundant supply is reported to have caused some popular discontent. It is not improbable that to this exceptionably good harvest in Rungpore in the winter of 1872 is largely due the great exportation of rice from Dinagepore in the ensuing year, to which I have already adverted.

24. In the year 1873 the rainfall was not only greatly deficient, it was also very unseasonably distributed. The following statement of the rainfall in 1873 will illustrate this deficient and unseasonable character of the rainfall in that year:—

*Statement showing the Monthly Rainfall in the District of Rungpore in 1873.*

SUB-DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
Sudder ... ..	0·05	0·24	0·90	3·24	1·07	13·09	3·93	14·11	2·63	...	...	0·58	44·64
Bhowanigunge ...	...	...	1·31	4·85	0·87	12·73	7·84	12·34	7·18	0·16	...	0·71	47·99
District average ...	0·05	0·24	1·10	6·54	0·97	12·91	6·88	13·23	4·90	0·16	...	0·54	46·32

25. It will be observed that in May 1873 there was, I may say, no rain; that in every month the fall was considerably under the normal quantity—in July it was only one-third of the usual fall in that month; and that the rains came to a sudden end in September, when a copious downpour was necessary to develop and bring to maturity the great winter crop of the year. The result of this abnormal weather on the crops varied in different parts of the district, but more markedly in case of the winter than in case of the autumn crops, and this for obvious reasons. Taking an average for the whole district, the autumn crop was one-half of an average crop, but not so the *amun* or winter rice.

26. In the first place, the insufficient moisture prevented much of the land which is usually sown with winter rice from being cultivated; and the land which was sown down yielded very varying outturns. Along the Brahmaputra the rainfall had been heavier than elsewhere; the harvest there was half an average harvest, and the best in the district. In the north there is much low-lying lands which act as drainage basins for the surrounding country, and retain moisture when other adjacent higher lands are parched. Here, too, about half an average crop was harvested. Towards the west and south the failure was more pronounced than towards the east or north; but in the central tracts the outturn was least of all, varying from total loss to one-eighth or three-sixteenths of an average harvest.

27. Reviewing the condition of the crop in January 1874, when it had been harvested, the Collector reports an average for the whole district of three annas, or one-fifth of an average crop. The failure was greatest in the Gyebandi sub-division, where only one-eighth of the crop was saved.

28. The outturn of the autumn and winter crops in Rungpore in 1873, therefore, was as follows:—

			Tons.
Autumn crop, or aous	...	...	77,430
Winter crop, or amun	...	...	123,888
			201,318
Total			...

29. The deficiency, therefore, as compared with an ordinary year, reached the large total of 573,000 tons.

30. Now, according to the plan I have hitherto adopted, and which I have more than once explained, I assume that the autumn crop does not come into general consumption till the beginning of October. I am well aware that the assumption does not accord with the facts at all times, but I have already shown the necessity I am under of fixing some specific date, and the immateriality of the date fixed as far as the consumption of the whole year is concerned. When the autumn crop of 1873 came into general use, there were in the district also the reserves of the previous year, which, on my system, may have been as high as 117,000 tons. This would be the maximum reserve of ordinary years.

31. With the produce of the autumn harvest, therefore, and with the stocks in hand, Rungpore had in October 1873 a maximum food-supply of in round numbers 195,000 tons.

32. This food stock received in January a further addition from the produce of the winter rice harvest, but in the interval it was diminished by the consumption of the district during three months. For the reasons specified in the 75th paragraph of the section on Shahabad, I estimate this consumption at 110,000 tons in round numbers. Therefore, in January 1874, the food-supply of Rungpore derived from internal sources of all sorts, was in round numbers 209,000 tons.

33. During the continuance of the scarcity this food-supply locally produced received a further addition from the produce of the cold-weather food-grain crops,\* which I learn from the Collector's narrative of March 9th, 1874, yielded a full average harvest. The district, then, drew from local sources a supply of food-grain reaching to 235,000 tons, or less than seven months' supply at ordinary rates of consumption, to last nine months.

34. If there be any truth in the suggestion [it is negatived by the large exportation from Dinagepore] that, owing to the abundant harvest of 1872, the stocks in hand in the autumn of 1873 were

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\* Potatoes are largely grown in Rungpore and yielded an excellent harvest in 1874. The tobacco crop was also excellent and materially relieved the pressure. But, it will be remembered, I am dealing with food-grain crops only.

higher than usual; if, also, owing to the diminished body of water in the rivers, navigation and exportation from Rungpore were impeded, as the Collector says they were, then the grain in the district was probably sufficient for eight months' consumption. Had this quantity been freely available, it might have sufficed for the wants of the district; but that it was neither freely available nor equally distributed will be manifest from the following statement of prices-current in the district in 1874:—

*Prices-Current in the Rungpore District in 1874.*

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ... ..	11'7	11'3	11'2	9	8'3	9'6	12'1	18'1	16'2	18'8	22'3	25'9
Indian-corn ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Millet ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Pulses ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Wheat ... ..	10	10'8	11'9	12'5	12'3	12'1	12'3	13	14'2	12'7	12'5	12'5

35. Thus it will be observed that in the beginning of January 1874 the price of common rice, which is the staple article of diet of all classes, was two and one-third times the usual price in that month. During the first quarter of 1874 prices remained steady at this high level, and this is doubtless due to the considerable importations of food-grain which were made from Cooch Behar, from Assam, from the districts of the Dacca division, and from the adjacent parts of Bogra. The fact of importations being made from these regions is chronicled in every district narrative during the first quarter of the year, and it must be remembered that Rungpore with its extensive river frontage on the always navigable Brahmapootra enjoyed peculiar facilities for trade from these quarters.

36. Although, however, the fact of the existence of this trade is thus regularly recorded during January, February, and March 1874, its magnitude can only be conjectured. Grain came into the district by innumerable channels, all of which no system of registration could manage to embrace. But the idea I form of this trade from the constantly recurring references to it, is that it must have been of very considerable magnitude indeed. I also am satisfied that much of the grain imported passed through Rungpore on to Dinagepore. In support of this belief of mine, I beg to point out that while this import trade continued unabated—that is, during the first quarter of the year—the price of rice in both districts did not vary greatly; also that when the trade collapsed in April, there was simultaneously in both districts an immediate rise to prohibitive rates.

37. I have said there was a collapse in this trade in April. Indications of this were not wanting towards the end of March; but in April there was “a general failure of the supplies in the market throughout the district, and mainly all down the western border.” “Prices at the head-quarters market reached Rs. 5-8 per maund,” that is,

nearly four times the normal rates at that time of the year; in the interior they rose to Rs. 6, and even at these rates the market was insufficiently supplied. This failure in supplies is attributed to various causes; to a rise of prices in Assam, stocks there having been depleted by the exportations that had been made; to a similarly induced rise of prices in Cooch Behar, which is said to have caused an outbreak of popular feeling against any further exportations being made; to a combination among local grain dealers to force up prices to an extreme point. Doubtless all and each of these causes co-operated to bring about the result, which was, as I have said, empty grain markets throughout the district.

38. Now this incident affords a crucial test of the value of that mode of Government relief which consisted in the sale of grain. In every other district, whose condition has been reviewed, sales of Government grain were begun in anticipation of the withholding of private supplies; and the invariable result was that, thereby, the tendency of prices in every such district to rise to famine rates was checked, and a rate, rigidly economical, it is true, prescribed to the market. In Rungpore, however, the prices-current do not seem to have afforded as true an indication of the tendency of trade as in other districts; and the failure in supplies came on the administration to some extent unawares. Sales of Government grain, therefore, in this district had in the first place, more of a remedial and less of a preventive character than elsewhere.

39. That this should be the case was unavoidable. The decrease in importations was noted by the Collector, but it was not possible to foresee from the prices-current that local grain dealers would make this decrease the occasion of combining for prices beyond the reach of any except well-to-do people. They did, however, make it the occasion of such a combination, and had the Collector not promptly interposed, there can be no doubt the result would have been disastrous to the people.

40. The Collector, as I have said, promptly interfered by throwing Government grain on the market. The result was, in the immediate interests of the people, quite satisfactory. The trade saw its fancied monopoly was no monopoly, and after a short time confidence was restored to the market. This salutary effect was not due to the quantity of grain sold by Government, which was inconsiderable; it was due to the powerful moral influence every action of Government or of its officers has on the people. It would have paid the Rungpore grain merchants many times over to have bought up the whole of the 13,000 tons of grain imported into the district by the Government; and perhaps, with a wisdom begotten of experience, they may strive to do so should similar circumstances ever again recur. But as events turned out, the effect of Government sales in Rungpore in restoring confidence which had been lost is a proof of the beneficial effect of Government sales elsewhere in maintaining confidence, which otherwise would have been lost.

41. The high prices which so early as January prevailed in this district pressed with great severity on the poorer classes of the people, and from the commencement of the year the local authorities were under

the necessity of concerting measures of relief. In no other district, however, in which the failure had been equally pronounced did relief measures cost Government so little as in Rungpore; in no other district equally distressed did the people owe so little to Government, and so much to private charity. One of the earliest, if indeed not the earliest, relief centres was opened by Roy Luchmeput Bahadur, whose liberality and benevolence have been specially recognized by the Government; and from the beginning of the year until the excellent autumn harvest prospects caused a general restoration of confidence and contraction of relief operations, every narrative records an increase in the number of private relief centres and the liberal exercise of private charity. So late as June the Collector reported that private charity continued, and was every day becoming more general; and in every earlier narrative the operations of private relief are shown as very considerable. I feel bound thus to record the manner in which the landed proprietors and wealthy classes of Rungpore treated their tenantry in their hour of need, because in another portion of this section I have suggested that their ordinary dealings with them are regulated by business principles, which are rigid.

42. I now proceed to tabulate the expenditure in grain and money incurred by Government in the district during 1874, and which reached the hands of those who were in need of relief.

*Statement of Grain Expenditure incurred in the Rungpore District during the Famine of 1874.*

Nominal quantity delivered.	Distributed in charitable relief.	Paid as wages of labour.	Sold for cash.	Advanced on loan.	Remainder.
Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
12,955	1,517	922	5,763	1,828	2,925

*N.B.*—The remainder is to be written off to loss by wastage (961 tons), and sale after close of relief operations (1,964 tons). It will be remembered that the nominal delivery was the weight said to have been despatched in some cases from Calcutta, in some cases from the port of exportation, which might be Rangoon.

*Statement of Cash Expenditure incurred in the District of Rungpore during the Famine of 1874.*

Cash distributed in charitable relief.	Cash paid away as wages of labour.	Cash advanced on loan.	Total cash expenditure of columns 1, 2, and 3.
Rs.	Rs.	Rs.	Rs.
1,54,975	4,50,909	1,75,934	7,81,818

43. I now proceed to show the number of people who, by the expenditure of money and grain tabulated above, were relieved. The following statements of persons charitably relieved, and of persons employed on relief works, are actual figures. I add the numbers of those who, according to the narratives, were relieved from private charity.

242 *Rungpore: Private Trade—Combination among Traders—*

*Statement of average number of persons charitably relieved in the Rungpore District during the Famine of 1874.*

DISTRICT.	FORTNIGHT ENDING ON THE									
	26th January.	7th February.	21st February.	7th March.	21st March.	4th April.	18th April.	2nd May.	16th May.	
Rungpore ... ..	50	567	1,532	3,075	4,625	8,968	14,623	18,988	21,735	

  

DISTRICT.	FORTNIGHT ENDING ON THE									
	30th May.	13th June.	27th June.	11th July.	25th July.	8th August.	22nd August.	2nd September.		
Rungpore ... ..	25,468	32,595	36,319	32,051	16,136	10,997	5,306	576		

*Statement of Labourers employed in the Rungpore District during the Relief Operations of 1873-74.*

DISTRICT.	Aggregate number of individuals employed.	AVERAGE DAILY ATTENDANCE EACH MONTH.											
		November 1873.	December 1873.	January 1874.	February 1874.	March 1874.	April 1874.	May 1874.	June 1874.	July 1874.	August 1874.	September 1874.	
Rungpore ...	3,754,650	...	59	722	1,705	8,988	31,696	53,308	22,747	5,830	93	7	

44. Now, an examination of the statement of persons charitably relieved by Government expenditure will show that, as far as mere numbers are concerned, it is equivalent to saying that 116,807 individuals was relieved for one month. Treated in a similar manner, the labour statement will be found equivalent to saying that 125,155 individuals received relief in this manner for a similar period of one month. The only other modes in which State aid was administered were by sales of Government grain, and by advances of cash or grain on recoverable loan. If the figures indicative of the expenditure on these heads be analysed, and if it be supposed that each portion of twenty seers of grain supported a person for one month, and each thirty annas another individual for the same period, then it will follow that



by these modes relief was administered to 518,930 individuals for a month. Therefore (with a reservation to which I shall presently refer), it may be said that by the Government expenditure of grain and money in the district 760,889 individuals, or 35 per cent. of the population, were aided for the period of one month.

45. The reservation I allude to is this. It is probable that much of the *money* paid away as wages of labour, advanced on loan, or distributed in charitable relief, returned to the Government treasury in the form of sale proceeds of grain; by so many thirty annas as so returned will the total number relieved be reduced. Of course it is impossible to say how much of the sale proceeds of grain had been previously distributed by Government, but it is not unreasonable to suppose that on this head an allowance ought to be made which would reduce the percentage of the population relieved from 35 to say 30 per cent.







## SECTION XIV.

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### MALDAH.

THE information which exists regarding the extent and nature of cultivation in this district does not supply a sufficient basis for even an approximate statement of agricultural statistics. I am therefore, I regret to say, unable to realize the position of the district as regards its local food-supply in ordinary years; and as this is the pivot on which much of the interest of this inquiry rests, the following observations will, I fear, lose a good deal of such value and precision as might otherwise attach to them.

2. Before, however, I proceed to offer such remarks as independently of a statistical basis may be offered, it may be well to summarize briefly the information I have collected regarding the extent of cultivation in Maldah.

3. This summary will be useful in showing that, as I have examined all existing sources of information concerning the agriculture of the district from a statistical, and not from a merely descriptive point of view, and as I have failed to extract from them any satisfactory results, we must, if we desire to gain any useful knowledge on the point, adopt special measures to obtain it.

4. The sources of statistical information which I first examined were the survey records (compiled in 1853), the Board of Revenue's Return XLIB, and the famine literature. The survey report is very interesting as far as the topography of the district goes, but the statistical information regarding agriculture which it gives is rendered nearly valueless by the fact that the demarcated boundaries of villages, with their internal geographical features, were, as a rule, alone surveyed, while it was only in exceptional cases of intermingled village lands that field to field measurements were made. At best, therefore, the survey statistics could possess that modified value only which I pointed out in the section on Bhagulpore.

5. Even this modified value, this indefinite character of a test for errors of magnitude, they do not possess in this instance. The recent statistics, for the discovery of large errors in which those survey figures might be utilized, do not refer to the same areas that the latter cover; and the cultivated tracts in Maldah are so interspersed with jungle tracts that proportions of cultivation which are applicable to one locality are, as we shall presently see, inapplicable to others. Therefore the survey statistics, valueless *per se*, are, from the character and extent of the country surveyed, valueless as a test of the more recent estimates.

6. Those estimates, again, which are embodied in the statistical return XLIB for 1872-73 would be, even could their absolute correctness be postulated, unsuitable for my present purpose. The fiscal

and criminal jurisdictions of Maldah not being conterminous, there is a difference of 314 square miles between the area of the district as recorded in this statistical return and the area mentioned in Mr. Beverley's census report. This being so, it would be obviously useless to calculate the food produce of the lesser area with a view to discussing the questions of the food-supply and trade of the larger and more populous area. As far, therefore, as available statistics went, the attempt to estimate the normal food-supply of Maldah, and consequently the extent to which it fell short last year, was a hopeless task.

7. In this state of things I addressed myself to the Collector, in the hope of obtaining some trustworthy figures for "specimen areas," from which I might make some approximation to the agricultural condition of the district as a whole. Mr. King has done all that within the time it was possible to do to help me, but that, I regret to say, is not very much. He has collected, through Mr. Reily, the Deputy Collector, who, under the Court of Wards, has successfully managed the Chunchal estates, agricultural statistics for the three pergunnahs which compose that estate. Both the Collector and Mr. Reily are careful to inform me that these statistics are of but little value as an index to the condition of the district as a whole.

8. It seems the district of Maldah may be divided into four well marked portions. There is, *first*, the *North-Western tract*, which produces in large quantities the *aughani*, or late low land rice; in smaller quantities, the *bhadoi* or autumn rice; and, to some extent, fibrous plants, such as jute and hemp. Next comes the *Western tract*, which produces the *bhadoi* or autumn rice in considerable quantity, cold weather crops of all sorts, and also indigo and mulberry. *Thirdly*, there is the *Central tract*, which is chiefly a mulberry-producing country, but in which some early rice and cold weather crops are also grown. *Lastly*, there is the *Eastern tract* (much of which is locally known as the *borin*), where the late transplanted species of rice harvested in January, and the *boro* or spring rice, are largely cultivated.

9. Now, the lands composing the Chunchal estate are situated in the north-western tract. It will therefore be seen, as Mr. Reily says, that the physical characteristics of this tract are different from those of the other tracts, and that the prevalence in it of certain conditions is no guarantee whatever of their prevalence elsewhere in the district.

10. The Collector, however, assures me that the statistics for the Chunchal estate may be looked on as trustworthy. We, thus, are in possession of the information we want for one considerable section of the district. It is not unreasonable to hope that the Collector may follow out the system, and, by collecting similar information from the other three sections, thus compile trustworthy and complete statistics for the district as a whole. With a view to facilitating such a compilation, and for any future use to which they may possibly be turned, I shall note the Chunchal estate statistics at the end of this section. For the reasons given, they are at present of no use to me.

11. To the consideration of the normal food-supply of a district, the next point for examination is its trade. There is a consensus of opinion here, to the effect that Maldah exports rice. The spring (*boro*)

and autumn (*bhadoi*) varieties seem to be mostly retained for home consumption; while the *ughani* or winter rice is largely exported. The extent of the exportations in ordinary years, however, cannot be even approximately determined from our statistics of river-borne trade.

12. This is due to the fact that much trade to, or from the district never goes near our registering stations; to the probability (in my mind amounting to a certainty) that much trade passing over the routes commanded by our registering stations escapes registration; and also to the fact [noted in the comprehensive review of river trade published in the first number of the *Statistical Reporter*] that much of the grain registered as exportations from Maldah really comes from Dinagepore [or, as I have shown, from Rungpore]. Under these circumstances, our trade statistics throw no special light on the export transactions of the Maldah district.

13. The late lamented Mr. Alexander, who, when Collector of Maldah, seems to have paid special attention to the economic condition of his district, estimated the annual exports of food at not less than 2,50,000 maunds (8,928 tons). This estimate he arrived at from a consideration of the number of trade depôts and markets in the district, and of the probable transactions annually carried on there. I proceed to show that on the supplementary speculative method of reasoning on this question I have in other places adopted, Mr. Alexander's estimate is fully supported.

14. The present Collector of Maldah informs me that the land rental of the Maldah district is Rs. 9,57,415, or three times the land revenue; he has also favoured me with a very exhaustive statement of the various times at which the periodical instalments of rent fall due, and of the various means by which the people finance them. The result he sums up by saying that on the average half the rent is paid from the sale proceeds of food-grain crops. The producers must therefore sell Rs. 4,78,707 worth of food-grain, that is, in this district, of rice. Now, in order to determine the quantity of rice so disposed of, I produce the following statement of average prices current in the district:—

*Statement of Average Prices current in the Maldah District.*

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Common rice ... ..	Srs. 25'4	Srs. 24'2	Srs. 25'4	Srs. 22'9	Srs. 24'9	Srs. 25	Srs. 22'5	Srs. 23	Srs. 24'3	Srs. 24'6	Srs. 25'2	Srs. 23
Indian corn ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Pulses ... ..	19'5	23'2	26'9	23'1	21'9	20	19'6	20'5	19'8	20'3	20'7	19'7
Wheat ... ..	18'9	17'5	18'1	19'2	20'4	20'4	21'4	21'1	19'2	26	20'4	15'8
Millet ... ..	...	...	...	...	...	...	...	...	...	...	...	...

15. Now, it will be seen from this statement of prices current that in ordinary years the price of rice in Maldah never varies much, and that it fluctuates about 24 seers for the rupee, or say Re. 1-11-0 per maund. This is the retail market rate, which is dearer than the wholesale rate at which the producers sell their grain. This latter rate, I estimate,

will be in ordinary good years Re. 1-8-0 a maund ; and at this rate the producers must sell in round numbers 3,20,000 maunds, or about 14,000 tons to discharge the landlords' dues. Not knowing what the surplus would be in Maldah, I cannot say with certainty whether all this would be exported ; but assuming that there still would be a surplus in the hands of the producers after selling this quantity, then, as these 14,000 tons would be unnecessary at home, they must either be exported or perish.

16. It will be remembered that Mr. Alexander estimated the exportations at " *not less* than 2,50,000 maunds." I show reason for thinking that in ordinary years they are 70,000 maunds more than his *minimum* estimate ; therefore our results are consistent.

17. For the sake of uniformity in my report, and because of the highly interesting and valuable information it affords regarding the trade of Dinagepore and Rungpore, I now produce a statement of the river-borne traffic registered as coming from, or going to, the Maldah district. It may be assumed with perfect certainty that at least one million maunds, or about 35,000 tons of the rice shown under exports in this statement, comes not from Maldah, but from districts further east. We have thus from the Dinagepore (and Rungpore) district a registered exportation of nearly 100,000 tons of rice. I submit that it is not unreasonable to suppose that all the rice which passing the registering stations is not registered, that all the rice which goes along the other trade routes on which stations have been but recently established, and that all the rice which is distributed nearer home, do in the aggregate come close to the quantity registered. If such be the case, it offers, to say the least, another striking coincidence between the fact and the results of my speculation on this question of district trade.

*River Traffic Statement for the Maldah District for 1873.*

	Rice.	Other food-grains.	Oil-seeds.	Cotton.	Sugar.	Tobacco.	Salt.	Saltpetre.	Hides.	Others.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Nos.	Mds.
Imports ... ..	2,150	.....	.....	...	...	5	1,60,781	...	...	28,938
Exports ... ..	13,51,282	2,26,278	11,272	24	1,224½	8,224	431	...	63	1,53,425½

18. I now present a statement of the average rainfall in the district, and then pass on to the events of the famine year.

*Statement showing the Average Monthly Rainfall in the District of Maldah.*

SUB-DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total rainfall.
Head-quarters	In. 0'74	In. 1'41	In. 1'47	In. 1'70	In. 3'19	In. 8'72	In. 10'35	In. 9'13	In. 10'88	In. 4'93	In. 0'20	In. 0'44	In. 53'24



## PART II.

19. The difficulties this district had to contend with in 1873-74 were not aggravated by an antecedent period of scarcity or unpropitious weather. I find it on record that in the year 1872-73 "the crops having been generally good, and the season for the most part healthy, and not marked by any severe inundation or outbreak of sickness, the condition of the people may certainly be said to have been prosperous and satisfactory." The district, therefore, was in a better position to bear up against the pressure which afterwards supervened than some of the Behar districts were.

20. The average rainfall of the Maldah district is, as we have seen, 53·24 inches. In 1873 only 27·26, or about one-half the average quantity, fell; in every month there was a deficiency, which culminated in a total cessation of rain in September. Thus it was not possible for any of even the autumn crops to escape the injurious effects of the deficient moisture. The following statement shows the rainfall in 1873:—

*Statement showing the Rainfall in the District of Maldah in 1873.*

SUB-DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total rainfall.
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
Head-quarters	0·45	...	0·29	1·19	0·06	4·36	7·03	7·76	4·91	0·92	...	0·24	27·26

21. The effect on the harvests of this great deficiency in the rainfall is described by the Collector after repeated examination of the district. The following is a summary of what he says.

22. The autumn rice crop (which forms one-fourth of the entire rice crop) was reaped in August-September, and was a very poor crop; it yielded on an average only a six-anna crop, or less than half of that of an ordinary year. The *amun* or winter lowland rice (forming one-sixteenth of the entire rice crop) was at first estimated to yield from one-fourth to three-eighths of an average yield, but subsequent reports showed that it did not turn out so well. It was certainly short of half an average yield. The *hymunt* or winter upland rice (forming one-half of the entire rice crop) was not more than from three-sixteenths to one-fourth of an average harvest. The remaining three-sixteenths of the year's rice crop consist of the "boro" or spring variety; I may add here that the "boro" rice of 1874, as well as the other cold weather or rubbee crops of that year, were average crops.

23. The proportion which, as regards the consumption of the people, the various food staples grown in the district bear to each other

is seven-eighths rice and one-eighth all other sorts of grain. It will therefore be seen that in 1873 from five-eighths to three-fourths of those crops were lost on which the people mainly depend for subsistence.

24. The failure in the harvest immediately affected the markets. In January rice had risen to more than double the usual price in that month; and though the harvesting of the upland or *hymunt* (winter) rice imported an easier tone to it, the effect was but temporary; prices continued to rise till in April they reached 10½ seers for the rupee. In this month also the supplies which had hitherto reached the local markets through Dinagepore fell off; the decreased importation being at the time strangely attributed to the fact that Government sales, at rates under market prices, had commenced in Dinagepore. Government sales had not commenced in Maldah, where famine rates prevailed. Manifestly, therefore, if Government sales in Dinagepore had any effect on trade to Maldah, they would have operated in driving private grain from the cheaper market in the former to the dearer market in the latter district. The fact is they did operate in this way; and, in truth, to those sales, timely commenced, as I have already shown, Maldah owes the fact that private trade to it from the eastern districts never entirely ceased.

25. I have already shown with what suddenness private trade to Rungpore ceased to be operative. The cessation affected the Rungpore markets in the first week of April, but its approach was more perceptible in Dinagepore; consequently, sales of Government grain, the sheet-anchor of our relief administration, assumed in Dinagepore a preventive rather than, as in Rungpore, a remedial character. When the shock came, however, that is, in the end of March and first week of April, it was felt almost simultaneously from the Brahmaputra to the Ganges, though less sensibly in the west than in the east of the affected regions. Felt, however, throughout the whole region it was, whether in the acute form of a total cessation of trade movements, as in Rungpore, or in their partial paralysis, as in Maldah. That the shock would have affected Dinagepore as it did the adjacent eastern district, had sales not commenced in the former, is manifest; for Dinagepore was in a great part supplied through Rungpore. It is also manifest that it would have in an equal degree affected Maldah, which is supplied by the other two districts, had not Dinagepore broken its force. It was the market rate prescribed by Government sales in Dinagepore which stimulated trade with Maldah. Had there been no Government sales in the former, there would have been no importations from it into the latter district.

26. These importations, however diminishing in quantity, had not the effect of keeping the markets fully supplied. Prices rose to the prohibitive rate of nine seers for the rupee, and at last, on the 2nd of May, it is reported that it had been found necessary to throw open the Government stores to purchasers. Whether it be due to this measure, or to the satisfactory condition of the "boro" rice crop, or to both causes conjoined, prices had gone down 25 per cent. by the

next month. The following statement of prices current in 1874 will illustrate the foregoing remarks :—

Statement showing the Prices current in the District of Maldah in 1874.

KIND OF GRAIN.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ... ..	11'5	12'5	12	10'5	9	11'5	13'5	12'8	13'8	18	23'5	28'5
Indian corn ... ..	16	14	16	16	16	16	16	20	20	25	20	20
Pulses ... ..	12	12'5	13	14	13	15	16	16	16	16	16	16
Wheat ... ..	12'5	12	13	15	12'5	13'5	14	15	16	16	16	18
Millet ... ..	...	14	16	16	15	14	14	14	14	14	14	14

27. I present the following statement of the trade movements of the district in 1874, as far as they have been registered. It shows that along the routes commanded by our registering stations, that is, up the Bhagiruthee, Jelinghee, or Matabhanga, but inconsiderable quantities of grain can have passed on to Maldah. The well marked decrease in the exports will attract attention :—

River Traffic Statement for the Maldah District for 1874.

	Rice.	Other food-grains.	Oil-seeds.	Cotton.	Sugar.	Tobacco.	Salt.	Hides.	Others.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Nos.	Mds.
Imports ... ..	2,510	825	.....	12	.....	.....	1,08,811	...	72,122
Exports ... ..	64,747	1,19,698	48,938	...	1,194	5,968	726	282	1,25,795½

28. I now proceed to tabulate the expenditure of grain and money incurred by Government for the relief of distress in Maldah. As the statements I submit are on the same plan as those which have been presented for other districts, it is unnecessary to introduce them with any explanatory comments :—

Statement of Grain Expenditure incurred in the Maldah District during 1874.

Nominal quantity delivered, exclusive of grain transferred to other districts.	Grain distributed in charitable relief.	Grain sold for cash.	Grain paid away as wages.	Grain advanced as loan.	Remainder.
Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
3,946	1,815	1,268	243	907	228

29. The remainder is to be written off to wastage, loss, &c. It is between 5 and 6 per cent. on the nominal deliveries.

*Statement of Cash Expenditure incurred in the District of Maldah during 1874.*

Cash distributed in charitable relief.	Cash paid as wages.	Cash advanced on loan.	Total cash expenditure.
Rs.	Rs.	Rs.	Rs.
26,951	1,06,762	48,450	1,82,163

30. It will of course be understood that I exhibit that expenditure alone which reached the hands of those who stood in need of relief. With establishment, transport, incidental or other charges, I have nothing here to do.

31. I now proceed to exhibit the number of persons who, by the expenditure tabulated above, were in one way or other assisted. Of those who were charitably relieved by distribution of money or grain, and of those who were aided by wages, I give the actual numbers. For those who were aided by sales of grain or by advances I give estimated numbers.

*Statement showing the average number of persons charitably relieved in the Maldah District during the Famine of 1874.*

DISTRICT.	FORTNIGHT ENDING ON THE									
	7th February.	21st February.	7th March.	21st March.	4th April.	18th April.	2nd May.	16th May.	30th May.	13th June.
Maldah ... ..	84	357	209	280	684	1,036	3,382	6,340	9,947	9,566

DISTRICT.	FORTNIGHT ENDING ON THE							
	27th June.	10th July.	24th July.	7th August.	22nd August.	4th September.	18th September.	6th October.
Maldah ... ..	12,648	13,009	10,698	9,315	6,890	4,458	3,352	469

*N.B.*—It would seem that this statement includes those who were relieved by distribution of wages for light labour, spinning, weaving, &c., the value of the wages paid to whom is shown under the head of expenditure in grain or money in payment of wages. It is impossible now to distinguish the numbers of persons so relieved from those who were aided with wages on relief works.

Statement of Labourers employed in the Maldah District during the Relief Operations of 1873-74.

DISTRICT.	Aggregate number of individuals employed.	AVERAGE DAILY ATTENDANCE EACH MONTH.										
		1873.		1874.								
		November.	December.	January.	February.	March.	April.	May.	June.	July.	August.	September.
Maldah ... ..	920,730	...	426	260	1,816	3,366	5,154	7,374	5,442	3,650	2,441	762

32. Now, an examination of the former of these two statements will show that, as far as the numbers of those relieved are concerned, it might be also expressed by saying that 46,359 individuals was relieved for one month; and treated in a similar way, the second or labour statement will be found equivalent to saying that 30,691 people were relieved for one month. Now, if it be supposed that by every 30 annas advanced on loan an individual was supported for a month, and that by every 20 seers of grain sold or advanced on loan another individual were supported for a similar period, then it will be readily seen that in these loans of cash and grain, and sales of grain, 1,46,800 individuals were supported for a month. Therefore, the gross effect of the Government expenditure of grain and money may (with one reservation) be expressed by saying that it sufficed for the support of 223,850 individuals, or 33 per cent. of the population of the district for one month.

33. The reservation to which I refer is the probability that some of the *cash* distributed in charitable relief, or paid away as wages or advanced on loan, returned to the Government treasury in the shape of sale proceeds of grain. By every sum of thirty annas that so returned to the treasury, should the number above be reduced to an individual. I can only form a conjecture on this point, and it is to the effect that the money so recorded would reduce to 25 the percentage of the population supported for one month by Government assistance.

Statement of Agricultural Statistics in the Chunchal estates, in the Maldah District, referred to in paragraph 10.

1	2	3	4	5	6	7	8	9	10	11
PERGUNNAH.	Total area in beegahs.	CULTIVATED.			UNCULTIVATED.			Land producing two crops.	Land producing one crop.	REMARKS.
		Under food-crops.	Under other staples.	Total.	Culturable.	Unculturable.	Total.			
Hallendah ...	241,414	122,202	8,147	130,349	58,032	58,033	111,065	48,881	81,468	
Gourhand ...	75,160	25,613	6,403	32,016	4,005	39,129	43,134	12,006	20,010	
Rokunpore ...	161,984	51,429	25,714	77,143	16,518	68,323	84,841	28,929	48,214	
Total ...	478,548	199,244	40,264	239,508	78,555	165,485	239,040	89,816	149,692	









## SECTION XV.

### MOORSHEDABAD.

THE district of Moorshedabad is divided into two unequal parts by the Bhagiruthee river, which, branching off from the Ganges at the northern, runs in a tortuous channel to the historic field of Plassey at the southern, extremity of the district. The eastern portion of the district, in whose local name of '*Bagur*' is perpetuated the designation of one of the six great divisions of Bengal under Hindoo *régime*, covers an area of 1,077 square miles, while the western portion, whose local name of '*Barh*' is also a relic of ancient rule, is 424 square miles larger than the eastern tract.

2. Between both divisions there are well marked differences on points of physical aspect of the country, its agriculture and population. The '*Bagur*' or eastern part is low, alluvial, and, lying between two rivers, subject to inundations. The chief rainy season crop is the *aús* or early rice. Cold weather crops, among others the red chillie, are produced in abundance. The inhabitants are mostly Mahomedans.

3. West of the Bhagiruthee, on the other hand, much of the land is of higher level and of older formation. Though in places alluvial, the soil is generally mixed with lime, oxide of iron, and decomposed vegetable matter. Beds of nodular limestone are scattered throughout this western region, which is intersected with numerous marshes (*beels*) and old river beds.

4. The chief food-crop grown in this western region is the late or *amun* rice. The cold weather crops are few, but sugarcane, safflower, and mulberry (the last a decaying industry) are cultivated. In this division the Hindoo outnumbers the Mahomedan population.

5. In a recent administration report the Collector, Mr. Wavell, thus writes of Moorshedabad:—"Owing to the differences of situation and soil, and of the nature of the crops grown, these two portions of the district are differently affected by the weather. Thus, for the eastern portion early rains are needed in April and May for the proper cultivation of the *aús* crop, and steady but not too heavy falls until the crop is reaped in August. A too early break-up of the rains is undesirable, as also are very heavy falls when the cold weather crops have been sown. Finally, some rain is wanted during the cold weather.

"For the great staple of the west of the district, it is not so important there should be early rain, though it is no doubt of advantage that the lands should be prepared in good time for the reception of the seed; but what is above all wanted is steady rain in the months of July, August, September, and in the early part of October, without long intervals of dry scorching weather, especially when the seedlings have been transplanted from the nurseries, when that mode of cultivation is

adopted." The preceding observations, epitomised from survey and administration reports, on the soil and agriculture of Moorshedabad are interesting in themselves, and valuable as an introduction to the more definite statistical information which I now proceed to discuss.

6. The sources of this information are—(a) the report of the revenue survey; (b) the local estimates of cultivation embodied in the return 41B; (c) the famine literature. The last mentioned source adds but little to the information contained in the other two; these, therefore, I shall now analyse.

7. The revenue survey of the Moorshedabad district, commenced by Mr. Pemberton in 1847, and continued by Captain Sherwell, was completed in 1855 by Captain (now Colonel) Gastrell, who compiled the statistical statement and report. Exclusive of the Ganges and Bhagiruthee river beds, the area of the district according to the survey is 2,492 square miles, which is 86 square miles less than that recorded in Mr. Beverley's Census Report. The difference seems to be due, either to the boundaries of the fiscal and criminal jurisdictions not being conterminous, or to the difficulty, which in some instances was experienced in the Surveyor-General's Office, in excluding, on insufficient data, the land covered by river beds from the areas supplied to Mr. Beverley. The difference, however, between the survey area and that adopted by the Collector in his statistical return 41B is inconsiderable (only fifteen square miles). It is not now possible to eliminate this difference from the subsequent calculations; but I venture to think the error due to this cause will not be material.

8. The revenue survey of the Moorshedabad district was an unusually difficult and laborious undertaking. This was owing to the extreme extent to which lands appertaining to different estates and pergunnahs had become scattered or interwoven. This interweaving of distinct estates necessitated not only the measurement of an unusually large number of small plots,\* but also compelled the revenue officials to have frequent recourse to *kusreh* or field-to-field measurement. I have not had the advantage of consulting the records of these field-to-field measurements, but there is no doubt that the care and trouble taken in unravelling the tangled web of landed property in Moorshedabad is, as far as the nature of the case permits, reflected in the survey statistics, an abstract of which I now present:—

*Statement (abstracted from the Revenue Survey Report) of Agricultural Statistics for the Moorshedabad District.*

Gross area in acres.	Cultivated or fit for cultivation.	UNFIT FOR CULTIVATION—218,174.						Village sites.
		Roads.	Jheels.	Hills.	Long grass jungle and sand.	Tanks and rivers.	Mango tops.	
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1,595,225	1,379,091	7,464	24,692	556	58,364	71,980	10,396	44,722

\* One hundred thousand plots were measured, allotted, and calculated.

9. These statistics show that twenty years ago 14 per cent. of the district area was physically unculturable, and that 86 per cent. was either cultivated land or fit for cultivation. The survey report affords no clue to the knowledge of how much land was actually in tillage and how much still awaited the plough. The survey statistics then do not after all help me greatly. The question, however, unanswered by them the return 41B. claims to solve.

10. This return was compiled in 1873, before local knowledge had been widened by the experience acquired during the famine year; but in its compilation the results of special statistical enquiries were utilized "for the preparation of return 41B. for 1872." [The Officiating Collector, Mr. Quinn, writes me] "statistics were collected by special agency in 343 villages on both sides of the Bhagiruthee." I have not seen and cannot criticize the statistics which were so collected, or gauge the degree of trustworthiness they impart to the return which has been based on them. In accepting the return, therefore, as an approximately correct estimate on the matters of which it treats, I can only point out that these statistical enquiries were prosecuted in 9 per cent. of the villages in the district; that if the villages operated in were well chosen and the enquiries well directed, the results should furnish a sufficient basis for generalizations; and that in the official papers before me I can find nothing to negative the affirmative presumption which necessarily exists on both points.

*Estimates of agricultural statistics for Moorshedabad District.*

Gross area in acres.	UNCULTIVATED.		RAINY SEASON.			DRY SEASON.	
	Culturable.	Unculturable.	Rice.	Other food crops.	Non-food crops.	Food crops.	Non-food crops.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1,584,000	134,400	367,360	760,068	9,744	42,853	110,981	64,664

NOTE.—The land shown as "unculturable" is in excess of the unculturable land of the survey. It may be assumed the survey figures are more correct. Unprofessional measurements and estimates are likely to confound culturable with unculturable waste land.

11. It will, on examination of these estimates, be found that they show the cultivated to be 69 per cent. on the gross area. As far therefore as concerns that inconsiderable test-character noticed in the section on Bhagulpore, as belonging to the survey statistics, those estimates are test proof. I would also beg to note that the extension of cultivation is in harmony with the density of population;\* for, I submit, no one can have followed me so far in this report without finding established in his mind a sentiment of fitness, as things go, between a given density of population and a certain extension of cultivation in most rural districts of Bengal and Behar. It will, however, be remembered that I do not claim for the estimates or the calculations, I now proceed to base on them more than approximate accuracy, and that I am personally unable to measure the degree of such approximation.

\* The population of Moorshednbad city and Behampore cantonments included is 1,353,626; city and cantonments excluded is 1,480,334. The density per square mile (city and cantonment included) is 525.

12. The average outturn in ordinary good years of an acre of rice land in Moorshedabad is 15 maunds husked grain. The Collector, Mr. Wavell, informs me that in good years some rice lands in his district yield so much as 60 maunds of *dhan*, or 37 maunds of husked grain. This enormous yield, however, is harvested only in a limited area and from a particular variety of rice. Taking one part of the district with another, and one sort of rice with another sort, Mr. Wavell thinks that 15 maunds of cleaned grain is the average outturn of ordinary good years.

13. The average outturn per acre of wheat (with which 20,243 acres are said to be usually sown down) is nine maunds, and of all other sorts of food-grain twelve maunds, or three-sevenths of a ton.

14. At those average rates of crop outturn the yield of the various food-grain crops in Moorshedabad in an average good year would be as follows :—

	Tons.
Rice crops ... ..	407,180
Other rainy season crops ... ..	4,176
Cold weather crops ... ..	45,395
Total ... ..	<u>456,751</u>

15. On this calculation therefore it would seem that the food-grain crops in Moorshedabad yield in an average good year, and in round numbers, a gross produce of 457,000 tons. The next step is to compare this produce with the requirements of the district.

16. The Moorshedabad district, according to the Census Report, contains 1,353,626 inhabitants, and at the accepted average rate of two-thirds of a seer of food-grain for each individual daily, the annual consumption is 294,086 tons.

17. The next necessary deduction to be made from the year's gross production is for seed-grain. At the average rate per acre computed in the section on Dinagepore, this deduction will reach 32,456 tons. The surplus produce therefore available for export, storing, or to cover wastage, will be 130,209 tons. With a view to showing how much food-grain, by getting into the hands of mahajuns, becomes immediately available for export, I proceed to consider the process of financing for rent followed in Moorshedabad. I am fortunately in possession of valuable trade statistics for this district, which I shall produce presently. In the first place, however, I shall follow the usual plan, and determine how much grain may in ordinary years be more advantageously exported than kept at home.

18. On the process of financing for rent followed in this district, the Collector has favoured me with interesting information. "I have had," writes Mr. Wavell, "inquiries made in various parts of the district on this subject. The practice with regard to payment of rent varies in the two portions into which the district is divided. The collections on the western side of the Bhagiruthee being greatest at the Pooos (December) instalment, and those on the eastern side of the river being greatest at the Bhadra (August-September) and Cheyt (March-April) *kist* or instalment. The reason for this difference is obviously this that in the former portion the winter rice is produced almost to the

exclusion of other crops except mulberry and sugarcane, while in the eastern portion the produce is almost entirely of the early rice, of cold-weather crops, and of indigo.”

19. A proportion of about twelve annas, or three-fourths of the yearly rent, is paid by the ryots of the western section of the district from the sale-proceeds of food-grain, the remainder being paid from the sale proceeds of crops other than food-grain—mulberry, molasses manufactured from sugarcane, and the few rubbee crops that grow there. In the eastern portion of the district the cultivators pay about one-half of their annual rent from the sale-proceeds of cold-weather crops, mulberry, indigo, and cocoons.

20. Seeing that the western half of the district is larger than the eastern half, I think I may fairly assume that eleven annas, or eleven-sixteenths of the district rental is paid from the sale-proceeds of food-grain. This rental is according to the road cess statistics, which are complete for Moorshedabad, Rs. 28,97,832. The portion financed by sale of food-grain will therefore be in round numbers 21 lakhs of rupees.

21. In order to determine the quantity of grain sold to realize this amount, I present the following average prices current in the Moorshedabad district:—

Statement showing the average prices current in the District of Moorshedabad from 1868 to 1872. (Seers of 80 tolahs each per rupee.)

KIND OF GRAIN.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ... ..	25·6	25·4	25·2	25·3	23·	24·1	21·4	20·9	23·1	22·1	24·3	26·2
Indian-corn ... ..	30·1	30·5	33·3	35·	30·5	26·6	29·3	28·3	29·4	28·5	31·5	29·9
Pulses ... ..	26·1	27·8	32·3	31·3	28·8	30·5	27·5	26·4	20·6	27·7	20·6	30·9
Wheat ... ..	17·9	17·3	21·2	22·2	20·9	21·6	18·3	19·	18·5	18·1	17·5	17·1
Millet ... ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

22. It will be observed that when the August, September, and December instalments are paid, the price of rice fluctuates from 23 to 26 seers for the rupee, and that when the March-April instalment falls due the food-grains then harvested vary from 22 seers the rupee for wheat to 32 seers the rupee for pulses. These are retail rates, necessarily dearer than the rates at which the producers dispose of the produce. I think it is therefore a fair assumption to make that the producers sell their food-grain in financing for rent at an average price of 30 seers per rupee, or Re. 1·5 per maund. Of course this is only a conjecture: they may, and possibly they do, sell at a cheaper price; but in the absence of definite information, and as an average rate, Re. 1·5 per maund does not seem unreasonable. At this rate to realize 21 lakhs of rupees they must sell, in round numbers, 57,000 tons of food-grain. The residue of the year's production, remaining with the cultivators, or getting later on into the mahajuns' hands, would then be 73,000 tons, including wastage. Allowing 5 per cent. for wastage within the year of

production, the net residue would be about 50,000 tons, or two months, food-supply for the district.

23. It will be remembered that my speculation regarding export trade is to the effect that, as the grain sold in financing for rent is the grain sold cheapest during the year, and consequently the grain which gives the largest profit on exportation; as it becomes available for export at a time when there is no home demand for it; and as in surplus-producing districts there never is in ordinary years a demand for it, it forms an export grain fund as it were from which foreign demand is, in the first instance, supplied. I now proceed to examine how far the registered export transactions of Moorshedabad tend, if not to confirm, at all events to coincide with this speculation. With this view I present the following statements of river-borne and railway-borne traffic from and to the district :—

*River Traffic Statement for the Moorshedabad District for 1873.*

	Rice.	Other food-grains.	Oil-seeds.	Cotton.	Sugar.	Tobacco.	Salt.	Saltpetre.	Hides.	Others.
Imports ...	8,050	2,375	18	.....	.....	75	1,60,657	.....	.....	1,29,267
Exports ...	2,99,855	4,19,543	22,815	.....	6,597	3,385	50,244	.....	85	89,276½

*Statement of Railway Traffic for Moorshedabad in 1872.*

	FIRST QUARTER.				SECOND QUARTER.				Total of food-grains.
	Food-grains.	Indigo.	Seeds.	Others.	Food-grains.	Indigo.	Seeds.	Others.	
Imports ...	317	.....	.....	35,302	988	.....	.....	.....	42,269
Exports ...	3,11,677	.....	778	19,252	1,03,243	.....	182	.....	5,574
	THIRD QUARTER.				FOURTH QUARTER.				Total of food-grains.
	Food-grains.	Indigo.	Seeds.	Others.	Food-grains.	Indigo.	Seeds.	Others.	
Imports ...	8,033	.....	.....	35,327	1,230	.....	.....	33,838	Mds. 5,568 or 199 tons.
Exports ...	86,119	.....	977	5,014	1,42,746	69	548	3,953	6,43,965 or 22,999 tons.

24. I regret the returns are not for the same year; but in 1872 the river registration system was in its infancy, and the results are less satisfactory than those for 1873. It will afterwards appear that the harvests of 1871 and 1872 were not average harvests, and this suggests that the operations shown in these statements are really under the normal magnitude.

25. It will thus be seen that in the period of a year, the most normal I can find yet, yet which, as we shall see presently, followed [as far as the Railway traffic statement is concerned] great inundations and bad crops, registered exportations of food-grain from Moorshedabad exceeded the registered importations by 48,120 tons. I have already deprecated an undue expectation of results from our system of river-trade registration, and I have stated that much river-borne, and all overland, traffic must necessarily escape being registered. Remembering this, and having regard to the preceding accurate statistics of the *registered* export trade, it seems to me a reasonable statement which makes the quantity of food-grain which, from one year's production, is annually exported from Moorshedabad not less than 57,000 or 60,000 tons. This would leave a reserve in ordinary years of about 70,000 tons, or two months' supply.

26. On the question of trade in Moorshedabad the Collector writes\*—"It would appear that though Moorshedabad was formerly the capital of the province, and though even now industrial pursuits unconnected with the land are more common than in many other districts, it is in the main an agricultural district, and depends on agricultural produce for prosperity. Taking the district as a whole, it may, I think, be said that most articles are the subject of export from, or import to, some part of it. Thus, to take the important article of rice, there are very considerable exports from the rice-producing lands west to Calcutta, the north-west, and the eastern part of the district, which also imports rice from the districts beyond the Ganges. I am not, however, in a position to say how the balance of trade in this commodity ordinarily stands. The chief articles of produce, other than rice, imported seem to be cotton, jute, oil-seeds, sugar, tobacco, vegetables, ghee [and salt]; while the chief exports are indigo, silk, pulses, and seed.

"There is a very considerable internal trade or interchange of commodities between the east and west of the district. In the cold weather I have frequently met long processions of carts and pack-bullocks laden with rice, the great produce of the west, which will return laden with the oil-seeds or other cold weather produce of the east, or *vice versa*. I have before remarked on the difference between the east and west as regards surface, soil, crops, and inhabitants. I would here add that I believe the generality of the inhabitants of the east are in better circumstances than those of the west. The cause is not difficult to find. Singularly suited as the soil of the west, generally clay with small nodules of limestone, is for the cultivation of paddy, its cultivators are exposed to this disadvantage, that should there be a failure of their crops from absence of seasonable rain, or any other cause, they cannot expect to make up for their losses to any appreciable extent by means of some other crop. The *aman* rice is in fact their mainstay, though of course good crops of mulberry and sugarcane also add to their prosperity. In the east of the district, on the other hand, the cultivators do not depend on a single crop. If there be a failure of the *aus* rice, they can still hope much

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\* District administration report for 1872-73.

from their cold weather crops; and it seldom happens that there are failures of crops at both seasons of the year.”

27. Having thus striven to realize the economy of the district as regards food-grain supply in ordinary years, I now pass on to the consideration of its position during the famine year, first presenting the following statement of the normal rainfall in the district:—

*Statement showing the Monthly Rainfall in the District of Moorshedabad in 1873.*

SUB-DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Sudder ... ..	0·20	0·01	1·50	0·68	0·70	3·01	9·71	10·30	4·96	0·42	0·02	...	31·51
Moorshedabad City ...	0·14	0·11	1·21	0·61	0·10	2·03	9·19	8·37	5·03	0·28	0·17	...	27·24
Jungypore ... ..	0·83	0·04	0·71	0·72	1·59	5·49	11·04	8·88	6·70	1·14	0·28	0·06	37·48
Rampore Hât ... ..	...	...	2·16	0·29	0·76	2·40	11·29	8·35	3·46	...	...	...	28·71
District average ...	0·39	0·05	1·39	0·57	0·79	3·23	10·31	8·97	5·04	0·61	0·16	0·06	31·23

## PART II.

28. The seasons preceding 1873 were in the Moorshedabad district unpropitious: the year 1871 was marked by a great inundation which caused very serious injury to the crops; the lateness of the September-October rains in 1872 affected the outturn of the rice crops in the western portion of the district—the result was that the year 1873 found the poorer classes of the people suffering from antecedent losses.

29. The rainfall in 1873 was greatly deficient, only 31 inches having fallen out of the normal total of 53 inches. Only half the usual quantity fell in September, while in October there was, I may say, no rain at all. The following statement of rainfall in 1873 will, if compared with the preceding one, set this point in a clearer light:—

*Statement showing the average Monthly Rainfall in the District of Moorshedabad.*

SUB-DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Sudder ... ..	0·35	0·94	1·07	2·20	3·97	9·51	10·17	9·52	9·45	6·04	0·18	0·09	53·49
Moorshedabad City ...	0·28	1·21	0·67	0·97	2·88	9·97	8·81	9·37	10·76	5·14	0·04	...	50·10
Jungypore ... ..	0·29	1·24	0·79	1·59	4·14	9·52	11·32	9·53	10·97	6·21	0·07	0·02	55·69
District average ...	0·31	1·13	0·84	1·59	3·66	9·67	10·10	9·47	10·39	5·80	0·10	0·05	53·09

30. The effect of the deficient rainfall was not so marked on the *aus* as on the *aman* crop. It will be remembered that the *aus* crop is grown chiefly in the eastern portion of the district, which is liable to inundation, and consequently not so dependent for moisture on rainfall as the crops in the western tracts, which are not liable to inundation. The Collector therefore reports that in 1873 “the outturn of the autumn crops was about that of an average year, or a twelve-anna



crop," and he adds that so far as can be ascertained the autumn crop of 1865 was of a similar character. If the outturn were but a "twelve-anna" crop, it was under the yield of the average good year, which in the first part of this section I have contemplated.

31. The effect of the deficient moisture was, however, much more marked on the *amun* crop, which in the second crop report, dated 11th December 1873, was estimated to yield "one-third of an average crop, and only two-fifths of the outturn of the year 1865-66." On a personal inspection of the district, however, the Collector raised the average to "at least a six-anna crop."

32. I regret that I am unable to quantify the outturn of either the *aús* or *amun* crop. No information having claims to precision exists on the point of the relative extension of *aús* and *amun* cultivation. It is true that in the second crop report referred to above the Collector writes:—"Roughly the *boro*, *aús*, and *amun* crops stand respectively in the proportion of one-eighth, three-eighths, and half of the whole rice produce of an average year."\* It is obvious that this estimate is devoid of claims to precision; that it is compatible with the *aús* or *amun* harvest being 50,000 tons more or less; and that uncertainty on such a point, and within such wide limits, would throw doubt on any result which might declare itself. Although I regret my attempts at quantifying the outturn should fail me at this juncture, I think it advisable to abstain from further effort on the point.

33. In Moorshedabad, as in other districts, the early reports regarding the rubbee crops were gloomy, dwelling not only on the poor appearance of such as had germinated, but also on the diminished area which had, owing to the want of moisture in the soil, been sown down. As the year progressed and showers fell, the reports became more hopeful, and I gather from the final allusions to this crop that the outturn was satisfactory. But I have been unable to determine whether this expression of satisfaction made allowance for the land which had not been sown. I am inclined to think it had reference only to the yield of the crops which had germinated, in which case three-fourths of an average yield would be a favourable estimate for the rubbee of 1874 in Moorshedabad.

34. I now come to the question of trade and prices. We have already seen what the average range of prices in this district is: the following statement will show what it was in 1874:—

Statement showing the prices current in the district of Moorshedabad in 1874.

KIND OF GRAIN.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ... ..	12·5	12	12·7	12	11	11*	12	12	11·5	13·5	13	20·5
Indian-corn ... ..	20·5	19	20	19	19	18	19	18	15	18	18	23
Pulses ... ..	13·5	13·5	15	17·5	16	15·5	15·5	15·5	16·5	16·5	14	17
Wheat ... ..	12	12·5	14·5	15	14	12·7	13·2	12·7	13·5	13·7	14·5	16
Millet ... ..	...	...	...	...	...	...	...	...	...	...	...	...

\* The sub-divisional reports seem to give a much less proportionate share of the cultivated area to *aús* cultivation.

35. It must not be supposed, however, that these quotations exhibit the highest level which the price of food-grain reached. This is not the case. I find in the Special Narratives a gradual rise in the price of common rice at rural markets from 11 seers per rupee in March to 10 seers per rupee in April, 9½ seers per rupee in May, and 8½ seers per rupee in June. It was in June that the price of food-grain reached its dearest point in this district. It was then beyond the reach of the poorer classes, whose gradual subsidence during May and June into a condition of distress, which culminated in July, is chronicled in successive narratives. These were the months during which in 1866, with a much smaller failure in the harvest, the severest distress was felt—a distress which the liberal exercise of private, supplemented by some public, charity was unable completely to alleviate.\*

36. I had intended noting before, and I now beg to note here, that the quotations in official prices current are those which prevail in the chief marts or large towns of a district. These prices are in ordinary years always dearer than the prices current in rural hâts or bazars; but in years of scarcity the price current in the rural market is always dearer than that current in the town. The reason is obvious. In normal years the country supplies the town; the retail price in the town must therefore suffice to cover cost of carriage from the rural market or depôt, besides the urban dealer's profit, which is always large. In years of scarcity the rural markets are partially supplied from the urban grain depôts; the country buyer must therefore pay the cost of carriage and the dealer's profit. When, therefore, in any section of this report I offer a tabulated statement of prices current it is to be understood that if the prices be "average prices," they are *dearer* than those at which the great majority of the people buy their food; and if they be prices current in 1874, they are *cheaper* than those at which the people bought their food in that year.

37. I now present the following statement of registered railway-borne and river-borne traffic for the period during which the scarcity lasted. It will be observed that though neither were considerable, the exports exceeded the imports. The higher range of prices in other more distressed districts sufficiently accounts for this fact.

*River Traffic Statement for the Moorshedabad District for 1874.*

	Rice.	Other food-grains.	Oil-seeds.	Cotton.	Sugar.	Tobacco.	Salt.	Saltpetre.	Hides.	Others.
Imports ...	23,440	10,488	425	...	425	375	1,19,970	...	...	71,741
Exports ...	53,231	1,00,474	41,254	...	2,023	7,356	26,553	...	340	58,084

\* See Orissa Famine Commissioners' Report, Vol. I, pages 120-21.

Railway Traffic Return for the Moorshedabad District for 1873-74.

	FOURTH QUARTER OF 1873.				FIRST QUARTER OF 1874.				Total food-grains.		
	Food-grains.	Indigo.	Seeds.	Others.	Food-grains.	Indigo.	Seeds.	Others.			
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.			
Exports ... ..	1,09,657	.....	230	5,242	82,940	.....	412	8,746			
Imports ... ..	1,167	.....	.....	25,342	3,801	.....	.....	39,822			
	SECOND QUARTER OF 1874.				THIRD QUARTER OF 1874.				Total food-grains.		
	Food-grains.	Indigo.	Seeds.	Others.	Food-grains.	Indigo.	Seeds.	Others.			
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.			
Exports ... ..	10,871	.....	1,903	7,127	1,544	.....	160	14,943	Mds.	Tons	
Imports ... ..	43,988	.....	.....	46,389	39,666	.....	.....	36,023	88,622		
				Deduct Mr. Toynbee's despatches ...					67,054		
							Remainder ...		21,568, or 770		

38 I now proceed to tabulate the expenditure incurred in Moorshedabad in the relief or prevention of distress, and to exhibit the extent of such relief as evidenced in the numbers of people aided thereby.

Statement of Grain Expenditure in the Moorshedabad District during the Famine of 1873-74.

Nominal quantity delivered, excluding transfers.	Grain sold for cash.	Grain distributed in charitable relief.	Grain paid by wages.	Grain advanced on loan.	Remainder.
Tons. 4,277	Tons. 36	Tons. 2,642	Tons. 707	Tons. 710	Tons. 182

39. There is an apparent discrepancy between the local accounts of grain expenditure and the preceding compiled by the Comptroller-General of Famine Accounts. The local accounts show 1,750 tons less expenditure on charitable relief, and 760 tons greater expenditure on relief works than the regular accounts show. I am inclined to think the chief cause of difference is that the local accounts separate from the charitable relief heading such expenditure as was incurred on light labour; and that the regular accounts include this expenditure under the general heading of charitable relief.

Statement of Cash Expenditure incurred in the Moorshedabad District during the Famine of 1873-74.

Money distributed in charitable relief.	Money paid as wages.	Money advanced on loan.	Total cash expenditure, sum of columns 1, 2, and 3.
Rs. 2,38,000	Rs. 70,795	Rs. 26,031	Rs. 3,34,826

40. I next proceed to exhibit the number of people who were relieved by the expenditure I have tabulated. The numbers of those relieved gratuitously or by wages on relief works are actual figures extracted from the official documents before me; those relieved by advances of grain and money, or by sale of grain, are estimated numbers, computed in the manner already sufficiently familiar:—

*Statement showing the average number of persons charitably relieved in the Moorshedabad District during the Famine of 1874.*

DISTRICT.	FORTNIGHT ENDING ON THE									
	21st March.	4th April.	18th April.	2nd May.	16th May.	30th May.	13th June.	27th June.	11th July.	25th July.
Moorshedabad ...	387	379	661	2,739	2,154	3,237	5,906	9,815	13,853	18,465

  

DISTRICT.	FORTNIGHT ENDING ON THE					REMARKS.
	8th August.	22nd August.	5th September.	19th September.	3rd October.	
Moorshedabad ...	19,787	23,397	9,847	14,077	14,639	These figures are doubtful. It is impossible to determine whether some of the items which compose the total are average or aggregate figures.

*Statement of laborers employed in the Moorshedabad District during the relief operations of 1873-74.*

DISTRICT.	Aggregate number of individuals employed.	AVERAGE DAILY ATTENDANCE EACH MONTH.										
		1873.					1874.					
		November.	December.	January.	February.	March.	April.	May.	June.	July.	August.	September.
Moorshedabad ...	848,640	...	737	1,892	2,338	2,834	3,134	3,103	3,347	2,765	6,171	1,967

41. An examination of the former of these statements in the usual way will show it to be equivalent, as far as numbers are concerned, to saying that 65,000 were charitably relieved for a month; and the latter is, in effect, a statement that 28,288 individuals were relieved by wages also for a month. The grain sold and advanced on loan, and the money lent, were adequate to the maintenance of 55,659 people for a month. The total expenditure therefore sufficed to maintain 148,947 individuals, or about 11 per cent. of the population, for thirty days.





## SECTION XVI.

### RAJSHAHYE.

THE agricultural statistics available for this district are even more meagre than those I had to deal with in the last section. The Collector has done what he could in helping me to such figures as could be compiled from his office records or collected from responsible sources; but I regret to say the results have not repaid Mr. D'Oyly's trouble.

2. The information regarding agricultural statistics for Rajshahye is contained in the Collector's return XLIB to the Board of Revenue, the estimates of cultivated areas contained in the famine reports, and on the special statistics compiled at my instance from butwara and other official records. I shall briefly examine these various sources of information.

3. The latest return XLIB for Rajshahye is for the year 1872-73. At the time of its compilation, therefore, the subordinate executive staff, through which the acquisition of much statistical knowledge was expected, had not been thoroughly utilised. The return therefore has no special claim to credence: it is no more than the embodiment of the general ideas of the local officials on the points with which it is concerned. Devoid of claims to statistical precision in its origin, it exhibits, besides, intrinsic evidence of inutility as far as my purpose goes. I find the return treats of Rajshahye as having an area of 2,863 square miles, the census report area being 625 square miles less. Doubtless the difference is due to the criminal and fiscal limits of the district not being conterminous; but to whatever cause the difference is due, it is obvious that even were the agricultural statistics furnished for this larger area absolutely correct (which they are not), still they would furnish no basis for calculating the food-supply produced in the smaller area, the latter being undistinguishable from the former both as to locality and population.

4. The next available source of statistical information for Rajshahye is the famine literature. This source sets forth estimates of cultivation to the effect that "as nearly as can be estimated the district is occupied thus:—ten-sixteenths by food crops, three-sixteenths by other staples, and three-sixteenths by villages, jungle, fallow land, jheels, &c." Such information as this, the expression of an officer's general impressions, is but a sort of approximation to, and was not meant to convey the idea of, statistical precision.

5. There thus remain only those statistics which the Collector has courteously compiled at my request. They are of two kinds—(1) statistics collected from the acreage roll of estates managed by the Court of Wards, (2) statistics compiled from the butwara records.

6. The former statistics have been furnished me with reference to estates situated in the

Name of Thana.	Gross area.	Cultivated area.	Food grain.	Non-food crop.	Double crop land.	Culturable waste.	Unculturable waste.	REMARKS.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	
Boragram ...	3,410	1,856	1,698	158	1,715	637	917	Boragram, Bagmara, and Pooteah thanas, containing an aggregate area of 12,672 beeghas; the latter refer to estates covering 12,908 beeghas situated in various, but unspecified parts of the district. I reproduce those statistics in the margin.
Bagmara ...	5,487	2,508	1,702	806	776	2,243	736	
Pooleah ...	2,402	1,475	1,113	362	583	1,085	142	
Barindro ...	1,373	197	197	...	1	853	323	
Figures from butwara papers	12,908	7,207	6,678	529	1,186	3,567	2,634	

7. The first point that strikes one in analysing these figures is the variations in the proportions which in each thana obtain between the uncultivated and crop areas. It will be observed that the figures for Bagmara thana shew 45, for Boragram 54, and for Pooleah 61 per cent. cultivated land on the gross thana area. Introducing the element of population, these percentages seem improbable. There is no reason apparent why a representative or specimen area in Bagmara thana, in which there are 858 people to the square mile, should have comparatively less land under cultivation than a specimen area in Boragram thana, with a density of 677 to the square mile. Equally improbable is it that the Pooteah thana, with 1,022 people per square mile,\* should have only 61 per cent. of its area cultivated. There is no explanation for these improbabilities, and I therefore conclude that the statistics in question do not correctly represent the thanas in which they are situated.

8. Judging from the Collector's impressions (as expressed in the famine literature), to the effect that thirteen-sixteenths, or 81 per cent., of the district is cultivated, I think I shall have his sanction in refusing to act on statistics which shew the cultivated to be no more than 50 per cent. on the gross area.

9. The fact is that for Rajshahye, as for Maldah, the inclusion within the district boundaries of a large jungle tract renders the formation of an approximately correct estimate of agricultural statistics for the district a matter of impossibility. Under the circumstances I abandon the attempt.

10. Although, however, I shall not present any estimates of cultivated areas, I shall note in a connected form such references to the growth of food-grain in the district as I find in the papers before me. The other staples of the district, jute and silk, it does not come within my province to deal with.

\* The thanas are agricultural, with no village of 5,000 inhabitants.



11. It seems that the district, from a food-grain producing point of view, is divisible into four parts. The *first* of these consists of the *Bhurind*, a tract of country, half unreclaimed, occupying the south-west of the *Beauleah*, the south and south-west of the *Godagaree*, and the western halves of *Tannore* and *Mandah* thanas. It covers probably some 350 square miles of country, of which, as I have said, one-half is unreclaimed jungle and waste lands. In the cultivated part of the *Bhurind*, as elsewhere in the district, the chief crop grown is rice, and the proportions in which the various food-grain crops occupy the cultivated land are said to be as follows—*aous* or autumn rice, one-sixteenth; *amun* or winter rice, thirteen-sixteenths; *boro* or spring rice, one thirty-second part. Other food crops cover the remainder.

12. The *second* great division of the district comprises the east and north of *Beauleah*, the north-east of *Godagaree*, the eastern half of *Tannore*, and the whole of *Pooteah*, *Charghat*, and *Belmareah* thanas—about 600 square miles of country. I can find no estimate of the proportion of this area which is cultivated, but the proportions in which the various crops are grown are said to be—autumn or *aous* rice, three-eighths; *amun* or winter, one-half; spring or *boro*, one thirty-second part; other food-crops making up the remaining three thirty-second parts.

13. The third division consists of the *Natore* sub-division, which comprises the *Natore*, *Baragram*, and *Singrah* thanas—an area of 832 square miles. It is estimated that three-fourths of this area is cultivated, and that of this cultivated land the autumn rice covers one-fourth, the winter rice one-half, the spring rice one-sixteenth, and various *rubbee* crops the three-sixteenths part.

14. It only remains to notice the fourth division, which covers the east of *Mandah* and the whole of *Baidakara* and *Bagmara* thanas—an area of about 450 square miles. In this division, the cultivated area of which has not been estimated, the autumn rice is said to occupy the one-sixteenth, the winter rice nine-sixteenths, the spring rice the three-sixteenths, and the *rubbee* crops the three-sixteenths part of the land under tillage.

15. A considerable portion of the land in this district yields two crops in the year, and both crops are often food-grain. No definite idea, however, can be formed of the proportion of the cultivated land which is double cropped; for although the figures produced in paragraph 6 show an extension of double cropping covering 52 per cent. of the cultivated area, these figures are not trustworthy.

16. *Rajshahye* is said to be both an exporting and an importing district as far as food supply is concerned. Its main export staple is rice, which it sends to the North-Western Provinces, to *Calcutta*, and to the adjoining districts of *Moorsheadabad*. Its imports are said to be cereals from the west and rice from the east.

17. As far as this information bears on the export trade of the district, it is confirmed by the river-borne trade registration statistics; but these statistics do not show any importations of food-grain to *Rajshahye*. Food-grain coming to the district from eastern districts would escape registration; but not so cereals coming from the west, unless they came from the adjacent districts in that direction.



Statement showing the average Monthly Rainfall in the District of Rajshahye.

SUB-DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Sudder ... ..	0'17	1'26	1'23	2'10	5'25	10'66	12'23	9'40	11'00	5'64	0'28	0'05	59'27
Natore ... ..	0'60	1'19	0'61	2'53	5'62	9'87	12'00	10'57	13'00	5'41	0'03	0'02	61'45
District average...	0'38	1'23	0'92	2'31	5'43	10'26	12'12	9'98	12'00	5'52	0'16	0'04	60'31

PART II.

19. Although in Rajshahye, as in Bengal generally, the year preceding 1873 presented abnormal phases of weather, it appears that the crops of 1872 were up to the average. In 1873, however, the rainfall was strikingly deficient, especially in September and October, the most critical months for the rice crops. The average rainfall in Natore sub-division is, as we have seen, 61 inches annually : in 1873 only 43 inches fell ; and in the sudder sub-division there was a deficiency of 27 inches in a normal fall of 59 inches. Out of the normal fall of 18 inches in September and October in Natore only 6 inches fell in 1873 ; while in the sudder sub-division the normal fall during those months, amounting to 16½ inches, was deficient by 13 inches. An extensive failure in the rice crops was the inevitable consequence.

20. I produce a statement of the rainfall in Rajshahye for each month of 1873 ; and in order that not only the deficiency in the fall, but the unseasonable distribution of the rain which fell, may become manifest, I invite a comparison of this statement with the table of average rainfall given above.

Statement showing the Monthly Rainfall in the District of Rajshahye in 1873.

SUB-DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Head-Quarters ...	0'48	0'15	1'49	1'09	0'31	6'90	6'73	11'27	3'12	0'32	0'27	0'01	32'14
Natore ... ..	0'51	...	1'09	3'95	1'42	7'79	9'05	13'60	6'08	0'14	0'15	0'10	43'88
District average...	0'49	0'15	1'29	2'52	0'86	7'34	7'89	12'43	4'60	0'23	0'21	0'55	38'01

21. The evidence of failure in the crops consequent on the insufficient rainfall varied in each of the four divisions of the district I have specified above. In the first division the aous crop was one-fifth, and the amun one-sixteenth of an average crop ; in the second division the aous harvest was one-half and the amun six-sixteenths of the average ; in the third division the aous was one-half and the amun

seven-sixteenths of the average; and in the fourth division the aous crop varied from one-half to a full crop, while the amun was three-eighths of an average crop. Generally, it may be said that the aous or autumn crop was one-half and the amun or winter crop three-eighths of an average crop all over the district.\*

22. The shortness in supplies, caused by the failure in the main crops of the district, had the immediate effect of forcing up prices. In January the price of rice was twelve seers for the rupee, that is, more than twice as dear as ordinary rates, and the harvesting of the cold weather crops, which in 1874 yielded a fair outturn, had no general effect in lowering market rates, although I find in the special narratives allusions to such an effect having been produced in different localities.

23. Neither had private importations any general influence in reducing prices. I find it frequently stated that private enterprise was active in Rajshahye throughout the whole period of the scarcity, and I find specific mention of the salutary effect had by these importations on local markets. This effect, however, does not seem to have extended to the large centres of trade, or if it did, it has not been recorded in the prices current submitted to the Collector. I produce a statement of these prices current, specially prepared by the Collector.

*Statement showing the Prices current in the District of Rajshahye in 1874.*

SUB-DIVISION.	Kind of grain.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
		Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
HEAD-QUARTERS.	Common rice	12	12½	12½	11½	11½	10½	13½	13	15½	15½	21	24½
	Indian corn	16	10	10½	12½	17	15	10	10½	9½	10	10	16½
	Pulses	11½	11	12½	12½	12½	11½	12½	12½	13½	15½	16½	14½
	Wheat	...	...	...	...	...	...	...	...	...	...	...	...
	Millet	...	...	...	...	...	...	...	...	...	...	...	...
NATORE.	Common rice	12	13½	13½	12	12	9½	12½	12½	13½	12½	16½	22½
	Indian corn	...	...	...	...	...	...	...	...	...	...	...	...
	Pulses	16½	15	15	30	30	26½	22½	18½	16½	15	13½	13½
	Wheat	15	16	16½	17½	16½	16½	15	15	15	15	15	15
	Millet	...	...	...	...	...	...	...	...	...	...	...	...
DISTRICT AVERAGE.	Common rice	12	12½	12½	11½	11½	10	13	12½	14½	13½	18½	23½
	Indian corn	...	...	...	...	...	...	...	...	...	...	...	...
	Pulses	13½	12½	12½	21½	23½	20½	16½	14½	13½	12½	11½	11½
	Wheat	13½	13½	14½	15½	14½	13½	13½	13½	14½	15½	15½	14½
	Millet	...	...	...	...	...	...	...	...	...	...	...	...

\* This is the Collector's final estimate, submitted in his crop report for December 1873. I find, however, a set of report from the District Superintendent of Police, Colonel Fagan, in which the outturn of the various crops is not estimated as high as the Collector's figures put it. Colonel Fagan reported that the aous rice had been all over the district from one-fourth to one-third, and amun about one-fifth of a fair average crop. In subsequent special reports, Colonel Fagan recorded the following rates of outturn for the places specified:—

Tract Buriud.				Tract Nuralabad, Baidakara, and Bagmaree thanas.			
Aous rice	...	...	½ average.	Aous rice	...	...	½ average.
Amun "	...	...	¾th "	Amun "	...	...	¾ "
Tract Sudder sub-division, Beaulinh, Pooteeah, Charyhat, and Belunarah thanas.							
Aous rice	...	...	...	...	...	nearly	½ average crop.
Amun "	...	...	...	...	...	roughly	¾ "

24. It will be remembered that in the sections on Rungpore and Maldah I dwelt on the marked rise in prices which occurred in the first week of April 1874: the same fact is observable in the history of Rajshahye too. In his special narrative for the first fortnight of April, the Collector writes:—"In the first part of the fortnight prices rose considerably at several places in the district, and at some markets not more than nine seers were procurable for the rupee." A slight reaction then occurred, which was merely transitory and local until June, when all over the district the price of rice became famine rates.

25. In his special narrative dated June 2nd, the Collector writes:—"The worst feature of the fortnight has been the sudden rise in prices in almost all parts of the district; this occurred in the early part of the fortnight\*\*\*. Importations have been very slack. The condition of the people has not yet much changed for the worse, in spite of the high prices that have prevailed. There have been no cases of starvation, but there is no doubt whatever that the opening of poor-houses and the distribution of food both in return for labour and gratuitously has arrested such a result." These high prices continued throughout the month, and in his next narrative the Collector had to report that rice had in places reached the altogether prohibitive price of 7½ seers the rupee, and that there had been a total cessation of importation.\* Until this time there had been 232 tons of Government grain expended in the district, chiefly in the way of charitable relief.

26. The condition of the people, which hitherto had not been, all the circumstances considered, unsatisfactory, began now to cause anxiety to the local administration. On the 30th of July the Collector reports that people were undoubtedly in a worse condition in many places than they had hitherto been; that numbers were flocking to the poor-houses; that he had seen several persons so emaciated that they could scarcely walk; and a large number of children in a very reduced condition. No authenticated deaths, however, from starvation were reported, but the Collector "can safely assert that had it not been for the relief afforded, there would have been many deaths from starvation." What this relief in money and in grain amounted to, and the numbers of people relieved thereby, I now proceed to show.

*Statement of Grain Expenditure incurred in the relief of distress in the Rajshahye District during the Famine of 1873-74.*

Nominal quantity delivered, exclusive of transfer.	Distributed in charitable relief.	Sold for cash.	Paid as wages.	Advanced on loan.	Remainder.
Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
4,685	2,080	176	209	360	1,860

*N.B.*—Of the remainder, 134 tons come under the head of miscellaneous expenditure recoverable, 209 tons, or less than 5 per cent., on the nominal quantity debited to wastage, and 1,517 tons were as I learn from a comparison between the Famine Narratives and the Comptroller General's Accounts, sold after the relief operations had ceased.

\* As the river trade registration returns only show an import of 810 maunds and an export of 96,731 maunds of food-grain, and as the other trade of the district was, to judge by the returns, paralyzed, I have not thought it worth while to reproduce them.

*Statement of Cash Expenditure incurred in the Rajshahye District during the Famine of 1873-74.*

Charitable relief	Wages of labour.	Advances.	Total.
Rs.	Rs.	Rs.	Rs.
46,998	51,841	1,33,872	2,33,711

27. I now proceed to exhibit the number of those who were relieved by the expenditure tabulated above. The following statements, extracted from the official records, exhibit the numbers charitably relieved and those employed on public works. In this district narratives, those who were employed on light labour, spinning, weaving, &c., were treated in conjunction with those who were gratuitously employed. I have striven to separate the two classes in the figures I give.

*Statement showing the average number of persons charitably relieved in the Rajshahye District during the Famine of 1874.*

	FORTNIGHT ENDING ON THE							
	4th April.	18th April.	3rd May.	17th May.	31st May.	14th June.	27th June.	
Gratuitous relief ... ..	282	1,503	2,418	3,474	3,500	7,009	7,452	
Light labour ... ..	.....	55	1,784	3,168	7,937	7,665	14,321	
<b>Total ...</b>	<b>282</b>	<b>1,558</b>	<b>4,202</b>	<b>6,642</b>	<b>11,437</b>	<b>14,674</b>	<b>21,773</b>	

  

	FORTNIGHT ENDING ON THE							
	11th July.	25th July.	8th August.	22nd August.	5th September.	19th September.	3rd October.	
Gratuitous relief ... ..	18,181	28,408	25,655	18,791	10,749	2,577	888	
Light labour ... ..	16,117	32,422	26,092	21,028	12,789	5,114	630	
<b>Total ...</b>	<b>34,298</b>	<b>58,830</b>	<b>50,747</b>	<b>39,819</b>	<b>23,538</b>	<b>7,691</b>	<b>1,488</b>	

*Statement of Labourers employed in the Rajshahye District during the Relief Operations of 1873-74.*

DISTRICT.	Aggregate number of individuals employed.	AVERAGE DAILY ATTENDANCE EACH MONTH.										
		1873.		1874.								
		November.	December.	January.	February.	March.	April.	May.	June.	July.	August.	September.
Rajshahye ...	448,650	619	713	557	451	3,316	2,971	2,162	1,914	979	878	395

28. Now, analysing those statements in the way adopted in previous sections, it will be found that, as far as mere numbers are concerned, the former is equivalent to saying that 138,488 people were relieved for one month, and the second statement is in effect equivalent to saying that 14,955 people were relieved on public works for one month.

29. At the usual allowance of 20 seers for one individual, and 30 annas for another individual per month, the grain distributed in advances or sold, and the money advanced, sufficed for the maintenance of 101,414 people for a month. Therefore the expenditure in grain and money which in this district reached the hands of the people sufficed (subject to a reservation to be noticed) for the support of 254,857 individuals for a month.

30. In addition to the relief afforded as specified above, the employment given on the Northern Bengal State Railway also materially contributed to lessening the burden of this and other districts through which the line ran. I regret, however, I am unable to apportion off to each district its share of the advantage.









## SECTION XVII.

### BOGRA.

THE dearth of trustworthy statistical information regarding the agricultural condition of Bogra is almost as great as I have shown it to be in the case of Rajshahye. I have consulted and examined three sources of knowledge on the point without being able to extract a valuable result from any. I am therefore compelled to offer for this district the same unsatisfactory form of comment as I was forced to content myself with in the last section.

2. I shall briefly analyse the sources of statistical information I have consulted in justification of the foregoing remarks discrediting their usefulness. These sources are three in number—(a) the Revenue Board's Return XLIB; (b) the Famine Narrative and Crop Reports; (c) special statistics compiled by the late Collector, Mr. Kelly, and kindly placed at my disposal by the present incumbent, Mr. Magrath.

3. The district was surveyed in 1851-56, but I have been unable to procure a copy of the survey report, if indeed one was ever written; neither the Board of Revenue nor the Secretariat library possesses a copy.

4. The latest return (XLIB) is for the year 1872-73; it therefore shares, with the similar return for Rajshahye, in the defectiveness of the then existing statistical information, and, extrinsically, has no claims to accuracy. Intrinsically, also, it does not invite confidence; for some portions of it are irreconcilably discrepant from others on points of cardinal importance; for instance, in Part I A. the cultivated is shown to be 75 per cent. on the gross area, while in part III D. of the same return not only are the rainy crop lands alone shown as occupying the incredibly large proportion of 90 per cent. on the gross area, but the rainy and dry season crop lands together are made to occupy the entire district. This of course is an impossibility, and as such a result discredits the return, I shall be excused for not noticing it further.

5. The next source of information is the famine reports and narratives, and I regret to say I gather no more help from them than from the return XLIB. The gist of the statistical information in these narratives seems to be that twelve-sixteenths of the district area yield food crops, one-sixteenth jute, and one-sixty-fourth mulberry, the rest being uncultivated land. No clue is afforded to the method or principle on which these proportions have been determined; no information is given regarding the proportion of land which is double cropped or which yields non-edible grain; and there can be no tangible reason alleged for accepting these proportions in preference to any of the others. Indeed, showing as they do an extent of cultivation covering 84 per cent. of the district area, they are far more improbable than those I now proceed to notice. It is extremely unlikely that Bogra, with its population of 459 to the square mile, should have 84 per cent. of its area cultivated, while the neighbouring and similarly circumstanced

district of Rungpore, with 619 to the square mile, has only 73 per cent. under tillage.

6. The last source of information consists of the special statistics with which the Collector has favoured me. In his covering letter he says—"From the statistical inquiries made by persons deputed by Mr. Kelly (a former Collector of Bogra), corrected as far as possible by more recent inquiries, the total area under tillage in this district is 710,400 acres." The Collector proceeds then to give the acreage under each sort of crop, oil-seeds, jute, and mulberry excepted. Having referred to the report of the Jute Commission, I am enabled to supply estimates for jute cultivation; and the following statement therefore sets forth the latest information regarding agricultural statistics in Bogra. I shall give the statement first, and then comment on it.

7. Now the first criticism I have to offer on these estimates is that they shew the district to be cultivated to the extent of 74 per cent. on the gross area, and that such an extension of agriculture is incompatible with the condition of things in the adjoining district of Rungpore. For Rungpore we have in the Deputy Collector's statistical report information as trustworthy as it is possible to get by any means short of a cadastral survey. We must therefore, in our present state of knowledge, or rather comparative want of knowledge, accept the Rungpore statistics as correct and a standard by which to judge.

Gross area.	Uncultivated area.	RAINY SEASON CROPS.						DRY SEASON CROPS.					
		Rice.	Indian-corn.	Other food-grain.	Sugarcane.	Vegetables.	Jute.	Wheat.	Barley.	Gram.	Dhall.	Vegetables.	Oil-seeds, mulberry.
960,640	250,240	565,700	2,900	800	2,600	150	35,419	300	500	200	47,300	6,400	48,131

8. Bogra adjoins Rungpore, and there is very considerable similarity between the climate and soil of both districts. Of course there are variations, but the points of resemblance outweigh the points of difference as far as the establishment of a broad rule of similarity of soil and climate is concerned. This being so, it is not probable that, if in Rungpore with 619 people to the square mile we have only 73 per cent. of the district area under cultivation, we should have in Bogra 74 per cent. of the area under tillage, the population per square mile in the latter district being only 459. No doubt it may possibly be the fact that the less dense population in Bogra is co-existent with the more extensive cultivation; but I know of nothing at present which countenances such a possibility.

9. Now, if I accept the Collector's latest estimate of cultivation as approximately correct, the average outturn of the rice crop alone, [taking, on the Collector's authority, 18 maunds of husked rice as the average produce per acre] I shall reach an incredible result; I shall find that the annual outturn of the rice crop is in round numbers 364,000 tons; while the annual requirements of the population for food and seed will be covered by 150,000 tons. Supposing the people are so thoughtless of

their own interests as to retain from the produce of any one year a six months' reserve against contingencies, there will still be available for export in that year over 150,000 tons of rice. In other words, the export grain fund of Bogra is larger than that of any other district with which I have hitherto dealt. This result, improbable on the face of it, finds no shadow of support in our trade statistics, and is, as we shall presently see, contradicted in terms by the local authorities. I may be permitted to add that while in charge of the Serajgunge sub-division of the Pubna and Bogra districts I had an opportunity of forming an idea of the quantity of Bogra produce which passed through that market, the largest in Eastern Bengal. As far as food-grain was concerned, the quantity was not very considerable. I believe that I may cite in favour of this view the present Magistrate of Serajunge, Mr. Nolan, a gentleman whose opinion on this and cognate economic questions is of much weight.

10. With reference, therefore, to the preceding discussion, I conclude that either the agricultural statistics furnished me or the average rate of produce, or perhaps both, are at fault. I myself believe that both are inaccurate, and for this reason I decline making them the basis of any statistical calculation.\*

11. The figures, untrustworthy as an index to the extension of agriculture in Bogra, are however of use as showing what the agricultural products of the district are. Rice is the chief, jute comes next; sugarcane is the most important and valuable staple of the northern part of the district, and the chief cold-weather crops are mustard and til (sessmentum).

12. The export and import trade of Bogra has hitherto escaped registration; but there is no doubt that if this traffic were of very great magnitude we should find traces of it in our trade returns. The chief trade is in rice and jute. A late Collector whose long experience of this district renders him a qualified judge, writes† thus of the trade in these two staples:—"On the whole trade is rapidly increasing. My Deputy Collector, Baboo Dwarka Nath Roy, whose knowledge of the district, acquired especially during his income tax inquiries among the merchants, makes his opinion valuable, estimates the annual exports of rice at six lakhs of maunds and of jute at three lakhs. I think his estimate for rice is a probable one; that for jute he advances with less confidence." I need only add that if the Jute Commission's figures‡ for the acreage under, and average produce of, jute be approximately correct, then three lakhs of maunds is a moderate estimate of the annual exportation of this staple. Bogra imports wheat, dhall (pulse), and other rubber grain; but the magnitude of its importations has not been estimated.

13. The following statements show the average prices-current in the district and its average rainfall.

---

\* If a further proof were wanting of the uncertain character of statistical knowledge of agriculture in Bogra, it is furnished by the fact that the arable land (cultivated area P) was in 1873 returned to the Jute Commission as 411,001 acres. These curiously precise figures differ from all those on which I have commented.

† See Mr. Bignold's Administration Report for 1872-73.

‡ Jute growing area 36,419 acres; produce 5,31,285 maunds—*Report of Jute Commission*, page 66.

## Average Prices-Current in the Bogra District.

District average (1868-72.)	Common rice ...	33'8	33'8	33'4	33'2	31'7	28'8	27'3	27'7	28'4	29'3	32'1	29'9	
	Indian-corn ...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Pulses ...	14'1	14'4	12'8	13'5	14'3	14'3	14'1	13'8	14'7	14'9	15	15'5	15'5
	Wheat ...	17'8	17'4	17'6	17'7	19'2	19'5	18'3	18'4	17'6	16'7	16'8	14'7	14'7
	Millet ...	...	...	...	...	...	...	...	...	...	...	...	...	...

## Statement showing the average Monthly Rainfall in the District of Bogra.

SUB-DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Head-quarters ..	0'48	1'25	0'81	4'73	8'92	16'31	18'41	12'03	14'72	5'72	1'15	0'10

## PART II.

14. The rainfall in Bogra in 1872 was 66 inches, that is 18 inches under the normal fall. This scanty rainfall was also unseasonably distributed, the September rains coming too late to make the *aous* crops other than scanty. It had the effect, however, of recovering the *amun* or late crop, whose prospects had been seriously threatened. Regarding this *amun* crop of 1872, the Collector reported "the outturn of the *amun* or main crop has been estimated by an experienced Deputy Collector at three-fourths of a full one, but I am inclined to think he has taken the crops of the last three years as his standard, and all these were really bumper crops. I should say, therefore, that the outturn did not fall far short of the average of ten years, which happily in this district represents a very good crop. The yield of the cold-weather crops was, from the dryness of the season, much below the average." It may be considered, then, that although the character of the *aous* rice harvest of 1872 and rubbee of 1873 was unfavourable, the year's crops as a whole were not much below the average.

15. In 1873, however, the case was widely different; in this year the rainfall reached only 37'13 inches, that is 47 inches less than the normal fall; and in September and October, the critical months for the rice crop, only 3 inches fell out of a normal fall of 20 inches. The following is a statement of monthly rainfall in 1873:—

## Statement showing the Rainfall in the District of Bogra in 1873.

SUB-DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for year.
Head-quarters ...	In. 0'22	In. 0'12	In. 0'47	In. 3'12	In. 2'01	In. 6'74	In. 7'95	In. 12'83	In. 3'29	In. ...	In. ...	In. 0'35	In. 37'13

16. Notwithstanding this great deficiency in the rainfall, the outturn of the rice crop was not so poor as one would expect. A large portion of the Bogra district lies low and is studded over with marshes which retain water, and thus admit of irrigation being practised. Much good was done in this way in 1873, and the otherwise inevitable incidence of the failure mitigated in those parts of the country where irrigation was possible. The results of a careful examination of the country are embodied in the Collector's report of 4th December. It is there stated that in the west of thana Bogra and in thanas Adamdighi, Badalgachi, Khillal, and Panchbibi [an area of about 700 square miles], the average outturn was seven-sixtenths, while in the rest of the district [an area of about 800 square miles] the outturn was only three-sixtenths of (presumably) an average crop. I am unable to say in which portion rice cultivation is more extensive; but knowing that the Adamdighi thana is very productive of rice, I think it would be fair to assume three-eighths of an average crop as the outturn of the rice harvest in Bogra in 1873.

17. This extensive failure in the main food staple of the district immediately affected prices. In January 1874 the price of rice had risen to 13½ seers for the rupee, that is, two and a half times the normal rate, and this dearness of the market continued, though with growing intensity, until the end of July. It does not seem to have been affected by the yield of the mustard and sugarcane crops, the chief cold-weather crops, which, some rain having fallen in the fortnight ending January 9th, yielded three-fourths of an average crop. The cold-weather crops in Bogra are not usually of high importance. I produce a statement of the average prices-current in the district during 1874:—

*Statement showing the Prices-Current in the District of Bogra in 1874.*

KIND OF GRAIN.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ... ..	13'7	13'4	11'8	11'1	10'2	10'9	13'1	18	17'4	16'9	26'1	31'5
Indian-corn ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Pulses ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Wheat ... ..	12	12	12	12	12	12	11'4	10'5	11'8	10'5	10'7	11'8
Millet ... ..	...	...	...	...	...	...	...	...	...	...	...	...

18. It must not be supposed, however, that prices never rose above ten seers for the rupee in Bogra. The prices-current given above represents the mean of those which prevailed, not the extremes. The highest rates prevailed in June, when rice in the Sherepore thana sold for 7½ seers and in other thanas for 9 seers the rupee. Up till June only twenty-two tons of Government grain had been sold in the district, but when in June prices touched the prohibitive rates I have mentioned, it was more freely offered for sale. In July the markets assumed an easier tone, and in the end of August the ripening of an abundant crop of early rice terminated the greater portion of the people's difficulties.

19. Our trade statistics for 1874 do not show the importation of a single maund of food-grain into Bogra, nevertheless a considerable quantity of grain must have found its way into the district by routes not commanded by our registering posts. Bogra supplied Rungpore and Dinagopore in the early part of 1874, and there is evidence in the narratives to show that when depleted stocks in Bogra induced high prices, grain came in from the east. I can, however, on the papers before me, form no idea of the extent to which the people of this district are indebted to private trade as a means of tiding them over their difficulties.

20. The following statements exhibit the expenditure of grain and money incurred in the relief and prevention of distress in Bogra :—

*Statement of Grain Expenditure incurred in the District of Bogra during 1874.*

Nominal quantity delivered, exclusive of transfer.	Grain gratuitously distributed.	Grain sold for cash.	Grain advanced on loan.	Grain paid as wages.	Remainder.
Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
9,844	2,549	1,834	2,386	813	2,262

*N.B.*—Of the remainder, 2,250 tons were sold after the relief operations had closed, and 12 tons unaccounted for are written off to wastage.

*Statement of Cash Expenditure in Bogra during the Famine of 1874.*

Charitable relief.	Wages of labor.	Recoverable advance.	Total.
Rs.	Rs.	Rs.	Rs.
56,440	2,58,111	53,998	3,68,549

21. I next proceed to exhibit the number of people who were relieved by the expenditure tabulated above. The following tables of these charitably relieved or assisted by wages on relief works are actual figures extracted from official documents.

*Statement showing the Number of Persons Charitably Relieved in the Bogra District during the Famine of 1874.*

	FORTNIGHT ENDING ON THE—									
	28th December 1873.	11th January 1874.	26th January.	9th February.	23rd February.	9th March.	23rd March.	6th April.	18th April.	4th May.
Charitable relief ...	.....	.....	.....	.....	.....	.....	680	583	.....	8,100
Light labor ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total ...	.....	.....	.....	.....	.....	.....	680	583	.....	8,100



Statement showing the Number of Persons Charitably Relieved in the Bogra District during the Famine of 1874.—(Continued.)

	FORTNIGHT ENDING ON THE—							REMARKS.
	16th May.	1st June.	15th June.	27th June.	13th July.	27th July.	10th August.	
Charitable relief ...	9,150	33,795	13,705	9,302	*19,234	*42,927	*67,192	No details are given after the narrative of 10th August.
Light labor ...	.....	18,603	9,419	6,641	5,443	4,895	1,221	
Total ...	9,150	42,398	23,124	15,943	24,677	47,822	68,413	

\* The majority of these persons were composed of laborers on the various relief works, who, when leaving the relief works for their fields, were aided with a small grant of grain to help them over the transition period from dependence on Government to self-dependence.

Statement of Laborers employed in the Bogra District during the Relief Operations of 1873-74.

DISTRICT.	Aggregate number of individuals employed.	AVERAGE DAILY ATTENDANCE EACH MONTH.										
		1873.		1874.								
		November.	December.	January.	February.	March.	April.	May.	June.	July.	August.	September.
Bogra ...	8,315,540	...	45	587	1,566	8,000	29,385	45,454	17,521	8,060	...	...

22. Now, treating these two statements in the way already sufficiently familiar, it will be seen that the former statement is equivalent to saying that a daily number of 120,485 people was charitably relieved for a month, and that the latter is in the same way tantamount to saying that a daily number of 110,518 was relieved by wages also for a period of this month. The money spent on advances and the grain sold and advances on loan, if treated in the prescribed way, will appear sufficient for the daily support of 265,119 additional people for a month; therefore the aid afforded by Government or the Central Relief Committee in this district was sufficient to maintain in round numbers 496,000 people, or 71 per cent. of the population of the district for one month.

23. And making allowance for that portion of the cash expenditure which returned to the treasury in the shape of the sale proceeds of grain, the proportion of the whole population supported for a month did not probably exceed 65 per cent. on the total.

24. These figures take no account of the aid afforded to the district by the labor employed on the Northern Bengal State Railway.







## SECTION XVIII.

### PUBNA.

THE only district of the Rajshahye division which remains to be noticed is Pubna, concerning which it seems unnecessary to enter into minute details. The failure of the crops in Pubna was less severe than in any other district of the division; the distress was consequently lighter and the relief operations less expensive there than elsewhere. And from this more limited failure in the harvests and smaller need for extraneous aid no lesson of importance is to be learned which the sections on other districts do not sufficiently inculcate.

2. I propose, therefore, in case of Pubna, merely to record the local estimates of failure and to tabulate the expenditure on relief entailed by such failure. The general dearness of food in Pubna during 1874—a dearness due partly to the deficiency in the crop outturn, partly to the depletion of local stocks consequent on the demand of other districts more distressed—will be evident from a perusal of the prices-current given in the appendix. It might not have been so allowable to adopt this course did trustworthy agricultural statistics exist for the district; such, however, is not the case. The Collector, indeed, has favoured me with figures which have been calculated from the “known details of a tract which seems to represent very fairly the physical characteristics of the whole district.” These figures show that out of the 989 square miles total fiscal area of the district, 817 square miles are cultivated, 93 square miles are culturable, and 79 square miles are unculturable waste. It will be observed, however, that as this fiscal area does not agree with the district area recorded in the census report, and as the population of the fiscal area is not readily determinable, these figures cannot help me much in an inquiry regarding the sufficiency of the district food-supply in reference to its population.

3. No information, based on actual inquiry in specimen areas, exists regarding the proportions of the cultivated land occupied by various sorts of crops. But it is estimated by the Collector that three-fourths of the cultivated land in the district is under food-crops and one-fourth under jute and other non-edible staples. Of the area under food-crops, seven-eighths is said to be occupied by rice and one-eighth by other food-crops.

4. There are two stations in the Pubna district at which the rainfall is registered—Pubna head-quarters and Serajgunge. The normal rainfall and the rainfall at each of these stations in 1873 stand thus:—

			Normal rainfall.	Rainfall in 1873.
Pubna head-quarters	...	...	69·20	45·26
Serajgunge	...	...	58·22	35·33

5. It has already been frequently pointed out that the September and October rains are absolutely necessary for the due development of

the winter rice crop; that a greater or less failure in the crop necessarily follows a greater or less deficiency in those rains, unless the nature of the country be such that the previous moisture is retained or irrigation facilitated. In Pubna the normal fall from September to the close of the season is 17.42 inches at head-quarters and 15½ inches at Serajgunge; but in 1873 only 5.34 inches fell during these months at the head-quarters and only 5 inches at Serajgunge. A very considerable failure in the rice crop became consequently inevitable.

6. The great division of the rice crop into the autumn or *aous* and the winter or *amun* obtains in Pubna as elsewhere. In the sudder or head-quarters sub-division the *aous* rice forms about one-fourth, and in the Serajgunge sub-division about one-third of the entire rice crop. Upon this *aous* rice the effect of the drought in 1873 was that in the head-quarters sub-division about one-half and in the Serajgunge sub-division about five-sixteenths of an average crop was harvested.

7. The *amun* or late rice crop consists in Pubna of several varieties, the chief of which are the *assina* and *bowalia*, harvested in October, and the *digga*, harvested in November and December. The former, sown on lands of a higher level than the latter, form about three-sixteenths in the sudder and about one-eighth in the Serajgunge sub-division of the entire rice crop. In 1873 they (the *assina* and *bowalia*) were a failure in Serajgunge, while in the sudder sub-division they yielded no more than one-sixth of an average outturn.

8. The chief rice crop of the year is the "*digga*" variety of the *amun* or late rice; in both sub-divisions it forms about seven-sixteenths of the whole rice crop. In 1873 between one-half and one-third of an average outturn was harvested from this crop all over the district.

9. There are other varieties of winter rice grown in Pubna which seem in 1873 to have yielded from one-half to a full average crop. They are grown in the lowest lands most retentive of moisture. Taking these varieties into consideration, the Collector reports that in the sudder sub-division the rice crop of 1873 had been at least nine-sixteenths and in Serajgunge six-sixteenths of the average. It may therefore be safely assumed that all over the district the yield was not less than one-half of the average. Had it not been for the greater failure in other districts, the depletion of Pubna stocks, and the high prices caused thereby, it is not probable that the local failure in Pubna would have necessitated the adoption of any measures of relief. As the following statements show, those that were adopted were in accordance with the smaller requirements of the occasion:—

*Statement of Grain Expenditure incurred in Relief and Prevention  
of Distress in Pubna in 1873-74*

Nominal quantity delivered.	Grain distributed in charitable relief.	Grain sold.	Grain paid as wages of labor.	Grain advanced on loan.	Remainder wastage.
Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
584	70	144	100	208	2

*Statement of Cash Expenditure incurred in Relief or Prevention of Distress in Pubna in 1873-74.*

Distributed in charitable relief.	Paid as wages.	Advanced on loan.	Total.
Rs.	Rs.	Rs.	Rs.
12,211	22,456	66,519	1,01,186

10. The following statements show actual numbers of those who were gratuitously relieved or assisted by wages on relief works :—

*Statement showing the average Number of Persons Charitably Relieved in the Pubna District during the Famine of 1874.*

DISTRICT.	FORTNIGHT ENDING ON THE—												
	20th April.	6th May.	15th May.	28th May.	10th June.	24th June.	8th July.	22nd July.	6th August.	19th August.	2nd September.	16th September.	30th September.
Pubna ...	335	245	270	282	6,713	5,737	10,276	7,615	4,919	6,274	8,390	7,967	2,601

*Statement of Laborers employed in the Pubna District during the Relief Operations of 1873-74.*

DISTRICT.	Aggregate number of individuals employed.	AVERAGE DAILY ATTENDANCE EACH MONTH.									
		1873.					1874.				
		December.	January.	February.	March.	April.	May.	June.	July.	August.	September.
Pubna ...	290,430	111	229	621	1,635	863	2,598	2,214	1,118	252	40

11. Examining these statements in the usual way, it will be seen that the former is equivalent to saying that 28,440 individuals were relieved for a month, and that the latter states in effect that 9,681 people were aided for a similar period. The grain sold and advanced on loan and the cash advanced on loan afforded an allowance of 20 seers of grain each to 23,072 individuals, and 30 annas each to 35,480 individuals; these allowances being taken as sufficient help for one month. Therefore the expenditure tabulated above sufficed for the maintenance of 96,673 individuals, or 8 per cent. of the population, for one month. If the grain sold were paid for by cash which had been previously paid away, the effect would be to reduce the total number of distressed people from 8 to 7 per cent. of the population.





## PART II.



## TABLE OF CONTENTS.—PART II.

### BURDWAN DIVISION.

#### BEERBHOOM.

	PAGE.
Agricultural statistics. Analysis of revenue survey figures ... ..	301
Special statistical inquiries. Their results considered ... ..	302
Local estimates of agricultural statistics ... ..	303
Local information regarding crop-yield and consumption. Its unsatisfactory character	304
Character of district's food-crop cultivation ... ..	305
Trade statistics. Prices current. Rainfall ... ..	306
Character of antecedent seasons. Deficient rainfall in 1873 ... ..	307
Failure in the harvest. Prices current in 1873 .. ..	308
Condition of the district in 1873 ... ..	310
Extent and effect of relief expenditure ... ..	311

#### BANKOORA.

General description of the district. Revenue survey statistics ... ..	315
Local estimates of agricultural statistics ... ..	317
Agriculture in Bankoora. Average rates of crop-yield ... ..	ib.
Quantified estimates of food-grain supply. Local consumption ... ..	318
Exportation. Stocks in hand ... ..	319
Process of financing for rent. Prices current ... ..	320
Average rainfall. Antecedent seasons. Rainfall in 1873 ... ..	321
Deficient outturn. Comparison with 1866 ... ..	322
Trade. Prices current. Condition of the district in 1874 ... ..	323
Extent and effect of relief expenditure ... ..	324

#### BURDWAN.

Agricultural statistics. Revenue survey figures ... ..	327
Local estimates. Their unsatisfactory character ... ..	330
Character of district's agriculture. Trade statistics ... ..	333
Average rainfall and prices current ... ..	335
Antecedent condition of district. Short crops. Epidemic fever ... ..	336
Rainfall in 1873. Its injurious effects on harvests ... ..	337
Comparison of harvests in 1873 and 1865. Prices in 1874 ... ..	338
Trade statistics. Nature of distress in 1874 ... ..	339
Extent and effect of relief expenditure ... ..	341

### PRESIDENCY DIVISION.

#### NUDDEA.

Agricultural statistics. Survey figures wanted ... ..	346
Local estimates considered ... ..	347
Quantification of food-grain supply impossible. Description of district's agriculture	348
Statistics of trade, prices-current, and rainfall ... ..	349
Antecedent seasons. Rainfall and harvests in 1873 ... ..	350
Comparison of district in 1873 and 1865. Trade statistics ... ..	351
Extent and effect of relief expenditure ... ..	353



BURDWAN DIVISION.



## SECTION XIX.

### BEERBHOOM.

WHEN, in 1855, Captain Sherwill completed the revenue survey of Beerbhoom the district was more than double its present size. Since the completion of the survey it has parted with nearly 1,800 square miles of country to the Sonthal Pergunnahs ; and this loss of territory not having been recouped by transfers from other districts, Beerbhoom now shares with its neighbour Bankoora the enviable distinction of being the most manageable charge in Bengal.

2. The Beerbhoom of the revenue survey was naturally divisible into three unequal parts, each part differing from the other in productions, in character of soil, and in physical aspect of the country. The western part included pergunnahs Deoghur, Pabbia, and Kureyeh, which, covering an area of 1,700 square miles, now belong to Sonthalia. This part is elevated and undulating, with a rapid fall towards the south and east. The surface is often rocky or gravel covered ; and gneiss peaks, from 1,000 to 2,500 feet above sea-level, present bold land-marks which the Great Trigonometrical Survey of India has utilized. The cultivated land covers a small extent of country, compared with the large barren or forest-elad expanses of hill and valley.

3. The eastern part, containing an area of 631 square miles, is generally undistinguishable from the alluvial plains of the adjacent districts of Burdwan and Moorshedabad. The surface of the country is level ; the soil, light grey alluvial ; and the productions generally such as we find in deltaic districts.

4. The central tract, containing 780 square miles, exhibits the various stages of transition from the eastern alluvial to the western hilly country ; from the flat rice plain which needs no description, through the higher land, where the laterite soil first appears, on to the elevated regions already described. The present district of Beerbhoom occupies the whole of the eastern and, with the exception of some 70 square miles, all this central tract.

5. The pergunnah boundaries do not always coincide with the limits assigned by the revenue surveyor to those three great divisions of the former district of Beerbhoom, and this has caused some difficulty in determining, as far as from the survey records it can be determined, the agricultural condition of each division. I think, however, it may be accepted that in the year 1855 twenty-four per cent. of the present district area was uncleared or unculturable waste, and that the remaining 76 per cent. was either actually under tillage or was fallow, pasturage, or cleared land fit for cultivation. Concentrating attention on each

portion of the present district successively, I gather from these survey records that in the eastern tract 85 per cent. of the area was cultivated or fit for cultivation, while in the western part (the 'central' division of the revenue surveyor) the land under tillage or fit for cultivation was 73 per cent. on the gross area of that part.

6. This is the sum of the information pertinent to my purpose which the survey records furnish. They show in effect that twenty years ago 24 per cent. of the present district area was unculturable, waste, and uncleared jungle, and that 74 per cent. was partly under tillage and partly cleared arable land. The proportion, however, which was actually in cultivation cannot be determined.

7. Coming to more recent times, I find that Beerbhoom is one of the four districts in which, under orders of the Government, special statistical inquiries have been prosecuted. The results of those inquiries in Shahabad and in Rungpore have already been analysed and turned to account, and the special report on Jessore has also been made use of. The inquiries hitherto carried out in Beerbhoom hold a position midway between those that have been prosecuted in Shahabad and in Rungpore. While falling short of the complete representation of district economy aimed at in the Rungpore report, they are less concerned with 'specimen areas' and more concerned with the condition of large, well defined tracts, than is the report on Shahabad. The inquiries are being still prosecuted, the published results having reference to but three, and those the eastern three, out of the eight thanas which compose the district.

8. The thana boundaries in Beerbhoom have not yet been finally adjusted, but the areas of the thanas already examined are reported to be as follow :—

				Square miles.
Thana Burwa	...	...	...	104
„ Moureshur	...	...	...	217½
„ Sacoolipore	...	...	...	136½

9. I have intimated that these three thanas lie in the east of the district; Moureshur occupies the north, as well as part of the east. Burwa and Sacoolipore are alluvial in soil and highly cultivated; but in the western part of Moureshur the laterite soil makes its appearance, and there is more uncultivated land. This laterite soil and this uncultivated margin are more marked in the distinctively western thanas than even in Moureshur; hence it will be understood that the condition or extension of agriculture in the highly cultivated and fertile eastern thanas is no true guide to its condition or extent in the remainder of the district, which is less fertile and less highly cultivated.

10. I have analysed the statistical information collected for each thana, and the result, as far as I need at present formulate it, is this: In thanas Burwa and Sacoolipore, which represent the pure alluvial region, the cultivated is 83 per cent. on the gross area; and of the cultivated area 90 per cent. is *aman* or winter rice land, 5 per cent. grows the early rice [*kartik sali*] and subsequently a rubber crop, and



5 per cent. is usually devoted to the production of non-edible crops, though edible crops are also sometimes grown on it.

11. In thana Moureshur, on the other hand, the cultivated is 76 per cent. on the gross area; but of the cultivated land 92 per cent. is *amun* rice land, 3 per cent. early rice and rubbee land, and on 5 per cent. non-edible crops, &c., are grown.

12. Finally, all three thanas taken together show an extension of cultivation in this eastern tract covering 80 per cent. on the area; and they further show a sub-division of the cultivated area into 91 per cent. *amun* rice, 4 per cent. early rice and rubbee [*rubbee suna* in local vernacular], and 5 per cent. non-edible or other crop land. I am unaware of the existence of any statistics based on actual experiment or inquiry which would enable me so to modify these percentages with reference to the uncultivated western tracts as to make them representative of average conditions over the whole district.

13. Although, however, definite statistics to this effect are still wanting, local officers have recorded opinions as to the extent to which such modifications should be made. The earliest opinion I find is that of Mr. Geoghegan, for some time Officiating Collector, who, in the Board of Revenue's return 41B for 1872-73, estimates the cultivated land in the whole district to be 885 square miles, or nearly 66 per cent. on the district area. In a note supplementary of his reply to circular 70, the present Collector, Mr. Hime, adopts Mr. Geoghegan's view, and subsequently in part IA of his own return 41B for 1873-74 he still further adheres to it. When Mr. Geoghegan formed his estimate he had the statistics for thana Burwa only before him; I presume that Mr. Hime had not only these, but some further information supplied by the statistical officer. Both of these successive Collectors were, therefore, in a position more or less favourable to the formation of a true estimate, and their concurrent opinion, that 66 per cent. of the district is under cultivation, is entitled to such weight as personal ability and local knowledge of a general character can confer.

14. When, however, the return 41B for 1873-74 comes to deal with the details of cultivation, I find it irreconcilable with the statistical officer's report, or, indeed, with itself. In the statistical officer's report mention of, and provision for, rubbee food-grain crops are made; but the return 41B denies the growth of rubbee food-grain in this district. It is probable that the cold weather food crops in Beerbhoom, as in all Bengal districts, are of subordinate importance. Still they are of some moment, and taken in conjunction with *khesari*, which in Beerbhoom is grown with rice, they form a not unimportant item in the district food-supply. The return 41B gives no adequate information on this point.

15. Again, I have stated that in the initial part of the return the cultivated area of the district is estimated to be 885 square miles, or 564,400 acres. In part IIID, however, of the same return I find the rice area alone estimated at over 610,000 acres, and to the explanation of this discrepancy neither the return itself nor the description of the agriculture of the district contained in the statistical report furnishes a clue.

16. If, then, I am precluded by these difficulties from adopting the detailed information in return 41B, I can find in my remaining source of knowledge—the famine literature—no materials to fill up the void. Wherever the estimates of cultivation in the famine reports are not based on the return 41B, they are devoid of even the appearance of precision; they give a general idea of the matters they deal with, but they afford an inadequate basis for statistical calculation.

17. The only plan I can think of, which under the circumstances would be likely to give approximately correct results, is to extend to the cultivated area accepted by both Collectors the proportions of crop cultivation deducible from the statistical report on the district. I doubt, however, whether the results which I note below\* form a true basis for calculations regarding district food-supply. They are affected on the one hand by the uncertainty which attaches to the Collector's estimate, and on the other by the error inherent in extending to the whole conditions which prevail in a part which imperfectly represents the whole. Seeing that these statistical inquiries are being further prosecuted in Beerbhoom, and that we shall soon have materials for a statement of agricultural statistics in the district, it is perhaps better to abstain now from further speculations on the subject.

18. Before I pass on to the trade of this district, I would note three points on which the papers before me suggest the advisability of local inquiry, with a view to clearing up certain difficulties which now exist. These points are—(a) the average daily consumption per head of the population in Beerbhoom, (b) the proportion of late to early rice land, and (c) the average outturn of paddy per acre. The Collector in his reply to circular 70 states that a man of the upper class consumes  $\frac{1}{3}$ ths of a seer of grain daily, besides other food; that a man of the middle class consumes  $1\frac{3}{8}$ th seers of food-grain daily; and that a labourer consumes  $1\frac{1}{2}$  seer of food-grain daily. Now, if these averages of daily consumption be correct, the average for all classes in the district will be considerably above two-thirds of a seer daily; and indeed Mr. Geoghegan, who has edited the statistical account of Burwa thana, accepts one seer [adding, however, that this is 'certainly not under the mark'] as the daily average consumption of food-grain for all classes. It would be well to determine, with all attainable precision, whether the average consumption differs from that which prevails in ordinary Bengal districts; whether the intermixture of hardy aboriginal tribes in the population

* Gross area of district.	Uncultivated area.	CULTIVATED AREA.		
		Amun rice.	"Rubbee suna," early rice and rubbee land.	Other crops, edible and non-edible.
Acres.	Acres.	Acres.	Acres.	Acres.
800,180	202,480	516,688	22,607	28,384

QUERY.—Whether this "rubbee suna" land corresponds to the "tava" rice land of the famine narratives, and whether the "aus" land is not included under the general head of amun?

of this district raises the average rate of daily consumption above two-thirds of a seer of grain.

19. The second point on which definite information is needed is the proportion of early to late rice land. The statistical report classing early rice as *kartik sali* allots to it not more than one-nineteenth of the whole rice area. The Collector on the other hand states there are two sorts of early rice, *tara* reaped in August-September, and *aus* reaped in October-November; and he makes the *tara* variety less than one-sixteenth, but the *aus* between one-third and one-fourth of the entire rice crop. The necessity of definite information on this point will be obvious from the fact that the *aus* and *tara* crops in 1873 are stated to have suffered much less than the *amun* or late rice. Had we, then, precise information on all other points than on that of the relative extension of *tara*, *aus*, and *amun* rice cultivation, our defective knowledge on this one point would preclude us from forming a definite conception of the effect on the district's food-supply in 1874 of the failure in the preceding year's crops.

20. The third point, which in the agricultural economy of this district requires elucidation, is the average yield of the rice crop per acre. The statistical officer states the average produce per acre of rice land is 2,778 lbs. of paddy, which gives  $21\frac{1}{2}$  maunds of husked rice. In Mr. Otley's "Note on Rice Statistics," compiled from various sources, official and non-official, the average yield per acre of the best rice land in Beerbhoom is given at 25 maunds, of the second class land at 20 maunds, and of the inferior land at 10 maunds of paddy. The maximum yield is said to be 27, 22, and 12 maunds for the first, second, and third description of lands respectively. Lastly, the Collector, Mr. Hime, assumes an all-round average of 15 maunds cleaned rice per acre as the outturn of a full crop.

21. It seems the statistical officer's estimate is unreasonably high; and this is one of the points on which his work might be advantageously tested by actual experiment. Attention has doubtless already been given to the other apparent incongruities in his report; to the fact of his showing that in Moureshur thana, which has 480 people to the square mile, but  $76\frac{1}{2}$  per cent. of the area is cultivated, while in Sacoopipore thana, with only 455 people to the square mile, 85 per cent. of the area is said to be under tillage. It will also not have escaped notice that while in Sacoopipore this, comparatively speaking, sparse population of 455 to the square mile is shown as co-existent with an extreme extension of cultivation, in thana Burwa, on the other hand, a population 36 per cent. denser is said to co-exist with a cultivated area 6 per cent. less than, relatively speaking, obtains in Sacoopipore. These are anomalies which, as the Beerbhoom statistical report now stands, invite inquiry and explanation.

22. I now come to the trade of Beerbhoom. The exports consist, I find, of rice, lac, indigo, and raw silk, with a small quantity of oilseeds; while the imports are cotton, piece-goods, tobacco, pulses, wheat, salt, and metal-ware. This trade is mainly railway borne, and

the following statement exhibits its magnitude in the year 1872, the most normal for which statistics are forthcoming :—

*Railway Traffic Statement for the Beerbhoom District for 1872..*

	1ST QUARTER.				2ND QUARTER.				
	Food-grain.	Indigo.	Seeds.	Other com- modities.	Food-grain.	Indigo.	Seeds.	Other com- modities.	
Imports ... ..	Mds. 23,587	Mds. .....	Mds. .....	Mds. 88,522	Mds. 22,579	Mds. .....	Mds. .....	Mds. 1,13,544	
Exports ... ..	2,92,583	352	763	36,141	2,69,420	.....	2,817	14,502	
	3RD QUARTER.				4TH QUARTER.				Total food-grain.
	Food-grain.	Indigo.	Seeds.	Other com- modities.	Food-grain.	Indigo.	Seeds.	Other com- modities.	
Imports ... ..	Mds. 22,389	Mds. .....	Mds. .....	Mds. 81,651	Mds. 22,603	Mds. .....	Mds. 81,439	Mds. 91,153 or 3,255	
Exports ... ..	1,45,865	1,312	1,595	1,11,665	758	1,231	12,391	8,19,543 or 29,269	

23. The exports of food-grain are thus shown to be  $7\frac{1}{4}$  lakhs of maunds, or 26,000 tons more than the imports. Although the railway conveys the largest share of the export trade, it still does not convey all. There must be some overland transport, and some grain must be sent away by boat. The exports in normal years are probably not less than 35,000 or 40,000 tons of food-grain alone. From the direction of the railway line, as it passes through Beerbhoom, it is more probable this trade is local than that other districts contribute their share to the total. On this, however, there can be no certainty.

24. The following statements show the average prices current and the average rainfall in Beerbhoom :—

*Statement showing the Average Prices Current in the District of Beerbhoom from 1868-72.*

Kind of grain.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Common rice ... ..	27'8	27'4	28'2	27'0	25'9	23'8	22'5	22'5	23'5	23'5	25'2	25
Indian-corn ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Pulses ... ..	20'3	21'5	22'0	23	21'9	20'5	20'7	20'3	22'3	20'6	20'6	20'1
Wheat ... ..	17'4	16'0	16'6	19'2	18'8	18'4	17'7	16'8	16'6	16'4	15'9	14'9
Millet ... ..	30'0	30'	33'0	42'3	53'	32'5	25'5	38'4	38'7	40'5	36'8	32'5

## Statement showing the Average Monthly Rainfall in the District of Beerbhoom.

SUB-DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Sudder ... ..	0'41	0'92	0'81	0'81	2'48	8'40	13'03	12'34	9'33	4'41	0'13	0'14	53'21

## PART II.

25. The weather in Beerbhoom during 1872 was unseasonable, the rainfall during the ploughing season being very scanty. The rice crop was, therefore, a short one, except towards the east, where the rainfall was greater than in the rest of the district, and where irrigation is more general than in the western parts.

26. It was not from unfavourable harvests alone that Beerbhoom suffered in this antecedent period. The epidemic fever, which had for some time previously afflicted Beerbhoom in common with the neighbouring districts, assumed in 1872 a more virulent type and invaded a wider area. "This epidemic fever, combined with the short rice crop, cannot but have had a lowering effect on the condition of a population almost entirely agricultural, and in the villages where the fever was worst the condition of the people was indeed deplorable, and cultivation received a temporary check. Prices, too, which in the year 1871-72 had been low and steady, began to rise in May 1872. They continued to rise till the ensuing August, when they stood about 50 per cent. above what had been the average of the previous year. From August to December they showed a steady decline, and then began to rise, and continued rising steadily" till the summer of 1873.\* It will thus be seen that Beerbhoom did not enter unweighed on the trials that ensued.

27. In 1873 the rainfall in Beerbhoom was normal in quantity, but very abnormal in distribution. The usual rainfall in May and June is, as we have seen, nearly 11 inches. In May and June 1873 only 5 inches fell. In July the normal fall is 13 inches: in July 1873 almost double that quantity fell.

28. Instead of an interval of fine weather after such heavy rain there were 17½ inches in August 1873—that is, 5 inches more than customary. Finally, in September and October, when abundant moisture—a normal fall of about 14 inches—is wanted, not more than about 4½ inches fell. The rainfall in Beerbhoom in 1873 affords striking example of how sufficient moisture may be neutralized by unseasonable

\* District administration report for 1872-73.

308 *Beerbhoom : Antecedent Period—Rainfall in 1873—*

distribution. The following table shows the rainfall in 1873 in Beerbhoom:—

*Statement showing the Monthly Rainfall in the District of Beerbhoom in 1873.*

SUB-DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Sudder ... ..	0·02	...	1·13	0·30	1·12	3·92	24·74	17·49	3·74	0·91	0·08	...	53·45

29. The effect of this abnormal weather on the harvest varied with the crop and with the place. If we divide the district by vertical lines into three nearly equal parts, we shall have in the western part three-fourths of an average outturn for the *aus*, and one-half an average yield for the *amun* rice. In the eastern portion we shall have for the *aus* rice one-half, and for the *amun* rice five-sixteenths of an average crop. But in the central part of our imaginary division the failure was greatest, the *aus* harvest there being only estimated at three-eighths, and the *amun* at one-fourth of an average crop. Summing up the results of the harvest, the Collector in his report for December states there had been all over the district nine-sixteenths of an average *aus*, and three-eighths of an average *amun* harvest; and this estimate he adheres to in his final report on this subject. The district, therefore, lost more than half its customary food-grain produce; for, although the exact proportion borne by *amun* to *aus* rice land is not known, there is no doubt whatever that the former is twice—it may be three times—as extensive as the latter.

30. The Collector in his second crop report essays to quantify the produce of both early and late rice in 1873, and his estimate is that the maximum outturn of both was  $3\frac{1}{2}$  million maunds, or 125,000 tons.\* Mr. Hime merely indicates the results of his calculation, not the steps by which he had reached them. I gather, however, from these results that he estimates the rice-growing land in the district at about 500,000 acres, which is not very different from the figures given in the foot-note to paragraph 17.

31. If the Collector be near the mark in his estimate, then, remembering that the cold-weather crops are in this district of small importance as a source of food-supply, and computing the daily consumption at two-thirds of a seer per head, the local production of food-grain in Beerbhoom for the year ending with August 1874 is shown to be less by two months' supply than the normal wants of the inhabitants for food. Of course, however, it is uncertain whether the Collector's estimate is correct or not.

\* The Collector adopts an average yield of 5 maunds husked rice per beegha (15 maunds husked rice per acre).

32. I now produce a statement of the prices current in Beerbhoom in 1874:—

Statement showing the Prices Current in the District of Beerbhoom in 1874.

SUB-DIVISION.	Kind of grain.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
		Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Sudder	Common rice	13·7	12·2	13·3	12·6	11·9	11·9	12·1	11·2	11	12·2	16·3	19
	Indian-corn..	...	...	...	...	...	...	...	...	...	24	27	27
	Pulses	...	...	...	...	...	...	...	...	...	...	...	...
	Wheat	10·3	10·5	10·6	12·7	13·4	12·5	12	12	12	12	12	12
	Millet	...	...	...	...	...	...	...	...	...	...	...	...

33. We have seen that in the early months of normal years the price of rice, which is the main article of diet in this district, fluctuates about 27 seers for the rupee. In the beginning of 1874 the price of rice was double the usual price, and this tension of the market continued throughout the year. Notwithstanding this local dearness of food, exportation from the district during the first quarter of 1874 did not cease to be brisk. The Collector in his earlier reports chronicles the fact that merchants continued to send grain to up-country markets, and he was inclined to deduce from this fact the existence of considerable stocks in hand. A more probable explanation, however, is afforded by his narrative of the 6th of April, in which the fact of a supply of food-grain being in the grain-dealers' hands, and thus available for export, is attributed to the necessity the people were under of selling some of the year's produce in financing for their rents. When the period for liquidating rent charges had passed grain was less freely thrown on the market, home prices rose, and exports consequently diminished. The following statement exhibits the railway-borne trade of the district during 1874:—

Railway Traffic Statement for the Beerbhoom District for 1873-74.

	4TH QUARTER OF 1873.				1ST QUARTER OF 1874.			
	Food-grains.	Indigo.	Seeds.	Other commodities.	Food-grains.	Indigo.	Seeds.	Other commodities.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Exports ... ..	1,03,023	91	846	12,081	55,077	20	1,445	55,439
Imports ... ..	7,947	.....	.....	76,101	19,969	.....	.....	2,04,443

*Railway Traffic Statement for the Beerbhoom District for  
1873-74.—(Continued.)*

	2ND QUARTER OF 1874.				3RD QUARTER OF 1874.				Total food-grains.		
	Food-grains.	Indigo.	Seeds.	Other commodities.	Food-grains.	Indigo.	Seeds.	Other commodities.			
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Tons.	
Exports ... ..	50,361	.....	5,890	11,347	10,908	.....	587	20,227	2,19,374	or 7,835	
Imports ... ..	40,721	.....	.....	1,18,566	75,882	.....	.....	1,37,091	1,44,549		
				Deduct Mr. Toynbee's despatches				...	...	1,05,157	
				Remainder	...	...	...	...	39,392	or 1,407	

34. The effect of high prices and diminished supplies first showed itself in Beerbhoom, as elsewhere throughout the distressed area, in the contraction of private charity, and the early appeals of the mendicant classes for public relief. This occurred early in the year, and was followed in March by pinching and want among the labouring people, to whom the failure in the crops meant the denial of harvesting employment by which they in a great way subsist. These difficulties were enhanced by the "continued drought, excessive heat, and parching westerly winds, unfavourable to growing crops, to agricultural operations, and exhausting the already scanty supply of water in the village tanks." To add to the troubles of the district at this period (March-April) a virulent outbreak of cholera occurred, and prevailed throughout the district, causing much mortality and great alarm.

35. Matters continued to grow worse during the month of May. The Collector, Mr. Hime, whose reports breathe a strong spirit of confidence in the ability of the people to help themselves, states in a report dated May the 4th—"Misery there must be, more or less, when the adult bulk of the labouring classes is reduced from [their daily fare of] one and a half seer of rice to three-fourths or half seer per diem each; but the numerous relief works and houses, aided by private charity, have as yet prevented misery from degenerating into starvation."

36. As the month of May wore on, however, the prospects became still more overcast. On the 18th of May the Collector writes—"The position has been sensibly altered for the worse by a fortnight's continued drought; pauperism and crime have increased; two grain robberies have occurred; the standing crops of *til* (oil-seed), indigo, and mulberry are much injured; all agricultural operations, except top-dressing with the deposit of dry tanks, are suspended. The cultivators are being reluctantly forced on the relief works by distress. Cholera and small-pox are ravaging the district. Rice is not procurable in many villages at market rates,\* though still to be had without difficulty in the principal marts; water supplies are running very low." Under these circumstances the appointment of a special relief officer to Beerbhoom and the establishment of an organized system of relief administration were decided on by Government. The

\* Which were then double normal prices.



expenditure incurred in this administration of relief, and its extent, I now proceed to exhibit :—

*Statement of Grain Expenditure incurred in the Beerbhoom District during the famine of 1873-74.*

Nominal quantity delivered, excluding transfers.	Grain distributed in charitable relief.	Grain sold for cash.	Grain advanced on loan.	Grain paid as wages of labour.	Remainder.
Tons.	Tons.		Tons.	Tons.	Tons.
3,719	1,725	Nil	800	1,004	190

*N.B.*—Of the remainder, 170 tons are shown in the accounts as having been sold (presumably after relief operations had ceased), and 20 tons are written off to wastage.

*Statement of Cash Expenditure incurred in the Beerbhoom District during the famine of 1873-74.*

Charitable relief.	Wages of labour.	Advances on recoverable loan.	Total.
Rs.	Rs.	Rs.	Rs.
49,456	64,809	61,615	1,75,880

37. I now proceed to exhibit the number of people relieved by the expenditure tabulated above. The following statements exhibit actual figures :—

*Daily Average Number of Persons charitably relieved in the Beerbhoom District during the famine of 1874.*

DISTRICT.	FORTNIGHT ENDING ON THE—							
	9th March.	23rd March.	4th April.	18th April.	2nd May.	16th May.	30th May.	13th June.
Beerbhoom... ..	149	680	683	1,796	3,600	5,475	9,801	10,013

DISTRICT.	FORTNIGHT ENDING ON THE—							
	27th June.	11th July.	25th July.	8th August.	22nd August.	5th September.	19th September.	3rd October.
Beerbhoom... ..	18,014	20,254	24,615	31,395	38,321	37,439	31,243	21,057

*Beerhoom: Trade—Relief Expenditure.*

*Statement of Labourers employed in the Beerhoom District during the relief operations in 1874.*

DISTRICT.	Aggregate number of individuals employed.	AVERAGE DAILY ATTENDANCE EACH MONTH.								
		February.	March.	April.	May.	June.	July.	August.	September.	
Beerhoom ... ..	1,340,580	652	2,107	3,846	8,054	10,352	6,655	7,826	5,194	

38. Now, examining these statements in the manner heretofore adopted, it will be seen that, as far as number is concerned, the former is equivalent to saying that 120,157 individuals received gratuitous assistance for a month; and the latter that 44,686 individuals received wages on relief works for a similar period. Estimating the numbers relieved by advances of money and grain in the manner already prescribed, it will be seen that 77,661 individuals were relieved by such advances for a period of one month. In fine, the effect of the entire expenditure tabulated above was to afford subsistence to 242,504 individuals, or about 35 per cent. of the population for one month.





## SECTION XX.

### BANKOORA.

THE revenue survey of Bankoora was completed in 1863 by Lieutenant-Colonel Gastrell, who drew up an interesting topographical account of the district.

2. "The district of Bankoora," says Colonel Gastrell, "forms with Beerbhoom, the border land where the alluvial plains of deltaic Bengal merge in the undulating up-lands and hilly country of Chota Nagpore. To the south and east of Bankoora the country is low and flat, presenting the uninteresting appearance of the deltaic rice plains, but to the north and west the ground gradually rises and becomes undulating. Rocks crop out, and small knolls, covered with boulders and brushwood, diversify the monotony of the scene. Rice lands and swamps give way to large tracts of low, thorny jungle, interspersed with trees of larger growth. The close-packed hog-backed huts of Bengal villages gradually merge into the mud walls and straight roofs common to Sonthal clearings; until, crossing the western boundary of the district and entering Purulia, hills and forests, rocks and mountain streams, and scattered hamlets take their places in the landscape; and the busy scenes of the fertile plains of Bengal change into the solitude and wildness of her forests."

3. On the geological structure of the district, Colonel Gastrell proceeds to say that, "viewing the district by itself, there is but little to interest the geologist; taken, however, in its intimate connection with the alluvial plains of Bengal, and the Tipperah and Purulia hills to the east and west, the district is a link in the chain of formation, by no means devoid of interest. In bygone days it is probable that these low undulating up-lands formed the sea-coast, or, earlier still, were buried beneath its waters; and that between them and the hills of Tipperah lay a widespread open bay; that as time rolled on these up-lands were slowly but gradually upheaved; that the Ganges, Brahmapootra, and other minor streams bringing down their yearly load of deposits, formed islands in the bay between them (similar perhaps to the present Soonderbuns formation), which were soon covered with grass reeds and low jungles; that the continuously increasing deposits raised and knitted these together in larger masses on which forest trees eventually made their appearance, consolidating and protecting them still more; that so they went on accumulating and spreading, until they and the main land formed one tract—the present fertile plains of Lower Bengal."

4. Passing from the general features of the district to matters of detail, I find that, as in the case of other districts, so in the case of Bankoora, the revenue survey records indicate—(a) the quantity of uncleared or absolutely unculturable land, (b) the quantity of land

which is cultivated or fit for cultivation. They afford no clue to the proportion of the latter actually under tillage. The following is an abstract of the survey statistics :—

*Agricultural Statistics of the Bankoora District—(extracted from the Revenue Survey Report).*

Gross area.	Area cultivated or cleared and fit for cultivation.	UNCULTURABLE AND UNCLEARED AREA.						
		Roads.	Jheels.	Hills.	Jungle.	Tanks, rivers.	Mango groves.	Village sites.
Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
868,090	526,919	2,478	661	108	275,556	40,153	3,848	17,467

5. Twelve years ago, therefore, 61 per cent. of the gross area of the Bankoora district was either under tillage or was cleared land, pasturage, fallow, &c., fit for cultivation. This is the extent of help I can draw from the survey statistics.

6. The other existing sources of information regarding the agricultural statistics of the district are the return 41 B. and the famine literature. The former source was compiled in 1874, and possesses some special claims on our belief. In reply to an application of mine for definite statistics for specimen areas, the present Officiating Collector, Mr. Larminie, writes:—"The figures furnished by me to the Board of Revenue in return No. 41B. regarding the culturable and unculturable portion of the area of this district, and the several sub-divisions of the culturable portion, according to the various kinds of crops grown thereon, were obtained by generalizations from the results of inquiries made during the year 1872-73, with regard to a limited area, by an officer specially appointed for the purpose."

7. I find also that, preliminary to answering circular No. 70, Mr. Larminie, "in order to secure as much accuracy as possible," utilized his staff in procuring detailed information regarding the agricultural condition of Bankoora. The results of these special inquiries go to confirm the general trustworthiness of the return No. 41B., which thus assumes the position of a carefully framed and, in all likelihood, approximately correct estimate of agricultural statistics for the district. It must not, however, be forgotten that in Bankoora the cultivated tracts are not as continuous as in most other Bengal districts; there is much uncleared or waste land interspersed between the expanses of tillage; often the cultivated plots are oases surrounded by wide stretches of waste land or uncleared jungle. This being so, it was a matter of no ordinary difficulty to find a limited area truly representative of the agricultural condition of the whole district; and therefore, in the case of Bankoora, generalizations had from specimen areas are more liable to error than they would be in the case of districts with more uniform soil and cultivation. With these few remarks I reproduce Mr. Larminie's estimate, unmodified in substance, but in form slightly altered.

*Estimate of Agricultural Statistics for the District of Bankoora.*

Gross area of district.	UNCULTIVATED.		RAINY SEASON CROP AREA.			DRY SEASON CROP AREA.	
	Unculturable.	Culturable.	Rice.	Other food-grain crops.	Non-food crops.	Food-grain crops.	Non-food crops.
Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
861,440	213,120	225,280	397,217	1,560	9,651	6,875	6,695

8. These estimates show an extension of cultivation covering 50 per cent. on the area of the district; they are, it will be seen, in harmony with the survey statistics, which show the cultivated and arable land to have been in 1863 61 per cent. on the area. The arable land not under tillage was probably more than the difference [11 per cent.] at the time of the survey, but has been since reduced by the progress of agriculture to this proportion.

9. There are three rice crops in Bankoora—the *aus*, reaped in September and October; the *nawan*, reaped in October and November; and the *amun*, reaped in November and December. Taking an average for the whole district, the Collector thinks that in ordinary years the *aus* yields one-eighth, the *nawan* one-fourth, and the *amun* five-eighths of the total rice outturn. He also states that the *rubbee* crops occupy such a small proportion of the cultivated area in the district, that they contribute but little to the gross food-supply.

10. On the question of the average yield per acre of the rice crop in Bankoora the information before me is unsatisfactory. There can be no doubt, however, that the average of 33 maunds paddy (20½ maunds of cleaned rice), given in Mr. Otley's "Note on Rice Statistics," is unreasonably high. It would be too high as an average for even the best *amun* rice land in the richest tracts of Bengal. The Collector of Bankoora assumes an average of 15 maunds cleaned rice per acre, but he does not advance this average with full confidence in its correctness.

11. If the Collector's average of 15 maunds husked grain per acre be, like the same average assumed for his district by the Collector of Beerbhoom, meant to express the yield of a *full* crop, then I have less objection to make: an ordinary good crop is from 10 to 15 per cent. under a full crop; and the average yield of an acre of rice land in Bankoora in an ordinary good year would thus be about 13 maunds of husked grain.

12. It seems to me, however, that even 13 maunds is a high average to assume. I think it may be safely asserted that none of the rice land in Bankoora is more productive than the corresponding sort of land in Burdwan or in Midnapore; and it may be equally safely assumed that the average rate of produce which prevails in Burdwan and Midnapore will certainly not be less, but in all probability more, than that which prevails in Bankoora. In neither Burdwan nor Midnapore is the average produce per acre estimated above 22½ maunds of paddy, which gives something less than 11 maunds or half a ton of husked rice.

Indeed the Collector of Midnapore, Mr. Harrison, "doubts whether this rate is not a little in excess."

13. All things considered, then, the circumstances prevailing in adjacent districts and the intermixture in Bankoora of the less productive laterite with the more fertile alluvial soil, I personally incline to the belief that 12 maunds of husked grain is a proper average rate of produce per acre to assume for ordinary good years. As the question, however, is involved in doubt, I hesitate to act on my own belief, and I adopt, in deference to local authority, an average rate of 13 maunds per acre. It is to be hoped, however, that the question may be put beyond doubt by actual experiment. An experiment of the kind would involve no expense, and but an inconsiderable degree of trouble, while the results it would give would be useful and valuable.

14. Assuming, then, for Bankoora 13 maunds cleaned grain as the average rate of produce per acre of rice land, and adopting 4 maunds per acre for the outturn of other food-grain crops [following in this the return 41B.], the food-grain produce in an ordinary good year would stand thus—

	Tons.
Rice ... ..	184,422
Other rainy-season crops...	223
Cold-weather food-grains...	982
Total	185,627

15. We have seen, however, that it is the custom in the adjoining district of Beerbhoom to sow *khesari* with rice; it is also the custom in Bankoora to sow pulse with the up-land rice crops. No suitable provision for the produce of this pulse crop has been made in the preceding estimate of outturn, and indeed, having regard to the system of cultivation—the crop being to a large extent grown simultaneously in the same field with the up-land rice—it is impossible to do more than offer a conjectural estimate of the produce. I venture, therefore, to estimate that the year's production of food-grain in the district in an ordinary good year is 195,000 tons.

16. Having thus estimated the annual production of food-grain, the next point is to consider the question of annual consumption. The Collector thinks that the average daily consumption of each adult male is three-fourths of a seer, of each adult female two-thirds of a seer, and of each child half a seer of food-grain. These averages differ so slightly from the average I have adopted for ordinary Bengal districts [two-thirds of a seer] that the variation is unworthy of special notice or discussion. It seems, however, there are good reasons for doubting the applicability to either Bankoora or Beerbhoom of the average prevalent in districts inhabited by pure Bengalis. The admixture in the populations of the two former districts of a considerable aboriginal element introduces a disturbing influence. There is no doubt that a hill man will eat more food than an average Bengali, and it seems to follow that if two-thirds of a seer be a fair average where Bengalis alone are



concerned, this average should be raised when we have to deal with a more robust population.

17. I have already observed\* that the statistical officer in Beerbhoom considered the average consumption of food-grain per head of the population of that district to be one and a half seer daily. Doubtless this average was excessive, but the well-informed editor of the statistical officer's report did not reduce the average below a seer ; he suggests indeed that a seer is a high average, but from this suggestion I gather that in Mr. Geoghegan's opinion three-fourths of a seer would not be other than a fair average. If three-fourths of a seer be a fair average for Beerbhoom, it will not be otherwise than fair for the sister district.

18. Although I am strongly of the opinion that the average daily consumption per head of the population in Bankoora is more than two-thirds of a seer, that it probably is three-fourths of a seer, I still abstain, in deference to the Collector's opinion, from importing my view into the succeeding calculation. By thus placing my opinion on record I shall probably succeed in attracting attention to it, and by that means having the question settled by actual experiment or inquiry.

19. At the rate of two-thirds of a seer per individual daily the annual consumption of food-grain in Bankoora is 114,450 tons. The requirements of the district for seed-grain at the usual rates per acre will reach 16,400 tons ; therefore to satisfy the absolute wants of the district 131,000 tons of food-grain, in round numbers, are annually required. Due provision made for those absolute wants, there will remain a surplus from the year's production of, say, 64,000 tons, or 18 lakhs of maunds, and this surplus must be partly exported, partly stored, and partly wasted. If, broadly speaking, the wastage be calculated at the rate hitherto adopted of 5 per cent. on the annual production, the quantity of grain which from one year's production must, on the foregoing calculations, be either exported or stored will reach about 54,000 tons, or 15 lakhs of maunds in round numbers. The question then is, how much of this grain is exported and how much is stored ?

20. To this question I can only give a conjectural answer, for there are no trade statistics available for the district, and the references to this topic in administration reports do not tend to clear away the obscurity which surrounds it. In one administration report (that for 1872-73) I find it absolutely denied that rice forms an article of export trade at all. "The exports from the district are chiefly in *tussur* and jungle products, but rice is imported in considerable quantities. Inland trade does not present any remarkable features, as might be expected from the absence of navigable rivers." Yet, if the Collector's estimates of agricultural statistics be approximately true, and if on the one hand the average consumption be not under-estimated, or on the other hand the average production over-estimated, there certainly must be an export trade in rice of not less than six or seven lakhs of maunds per annum.

21. I have no definite information regarding the proportion of the rent, which in Bankoora is defrayed from the sale-proceeds of

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\* See paragraph 18 in the section on Beerbhoom.

food-grain, but seeing that the agricultural estimates provide for an insignificant cultivation of other products than food-grain, it is permissible to assume that three-fourths at least of the rent is financed for from the latter source. The road cess statistics show the rental of the district to be Rs. 6,71,249, a total which may safely be raised to eight lakhs of rupees, if regard be had to those "abwabs" and cesses which though not called 'rent,' resemble it in the certainty of their incidence and period of realization. To realize three-fourths of the sum of six lakhs of rupees, food-grain must, I submit, be sold, and the following average prices current will indicate the rate at which it is sold:—

*Statement showing the Average Prices Current in the District of Bankoora from 1868 to 1872.*

Kind of grain.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Common rice ... ..	Srs. 26'9	Srs. 27'5	Srs. 27'2	Srs. 26'7	Srs. 26'4	Srs. 24'5	Srs. 21'9	Srs. 22'4	Srs. 22'2	Srs. 21'7	Srs. 22'7	Srs. 24'2
Indian-corn ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Pulses ... ..	18'1	18'9	19'5	20'5	20'8	20'5	18'2	19'4	18'9	17'6	18'5	18'4
Wheat ... ..	15'3	15'4	16'6	17	16'5	16'2	14'7	15'6	15'1	14'2	15'1	14'6
Millet ... ..	33'7	34'5	36'8	34'5	33'7	31'8	30'5	30'6	31'7	34'6	32'5	32'8

22. Now, it will be seen that about the period of the rice harvests, when the heaviest instalments of rent fall due, the retail price fluctuates about 26 seers for the rupee; the price at which the producers sell the produce is necessarily cheaper than this; allowing from 15 to 20 per cent. profit to the retail dealer, we shall have the cultivators selling their corn at about Re. 1-4 per maund, and at this rate they must sell, in round numbers, five lakhs of maunds to realize six lakhs of rupees.

23. This quantity of grain (five lakhs of maunds) getting into traders' hands becomes at once available for export, and seeing that if it were all exported there would still be in the district some ten lakhs above annual requirements, it may be assumed that it is all exported. Further, as the staple product of the district is food-grain, the people must sell more of it at cheap prices in financing for other wants, and thus the grain fund available for immediate export after the chief harvests is probably not less than half the surplus production, or some eight lakhs of maunds.

24. It will, of course, be understood that these speculations are based on the Collector's estimates. I again repeat that if his estimates of cultivation be too high, if the average rates of produce I have accepted be too high, or the average rate of consumption too low, the complexion of the case will be altered.

25. Judging by the general insight into agricultural economy these investigations have enabled me to acquire, I believe the extent of cultivation has not been over-estimated, but I think it possible that the estimates of produce have ranged too high, and the estimates of

consumption too low. If we knew the facts accurately, we should probably have a surplus less than that I have shown.

26. I now produce a statement of average rainfall in this district:—

*Statement showing the Average Monthly Rainfall in the District of Bankoora.*

SUB-DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Sudder ... ..	0'42	0'93	1'59	1'85	3'00	9'55	11'92	10'40	7'75	4'45	0'18	0'07	52'11

PART II.

27. The year 1872 was in Bankoora a very unfavourable one from an agricultural point of view. "The weather\* during the year was abnormal. The rains commenced early, but after the first burst little fell for some considerable time. Very late in October there was a heavy fall, but the total number of inches was less than the average. The results on the crops were various: indigo, cotton, and sugarcane turned out very well; on the other hand it was at one time feared that the rice crops would have been a total failure. Fortunately at the critical moment rain fell, and *although there was only a half crop*, taking the average of the whole district, yet the disasters of a famine were averted. It was no doubt a hard time for the poorer classes, and a large number emigrated to the tea districts."

28. The rainfall in 1873 was even more unseasonable than that of the preceding year. There was a heavy fall of 5½ inches in March—an unheard-of thing,—and then until July the district was visited with showers only. In June the rainfall was 6 inches deficient, but in July and August it was 8 inches in excess of the normal fall. The September rainfall was less than half the average of that month, and in October 1873 there was no rain to speak of. Serious injury to the crops was the inevitable consequence of this unusual weather.

The following statement shows the rainfall in Bankoora during 1873:—

*Statement showing the Monthly Rainfall in the District of Bankoora in 1873.*

SUB-DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Sudder ... ..	...	...	5'49	1'45	2'26	3'28	15'18	14'72	3'65	0'30	0'44	0'07	47'34

\* Administration Report for 1872-73.

29. The effects of the unseasonable rainfall on the harvests varied in different parts of the district. In pergunnah Moheshra, which occupies one-fifth of the district area, the whole rice crop, *aus*, *nawan*, and *amun*, was after full examination estimated at one-fourth of the average; while in the remaining four-fifths of the district the outturn of all those crops was rated at half the average. The Collector, comparing the prospects in the winter of 1873 with what they had been in the winter of 1865, says: "From the best information at my disposal, I have come to the conclusion that the crop this year in Moheshra is about one-half that of 1865-66, and that in the rest of the district the two years give about an equal outturn." The Orissa Famine Commission's Report does not estimate the failure in Bankoora in 1865; it dwells, however, on the very severe nature of the distress which in 1866 prevailed all over the district, entailing some mortality.

30. The Collector assumes that pergunnah Moheshra comprises not only one-fifth of the whole district, but also one-fifth of the cultivated area of the district—an assumption which can only be regarded in the light of a rough estimate. In the absence of better information he had no option in the matter, and I am similarly situated. Adopting the Collector's mode of distributing the cultivated area, and accepting his verified estimates of deficient crop-yield, I make out the produce of the rice harvest of 1873 in Bankoora to have been 83,000 tons, or 23½ lakhs of maunds.

31. What reserve stock the district had in hand in September 1873 is a question impossible of solution. My belief, founded, it must be borne in mind, on the Collector's estimates of agricultural statistics, is that after an ordinary good year the reserve might be about two months' supply. But the year 1872 was anything but an ordinary good year, and consequently the reserves, which depend mainly on the character of the immediately preceding harvests, cannot have been up to the normal level. The Collector in the early part of December 1873 estimated the reserves at one lakh of maunds. Although I think the result has shown this to have been an inadequate estimate, I would not, having regard to the character of the harvest in 1872, raise it to more than four lakhs of maunds, or 11,000 tons. This would give a stock of 94,000 tons from the produce of the rice crops and the reserve.

32. To this, however, we must add the produce of the other rainy season crops, whether grown simultaneously with rice or grown alone; and what this produce was can only be conjectured. As the incidence of failure, however, was heaviest on the *amun* rice, with which, as I gather, no other crop is grown in Bankoora, it is probable that the pulse grown with up-land rice was not a great failure. There is, however, no definite evidence on the point; and I think, looking to the extent (one-half) to which the *nawan* rice is said to have failed, that the produce of the pulse (*kalai*) crop in Bankoora in 1873 may be estimated at 6,000 tons. The gross local food-grain supply would thus be raised to 100,000 tons.

33. During 1874 this supply received a further addition from the produce of the *rubbee* harvest, which, however, is of no great importance as a source of food-supply. These cold-weather crops were greatly benefited by rain in February, and those along the

banks of the Damooda river seem to have had earlier the advantage of irrigation. On the whole the outturn seems to have been up to the average, and to have afforded, if not a sensible addition to the food-supply, at all events to have added to the people's means of importing food.

34. Importations of food-grain seem to have been steadily carried on; but during the earlier months of the year the imports were nearly balanced by exports *via* Raneegunge to other places where higher prices prevailed. By March, however, local prices rose; exportation from that time forward ceased to be of magnitude. Importations also from Midnapore and Chota Nagpore districts assumed an intermittent character. They were influenced doubtless by the ebb and flow of that tide of distress which in some form or other invaded every district in Bengal, assuming in many districts the acute form of absolute want of food, in others the form of high prices induced by that depletion of local supplies which the urgent demand of other less favoured regions created.

35. The following statement shows the prices current which in 1874 prevailed in Bankoora:—

*Statement showing the Prices Current in the District of Bankoora in 1874.*

KIND OF GRAIN.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ... ..	14'4	13'6	13'6	13'5	12'8	12'5	12'3	11'6	12'6	13'7	14'8	17'5
Indian-corn ... ..	20	18'6	18'5	18'9	17'6	17'5	15'8	16	23'5	26'9	28'8	29'8
Pulses ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Wheat ... ..	12'2	12'3	12'4	14'4	13'3	12'7	12'3	13	13'4	13'7	13'9	14'1
Millet ... ..	...	...	...	...	...	...	...	...	...	...	...	...

36. The pressure of distress did not become perceptible in Bankoora till the middle of March; but about this time "people in Moheshra (where the failure in the crops had been worst) were being pinched, and were consequently obliged to resort to relief works in large numbers. Some put off doing so too long, and we (the district authorities) were consequently obliged to feed them gratis until they had become strong enough to work."

37. As the season wore on, distress among the artisan classes\* became prevalent, and in June it had extended to the middle and higher classes of the population. Its circle widened during June and July, and it was not till the end of August that I find on the papers before me mention of an abatement. When this distress first showed signs of requiring the appointment of a special officer to watch its progress and deal with its various phases, Mr. Macaulay, of the Civil Service, was selected for the responsible duty. The measures adopted by him were,

\* The weavers of Bishenpore are well known. In 1866, according to the Orissa Famine Commission's Report, "the whole class suffered very severely."

under the Collector's general supervision, successful in saving the district from the threatened danger. What the extent and effect of these measures were I now proceed to exhibit in the usual tabulated forms :—

*Statement of Grain Expenditure in the District of Bankoora during the famine of 1873-74.*

Nominal quantity delivered, exclusive of transfers.	Grain sold for cash.	Grain distributed in charitable relief.	Grain advanced on loan.	Grain paid away as wages.	Remainder.
Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
3,180	87	930	1,290	797	76

*N.B.*—The remainder is to be written off to miscellaneous expenditure and wastage.

*Statement of Cash Expenditure incurred in the District of Bankoora during the famine of 1873-74.*

Cash expended in charitable relief.	Cash expended in wages.	Cash advanced on loan.	Total cash expenditure.
Rs.	Rs.	Rs.	Rs.
1,02,650	96,850	56,005	2,55,514

38. I now proceed to exhibit the numbers of people who were relieved by the expenditure tabulated above. The two following statements present actual figures extracted from the official papers before me :—

*Average Number of Persons charitably relieved in the Bankoora District during the famine of 1874.*

DISTRICT.	FORTNIGHT ENDING ON THE—								
	22nd March.	6th April.	20th April.	4th May.	18th May.	1st June.	15th June.	29th June.	13th July.
Bankoora ... ..	480	1,432	3,513	6,852	8,130	10,909	14,446	24,035	36,809

  

DISTRICT.	FORTNIGHT ENDING ON THE—							REMARKS.
	27th July.	10th August.	24th August.	7th September.	21st September.	5th October.		
Bankoora ... ..	30,308	32,802	17,645	15,354	11,240	7,310	These figures include those employed on light labour tasks as well as those gratuitously relieved; also those indigent members of respectable classes who were gratuitously assisted.	

*Statement of Labourers employed in the Bankoora District during the relief operations in 1874.*

DISTRICT.	Aggregate number of individuals employed.	AVERAGE DAILY ATTENDANCE EACH MONTH.						
		March.	April.	May.	June.	July.	August.	September.
Bankoora ... ..	641,040	2,291	1,890	2,639	3,492	3,651	4,103	3,302

39. Now, an examination of these statements in the manner already familiar will show that, as far as numbers are concerned, they are equivalent to saying, the former, that 107,828 individuals, and the latter, that 21,368 individuals were supported for a period of one month. If the grain sold and advanced on loan, and the money advanced on loan be also treated in the usual manner, it will be seen that by these methods of expenditure 106,981 individuals were afforded subsistence for a month. Therefore the effect of the relief expenditure was to afford subsistence to 236,177 individuals, or 44 per cent. of the population for a month. The quantity of grain sold is so small that it seems unnecessary to make any deductions for such of the sale-proceeds as may have previously been paid away in cash.









## SECTION XXI.

### BURDWAN.

THE district of Burdwan was noted, before the commencement of the present century, for the fertility of its soil and the high degree of cultivation it had attained. It was, in figurative language, styled the "Garden of Bengal;" and it seems that in the case of no district did Government forego less prospective gain at the time of the permanent settlement than it did in the case of Burdwan.

2. It is well known, however, that in recent years the district has been visited by an epidemic fever of a virulent type; the mortality due to this cause has been great, and the depressing effect on agriculture, entailed by this mortality, cannot have been inconsiderable. It is, however, impossible to measure this effect; for we know but little of what the position of the district regarding agriculture was before the fever commenced its ravages, and our knowledge of its present condition in that respect is nearly as limited.

3. It had once been open to the Government to acquire satisfactory information on this question of agricultural statistics. When the revenue survey of these provinces was undertaken an additional outlay—inconsiderable if compared with the valuable results it must have furnished—would have converted it into a cadastral survey. This is perhaps not the place to canvass the wisdom of the policy which restricted the operations of the revenue survey to a mere demarcation of the boundaries and ascertainment of the areas of estates. But it is allowable to regret the lost opportunity of collecting really trustworthy information on an all-important question.

4. The revenue survey of Burdwan, commenced in 1855 by Major Smythe, was completed by him two years later. Ill-health, however, forced Major Smythe to postpone the preparation of his report, and ultimately compelled him to leave India without having written it. He never returned; and in his absence no report or statistical *resumé* of the district's position regarding agriculture was compiled. It is not, indeed, improbable that the knowledge to be derived on this point from the survey records would have been of small value. Still, small though it might have been, it would probably be of some use.

5. At present the sources of statistical information regarding cultivation in Burdwan which I have been able to consult are—(a) the Board of Revenue's return 41B for 1872-73; (b) the famine literature; (c) the results of inquiries made by a Deputy Collector while engaged on duty connected with sanitation in the fever-stricken portions of the district. I proceed to analyse these various sources of statistical information, commencing with the return 41B.

6. No special statistical inquiries have hitherto been prosecuted in Burdwan, nor am I in possession of definite figures for "specimen

areas." I cannot therefore reduce these estimates to any test, or compare them with any standard intrinsic to the district. I can, however, compare them with conditions known to prevail in Rungpore, Jessore, and Beerbhoom,—those districts of the Lower Provinces in which special statistical inquiries have been conducted.

7. I am not unconscious of the objections to this method, nor of the difficulties in the way of comparing a district which may be considered partially metropolitan, and which is peopled by Hindoos chiefly, with districts which are not so near the capital, and in which Mahomedans predominate. No doubt these peculiarities of situation and of prevalent religious belief exert a certain amount of influence on local agriculture; but I venture to think the one tends more to neutralize than to widen the difference which the other might create. If Burdwan, being partially metropolitan and affected by the industries of Calcutta, be less dependent on agriculture than more rural districts, still these other districts, peopled mainly by Mahomedans who are not vegetarians, would seem to require less attention to tillage than districts inhabited by Hindoos who are vegetarian in diet. These points, however, admit of precision neither in conception nor in treatment. Therefore, although I do not deny that the complex economy of a metropolitan district peopled by Hindoos on the one hand, and the predominance of Mahomedans in a rural district on the other, may militate, in some degree, against our comparing the districts, still, I submit, the objections to such a comparison are intangible and vague. They may be of potency; but in the case in point this potency cannot be such as to discredit conclusions forcibly suggested by such a comparison.

8. Having premised this much, I have to point out that the return 41B in question makes the cultivated area in Burdwan 87·5 per cent. on the district area. Now, judging by the conditions known to prevail in Rungpore, in Jessore, and in the portions of Beerbhoom in which statistical inquiries have been prosecuted, this estimate is unreasonably high. In Rungpore, which is a purely agricultural district, with a denser population than Burdwan, the cultivated is only 73 per cent. on the total area. In Jhenida and Magoorah, rural sub-divisions of Jessore, with a population 11 per cent. denser than that of Burdwan, the area under tillage is 75 per cent. on the gross area. Finally, in the neighbouring highly cultivated parts of Beerbhoom, in which statistical inquiries have been prosecuted, the cultivated land does not exceed 80 per cent. on the area examined. So far, then, as I can test the estimates in the return 41B by comparing them with the known conditions of other districts, the estimates seem unduly high. In some of the sections of this report estimates of agricultural statistics are given which, I submit, are close approximations to the truth. In no instance of such estimates have we found that a population borderin gon 600 to the square mile was compatible with an extension of cultivation covering eleven-twelfths of the total area. In no district of these provinces, except Sarun, is it probable that cultivation covers so large an area. I therefore think the estimates of the return 41B for Burdwan do not commend themselves to one's judgment, and I trust I shall be excused from considering them further.

9. The next source of information regarding the agricultural statistics of the district is contained in the famine literature and the various replies to circular No. 70. Those replies are summarized in a full and clear report to Government, under date the 7th of January 1874. The Collector introduces this report with the remark that "the information now furnished is the net result of two months' hard work by all the gazetted revenue officers of the district and by the police." The Collector himself expresses concurrence in the conclusions of his subordinates; and although, he adds, "the estimates now submitted cannot be expected to be more than rough approximations to the truth," still the time and labour bestowed on their preparation entitle them to careful examination at my hands.

10. The area of the Burdwan district is 3,523 square miles, or 2,254,720 acres. Of this area, according to the Collector, 59 per cent., or 1,332,480 acres, is cultivated. Almost the whole cultivated area is said to be devoted to the growth of food-crops. "The staples other than food-crops cultivated here," says the Collector, "are most insignificant." Of the land which produces food-crops, about 94 per cent. is said to grow rice, and about 6 per cent. cold-weather crops.\*

11. Now, I would, in the first place, point out that a cursory inspection of these estimates suggests the view that, judged by the same standard, they will be found to be as unduly low as the estimates of the return 41B were unduly high. If the conditions which prevail in Rungpore, in Jessore, and in Beerbhoom be any indication of the proportion which cultivation in Burdwan should bear to gross area, then it would seem that the cultivated land in this district ought to be about 75 per cent. on the area. Estimates, therefore, rating the cultivated land in Burdwan at only 59 per cent. on the gross area, would seem to be as wide off the mark as estimates rating it at 87 per cent.

12. This criticism is of course founded on the assumption of general similarity between the districts, following on each being rural and equally populous or nearly so. There is, however, in the present instance a disturbing element to be discounted in the fact that the Raneegunge sub-division is rich in mineral wealth, has extensive mining industries, which the other districts have not, and has a larger population than its local agriculture could probably support. Does the existence of this mining population, who are not dependent on local production for food-supplies, explain the anomaly why Burdwan, with a population nearly as dense as Rungpore or Jessore, should have, compared with those districts, such sparse cultivation?

\* For the sake of ready reference I throw the Collector's estimates into a tabulated form :—

Gross area of district.	Uncultivated area.	CULTIVATED AREA = 1,332,500.		
		Rice.	Other food-crops.	Non-food crops.
Acres.	Acres.	Acres.	Acres.	Acres.
2,254,720	922,220	1,155,000	66,000	111,500

13. I have examined the local estimates on this point, and I find that, omitting the Raneeunge sub-division altogether from consideration, and concentrating attention on the other purely agricultural divisions of the district, the anomaly still markedly exists. In those purely agricultural sub-divisions which make up five-sixths of the district area, and in which the density of population is so high as 626 to the square mile,\* the estimates show a cultivated area covering only 66 per cent. on the gross area. This result is not in harmony with the conditions prevailing in the Rungpore and Jessore districts, and still less with the conditions which obtain in the adjacent thanas of Beerbhoom, in which statistical inquiries have been prosecuted. Furthermore I submit, with reference to all the preceding sections of this report, it is not reasonable to hold that in a purely agricultural region, producing no specially valuable crops, containing no specially fertile soil, but nevertheless with the dense population 626 to the square mile implies, there should be only 66 per cent. of the area under tillage. With all deference I maintain this to be improbable, and my conviction on this point will excuse me from accepting or considering further these local estimates.

14. It only now remains to notice the third source of statistical information mentioned in paragraph 5. This, I have stated, is contained in the results of inquiries made by a Deputy Collector while engaged on special duty connected with the sanitary condition of the district. It may be well to add that the Deputy Collector employed on this duty had had previous knowledge of the district, having introduced the Road Cess Act into Burdwan. Therefore, by reason of his opportunities, as well as of his general intelligence, the Deputy Collector is a noteworthy witness on this question of agricultural statistics.

15. In his opinion between 73 and 74 per cent. of the district area is under cultivation; and this proportion is more in harmony with the Rungpore and Jessore statistics than any I have yet examined. If it be remembered that this percentage of cultivation is for the whole district, the sparsely inhabited semi-agricultural Raneeunge sub-division included, it might perhaps be thought that a somewhat smaller percentage of cultivation, say 70 per cent., would be nearer the mark. It must, however, be observed that the Deputy Collector's proportions, as they stand, are in harmony with the statistics which have been collected for the neighbouring thanas of Beerbhoom.

16. The Deputy Collector's estimates, however, possess no other claims on our confidence beyond these conferred on them by the local knowledge and special opportunities of their author, and by their being more or less in harmony with the conditions which prevail in those districts regarding which we have definite information. These circumstances are not unimportant; but they do not attach to the figures that definite character of proximate correctness which would justify me in

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\* In Rungpore the density of population per square mile is 610, and in the Jhenida and Magoorah sub-divisions of Jessore 682 and 649 respectively.

basing on them an estimate of district food-supply. I note\* the estimates, but I abstain from building any argument upon them.

17. It will have been observed that the rice crop is the main staple in Burdwan. There seem to be five crops of rice grown there. The *aus* proper, which is harvested in September; the *aus keleah* and *aus neale*, which are harvested in October; the *nawan*, harvested in November; the *amun*, harvested in December; and the *bora*, or spring rice, harvested in April and May. The spring or *bora* rice crop, however, is in this district altogether insignificant, and may be discarded from consideration.

18. The Deputy Collector contemplates two main harvests, the *aus* rice and the *amun* and *nawan* crop, and he makes the former one-fifth of the total rice harvest. The Collector, however, thinks the *amun* and *nawan* crops form together seven-eighths, and the *aus* crop only one-eighth of the entire rice produce. The difference is material, for in Burdwan, as elsewhere, the later crops suffer more severely from abnormal rainfall than those harvested earlier in the year. The preceding are the only pertinent facts I can gather from the papers before me regarding the food-crops of the district.

19. The information regarding the trade of Burdwan contained in those papers is inconsiderable, and on this important topic I regret I must content myself with tabulating the trade statistics I have collected from other sources. These statistics seem to show that besides the large railway-borne traffic in "other commodities"—chiefly Ranee-gunge coal I apprehend—the district does not export or import largely by rail or by river. It must, however, be remembered that much traffic passing over the Grand Trunk Road escapes registration, and that our registering system necessarily misses all the traffic which passes to and from the district by the numerous unnoticed and unknown channels of inter-district communication.

*River Traffic Statement for the Burdwan District for 1873.*

	Rice.	Other food-grains.	Oil-seeds.	Cotton.	Sugar.	Tobacco.	Salt.	Salt-petre.	Hides.	Others commodities.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Imports ...	33,845	53,353	11,264	.....	3,902	15,419	68,417	.....	.....	1,40,292
Exports ...	1,08,319	67,551	14,794	.....	35	1,796	30,776	.....	1,475	49,237

* GROSS AREA.	CULTIVATED AREA=1,628,800 ACRES.			UNCULTIVATED = 625,920 ACRES.			
	Rice area.		Non-food crop.	Pasturage.	Village sites.	Orchards, groves.	Waste.
	Dow or aus.	Amun.					
Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
2,254,720 ...	347,000	1,221,800	60,000	104,320	208,640	104,320	208,640





Average Rainfall and Prices—Harvests antecedent to 1873. 335

Statement showing the Average Prices Current in the District of Burdwan from 1868-72.—(Continued.)

Sub-divi- sion.	Kind of grain.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Cutwa.	Common rice ...	Srs. 24	Srs. 24'4	Srs. 21'8	Srs. 23	Srs. 22'4	Srs. 21'6	Srs. 21'4	Srs. 21'4	Srs. 22'6	Srs. 23'2	Srs. 23'4	Srs. 24'4
	Indian-corn ...	...	...	...	...	...	...	...	...	...	...	...	...
	Pulses ...	20'6	22'6	21'8	22'6	22'6	21'6	21'2	20'8	21	20	18'8	19'2
	Wheat ...	19	16'4	18'6	17'2	18'4	17	16'2	16	16'8	17'6	16'6	19
	Millet ...	...	...	...	...	...	...	...	...	...	...	...	...
Food- Boud.	Common rice ...	26'2	26'8	27'2	26'8	26'2	26	25'2	24'6	24'6	25	25'2	25'4
	Indian-corn ...	...	...	...	...	...	...	...	...	...	...	...	...
	Pulses ...	12'4	12'4	13'2	13'2	13	13	12'5	12'6	12'6	12'8	13	13
	Wheat ...	16'2	16'2	16'8	17'2	16'8	16'6	16'2	15'6	15'6	15'2	15'2	15'2
	Millet ...	...	...	...	...	...	...	...	...	...	...	...	...
Raneegunge.	Common rice ...	26'6	26'2	27	26'2	25'2	23'4	20'8	21'4	21'6	21	21'4	22'8
	Indian-corn ...	...	...	...	...	...	...	...	...	...	...	...	...
	Pulses ...	18'8	20	20	18'6	18'6	18'6	18'2	18'4	18'4	18'4	17'6	17'8
	Wheat ...	15'2	16'8	17'4	17	17'6	17'8	15'6	15'6	15'2	14'6	13'8	14'4
	Millet ...	...	...	...	...	...	...	...	...	...	...	...	...
Jehana- bad.	Common rice ...	24	25	24	23	22	21	21	20'7	20'8	20'5	21	21'7
	Indian-corn ...	...	...	...	...	...	...	...	...	...	...	...	...
	Pulses ...	16'5	16'5	19	17	17	17	17	16	16	16	15'7	15'7
	Wheat ...	14	13'5	13'3	14'3	14'3	14'3	14	14	14'3	14'3	14'3	14'5
	Millet ...	...	...	...	...	...	...	...	...	...	...	...	...
District average.	Common rice ...	24'6	25	26'2	24'4	24	22'8	22'1	21'7	21'9	22'2	22'6	23
	Indian-corn ...	...	...	...	...	...	...	...	...	...	...	...	...
	Pulses ...	18'1	19'8	20'2	19'5	19'4	19	18'6	18'3	17'6	17'5	17'1	17'3
	Wheat ...	16'9	16'8	17'2	17'4	17'8	17'1	16'4	16'3	16'1	15'8	15'1	15'7
	Millet ...	...	...	...	...	...	...	...	...	...	...	...	...

PART II.

21. The year 1872 was unfavourable in Burdwan. "The rains commenced very late; and when they did commence, they were not equally distributed throughout the district. The result was a very short outturn of the *aman* rice crop, the principal food-supply of the inhabitants. Several plots of land, even entire villages, remained uncultivated. The low lands only, and those which had the advantage of irrigation, yielded a fair crop, the average outturn of the district being about eight annas."\* Only in the Cutwa sub-division—less than one-eighth of the district—was the rainfall seasonable or the harvest good.

22. In addition to unfavourable harvests, the district also, during 1872, suffered severely from the prevalence of epidemic fever. "With the exception," writes the Collector,\* "of Culna and Raneegunge, epidemic fever raged violently all over the district. It crossed the boundary line between Burdwan and Beerbhoom to the north, towards the west it has touched the confines of the sub-division of Raneegunge, and towards the south it has passed over to the Midnapore district. The south-west thana of this district has yet escaped its ravages, but the fever there this year was worse than the usual autumnal fever. Owing to the prolonged ravages of the disease the general condition of the affected villages has been much impaired." It was also reported that, owing to the prostration with fever of the agricultural classes,

\* Administration Report for 1872-73.

the greater portion of the land in Jehanabad sub-division had been thrown out of cultivation ; and although this was found subsequently to have been an exaggeration, there is no doubt that the prolonged prevalence of the disease had an injurious effect on the agriculture of the district. That it weakened the capacity of the people to bear the strain of the ensuing season, is too manifest for comment.

23. The rains in 1873 were not so greatly deficient in quantity as they were unseasonable in distribution. In the first six months of the year the normal fall is  $17\frac{3}{4}$  inches, of which  $13\frac{1}{2}$  inches fell in May and June. In the first half of 1873 only  $11\frac{1}{2}$  inches fell, of which  $7\frac{1}{2}$  inches only fell in May and June. During July and August the normal fall is  $23\frac{1}{2}$  inches ; but in 1873 during those months  $30\frac{1}{2}$  inches fell. Finally, instead of a normal fall of 13 inches in September and October, there fell only  $4\frac{3}{4}$  inches in the former and only  $\frac{3}{8}$  of an inch in the latter month of 1873. The character of the rainfall in Burdwan in 1873 was, therefore, deficiency when copiousness was wanted, and excess when moderate moisture was required. The following statement shows the rainfall month by month in 1873 :—

*Statement showing the Monthly Rainfall in the District of Burdwan in 1873.*

SUB-DIVISION.	January.		February.	March.	April.		May.	June.	July.	August.	September.	October.	November.		December.	Total.
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.		
Sudder	...	...	..	2'00	4'17	3'44	6'44	10'60	17'15	4'44	0'20	0'08	1'15	58'67		
Cutwa	...	...	0'10	2'05	1'09	3'45	5'62	12'29	11'58	2'76	0'36	0'07	...	39'37		
Culina	...	...	...	1'23	2'86	2'72	2'21	15'11	17'47	3'24	1'34	...	...	46'18		
Bood-Bood	...	...	...	2'28	1'46	3'26	4'99	17'96	12'94	5'87	0'17	0'19	...	49'49		
Raneegunge	...	0'10	0'05	1'26	1'26	1'77	4'23	14'22	15'53	5'84	0'26	0'32	...	44'54		
Jehanabad	...	...	...	0'88	1'98	3'00	2'22	11'90	15'42	6'38	0'96	...	0'49	43'23		
District average	0'10	0'07	1'62	2'14	2'94	4'23	15'18	15'01	4'75	0'68	0'16	0'61	...	46'96		

24. The effects of the unseasonable rainfall on the harvests varied with the crops. The *aus* or early rice crop escaped injury except in places where it was damaged by floods consequent on the abnormally heavy rain in July and August ; the late crops, however, suffered severely. The Collector, more hopeful in his estimates of crop outturn than his subordinates, thinks that in Jehanabad, Culna, and part of the Sudder sub-divisions the outturn was seven-twelfths, and in the rest of the district one-half of an average crop. Summarizing his latest and fullest information, he states,—“ the outturn of the late rice crop over the whole district was well over half an average crop.” He does not, however, say it was seven-twelfths of the average. It will be remembered the Collector estimates the late rice crop to be seven-eighths of the entire rice produce.

25. The Collector institutes a comparison between the failure in the harvests of 1873 and of 1865. There is, however, conflicting evidence on this point. The Orissa Famine Commission say there was two-thirds of a full crop (*i.e.*, five-sixths of the Collector's average crop) in 1865, while the local estimates for that year put the outturn

*Harvests in 1873—Comparison with 1865—Prices in 1874. 337*

variously at four or at seven annas, without, however, specifying the denominator of the fraction. The Collector, who, as I have said, was more hopeful than his subordinates, thinks that, prices and rainfall all considered, the harvests in both years were "about the same." In Burdwan in 1866 there was much distress,\* unaggravated, however, by the serious complications which the epidemic fever created in 1874.

26. The district narratives chronicle the activity of private trade to and from Burdwan throughout the period of distress, but I have been able to measure the magnitude of the railway-borne and river-borne trade only. The trade with neighbouring districts—Midnapore, Nuddea, &c.—has not been registered. The returns I shall produce do not show that the district derived great help from trade in 1874. The prices, however, which throughout the year prevailed in Burdwan were cheaper than those which prevailed in many other districts, and consequently exportation from Burdwan never ceased. That the current local prices, however, were so high as to cause sustained pressure on the people will be evident from the following statement:—

*Statement showing the Prices Current in the District of Burdwan in 1874.*

SUP-DIVISION.	Kind of grain.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
		Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Sudder.	Common rice ...	14	13·5	13·2	13·5	13·5	13·8	12	11·8	13·2	14·5	16	15·5
	Indian-corn ...	18	18	18	19·5	19	20	18·8	17	17·2	17	18	19
	Pulses ...	13	12	16·5	13	12·5	12	13	13	13	16	12	13
	Wheat ...	...	...	...	...	...	...	...	...	...	...	...	...
	Millet ...	...	...	...	...	...	...	...	...	...	...	...	...
Culina.	Common rice ...	21	18	15	13·2	13	12	12	11·7	16	12	11·8	15
	Indian-corn ...	23	18	17·8	17·7	18	17	17	18	17·5	15·5	16	17·2
	Pulses ...	14	15	15	15·5	16	12·5	13·9	13·9	13	13	13·5	14
	Wheat ...	...	...	...	...	...	...	...	...	...	...	...	...
	Millet ...	...	...	...	...	...	...	...	...	...	...	...	...
Cutwa.	Common rice ...	12·5	12	11·5	11·3	11·2	11·5	11·5	11·2	11·3	11·5	14	17·5
	Indian-corn ...	22	18·7	18·7	17·3	17·2	16·5	17·2	16·8	15·3	16	16·5	17·3
	Pulses ...	14·2	17·8	17·2	12·8	15·2	13·3	12·8	14·9	15·2	19·2	22·8	21·3
	Wheat ...	...	...	...	...	...	...	...	...	...	...	...	...
	Millet ...	...	...	...	...	...	...	...	...	...	...	...	...
Bood-Bood.	Common rice ...	14	12	13	13	13	13	13	13	14	16	21	22
	Indian-corn ...	15	15	15	14	13	14	14	14	15	15	16	16
	Pulses ...	11	11	12	14	14	14	13	13	13	13	13	13
	Wheat ...	...	...	...	...	...	...	...	...	...	...	...	...
	Millet ...	...	...	...	...	...	...	...	...	...	...	...	...
Rane-gunge.	Common rice ...	14	13	13·5	14	13·5	12·7	13·2	13·8	12·2	13·5	16·5	21
	Indian-corn ...	17	16	18	18·5	17	16	16	17	16	17	17	18
	Pulses ...	13·5	13·5	14	14·5	14·5	13·5	14·2	14·8	14·8	15	15	15
	Wheat ...	...	...	...	...	...	...	...	...	...	...	...	...
	Millet ...	...	...	...	...	...	...	...	...	...	...	...	...
Jehana-bad.	Common rice ...	15·5	12·8	13·5	13·5	13·5	12·5	12·5	12	11	12·5	12·5	14·5
	Indian-corn ...	...	...	...	...	...	...	...	...	...	...	...	...
	Pulses ...	...	...	...	...	...	...	...	...	...	...	...	...
	Wheat ...	11	10	10	10	10	10	10	10	10	10	10	10
	Millet ...	...	...	...	...	...	...	...	...	...	...	...	...
District average.	Common rice ...	15·1	13·5	13·3	13·1	13	12·6	12·4	12·2	13	13·3	15·3	17·6
	Indian-corn ...	19	17·1	17·7	17·4	16·8	16·7	16·6	16·5	16·2	16·1	16·7	17·4
	Pulses ...	12·8	13·2	14·1	13·3	13·7	12·5	12·8	13·3	13·2	14·3	14·4	14·5
	Wheat ...	...	...	...	...	...	...	...	...	...	...	...	...
	Millet ...	...	...	...	...	...	...	...	...	...	...	...	...

\* Consult Orissa Famine Commission's Report, pages 319-324.

27. The following are the registered statistics of river-borne and railway-borne trade for the district during 1874 :—

*River Traffic Statement for the Burdwan District for 1874.*

	Rice.	Other food-grains.	Oil-seeds.	Cotton.	Sugar.	Tobacco	Salt.	Salt-petre.	Hides.	Other commodities.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Imports ...	26,140	69,332	11,763	.....	2,714	21,710	57,285	.....	.....	1,16,560
Exports ...	20,896	23,488	20,188	.....	100	1,694	57,916	.....	1,550	48,106

*Railway Traffic Statement for the Burdwan District for 1873-74.*

	4TH QUARTER OF 1873.				1ST QUARTER OF 1874.				TOTAL FOOD-GRAINS.	
	Food-grain.	Indigo.	Seeds.	Other commodities.	Food-grain.	Indigo.	Seeds.	Other commodities.		
Exports ...	Mds. 85,870	Mds. 12	Mds. 6,768	Mds. 31,44,888	Mds. 1,69,459	Mds. 547	Mds. 14,798	Mds. 33,81,785	Tons. 14,670	
Imports ...	97,303	.....	.....	2,57,445	61,518	.....	.....	.....	.....	3,06,310
	2ND QUARTER OF 1874.				3RD QUARTER OF 1874.				TOTAL FOOD-GRAINS.	
	Food-grain.	Indigo.	Seeds.	Other commodities.	Food-grain.	Indigo.	Seeds.	Other commodities.		
Exports ...	Mds. 1,27,710	Mds. 9,372	Mds. 34,17,399	Mds. 27,724	Mds. 1,829	Mds. 33,02,019	Mds. 4,10,763	Tons. 14,670		
Imports ...	3,07,928	...	...	4,02,690	3,30,524	...	3,23,203	7,87,363		
				Deduct Mr. Toynbee's despatches ...				4,71,292		
					Remainder ...			3,16,071	or 11,288	

28. Relief operations in Burdwan during 1874 were for a lengthened period very widespread; but the distress which called for this extension of relief cannot be wholly attributed to the failure in the harvests of 1873. No doubt that was a great and a proximate cause, but the exceptionally short crops in the previous years, combined with the fever-stricken condition of the people, were also very efficient causes. The year 1874 found the district prostrated from the effects of two years of markedly adverse harvests, and of nearly ten successive years of virulent epidemic fever. Not only were the material resources of the people reduced, but their physical capacity to bear a strain was also seriously impaired; and to those complications is due much of the difficulties with which the district had to contend in 1874.

29. Distress, which had gradually been making way, first attracted serious attention in the Bood-Bood sub-division about the beginning of April. The Collector on proceeding to the spot found "the condition of some of the people very wretched; the labourers complained very loudly of want of work; and it appeared that many of the men had emigrated to Cachar and elsewhere, leaving their women and children.

The so-called respectable classes were nearly as loud in their complaints as the poor,—sonars (goldsmiths) complained that their trade was at a stand-still; napits (barbers), that people have given up shaving; cultivators, that mahajuns (usurers) have refused the usual advances of grain; brahmins (priests), that their sources of income have failed; chowkidars (village watchmen), that their choukiran (service) lands yielded next to no crops, and that their money dues are not paid; fakeers (religious mendicants), cripples, and lepers, that charity is no more; weavers, that advances were no more to be had. Allowing of course for some exaggeration in all these complaints, still the looks of many of the complainants were enough to prove that they were in the main founded on truth." The Collector concludes his report by expressing a conviction that distress was on the increase. This report is dated the 10th April 1874.

30. As the year wore on, the circle of distress widened. On the 4th of May the Collector reported that it had extended to the Sahebgunge thana of the Sudder sub-division, and quotes with approval the opinion of the Raneegunge Relief Committee, that "private charity had in a great measure ceased, and that relief, moderate but present and ready to hand, was urgently needed."

31. On the 1st of June a still further widening of the circle of distress in the Sudder sub-division is reported by the Collector as his own opinion, and on the 15th of June, after a tour of inspection, he writes :—"The eye is at once caught by the anæmic, clammy faces of the sufferers from chronic fever; by the maimed and scarred limbs and colourless faces of the lepers; by the swollen legs of those suffering from elephantiasis; by the wretched looks of the old women; by the studiously miserable appearance of the professional beggars. After the first glance at these assemblages, one is inclined to come to the conclusion that the distress is most severe, *and so doubtless it is*; but it is not the distress of starvation, but the distress of leprosy, disease, or old age." It is perhaps unnecessary to observe that those creatures of whom this pitiable description is given had been, before the Collector's visit, on the receipt of charitable relief at the various depôts established in the district.

32. The circle of distress as the year wore on widened still more. In July the Collector found it larger in Cutwa than it had been before. "In almost every village" visited by him and the zealous Civil Surgeon of Burdwan, Dr. French, "we found more or less distress; some of the poorest people were found to be eating grass seeds, and nearly every crowd appeared to contain a larger or smaller admixture of lean and badly nourished persons." The Collector in this month also visited the Culna sub-division. He saw, "in several of the villages we passed through some lean and emaciated persons in the crowd over and above the normal admixture of aged and diseased persons." He observes, in conclusion, "distress is certainly increasing in Culna." Thus it was that from month to month the circle of distress widened. Disease, too, "had left on our (the local authorities) hands many orphans, widows, and people so debilitated that they cannot work or earn a subsistence. There are also a great number of sufferers from old

chronic diseases and sequelæ of fever. For this reason Burdwan requires more liberal relief, and more care and attention, than other more healthy districts.”

33. What the extent and effects of this relief were I now proceed to show:—

*Statement of Grain Expenditure in the Burdwan District during the famine of 1874.*

Nominal quantity delivered exclusive of transfers to other districts.	Grain distributed in charitable relief.	Grain sold for cash.	Grain advanced on recoverable loan.	Grain paid as wages.	Remainder.
Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
13,380	6,812	4	3,002	1,495	2,067

*N.B.*—Of the remainder 1,693 tons were sold after the 1st October 1874, and 374 tons are to be written off to wastage.

*Statement of Cash Expenditure incurred in the Burdwan District during 1874.*

Cash expended in charitable relief.	Cash expended in wages.	Cash advanced on loan.	Total.
Rs.	Rs.	Rs.	Rs.
5,46,723	62,277	70,559	6,79,559

34. I next proceed to exhibit the numbers of people relieved by the expenditure tabulated above. The following statements of persons gratuitously relieved, and of labourers employed on relief-works, are actual figures extracted from the official records:—

*Statement showing the Average Number of Persons charitably relieved in the Burdwan District during the famine of 1874.*

FORTNIGHT ENDING ON THE									
9th March.	23rd March.	6th April.	20th April.	4th May.	18th May.	1st June.	15th June.	29th June.	13th July.
115	142	6,987	13,370	10,025	10,939	11,351	12,182	20,000	55,046
27th July.	10th August.	24th August.	7th September.	21st September.	5th October.	18th October.	2nd November.	16th November.	30th November.
58,932	60,551	61,100	67,300	60,828	58,402	5,060	5,603	4,761	3,475

*Statement of Labourers employed in the Burdwan District during the relief operations in 1874.*

DISTRICT.	Aggregate number of individuals employed.	AVERAGE DAILY ATTENDANCE EACH MONTH.									
		January.	February.	March.	April.	May.	June.	July.	August.	September.	
Burdwan ...	1,520,580	1,168	3,513	3,359	6,430	9,613	11,574	7,571	5,252	2,206	

35. An examination of these statements in the usual way will show that as far as numbers are concerned, the former is equivalent to saying that 250,989 individuals, and the latter that 50,686 individuals, were assisted for the period of one month. The money and grain advanced on loan and the grain sold, treated in the usual way, will be found sufficient for the support of 205,967 individuals also for the period of a month. The effect, therefore, of the relief expenditure in Burdwan was to afford subsistence to 507,642 individuals, or about 24 per cent. of the population, for one month.





**PRESIDENCY DIVISION.**



## SECTION XXII.

### NUDDEA.

THE Nuddea district was surveyed by Major Smythe, who also completed the revenue survey of Bengal. Major Smythe, it will be remembered, was compelled by sickness to leave India without having written the statistical report on the latter district. To this circumstance of his failing health we also owe the want of a report on the survey operations in Nuddea.

2. Failing aid from the survey records, the only other sources of statistical information regarding the district's agriculture which I have been able to consult are to be found in the famine literature and in the return 41B. Before I refer to these documents, however, I beg to offer a few general remarks.

3. The district of Nuddea has long enjoyed a settled system and a high degree of material prosperity. Its inhabitants are among the most forward in Bengal in point of substantial comfort and general enlightenment. Nowhere else is the tenure of land better defined or more secure; nowhere else are the just rights of the producer to his equitable share of the produce better understood or more firmly insisted on.

4. The district also enjoys material advantages of no ordinary kind. Skirted by two perennially navigable rivers, intersected by others and by a railway, it is favourably situated from a commercial point of view; while its fertility of soil and propinquity to Calcutta have usually assured to it favourable harvests and paying markets. Judging, then, from circumstances like these, one expects to find Nuddea among the most densely peopled and highly cultivated districts in Bengal.

5. As far as population is concerned, expectation is not disappointed. There are 530 people to the square mile in Nuddea, and this is the density of population which in Bengal seems to me most compatible with general prosperity under the peculiar conditions of rural society in this province.

6. Neither would expectation be disappointed regarding agriculture in Nuddea, if to its condition in this respect any indication be afforded by the circumstances which prevail in the adjacent regions of Jessore. We have in the section on Burdwan seen that in the Jhenida and Magoorah sub-divisions of the Jessore district 75 per cent. of the gross area is under cultivation. There is, I submit, a high probability that in Nuddea cultivation is not less extensive. The grounds of this probability are that the two regions adjoin; that between their respective soils, productions, and systems of agriculture, there is much

similarity; that each region is rural to the same, or nearly the same, extent; that facilities for commerce are not greatly larger in one region than in the other; that, finally, among the population, which is of nearly equal density in both tracts, the Hindoo and Mahomedan tenets are not unequally diffused. These points of similarity suggest forcibly to my mind that if in Jhenida and Magoorah there be 75 per cent. of the area under tillage, the proportion of cultivated land is not less in Nuddea.

7. Having thus stated those general considerations which seem pertinent to the question, I proceed to consider the local estimates, beginning with these embodied in the famine literature. These are prior in point of date, and, I shall be permitted to say, of less verisimilitude than those contained in portions of the latest return 41B.

8. There is a coincidence of opinion between the various sub-divisional officers of Nuddea to the effect that five-eighths of each sub-division is cultivated, and that of this five-eighths, four-eighths is occupied by food-crops and one-eighth by non-edible products. In the Kooshtea sub-division only is the cultivated land estimated at a higher ratio. Remarking on these estimates the Collector says—“Taking the district as a whole, I believe that in saying half the area is usually under food-crops I am not far from the truth; if there be error, it is more likely to be through my under-estimating than through my over-estimating the [food-crop] area.” I feel much diffidence in venturing to dissent from the opinion of such a competent judge as Mr. Stevens. I am bound, however, to say that five-eighths (*i.e.*, 62·5 per cent.) of the total area of the district seems to me an inadequate provision for cultivation in Nuddea. It is at variance with conditions prevailing in adjacent regions similarly circumstanced; and it is out of harmony with that fitness between density of population and extension of agriculture which, to my mind at all events, the whole tenor of my inquiries has shown to prevail. These, it may be urged, are but intangible objections to estimates based on local knowledge. To me they are of much significance, it being, from the nature of our knowledge, impossible to adduce more direct and cogent arguments.

9. Convinced, then, of the justness of the Collector's doubt, that possibly his estimates understated the cultivated area, I shall be excused from accepting or considering them further. I pass on to the return 41B.

10. This return 41B for 1873-74 was framed after local knowledge had been widened by the information acquired in the progress of relief operations. It seems also to have been in some extent based on definite figures collected for specific areas. Although no special claim to precision is put forward on its account, the return seems to embody the most recent and matured estimates on the question with which it deals.

11. In the initial portion of the return the cultivated area is shown to be 80 per cent. on the gross area of the district; and in my belief this is a very probable estimate. When, however, I come to examine the distribution of this cultivated area according to the crop grown (Part IIID), I find that the figures, not contemplating the whole

cultivated area, show the distribution of only 1,063,720 acres, or less than five-eighths of the tillage land shown in the preceding section of the return. I apprehend, from an explanatory remark in the original return, that only for this much of the cultivated area could estimates, based on significant facts, be collected; that no information was obtainable showing the mode of distribution of the remaining seven lakhs of acres; and that it was deemed advisable to give for a fractional portion of the district statistics of some value, rather than statistics of indefinite value for the whole district area.

12. However valuable, then, this return may be as outlining the condition of agriculture in Nuddea, and however accurate may be the statistics it gives for a fractional part of the district, it affords no safe indication to the agricultural position of the whole district. I can turn it to no use; and as it was my last source of statistical information, I am now forced to abstain from any further endeavour to quantify the food-grain supply of Nuddea.

13. In Nuddea, as in Bengal generally, the chief crop is rice. "Practically the only rice crops grown in this district are the *aus* or early, and the *amun* or late rice. The *aus* crop is sown in April or May, and reaped in August and September; the *amun* is sown in July, and reaped in November and December. The relative proportions in which these two crops are cultivated vary in different parts of the district. There is more *aus* than *amun* in the Meherpore, Chooadanga, and Sudder sub-divisions. In these three sub-divisions the area sown with *aus* is nearly three times that sown with *amun*. In the other three sub-divisions *aus* and *amun* are nearly equally grown, but it is supposed there is a slight preponderance of *aus* in Bongong and Kooshtea, and a slight preponderance of *amun* in Ranaghat. Taking the district as a whole, the *aus* crop forms in an ordinary year about two-thirds of the whole rice crop. The proportion of *boro* or spring rice is too small to be appreciable."\*

14. There is also a large cold-weather crop cultivation in Nuddea. The edible grains grown are wheat, oats, peas, gram, and pulses of various kinds; the non-edible products are oil-seeds, sugarcane, chillies, turmeric, tobacco, jute, and indigo.

15. The existing information regarding the trade of Nuddea is not of a very satisfactory nature. In the Collector's opinion, the district imports the better qualities of rice for consumption in towns and by the better classes, while not usually exporting any. It has, however, a considerable export trade in cold weather produce with Calcutta and Assam. The Collector thinks "that not much, if at all less than half the produce" of those cold-weather crops is annually exported.

16. This trade with Assam has hitherto escaped our system of registration, but measures have now been adopted to remedy this defect. As far as the river-borne trade to or from Calcutta is concerned, a considerable portion of it has been registered, and for this portion

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\* Collector's report to Government, dated 6th December 1873.

348 *Nuddea : Average Rainfall and Prices Current—*

I produce statistics. For the railway-borne traffic I have, I regret to say, no figures :—

*River Traffic Return for the Nuddea District for 1873.*

	Rice.	Other food-grains.	Oil-seeds.	Cotton.	Sugar.	Tobacco.	Salt.	Saltpetre.	Hides.	Others.
Imports ... ..	Mds. 65,292	Mds. 1,33,953	Mds. 5,816	Mds. 2,200	Mds. 40	Mds. 1,539	Mds. 1,35,738	Mds. ...	Nos. ...	Mds. 1,80,577
Exports ... ..	16,888	4,68,847	54,450	113	411	170	1,986	199	495	1,70,034

17. I now present statements of average prices current and average rainfall in Nuddea, and with this pass on to the condition of the district in 1873-74.

*Statement showing the average prices current in the district of Nuddea from 1868—72.*

SUB-DIVISION.	Kind of grain.	Month.											
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Sudder.	Common rice...	20	20	20'6	20'4	19'6	18'8	18'2	17'8	18'6	18'2	17'8	17'8
	Pulses ... ..	23'4	24'3	27'8	26	25	23'7	23'6	23'8	22'7	22'7	21'6	22'5
	Wheat ... ..	17'2	16'2	18	19'8	18'2	18	18'6	18	17'6	16'8	15'8	15'2
Koochta.	Common rice...	24'6	25	25	23'3	25'2	25'4	25'2	24	25'7	23'8	22'8	24'4
	Indian corn ...	13'1	12'2	12	12'4	12'2	11'9	12'2	11'9	11'5	12'2	12'4	12'6
	Pulses ... ..	32'3	31	33'5	32'7	33'1	31'5	30'9	31'5	31'1	30'7	31'7	33'9
Meher-pore.	Common rice...	18'2	18'7	19'1	20	20'7	20'6	20'8	21'2	20'9	20'8	20'6	20'3
	Pulses ... ..	20'2	17'1	19'7	21	24'9	21'1	22'1	23'9	24'6	21'3	19'2	19'8
	Wheat ... ..	19'4	22'5	25	25	18	16	16	24'8	24	25'3	21'3	24'4
Chooa-danga.	Common rice...	21'6	21'8	22'4	22	19'8	19'4	20'2	19'8	20'8	21	21'8	21'8
	Pulses ... ..	22'4	19'8	20'4	18'6	16'8	16'6	15'4	15'8	14'2	14'8	13'2	13
	Wheat ... ..	16'8	17'2	20'8	22'8	22'4	22	21	20'8	19'6	17'8	17'2	17'2
Raana-ghat.	Common rice...	21'4	20'6	19'6	19'6	19'6	19'8	20'6	20'8	20'6	20'8	20'8	18'6
	Pulses ... ..	20'6	20	19'6	19'2	19'2	19'2	20	19'2	20'2	19'8	19'8	18'4
	Wheat ... ..	18'5	...	15	18	21	...	...	...	21	...	...	21'5
Bongkong.	Common rice...	22'4	21'8	22'3	20'8	21'6	20'8	20'8	21'1	20'5	23	22'7	22
	Pulses ... ..	17'8	17'5	18	17'1	18'2	18'2	17'2	17'2	16'6	16'2	17'1	17

*Statement showing the average monthly rainfall in the district of Nuddea.*

SUB-DIVISION.	Month.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Sudder ... ..	0'61	1'11	0'87	3'82	0'98	10'06	9'72	9'43	7'40	4'50	0'31	0'14	55'45
Bongkong ... ..	0'17	1'15	1'72	2'34	4'13	9'01	8'58	11'05	7'08	5'17	0'09	0'32	51'09
Meherpore ... ..	0'28	1'08	1'71	1'03	3'73	9'42	12'02	10'69	7'43	3'37	0'04	...	51'70
Chooadanga ... ..	0'23	1'11	1'41	2'81	0'83	9'09	10'14	10'42	8'54	4'38	0'06	...	55'02
Koochta ... ..	0'24	0'87	1'20	2'03	5'06	9'52	10'20	8'34	9'20	3'06	0'05	0'07	52'53
Raanghat ... ..	0'71	1'12	0'93	2'70	4'18	10'06	7'57	10'72	6'01	3'54	0'30	0'10	47'84
District average...	0'86	1'07	1'27	2'75	5'25	9'44	9'72	10'11	7'62	4'15	0'14	0'16	52'34

PART II.

18. It is well known that the year 1871-72 was in this district one of exceptionally heavy rainfall and unprecedented inundations. Over a large portion of the district the injury caused to standing crops, to life and property, was so great that it was at one time believed the circumstances called for the charitable interference of Government. The district, however, surmounted its difficulties unaided, thereby demonstrating the reality of its material prosperity, and how far on this point it is in advance of the no less fertile regions of North Behar.

19. The year 1872-73 was on the whole a prosperous year, though there were not wanting periods of unpropitious weather, or circumstances of partial failure in some of the crops. It was not, however, a bumper season, nor such as to make good all the losses which the preceding disastrous season had entailed. The rainfall in 1873 was both deficient in quantity and unseasonably distributed. We have seen that in May and June the normal rainfall is about 14 $\frac{3}{4}$  inches: in these months of 1873 only 7 $\frac{3}{4}$  inches fell; in July and August the normal fall is 9 $\frac{3}{4}$  and 10 inches respectively; in the corresponding months of 1873 there was an excessive fall of nearly 4 inches in the former and 3 inches in the latter month. The average fall in September and October in normal years is 11 $\frac{3}{4}$  inches; in September 1873 only 4 inches, and in October only 1 inch fell. There was thus unseasonable deficiency and unseasonable excess, the combined result being a deficiency for the whole year of 9 inches.

The following statement shows this more clearly:—

Statement showing the monthly rainfall in the district of Nuddea in 1873.

SUB-DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Sudder ...	...	...	1.15	2.71	3.94	3.52	13.15	14.80	2.42	0.98	0.03	...	46.80
Bongong ...	0.11	...	0.85	2.25	3.78	5.79	11.84	11.19	6.80	0.65	...	...	42.26
Meherpore ...	...	0.25	1.45	1.77	3.08	4.93	17.47	16.82	4.06	2.28	0.20	...	52.31
Choodanga ...	...	...	1.37	2.02	4.21	4.83	10.79	15.96	4.64	2.10	0.32	...	46.24
Kooshtea ...	0.24	0.06	0.81	4.70	1.76	4.18	14.13	8.80	3.62	0.36	...	0.35	39.01
Ranaghat ...	...	...	0.44	1.63	3.45	4.35	9.31	11.78	3.02	0.53	...	...	34.51
District average	0.17	0.15	1.01	2.51	3.20	4.60	13.61	13.22	4.09	1.00	0.18	0.35	43.52

20. The effects on the harvests varied with time and place. "The *aus* crop of the year," writes the Collector, "varied remarkably in different localities: in some it was first rate, in others it is said to have been much below the average. On the whole I am of opinion the crop has been an average one throughout the district. As I remarked in my last report, the *amun* dhan in the high lands has been a disastrous failure. That in the *beels* (marshes) is, however, so far as I yet know, fair. Taking the whole district, I am not disposed to think the outturn will be much, if at all, below five *anuas*, or, say, one-third of an ordinary crop."

21. The Collector institutes a comparison between the circumstances of 1873-74 and those of the preceding famine year 1865-66. The result is to the effect that while the *aus* crop of 1873 was decidedly better than the *aus* crop of 1865, the *amun* of the latter year was somewhat better than the *amun* of the former. The cold weather crop of 1866, however, was fair, while that of 1874, sown over an area considerably less than usual, gave, when compared with an average harvest, a very deficient outturn. In no sub-division of the district, except Kooshtea, do the cold weather crops seem to have been more than half; in some they varied from one-fifth to one-half of an average crop.\* On the whole, the Collector was of opinion that up till March the district would be better, but after March worse off in 1874 than it was in 1866. On this point also Lord Ulick Browne, Commissioner of the Presidency Division, writing from Nuddea in February 1874, says,—“ I find conflicting opinions here as to whether the present prospects of this district are better or worse than they were in 1866, and see no reason to change my opinion that, taking crops all round, the general prospects are much the same.” The Commissioner thought indeed that in 1874 the general condition of the people was better than in 1866, having improved in the interval; but the hopeful view he took of the prospects in 1874 seems more founded on the preparedness of Government to meet any strain than on less palpable considerations. It will be remembered that in 1866 there was severe distress and some mortality in Nuddea, and that it was owing to Lord Ulick Browne’s distinguished administration [he was Magistrate-Collector of Nuddea at the time] that the district was tided with, comparatively speaking, such little loss over that disastrous year.†

22. I come now to the question of private trade in Nuddea during 1874. I find in the various narratives mention made of the activity of private trade during the whole period of the distress. As in all other districts, so in Nuddea, private trade had during 1874 its periods of briskness and its periods of depression, but it seems to have been always operative. The trade was mostly from Jessore and the eastern districts unaffected by the drought. Flowing from these quarters it naturally escaped our registering stations, which are situated in the east and south of the district. The trade statistics therefore fail to indicate the magnitude of this trade, which must have been very considerable. I give the trade statistics, however, for what they are worth, and I also add a statement of prices current in Nuddea during 1874:—

*River Traffic Return for the Nuddea District for 1874.*

	Rice.	Other food-grains.	Oil-seeds.	Cotton.	Sugar.	Tobacco.	Salt.	Saltpetre.	Hides.	Others.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Imports ... ..	77,468	69,518	13,840	1,323	122	2,251	1,67,822	...	...	1,92,446
Exports ... ..	38,126	2,76,703	55,701	5	2,300	1,100	533	76	943	1,20,629

\* See special narrative for February 6th. The estimates given in this narrative were not materially modified by later information.

† See Orissa Famine Commission’s Report, Vol. I, pp. 337-349.



Statement showing the prices current in the district of Nuddea in 1874.

SUB-DIVISION	Kind of grain.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
		Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	
SUDDER	Common rice	12'5	11'4	11'4	11'4	11	10'3	11	10'3	10'4	13'3	10'6	14'5	
	Indian corn	...	...	...	...	...	...	...	...	...	...	...	...	
	Pulses	18'7	17	18'3	18	17'4	16'3	18	16'7	15'7	15'7	15'7	16'7	
	Wheat	12'8	12'3	12'2	14'5	13'3	12'3	13'3	12'3	12'3	12'3	12'3	12'3	15'2
	Millet	...	...	...	...	...	...	...	...	...	...	...	...	
KOOSHTEA	Common rice	19	19	18	14	14	14'7	13	12'7	14	16'5	15	18	
	Indian corn	13	13'2	14	14	14'5	13	13'2	13'5	15'2	16	14	14'2	
	Pulses	23'5	23'7	22'2	22'2	21'5	22	21'5	22	22'2	21'2	21'2	22	
	Wheat	16	22	23	20	21	20	21	22	23	20	20	21	
	Millet	38	38	37	36	37	38	38	38	35	36	36	37	
MEHERPORE	Common rice	13'5	13'7	14	13'7	14	14	14	14	14	16	16	18	
	Indian corn	...	...	...	...	...	...	...	...	...	...	...	...	
	Pulses	16	16	20	20	13'2	13'2	...	17	17	16'6	16'5	16'5	
	Wheat	...	...	...	14	...	...	...	...	...	...	...	...	
	Millet	...	...	...	...	...	...	...	...	...	...	...	...	
CHHOADANGA	Common rice	20	19	20	18	16	17	17	16	20	23	20	18	
	Indian corn	...	...	...	...	...	...	...	...	...	...	...	...	
	Pulses	26	26	23	23	20	20	20	18	16	15	23	20	
	Wheat	23	25	26	26	26	26	29	28	29	24	24	23	
	Millet	...	...	...	...	...	...	64	58	64	64	...	...	
RANAGHAT	Common rice	13	13	13	15	14	13	14	15	15	16	16	16	
	Indian corn	...	...	...	...	...	...	...	...	...	...	...	...	
	Pulses	16	16	16	16	16	16	16	16	16	19	23	23	
	Wheat	20	...	...	...	17	...	...	...	20	...	...	20	
	Millet	...	...	...	...	...	...	...	...	...	...	...	...	
BONGONG	Common rice	15'2	15'2	15'2	15'2	14'5	14	13'5	14	13'3	12'8	12'8	15'2	
	Indian corn	...	...	...	...	...	...	...	...	...	...	...	...	
	Pulses	17'8	17'8	17'8	15'2	16'8	17'8	16	16	16	16	16'8	16'8	
	Wheat	...	...	...	...	...	...	...	...	...	...	...	...	
	Millet	...	...	...	...	...	...	...	...	...	...	...	...	

23. Owing to the comparatively speaking moderate character of the failure in the harvests, and to the timely measures of relief concerted, severe distress never prevailed in Nuddea during 1874. Those portions of the country, chiefly in the Meherpore sub-division, which adjoin the distressed districts of Moorshedabad and Rajshahye, where distress was most marked, were also those places which suffered most in 1866. The difficulties of this tract were in 1874 enhanced by the want of drinking-water—a want caused partly by drought, partly by the silting up of old tanks. This want was very keenly felt over the whole of this region; it attracted the early attention of the Collector, causing him much anxiety. Compelling the people to use impure water, it ultimately induced a severe outbreak of cholera. To remedy this want, to confer on the district generally a lasting benefit, large advances in cash were made to responsible persons for the re-excavation of village tanks; and there is no doubt that in this way, not in Nuddea alone, but in every distressed district of Bengal, the relief operations have conferred lasting advantages on the country and on the people.

352 *Nuddea: Extent and Effect of Relief Expenditure.*

24. I now proceed to tabulate the expenditure incurred in the district in the relief or prevention of distress :—

*Statement of grain expenditure incurred in the Nuddea district during the famine of 1874.*

Nominal quantity delivered, exclusive of transfers to other districts.	Grain distributed in charitable relief.	Grain advanced on loan.	Grain sold for cash.	Grain paid as wages of labor.	Remainder wastage.
Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
883	264	115	6	478	20

*Statement of cash expenditure incurred in the Nuddea district during the famine of 1874.*

Cash distributed in charitable relief.	Cash advanced on loan.	Cash paid as wages.	Total cash expenditure.
Rs.	Rs.	Rs.	Rs.
54,000	1,30,662	1,30,712	3,15,374

25. I next proceed to show the numbers of people relieved by the expenditure tabulated above. I regret I am unable to show any actual figures for those gratuitously relieved. On this point the local reports are not clear; there are *lacunæ* which I have been unable to fill in. I shall present estimates on this head framed on the usual allowance of two-thirds seer of grain or one anna cash per individual. The following statement presents actual figures extracted from official documents before me :—

*Statement of labourers employed in the Nuddea district during the relief operations in 1874.*

DISTRICT.	Aggregate number of individuals employed.	AVERAGE DAILY ATTENDANCE EACH MONTH.							
		February.	March.	April.	May.	June.	July.	August.	September.
Nuddea ... ..	7,26,420	1,602	2,400	1,850	2,348	4,054	5,006	4,848	2,037

26. This statement is, it will be seen, equivalent, as far as numbers are concerned, to saying that 24,314 individuals were employed for a month. Now, treating the grain distributed in charitable relief, advanced on loan, and sold, and the money in like manner distributed and advanced in the manner indicated in the preceding section, it will be seen the effect of the expenditure in these forms was to afford subsistence allowance to 120,046 individuals for a month. Therefore the net effect of the expenditure I have exhibited was to afford subsistence to 144,260 individuals, or about 8 per cent. of the population for one month.

CHOTA NAGPORE DIVISION.



## SECTION XXIII.

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### MANBHOOM.

IN the section on Bankoora I had occasion to refer to the difference in soil and aspect of the country presented by the eastern as compared with the western portions of that district. I quoted the revenue surveyor's description of how the alluvial plains of deltaic Bengal gradually merged in an undulating country, until, as you went westwards, "hills and forests, rocks and mountains, and scattered hamlets, take their place in the landscape, and the busy scenes of the fertile plains of Bengal change into the solitude and wildness of her forests." It is with this, comparatively speaking, barren region westwards of Bankoora that I have now to deal.

2. The district of Manbhoom, with the town of Purulia for headquarters, is the most easterly part of the Chota Nagore Commissioner-ship. According to the census report its area is 4,914 square miles, with a population of 995,570 souls. This population gives 203 inhabitants to the square mile. The soil of the district is laterite, the northern portion being undulating and the southern portion hilly.

3. For the district of Manbhoom there are no agricultural statistics extant. It will be remembered that for those districts which possess a uniform arable soil and a dense population necessitating extensive husbandry, it was not always possible to offer satisfactory estimates of cultivation. The impossibility, therefore, of framing such estimates for a district so sparsely peopled, and so peculiar in its system of agriculture as Manbhoom is, will be readily apprehended.

4. This system of agriculture corresponds closely with that prevailing in Sonthalia, which bounds Manbhoom on the north. A description of this system will be found in the section on the former district; it need not therefore be repeated here. I beg, however, to refer to that section for some explanation of the reasons why estimates of cultivation for such districts as the Sonthal Pergunnahs or Manbhoom must necessarily be devoid of precision.

5. Precision apart, local authorities seem to think that six-sixteenths of Manbhoom is under cultivation, the remaining ten-sixteenths of its area being culturable or unculturable waste; of the cultivated area five-sixths is said to grow food crops, and one-sixth non-edible products. The chief food crops grown are rice, Indian corn, millets, and various sorts of pulses, while the non-edible products are oil-seeds, sugarcane, tobacco, cotton, and the dwarf sunflower, called in the vernacular "Surguja." The chief crop, however, is rice, and on it the people mainly subsist.

6. There are three rice harvests in the year: the September-October harvest, when the *gara* and *aus* varieties of rice, forming three-sixteenths of the whole rice crop, are reaped; the November harvest, when the *maan* rice, forming three-eighths of the whole crop, becomes ripe; and the December harvest, when the *amun* crop, forming seven-sixteenths of the whole rice produce, is gathered.

7. Besides its crops of edible or non-edible grain, Manbhoom possesses in its forest and other natural productions considerable sources of commercial wealth and of food-supply. Its lac and tusser industries are important, while the mohwa blossom and mango fruit here, as in Sonthalia, is a staple article of food among the poorer classes. It does not, however, come within my province to do more than refer incidentally to this head of district economy.

8. We possess no definite information regarding the magnitude of this district's trade. Of river-borne trade it can have none, for although it is intersected by the Damooda, Barrakur, Suburnreka, and some other less important rivers, none of them is navigable. "Beds of sand in the dry weather, with a narrow fordable stream in the centre, in the rains they assume the dimensions of torrents so suddenly, that carts and travellers are occasionally overwhelmed while crossing the sandy bed."

9. Although not so impracticable as the rivers, the roads in Manbhoom are not very favourable to commercial intercourse: much traffic with the eastern districts and the railway at Barrakur is, however, carried on by means of pack-bullocks. Tusser, lac-dye, and oil-seeds are exported, and food-grain "to the extent of from one-fourth to one-sixth of the total quantity produced" finds its way out of the district, eastwards to Bankoora, and westwards to Hazareebagh. The importations of food-grain seem to be inconsiderable. The prices which prevail for the more common varieties will be found in the appendix to the first volume of the report.

10. The year 1872 was not a favourable one in Manbhoom. "In some parts of the district, as in the pergunnah or estate called Manbhoom, the main rice crop was almost a total failure, and the Deputy Commissioner estimates that throughout the district the yield was not more than five-eighths of a full crop.\* \* \* There was, however, a good yield of pulses, oil-seeds, cotton, sugarcane, and tobacco."\*

11. This unpropitious season was followed in 1873 by one still more adverse. This was owing to the fact that after the month of August there was no general rain all over the district, while in the months of June and July the rain was most unseasonably distributed. A reference to Appendix II of the first volume of this report will show that the normal rainfall in Manbhoom during June and July is  $8\frac{3}{4}$  and  $12\frac{1}{2}$  inches respectively. In June 1873 only 2.21 inches fell, while in July the fall was over 20 inches. The normal fall in the sudder sub-division during September and October is 7 inches and  $4\frac{1}{2}$  inches respectively; but in September 1873 only 3 inches and in October only one-sixth of an inch fell. In the Gobindpore sub-division, on the other hand, the fall in

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\* Colonel Dalton's Administration Report for 1872-73.

September 1873 was slightly over the average, while in October there was no rain at all. The following statement shows the rainfall in Manbhoom during 1873:—

*Statement showing the monthly rainfall in the district of Manbhoom in 1873.*

SUB-DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Sudder	...	...	2.36	1.78	1.17	1.70	19.33	12.50	3.01	0.15	...	...	42.00
Gobindpore	...	...	1.90	1.40	0.50	2.73	21.73	11.41	9.95	...	...	...	49.62
District average...	...	...	2.13	1.59	0.83	2.21	20.53	11.95	6.48	0.15	...	...	45.81

12. The effect of this abnormal weather on the crops is thus stated by the Deputy Commissioner, Colonel Rowlatt: "Taking the district as a whole, it may be stated that the outturn has been half of an average crop. There has, however, been considerable [local] differences in the yield. While in the western pergunnahs [excepting Torang, where through want of irrigation reservoirs the crop has been bad,] the crops have given a return of nine to ten-sixteenths of the average, in the centre of the district there has not been more than a six to an eight-annas crop; nor in the eastern portion more than from four to six annas [*i.e.*, from one-fourth to three-eighths of the average]. In some villages, where the lands are all high and there is a deficiency of reservoirs and tanks from which the crops could be irrigated, only one-eighth of an average crop has been harvested."

13. The preceding description refers to the rice crops only. It was written after the crops had been reaped and threshed out, so that it may be accepted as an authoritative exposition of the facts. Referring to the other crops that had been harvested, kurthi (pulse) and oil-seeds, the Deputy Commissioner states that in Gobindpore subdivision a half an average crop had been gathered; in the western pergunnahs the crop had been three-fourths of the average; but elsewhere in the district it had "almost entirely failed."

14. The Deputy Commissioner institutes a comparison between the crops in 1873 and those of the last famine year, 1866, with the result of showing that the crops in 1873 were to those of 1866 as 6 is to 5; that is to say, that the crops in the latter year were 15 per cent. worse than those in this former.

15. The cold weather crops in 1866, however, seem to have been better than the cold weather crops of 1874. The Orissa Famine Commissioners say "the outturn of the cold weather crops all over the district is estimated by the Deputy Commissioner to have been between one-third and one-half of a full crop" On the other hand, the Deputy Commissioner, on the 23rd March 1874, after dwelling on the unsatisfactory character of the weather for the mango and mohwa crops, continues: "the wheat, barley, and (other) grain are

being gathered in, and where it has not been injured by hailstorms the outturn will be good; the quantity, however, that will be reaped is insignificant." This was due to the previous exhaustion of the reservoirs, on which the district's agriculture so much depends—an exhaustion which necessarily curtailed the extent of land sown down with cold weather crops. It seems to me therefore that, taking the crops of 1873-74 as a whole, and having due regard to previous adverse seasons, the position of the district in 1874 was no better than it was in the preceding famine year of 1866, and this view seems to be borne out by the following comparative statement of prices current for common rice. The figures for 1866 are taken from the Orissa Famine Commission's Report:—

*Comparative Statement of the price of common rice at Purulia in 1866 and 1874.—Seers for the rupee.*

MONTH.	1866.	1874.
January ... ..	13	15½
February ... ..	15	14½
March ... ..	14	14½
April ... ..	13	13
May ... ..	9½	14
June ... ..	9	14
July ... ..	6½	13
August ... ..	4	13½
September ... ..	6	14
October ... ..	10	15
November ... ..	22	22
December ... ..	26	24

16. The Orissa Famine Commission's Report does not quote the prices which prevailed for any other article of food except common rice. I have already stated, however, that this is the mainstay of the people; the prices current for it, therefore, afford a fair basis for comparing one year with another in respect to available stocks of food-grain. The prices current in the appendix will show that no such variation in the price of food-grain occurred since 1866 as to vitiate a comparison on such a basis between it and 1874.

17. Judging, then, by the trustworthy indication which prices current afford, it seems the position of the district as regards food-supply did not differ materially, if at all, in 1874 from what it was in 1866. The comparison can only be made on the basis of the first four months' quotations; for on the 28th March 1874 the first consignment of Government grain to Manbhoom reached the Burrakur station of the East Indian Railway, and during April it was conveyed to its destination. In May its disposal in the prescribed channels of relief affected the markets and renders the comparison inadmissible. Still no one, I submit, having regard to the history of the seasons of 1865 and 1873, to the character of the harvests in those years, and to the state of the markets during the first four months of each year, can have a reasonable doubt that to the action of Government in 1874, and to nothing but that, is due the fact that in the summer and autumn of this year prohibitive prices did not prevail. If in 1866 the Orissa Famine



Commission declared\* there had been extreme distress and great mortality in Manbhoom, it is manifest that extreme distress and great mortality there in 1874 was averted solely by the action of Government. A further coincidence between the circumstances of both years is furnished by the district's trade.

18. In the year 1866 Lieutenant Roland Money (now Major, and Deputy Commissioner of Julpigoree) was district officer of Manbhoom. At an early period his attention was attracted to the drain on the district resources created by the demand for food-grain in other distressed regions he foresaw the difficulties this exportation, if not neutralized by corresponding importation, would bring on his district; and he sought by his personal influence, and by invoking the action of the superior authorities, to reduce it within limits. There was under precisely similar circumstances an equally remarkable development of the district's export trade in 1874. The greater demand in other districts created a drain on local stocks which did not escape the vigilance of the local executive; and from the beginning of January till the spring the existence of this export is regularly chronicled. The remedy, however, lay not in the prohibition of exportation, but in importation; and the efficacy of the remedy was demonstrated in the closing days of April and commencement of May.

19. In Manbhoom, as elsewhere in the distressed area, distress shewed itself first among beggars and those who in ordinary times subsist on private charity; these first appealed for relief in March. During April the ripening of the mohwa harvest prevented a further increase of distress, the mohwa blossoms affording cheap and wanted food to the poorer classes. To quote the Deputy Commissioner's words, "had it not been for this very timely supply of food, great distress, if not actual starvation, would ere this have taken place." There was, however, a very indifferent mango season; and thus the district was deprived of a source of food supply which was of material assistance north of the Ganges. In addition to the mohwa and mango harvest the spring crop of lac came in at this time, and as the lac market was favourable to sellers, this was also a material aid to the people—lac exchanging locally at the rate of one seer of the dye for three seers of rice. I may observe parenthetically that in Manbhoom most transactions among the people take the form of barter, not of sale or exchange for money.

20. Notwithstanding the opportune presence of these subsidiary resources, the tide of distress was stayed, not turned. Gradually it spread over the portions of the district where the failure in the crops had been worst, thence invading regions till now comparatively well off. On the 26th of April Colonel Rowlatt reports, "places hitherto thought to be quite safe are now reported to be suffering from want of food." On the 5th of May he states that in villages where there had been no mohwa crop "cases of distress are numerous and on the increase." The circle of distress had widened, so as to include the smaller cultivators with the mendicant classes and poorer villagers. In May the commencement of distress in other places hitherto unaffected is reported. These places, towards the south of the district, had had

\* Consult Orissa Famine Commission's Report, Vol. 1, page 267.

a fair harvest, but exportation from there had never ceased, and now in the end of May prices had risen so high that distress resulted. There was, however, sufficient means in grain and money at the disposal of the local executive to deal with all phases of the difficulty. The expenditure incurred in dealing with them I now proceed to tabulate in the usual way.

*Statement of grain expenditure in the Manbhoom district during the Famine of 1873-74.*

Nominal quantity delivered exclusive of transfers.	Grain distributed in charitable relief.	Grain sold for cash.	Grain advanced on loan.	Grain paid as wages.	Remainder—wastage.
Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
8,830	706	12	5,892	1,691	529

*Statement of cash expenditure in the Manbhoom district during the Famine of 1873-74.*

Cash distributed in charitable relief.	Cash paid as wages.	Cash advanced on loan.	Total.
Rs.	Rs.	Rs.	Rs.
84,857	88,122	99,062	2,67,641

21. I now proceed to exhibit the numbers of those relieved by the expenditure tabulated above. The following statements, extracted from the official papers before me, exhibit actual figures :—

*Average number of persons charitably relieved in the Manbhoom district during the Famine of 1874.*

DISTRICT.	FORTNIGHT ENDING ON THE							
	4th April.	2nd May.	16th May.	30th May.	13th June.	27th June.	11th July.	25th July.
Manbhoom ...	600	5,776	5,976	8,569	10,496	11,228	20,065	16,214

  

DISTRICT.	FORTNIGHT ENDING ON THE					REMARKS.
	9th August.	22nd August.	5th September.	20th September.	3rd October.	
Manbhoom ...	21,948	13,576	12,508	9,332	8,355	Figures for the fortnight ending 18th April are wanting. I have, in para. 22 below, assumed a mean for this fortnight between the preceding and following fortnights.

*Statement of labourers employed in the Manbhoom district during the relief operations in 1874.*

DISTRICT.	Aggregate number of individuals employed.	AVERAGE DAILY ATTENDANCE EACH MONTH.							
		February.	March.	April.	May.	June.	July.	August.	September.
Manbhoom ...	1,556,880	1,371	3,215	10,002	13,917	14,259	8,211	794	127

22. Now, treating these statements in the way already familiar, it will be seen that the former, as far as numbers are concerned, is equivalent to saying that 68,633 individuals, and the latter that 51,896 individuals, received assistance for thirty days. Now, treating the grain advanced on loan or sold, on the basis that every  $\frac{3}{4}$ ths of a seer in Manbhoom, as in Behar, supported an individual for a day, and the cash advanced on loan on the supposition that each anna supported another individual also for a day, we shall find the grain and cash so distributed sufficient for the support of 346,721 individuals for a month. Therefore, the total expenditure sufficed for the support of 467,250, or about 46 per cent. of the population, for one month.



COOCH BEHAR DIVISION.



## SECTION XXIV.

### JULPIGOREE.

THE district of Julpigoree, with an area of 2,906 square miles and a sparse population of 418,665 souls, occupies the north-east corner of the Lieutenant-Governorship of Bengal. The submontane tract—a virgin soil of peculiar fertility—ceded to us at the close of the Bhútan war, and known as the Western Dooars, forms nearly two-thirds of this area. This submontane region has only 48 inhabitants to the square mile—a population manifestly inadequate to the development of its resources. It is of all Bengal the region which holds out the greatest inducements to emigration; and it was partly with the view of facilitating and encouraging emigration to it on the one hand, and on the other of developing its resources and those of the intermediate country, that in the introduction to the first volume of this report I advocated an extension of the Tirhoot State Railway towards Julpigoree.

2. The southern boundary of the Julpigoree district marches with the northern boundaries of Dinagepore and Rungpore, and on either side of the dividing line the character of the country and of its agriculture is naturally similar. The southern tracts of Julpigoree, known as pergunnah Boda, cover an area of 475 square miles, and belonging chiefly to the Minor Rajah of Cooch Behar, are managed by the Court of Wards.

3. The central portion of the district occupies an area of about 550 square miles, and is more thickly inhabited than either the Dooars on the northern, or Boda on the southern extremity. The density of population in Boda is 298, and in this central region 387 to the square mile.

4. These figures indicate the fact that a large portion of the district is uncultivated. The Board's return 41B for 1872-73 states the cultivated area covers only 20 per cent. on the gross area; and although the return for the succeeding year shows the cultivated land as covering 50 per cent. on the district area, there seems reason to doubt the accuracy of the more recent information. The matter, however, is one of pure guess work. Beyond knowing that wide stretches of fertile land await the plough in Julpigoree, we know no more.

5. Rural life in Julpigoree differs from conditions prevailing in other Bengal districts. There are no towns and but few villages. In the social economy of the district the unit is the farmer or jotedar; in its agrarian economy the unit is the farm or jote. The farm may be a free-hold or it may be rented; but in any case the jotedar lives in his homestead on it, and in isolated huts studded over it live the cultivators who till the soil. These receive from the jotedar seed-grain, and they share with him the produce; to him also they dispose of any surplus over their requirements. He stands towards them

in the threefold relation of landlord, or employer, or capitalist, and of mahajun, thus leaving no opening for the professional usurer as we know him in the more settled districts. The system is characteristic of an early feudal stage of society. It combines with some advantages many obvious defects.

6. Regarding the normal condition as regards food-supply of this district, I can give but little definite information. We know that it usually produces a surplus of food-grain; that it exports much of this surplus, keeping however a large reserve; and that in addition it grows valuable crops of jute, tobacco, sugarcane, and other non-edible crops, which add to its financial resources. It is less liable to suffer from vicissitudes of season than other districts to the south, its normal rainfall being so heavy that it can afford a large deficiency without material injury to the crops, while its propinquity to the Himalayas secures it some rainfall in the dryest of years. The following statement shows the annual normal rainfall of the district:—

*Statement showing the average monthly rainfall in the District of Julpigoree.*

SUB-DIVISIONS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	
Sudder ... ..	0·50	0·39	2·03	4·66	8·59	29·61	25·86	24·95	27·31	7·09	0·02	0·02	131·03
Bura ... ..	0·50	1·09	1·57	7·33	19·72	50·61	61·30	45·69	37·34	12·76	0·61	0·49	238·90
Boda ... ..	0·82	0·40	0·82	3·39	5·99	16·72	16·08	16·44	19·78	7·52	...	0·11	88·07

7. In the year 1873 there was a deficient rainfall all over the district, but the deficiency was, as we might expect, more markedly injurious in the southern tracts of Boda pergunnah than in the central, or yet than in the northern regions. The following statement shows the rainfall in the district in 1873:—

*Statement showing the monthly rainfall in the District of Julpigoree in 1873.*

SUB-DIVISIONS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	
Dooar ... ..	0·44	0·46	1·00	3·59	3·25	62·26	35·76	35·48	32·41	...	...	0·35	175·99
Sudder ... ..	0·05	0·05	0·75	7·43	2·07	28·93	15·68	13·79	18·76	...	...	0·15	88·31
Boda ... ..	...	0·50	0·00	5·87	3·37	22·02	12·02	14·07	7·28	...	...	0·26	67·68

8. In the Dooars the rice harvest was thirteen-sixteenths of the average; in the central region it varied from five-eighths of three-fourths



of the average; but in the Boda pergunnah the Deputy Commissioner\* (herein more sanguine than Mr. Bradbury, c.s., Manager of the pergunnah under the Court of Wards) estimated the outturn at only seven-sixteenths of average harvest. The failure was greatest in South Boda along the Dinagapore and Rungpore boundaries. Starting with an out-and-out failure in some villages, and with one-eighth of an average harvest in others, the crops improved as you went north till you reached the Patgram pergunnah, where there was a ten anna crop, or the Bykuntpore pergunnah where only one-fourth of the crop had been lost. Taking the district all in all, therefore, the failure in the harvests of 1873 in Julpigoree had not been such that had the district been isolated it would have experienced any serious difficulty. It was to the fact of its being surrounded on the south and west by famine-stricken districts that Julpigoree owes the troubles it had to encounter. To the demand of Dinagapore and Rungpore especially is due that depletion of stocks and that expectation on the part of Julpigoree grain-holders of exorbitant gains, which, forcing up local prices to eight seers, and in places to six seers of common rice for the rupee, produced transient distress and that ebullition of popular feeling to which I referred in the section on Rungpore.

9. Reviewing the position of his district, in a report dated the 30th of May 1874, the Deputy Commissioner has summarized the origin and progress of the difficulties with which during that year Julpigoree had to contend. Having described the character of the late harvest, and dwelt upon the other local industrial resources which suggested the hope that distress might be averted from the district, Major Money continued; "a source of danger, however, early developed itself in the commencement of an export trade on a scale never before known here. Easily accessible from Purneah, from Rungpore, from Dinagapore, and from Darjeeling, traders from all these places poured into this district. These traders were willing to give what appeared to the people of a district where rice is always very cheap\* fabulous prices, and there began an eager rush to convert rice into money. Cloth merchants, who never before thought of grain trade, left their own business and started as grain-dealers; even pure agriculturists, bitten with the mania, went about from hât to hât buying, where they could cheap, and selling to *beparies* (itinerant hucksters), who were always willing to buy at rates in advance of the local bazar rates.

10. There was as much emulation among those *beparies*† as amongst the people of the district, and they seemed always prepared to bid each other out of the field; they thus ran up prices greatly.

11. Gradually rising prices reached twelve seers for a rupee all over the district. At this rate they stood firm for some little time; but about the first week in May they began to rise more rapidly, and by the middle of the month had run up to eight seers the rupee, and in some places even to seven or six seers. The rise in price was at last

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\* Julpigoree is a "Non-regulation" district. In the administration of the district the local executive is guided by the general spirit of the Regulations and Acts; but it is vested with discretion to modify the action of the laws so as to bring them into harmony with the requirements of an undeveloped country.

† These *beparies* took the grain to the dear markets in Rungpore, Dinagapore, and other distressed districts.

general and most sudden : at all parts of the district, Titalya, Siligoree, Julpigoree, the Dooars, and Patgram, eight seers the rupee was the general quotation, while here and there it was still higher.

12. With this rise in price came reports of distress and of markets insufficiently supplied. Everything seemed to indicate that the *golas* of the district must be empty. About this time I first heard a rumour of some grain robberies having occurred in the Rungpore district, and uneasiness was expressed by traders who came from Rungpore into the south of Boda to buy grain three. I next heard rumours of such cases about Meckligunge, and then three cases of grain robberies occurred on our border. Thence these offences seemed to sweep up into the Dooars, twenty-five cases of grain robbery occurring there in three successive days. At the same time a few cases occurred in Boda and Bykuntpore."

13. The steps taken by the Commissioner, Sir William Herschel, and by the Deputy Commissioner in this grave emergency, were prompt, decided, and successful. Parties of police, mounted and foot, were thrown into the disturbed regions ; these were supported by detachments of the Cooch Behar regiment of infantry ; a detachment of the line regiment quartered at Buxa was summoned by telegraph, and application made to Government for one lakh of maunds of rice. Finally the Deputy Commissioner, passing rapidly through the distressed tracts, arrested many delinquents on his way. These energetic measures were successful. The show of military force overawed resistance and checked further crime, while the grain, which, on its arrival, was offered for sale, had the immediate effect of lowering prices to ten seers for the rupee, and of restoring confidence to the markets.

14. At the commencement of the year Major Money had foreseen the consequences which resulted in May and June, from the partial depletion of local stocks in Julpigoree, caused by the demand of the distressed districts to the south. District Officer of Manbhoom during the famine of 1866, he remembered the disastrous consequences of an exportation which in all attendant circumstances strikingly resembled that he now saw growing to such magnitude. Convinced of the reality of the danger he sought, by personal influence and exhortation, to dissuade grain-holders from pursuing what seemed to him the suicidal policy of selling their stocks ; and failing to persuade them, he besought Government to concur in his wish to prohibit exportation. The Government, however, declined, and the result has vindicated the wisdom of this decision ; adding also further proof [if any be wanting] to the remarks offered in the section on Monghyr, in deprecation of interference in this way with the free action of private trade.

15. In reality exportation from Julpigoree in 1874 had partially, but not unduly, depleted local stocks. Local prices, when they had reached their highest level, were no indication to the quantity of grain in store, the competition of buyers from the south having established an abnormal and fictitious market rate. The holders of grain saw, in the continuous and increasing demand of the southern districts, a rich harvest of profit if they held over their grain. They did hold it over with the result described. When, however, the presence in the

district of Government grain, and its sale at a fixed price, taught grain-holders that persistence in the policy of withholding stocks might result in their losing the present favourable market, they were not slow to recognize their interest. The peculiar customs of the country precluding the concentration of large stores in the hands of the few, neutralized any attempt at combination to force prices above that rate prescribed by the Government sales. Thus it was that in Julpigoree, as well as in every distressed district in Bengal, the sale of Government grain had a salutary effect, altogether out of proportion with the insignificant quantity thrown on the market. The sale of this small quantity demonstrated the existence of large reserves in Julpigoree, the "export trade springing up afresh and as vigorous as ever." If, instead of importing, Government had prohibited exportation, a twofold injury would have been wrought—an injury to the importing districts thus shut out from their food-supplies; an injury to Julpigoree, thus deprived of its paying market.

16. A serious emergency, such as I have now described, could not fail entailing distress on particular classes of the people. Fortunately, however, this distress, like the emergency, was transitory over the larger portion of the district. It was only in Boda, especially in the southern portion of the pergunnah, where the failure in the crops had been greatest, that severe or continuous pressure was felt. Here, indeed, there was much pressure; but as the affected tracts were the property of the minor Rajah of Cooch Behar, the expenditure incurred on relief operations here were borne not by the Government, but by the Court of Wards managing his estates. It is proper, however, that I should exhibit, as far as my materials will allow, the expenditure incurred in Boda as well as in the rest of the district. This I now proceed to do.

*Statement of grain expenditure incurred in Julpigoree during the scarcity of 1874.*

Name of Relief Division.	Nominal quantity delivered.	Grain distributed in charitable relief.	Grain sold for cash.	Grain advanced on loan.	Grain paid as wages of labour.	Remainder.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Cooch Behar Raj expenditure (Boda) ...	1,696	120	876	700	.....	.....
Government expenditure	1,625	.....	1,316	90	40	179
	3,321	120	2,192	790	40	179

17. The Cooch Behar accounts have not been audited by the Controller-General of Famine Accounts. I have therefore abstracted the preceding figures from the famine narratives.

370 *Julpigoree : Extent and Effect of Relief Expenditure.*

*Statement of cash expenditure incurred in Julpigoree during the scarcity of 1874.*

Relief Division.	Cash distributed in charitable relief.	Cash paid as wages.	Cash advanced on loan.	Total.
	Rs.	Rs.	Rs.	Rs.
Government expenditure ...	.....	17,696	55,110	72,806
Cooch Behar Raj expenditure ...	1,541	20,069	.....	21,610
Total expenditure ...	1,541	37,765	55,110	94,416

18. I regret I cannot present actual figures for those relieved by the expenditure tabulated above. The labour returns for Julpigoree have been consolidated with those for Darjeeling, and the charitable relief returns are imperfect. A reference to the District Officer of Julpigoree has failed to throw light on the question. Estimating the numbers relieved, however, in the way already familiar, I find that the total expenditure incurred was sufficient to support 226,307 individuals, or 54 per cent. of the population for a month. Considered alone, the Government expenditure sufficed for the support of 119,806 individuals for the period of one month.





## CONCLUSION.

“THE [distressed] area is divided into two parts, namely, the very distressed tracts comprising a large portion of the districts of Sarun, Chumparun, Tirhoot, Bhagulpore, Purneah, Dinagepore, Rungpore, and Bogra, and the partially distressed tracts comprising portions of the districts of Shahabad, Gya, Monghyr, Sonthalia, Maldah, Rajshahye, Pubna, Moorshedabad, Julpigoree, Burdwan, Beerbhoom, Bankoora, Manbhoom, Nuddea, and some scattered places not worth mentioning.”\* To this passage in the Lieutenant-Governor’s famine report my instructions referred me for an enumeration of the districts with which I had to deal. With each of the districts thus enumerated I have dealt in the preceding pages, and therefore, as far as concerns the letter of my instructions, the work entrusted to me is now done.

2. In those ‘scattered places,’ however, not specified by name there was some pressure. This pressure was due partly to a failure in local harvests, partly to exportation depleting local stocks, enhancing local prices, and entailing complications not altogether unsimilar to those reviewed in the section on Julpigoree. These complications necessitated some relief administration; and therefore being desirous of making this report an exhaustive exposition of all relief expenditure of the kind hitherto dealt with, I have, in consolidated statements appended to this section, included the expenditure incurred on relief in those ‘scattered places.’†

3. There were many districts to which it was happily unnecessary to extend assistance in 1874; but an examination of the prices current appended to the first volume of this report will show that no district in these provinces escaped in that year the pressure of high prices and the hardships consequent thereon. An examination of the prices current during 1874 in the North-Western Provinces will show that, in sympathy with Bengal, dear rates prevailed throughout Hindoostan.

4. The primary object of this report is “to place in clear relief the relation which in each district existed between the failure in the harvest there and the consequent distress, in order that on future occasions of a similar nature Government might have the benefit of this experience in determining the provision to be made to meet distress.” I have now to the best of my ability defined this relation and reduced to definite form the *data* by which Government may compare future emergencies with that which has occurred. When, however, in accordance with another portion of my instructions, I come to formulate from these *data* “rules for future guidance in making provision for another scarcity,” I confess myself unequal to the task.

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\* Minute by the Lieutenant-Governor of Bengal, dated 31st October 1874, Ch. III, p. 29.

† I have not included the Midnapore district. The relief operations in this district were carried out by the Collector in communication with the Central Relief Committee. The Committee’s accounts are not yet made up; I was therefore unable to consult them.

5. I am not, I apprehend, required to determine the best among divers modes of relief administration. If this were what is required, the task would not be difficult. I should then have no hesitation in stating that in case of local scarcities, unmodified by other complications, employment on relief works and facilitation of private trade was all that was needed. I should state that in case of severer and more widespread difficulties there should be added a provision for gratuitous relief—not in the shape of cooked food and poor-houses (to which I have an extreme aversion\*), but in the shape of out-door relief. Finally, I should state that in extreme cases, such as that of 1874, the relief administration should hold a reserve stock of grain sufficient to neutralize combination among dealers, and by judicious sales to keep prices from becoming prohibitive. If in addition it were required of me to fill in the outlines of this policy with working rules—to reduce it, in fact, to practice—I should quote the rules framed in 1874 for relief officers in Durbhunga; these rules being amplifications of, and deductions from, the principles laid down by Sir Richard Temple.

6. I do not, however, apprehend that this is what is meant. I believe rather the hope was that it might be possible from the experience of the past to determine definitely the actual provision in money or grain which, in case of a future failure of given magnitude, it would be necessary to make. This is what, I respectfully submit, it is impossible to do with any pretence to accuracy. It seems to be beyond the compass of human foresight.

7. Between the failure of the harvests in a district and the capacity of the people there to withstand the consequent strain, there can be no fixed connection. Granted that such a connection exists to-day, there is no certainty that it will prevail a year hence, still less at a more distant period. If we could predicate fixity of all the elements which influence a people's material position, the character of antecedent harvests, local and in adjacent regions; the rates of rent and tenure of land; the conditions of trade; the prices of agricultural produce; the progress of agriculture and of population; the development of new industries; the expansion or contraction of credit; if of these and of many other similar influences we were assured of the stability, or could foresee the variations, then we might be able, from the experience of past emergencies, to gauge the requirements of a future emergency. With the lesson taught by the past before us, we may indeed hope to interpret the needs of the present; but the past alone projects no certain light on a changeful future.

8. My instructions raise one other question on which in the preceding pages I have not dwelt. This question is how far the subdivision of land has operated either to enable the people to bear a scarcity or to render them more liable to it. To this interesting topic the papers before me do not once refer; and my own knowledge of the various distressed districts is not so extensive or minute that I can supply the omission. The question invites speculation, but I apprehend the desire of Government is, not to elicit speculations, but to learn

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\* Founded on my experience of their demoralizing effect during the famine of 1866 in Monghyr and of 1874 in Tirhoot.



how far obvious probabilities are supported by ascertained facts. The famine literature throws no light upon the subject, and I therefore abstain from speculations.

9. I had intended in these final paragraphs to invite special attention to that want of accurate agricultural statistics for those provinces which the preceding sections have, I trust, brought into prominent notice. I had intended dwelling on the advantages to the community generally, and to landowners in particular, of a cadastral survey of the country, accompanied, if possible, by an inquiry into, and record of, the various rights to the soil. I had purposed suggesting that landowners might fairly be called on to contribute to the expense of an undertaking fraught with so much good to the public generally, and to themselves in particular; and that any extra expenditure Government might have to incur should be recouped by rendering imperative the production, in all litigation connected with land, of a stamped copy of the survey maps or record, a provision which would add to the country's permanent sources of income. I find, however, that, on the submission of the first volume of this report, the Lieutenant-Governor's attention was attracted to this matter and an expression of opinion from him elicited. It is therefore unnecessary for me to dwell further on the question.

10. And now I have come to the end of my work. In what I have written I am conscious of many imperfections. There doubtless occur in it many defective or immature opinions on agricultural and economic questions which a larger knowledge and a wider experience than I possess would have obviated. What I have done, however, is, to some extent, in the nature of a venture into untrodden regions, and I shall be permitted to claim such considerate treatment as a venture of the sort may merit.

I do not, however, deprecate criticism. If my facts or reasonings from them be invalid, exposure of their invalidity is for the public good; if they be valid, criticism, by testing, will but exhibit their force.

11. In conclusion, I would say that in submitting my completed work I am more confident in the strength of my facts than satisfied with the literary workmanship which has bound them together. On this point, however, I will obtrude no excuses on the Government, trusting it will be mindful that, brought from accustomed executive work to the less congenial labour of the closet, I was allowed but a limited time to search for materials and mould them into shape. If the pressing needs of Indian official life render inevitable a limitation in the time assigned for the completion of any work, these needs may be pleaded in excuse of the many literary failings which leisure will detect in the preceding pages.







*Statement of the Receipts and Issues of Government Grain in the distressed districts of Behar and Bengal during the famine of 1873-74.*

1	2	3	4	5	6	7	8	9	10
DIVISION.	District.	Nominal quantity of grain delivered.	Grain distributed in charitable relief.	Grain paid as wages of labour.	Grain advanced on loan.	Grain sold for cash.	Wastage and loss.	Grain sold after the close of relief operations.	Difference of columns 3 and 4 to 9.
		Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
PATNA	Shahabad	4,781	287	545	158	3,153	104	534	.....
	Gya	3,073	220	117	85	2,433	218	.....	.....
	Durbhunga	118,745	14,351	10,769	14,512	37,750	14,396	24,479	(a) 2,488
	Mozufferpore	60,352	3,448	9,500	15,067	19,054	.....	.....	(b) 13,283
	Saran	40,200	610	11,487	17,894	6,410	2,255	772	(c) 772
	Chumparun	29,183	1,190	7,294	8,012	11,081	.....	.....	(d) 1,606
BHAGULPORE	Monghyr	8,158	360	486	5,009	1,900	235	168	.....
	Bhagulpore	26,318	4,232	1,474	4,276	10,118	1,671	4,547	.....
	Furneah	24,802	1,897	5,366	4,583	*10,762	2,149	.....	(e) 45
	Sonthalia	7,419	121	1,970	3,334	643	148	1,203	.....
RAJSHAHYE†	Moorshedabad	4,277	2,642	707	710	36	182	.....	.....
	Dinagapore	39,674	2,732	2,934	12,531	15,516	2,803	5,159	.....
	Maldah	3,946	1,315	243	907	1,253	238	.....	.....
	Rajshahye	4,685	2,080	209	360	176	209	1,517	(f) 134
	Bogra	9,844	2,549	813	2,386	1,834	12	2,250	.....
	Rungpore	12,955	1,517	922	1,823	5,763	961	1,964	.....
	Pubna	584	70	100	268	144	2	.....	.....
CHOTA NAGPORE	Singbhoom	393	291	.....	95	.....	7	.....	.....
	Manbhoom	8,830	706	1,691	5,892	12	529	.....	.....
	Hazareebagh	1,291	.....	504	603	154	30	.....	.....
	Lohardugga	1,062	4	40	710	303	5	.....	.....
BURDWAN	Burdwan	13,380	6,812	1,495	3,002	4	374	1,693	.....
	Bankoora	3,180	930	797	1,290	87	.....	.....	(g) 76
	Beerbhoom	3,719	1,725	1,004	800	.....	20	170	.....
	Hooghly	2,901	2,350	502	44	.....	5	.....	.....
	Howrah	18	18	.....	.....	.....	.....	.....	.....
PRESIDENCY	Nuddea	883	264	478	115	6	20	.....	.....
	24-Pergunnahs	43	43	.....	.....	.....	.....	.....	.....
COOCH BEHAR	Julpigore†	3,321	120	40	790	2,192	179	.....	.....
	Darjeeling	105	89	.....	.....	13	3	.....	.....
	Total	438,122	52,973	61,487	105,261	128,797	26,745	44,455	18,404

\* It cannot be determined how much of this quantity was sold after the relief operations had ceased.

† Includes the Cooch Behar Raj expenditure.

‡ In addition to above, 2,266 tons were sold, 22 tons distributed in charitable relief on the Northern Bengal State Railway, and 638 tons disposed of and written off to wastage after the close of relief operations.

(a) This quantity was issued as fodder for the Government transport trains.

(b) It cannot be stated what portion of this quantity has to be written off to miscellaneous expenditure, wastage, and sale after the close of relief operations.

(c) Of this quantity 543 tons are debited under the head of miscellaneous expenditure recoverable, and 229 tons were expended as fodder for the Government transport trains.

(d) This quantity includes the grain sold after the close of relief operations, and also the wastage and loss.

(e) This quantity was expended as fodder for the Government transport trains.

(f) This quantity comes under the head of miscellaneous expenditure recoverable.

(g) This quantity has to be written off to miscellaneous expenditure and wastage.

*Statement of Cash Expenditure incurred in the distressed districts of Behar and Bengal during the famine of 1873-74.*

DIVISION.	District.	Cash distributed in charitable relief.	Cash advanced on loan.	Cash paid away as wages.	Total cash expenditure.
		Rs.	Rs.	Rs.	Rs.
PATNA ...	Shahabad ...	33,566	17,437	1,89,373	2,40,376
	Gya ...	11,522	40,503	40,648	92,673
	Durbhunga ...	1,73,250	1,17,250	31,88,829	34,79,329
	Mozufferpore ...	1,41,711	2,21,255	11,00,685	14,63,651
	Sarun ...	2,92,663	6,41,477	15,06,412	24,40,552
	Chumparun ...	36,950	3,00,430	6,43,808	9,91,188
BHAGULPORE ...	Monghyr ...	89,865	1,86,464	1,32,993	4,03,322
	Bhagulpore ...	1,28,064	1,47,050	1,85,498	4,60,612
	Purneah ...	1,92,000	1,13,125	2,17,584	5,22,709
	Sonthal Pergunnahs ...	224	7,800	1,79,959	1,87,983
RAJSHAHYE ...	Moorsheadabad ...	2,38,000	26,031	70,795	3,34,826
	Dinagpore ...	87,633	23,300	11,61,492	12,72,425
	Maldah ...	26,951	48,450	1,06,762	1,82,163
	Rajshahye ...	46,998	1,33,372	51,841	2,32,711
	Bogra ...	66,440	53,993	2,53,111	3,68,549
	Rungpore ...	1,54,375	1,75,934	4,50,909	7,81,318
CHOTA NAGPORE ...	Pubna ...	12,211	66,519	22,466	1,01,186
	Singbhoom ...	.....	1,450	16,735	18,185
	Manbhoom ...	84,857	99,062	83,122	2,67,041
	Hazareebagh ...	25,381	72,994	70,835	1,69,210
BURDWAN ...	Lohardugga ...	3,879	61,705	1,63,685	2,29,269
	Burdwan ...	5,46,723	70,559	62,277	6,79,559
	Bankoora ...	1,02,659	56,005	96,850	2,55,514
	Beerbhoom ...	49,455	61,615	64,809	1,75,880
	Hoochly ...	2,29,000	58,611	1,31,020	4,09,631
PRESIDENCY ...	Howrah ...	.....	.....	.....	.....
	Nuddea ...	54,000	1,30,662	1,30,712	3,15,374
COOCH BEHAR ...	24-Pergunnahs ...	.....	8,294	80,466	88,760
	Julpigoree ...	1,541	55,110	37,765	94,416*
	Darjeeling ...	6,000	.....	3,495	9,495
	Total ...	28,05,519	30,02,962	1,04,49,926	1,62,58,407

\* Includes the Cooch Behar Raj expenditure.

## APPENDICES.





# CONTENTS.



## APPENDIX I.

						Page.
Prices current of food-grain from 1868 to 1874 in each sub-division of each district in the Patna						1
		Division	...	...	...	1
Ditto	ditto	Bhagulpore	„	...	...	21
Ditto	ditto	Rajshahye	„	...	...	33
Ditto	ditto	Dacca	„	...	...	45
Ditto	ditto	Chittagong	„	...	...	55
Ditto	ditto	Burdwan	„	...	...	61
Ditto	ditto	Presidency	„	...	...	75
Ditto	ditto	Chota Nagpore	„	...	...	89
Ditto	ditto	Orissa	„	...	...	103
Ditto	ditto	Cooch Behar	„	...	...	111

## APPENDIX II. -

Table of average monthly rainfall in each sub-division of each district in Bengal ...	115
---	-----

## APPENDIX III.

Outturn of paddy (unhusked rice) in standard maunds per acre, extracted from a "Note on Rice Statistics," compiled by Lieut. Otley, R.E., of the Irrigation Department	121
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PATNA DIVISION.



# APPENDIX I.

## PRICES-CURRENT.\*

NOTE.—It has been deemed advisable to append to the preceding report revised statements of the prices of food-grain in Bengal for as many years as it was possible to compile accurate figures. The question of prices in Bengal—their fluctuation and its causes—has hitherto not had that attention paid to it which its importance deserves. This branch of economic study in Bengal still awaits its historian. As some contribution to the *data* such an historian will need, as well as for their bearing on the preceding discussion, and the interest they possess for the commercial public, the following tables of the prices of food-grain, which in each sub-division of each district in Bengal prevailed since 1867, are now presented.

### PATNA DIVISION.

#### SHAHABAD.

*Prices-current in the ARRAH or SUDDER SUB-DIVISION.—Number of seers of 80 tolahs retailed for a rupee.*

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1868.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	29	28	25	23	24	24	25	22½	22	19	18	17
Indian-corn ...	40	38	35	35	36	35	35	30	28	25½	25	21½
Pulses ...	30	28	23	27½	26	25	25	23	24	20	18	18
Wheat ...	27	27	20	18	20	19	21	20	21	17½	16	13
Millet ...	40	38	35	35	36	35	35	30	28	25½	25	21½
1869.												
Common rice ...	17	18	18	17	16½	15	14	13	15	18	16	19
Indian-corn ...	21½	20	21	21½	20	16½	15	15	17	28	24	27½
Pulses ...	18	16	18	17	18	14	12	12½	16½	11	10	12
Wheat ...	14	12	13	16	17	15	13½	14½	15	14	11½	13
Millet ...	21½	20	21	21½	20	16½	15	15	17	28	24	27½
1870.												
Common rice ...	19	20	21	22	19	20	18	19	19	22	18	21
Indian-corn ...	26½	28	32	28	24	24	22	23	24	29	29	30
Pulses ...	12	12	12½	19	25	20	20	20	18	20	20	22
Wheat ...	11	11	11½	19	18	18	17	18	18	20	19	18
Millet ...	26½	28	32	28	24	24	22	23	24	29	28	30
1871.												
Common rice ...	25	24	24	24	23	24	24	25	22	20	22	22
Indian-corn ...	31	30	30	32	31	31	34	33	34	29	28	31
Pulses ...	25	24	24	30	30	29½	28	30	32	30	30	30
Wheat ...	23	22	23	22	25	25	26	25	24	21	24	14
Millet ...	31	30	30	32	31	31	34	33	34	29	28	31
1872.												
Common rice ...	20	21	19-5	19-5	18-6	16-7	17	18	18	16	18	19
Indian-corn ...	29	30	29-8	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pulses ...	30	28	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ...	20	20	18-6	18-6	18-6	16-7	16	16	16	15	15½	15
Millet ...	29	30	29-8	.....	.....	.....	.....	.....	.....	.....	.....	.....
1873.												
Common rice ...	19	19	20	20	17	16	15	16	16½	14½	13	14
Indian-corn ...	.....	.....	.....	.....	.....	.....	.....	18	17	19	.....	18
Pulses ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ...	14	13	16	16	16	16	15	14	14	13	11½	14
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1874.												
Common rice ...	13	12½	12	12	11½	11	11½	11½	13½	11½	16	18
Indian-corn ...	16-8	15	17½	18	18	17½	18	17	20	21	20	25
Pulses ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ...	18	14½	15½	14½	14½	14	15½	16½	14½	15	15	17
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

\* See paragraph 36, page 208.

## BUXAR SUB-DIVISION.

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1868.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	21	23	21	23	23-8	23-8	21	21-8	20	19	18	16
Indian-corn ...	30	30	30	30	27	29	27	23	24-8	25	24	19
Pulses ...	38	32	32	27	30	31	26	27	22	21	20	17
Wheat ...	23	22	20	17	18	21	19	19	16	15	14	12
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1869.												
Common rice ...	17	18	17	17	15	14-8	14	14	17	16	17	18
Indian-corn ...	20	22	23	20	16	16	13	15	25	21	22	23
Pulses ...	18	20	21	20	16	14-8	14	14-8	13	11-8	11-8	24
Wheat ...	12	12-8	15	15-8	14	13-8	13	13-8	13	12	11-8	11
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1870.												
Common rice ...	19	20	20	20	19	19	19	19	21	21-8	21-8	25
Indian-corn ...	24	26	27	26	26	25	16	16	30	28	29	30
Pulses ...	16	22	27	24	24	22	22	22	24-8	24-8	20	23
Wheat ...	11	11-8	15	16-8	17	16	16	16-8	17-8	18	18	19
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1871.												
Common rice ...	24-8	21-8	22-8	22-8	22	24	23-8	24	22	22	22	22
Indian-corn ...	28	23	25	25	30	30	30	30	29	25	25	25
Pulses ...	26	24	32	30	30	32	32	32	23	31	29	29
Wheat ...	19	19	21	22	22	23	21-8	22	21-8	21	21-8	21-8
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1872.												
Common rice ...	23	22-8	23	23	22	20	18	17-8	17	17-8	19	21
Indian-corn ...	22	23	23	23	23	21	16	16	30	26	28	29
Pulses ...	29	30	31	31	30	28	26	27	26	25	28	28
Wheat ...	21-8	16	17	18	17-8	17	15	15	14	14	15	14-8
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1873.												
Common rice ...	22	22	21	21	20	19	18	17-8	17	16-8	13	14
Indian-corn ...	30	30	28	25	24	22	16	16	24	20	17	17
Pulses ...	28-8	29	29	29	28	24-8	23	22	20	19	17	17
Wheat ...	14-8	14-8	15-8	16-8	16	15-8	15	15	14-8	13	13	14
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1874.												
Common rice ...	18	12-8	13	12-8	12	12	12-8	12-8	12-8	17	18	19-8
Indian-corn ...	16	17-8	18	18	17	15	15	18	20	20	24	21
Pulses ...	16-8	21	18	18	18	17-8	18	18	13	19	20	21
Wheat ...	14	14	14	14-8	14-8	14	15-8	15	15	15	15-8	16
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

## SASSERAM SUB-DIVISION.

1868.												
Common rice ...	16	16	17	18	19	20	20	20-4	22	20-8	21	21
Indian-corn ...	22	23	23	24	25	23	21	20	20	21	19	19-8
Pulses ...	15	15	16	17	17	17	17	17	17-4	17-4	16-8	16-8
Wheat ...	20	22	21	22	22	21	20	20	19-8	19-8	18	18
Millet ...	40	35	40	40	37	35	35-8	35	29	32	35	35-8
1869.												
Common rice ...	15	15	15	14	14-4	14-8	10	11	11	11-8	17-8	17
Indian-corn ...	20	21	21-8	22	22	21-8	20	19-8	19-4	19	19	20
Pulses ...	15	14-8	15	14 $\frac{1}{2}$	14-4	14-8	9-12	9-4	9	9	9-12	9
Wheat ...	12-8	16-8	16-8	15-12	16	15-12	11	11	11-4	11-12	12-4	11-12
Millet ...	30	31	31-8	32	31	32	29	29	29-8	28-8	28-8	30
1870.												
Common rice ...	17	18	18	17	15-8	15-8	16	17	18	18	23	23
Indian-corn ...	20	21	21-12	20	20	20-4	20	20-8	21	20	19-8	19
Pulses ...	12-4	15-4	16	17	15	14	14	15	16	14	15	17-8
Wheat ...	10-8	17	17	17	17	16-8	16-8	16	18-8	18-8	18-8	18-8
Millet ...	33	32	31	25	29	29-8	29-8	29-8	31	30	28	30
1871.												
Common rice ...	20	20	21	21	19-8	19	19-8	20	20	20	22	22
Indian-corn ...	23	24	24	25	24	24	23	23	22-8	24	24	24
Pulses ...	16	15-8	18	19-8	18-8	20	20	19-8	18-8	17	18	18
Wheat ...	19	20	19	.....	20-8	21-8	21	20	21	22	21-8	22-8
Millet ...	35	36	35	40	35	36	35	35	35	35	35	40
1872.												
Common rice ...	20	20-8	20-5	20	18-8	17-8	18	18-8	18	18	16-8	17-8
Indian-corn ...	23	24	23	23	23	23	22	23	23	23-12	24	24
Pulses ...	18	17-12	18-8	19	19	19-4	20	20	20	19-12	19	18
Wheat ...	24	22-12	18-6	20-2	20-5	17	17	17	16-8	16	16	16-8
Millet ...	40	40	39	39	39	37	36-8	36	36	36	36	39

SASSERAM SUB-DIVISION.—(Continued.)

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1873.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	17	16	16-8	16	15-8	14-8	14-8	13-8	13	12-8	12	12-8
Indian-corn ...	23	22-8	22	.....	.....	.....	.....	.....	16	16	14	14-4
Pulses ...	17-8	17	16-8	16-8	16-8	15	14	14	13-8	12-8	12	12-8
Wheat ...	15	14-8	17	17	17	16-8	16-4	15-4	14	12-12	12-4	13
Millet ...	38	38	.....	.....	.....	.....	.....	.....	.....	.....	22	22
1874.												
Common rice ...	10-8	10-8	10-8	11	11	11	11-4	11	14	14-8	21	21
Indian-corn ...	14	14	.....	.....	.....	.....	.....	.....	17	22	22	25
Pulses ...	12-8	11	12-8	11-8	12	12	12	12	11-8	12	12	13
Wheat ...	12-12	13-8	14	14-4	14-4	14-8	14	14	14	14-4	14-12	17
Millet ...	21	20	.....	.....	.....	.....	.....	.....	.....	35	37-8	37-8

BHUBOOAH SUB-DIVISION.

1868.												
Common rice ...	25	21	21	20-8	21	20	17-8	20	19	21	29	26
Indian-corn ...	32	31	31	30	30	28	26	25	35	34	35	32
Pulses ...	20	20	20	20	20	19	18	18	19	19	20	20
Wheat ...	24	23	23	22	20-8	17	20	17	17	23	24	24
Millet ...	35	34	32	30	30	29	28	28	49	39	38	30
1869.												
Common rice ...	19	18-12	18-8	18-8	18-8	18	18	17-12	17	16	17-8	25
Indian-corn ...	26	26	25-8	25	26	26	25	24	24-8	23	25	28
Pulses ...	20	19-8	19	18	17	17	16	15	14-8	14	14-8	20
Wheat ...	21	21	22	22-8	22	22	21	20	18-8	18	19	20
Millet ...	28	28	27	26	25	25	25-8	24	24	22	24	30
1870.												
Common rice ...	16	16	16	16	15	13-12	14	11-4	14	17	24	28-8
Indian-corn ...	30	30	30	30	16	16	18	20	22	22	32	32
Pulses ...	16	16	16	16	14	13	14	14	14	14	15	15-8
Wheat ...	17	17	17	17	15-8	18	15	16	15	17	18	18
Millet ...	30	30	30	30	18	16	16	24	24	24	32	32
1871.												
Common rice ...	23	20-8	20	19-8	20-8	21	22	22	22	22	24	23
Indian-corn ...	28	27	21	24	24	26	27	32	36	36	30	30
Pulses ...	15-12	16	16	17	17	18	18	19	19	19	18	16
Wheat ...	18	20	20	20	20	21	21	20	21	21	22	22
Millet ...	28	26	25	24	24	26	26	28	29	35-8	32	34
1872.												
Common rice ...	22-8	21-8	20-12	21	20	19	19	18-8	18-8	19	17	17-8
Indian-corn ...	30	28	28	28	30	25	28	27	30	26	24	20
Pulses ...	16	17	16	16	15	14	13	13	13	13	13	16
Wheat ...	21-8	20	17	20	20	20	16	15	16	16	16	15
Millet ...	32	30	28	30	30	28	28	26	30	32	26	24
1873.												
Common rice ...	17-8	17	17	17-4	15-12	15	14	15	16	13	11-4	13
Indian-corn ...	20	20	22	.....	.....	.....	.....	.....	.....	.....	16	14-8
Pulses ...	16	15	15	15	16	14	14	14	14	14-8	12-8	13
Wheat ...	15	15	14	16	16	16	14	14-8	15	14	12-8	13
Millet ...	24	24	24	.....	.....	.....	.....	.....	.....	25	16	.....
1874.												
Common rice ...	12	11	10-8	10-4	10-4	10-8	10-4	10-4	11-4	11-8	16	20
Indian-corn ...	16	14-8	14-8	15	.....	.....	.....	.....	.....	.....	20	20
Pulses ...	12	12	12	12	12	12	12	11-8	11-8	11	10-8	11
Wheat ...	14	13-8	13-8	13	14	14-8	13-8	13-8	13	13	13	14-8
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	24	18	17	.....

Statement showing the average Prices-current in the District of Shahabad from 1868-72.

Sub-Division.	Kind of grain.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Sudder...	Common rice ...	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
	Indian-corn ...	23	22-2	21-5	21-1	22-2	19-9	19-6	19-5	19-2	19	18-4	19-6
	Pulses ...	29-6	29-2	29-5	29	27-7	26-6	26-5	25-2	25-7	27-9	25-7	27-5
	Wheat ...	23	21-6	20-6	23-4	24-7	22-1	21-2	21-1	22-5	20-2	19-6	20-5
	Millet ...	19	18-4	18-8	18-7	19-7	18-7	18-7	18-6	18-8	17-6	17-1	14-4
		29-6	29-2	29-5	29	27-7	26-6	26-6	25-2	23-2	27-8	24-3	27-5







## DURBHUNGA.

Prices-current in the SUDDER SUB-DIVISION.—Number of seers of 80 tolahs  
retailed for a rupee.

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1868.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Indian-corn ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pulses ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1869.												
Common rice ...	.....	.....	.....	.....	.....	14	15½	14½	14½	16	19	24
Indian-corn ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pulses ...	.....	.....	.....	.....	.....	11	14	14½	13½	11½	13	15
Wheat ...	.....	.....	.....	.....	.....	14	16	16	15	16	16	15½
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1870.												
Common rice ...	27	25	28	27	.....	24	22	24	21½	22	.....	.....
Indian-corn ...	34	37	26	22	.....	36	37	37	37	37	.....	.....
Pulses ...	13	14	15	20	.....	19	20	20	19½	19	.....	.....
Wheat ...	16	13½	14	16	.....	17	19	29	17	19	.....	.....
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1871.												
Common rice ...	.....	26	27½	26½	26½	26½	22	25	21	.....	21	21
Indian-corn ...	.....	38	36	36	36	37	42½	45	45	.....	45	40
Pulses ...	.....	19	19	19½	19½	19½	31	31	30	.....	14½	25
Wheat ...	.....	21	20	22	22	22	22	22½	27	.....	25	19
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1872.												
Common rice ...	26	.....	.....	27	19	18	17½	17	16½	19½	20½	27½
Indian-corn ...	23	.....	.....	48	35	30	28	28½	25	27½	27½	44
Pulses ...	22½	.....	.....	24	21½	22	22½	26	23	25½	23½	26½
Wheat ...	22	.....	.....	25	23	19	19½	19½	19	20½	20½	20½
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1873.												
Common rice ...	33	29½	27	24	23½	23	22	23	18	14	12	13
Indian-corn ...	44	40	45	.....	35	35	35	32	22½	22	17	15
Pulses ...	27½	.....	30	22	32	.....	24	26	21	20	16	.....
Wheat ...	21½	16	12	18	17	17	17	14	13	11	11	13
Millet ...	.....	.....	.....	.....	.....	.....	32½	.....	.....	25	18	17½
1874.												
Common rice ...	11½	9½	11½	9½	9	9½	9½	11½	12	13	19½	26½
Indian-corn ...	14½	11½	12½	11½	12	13½	15½	17½	24½	29½	29½	38
Pulses ...	14	10	14	13	13	13	15½	16½	18	27	25	30
Wheat ...	13	11½	12	10½	9½	12½	12	12½	18	14	16½	19
Millet ...	15½	12	13	13	13	14½	16½	17½	25	22½	35	38

## MUDHOOBUNNEE SUB-DIVISION.\*

1872.												
Common rice ...	30	28½	29½	27	27½	25½	24½	26	26	22	28	39½
Indian-corn ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	26	35
Pulses ...	20	20	20	20	20	20	20	20	20	20	20	27
Wheat ...	17	18	17	18	19	17½	16½	17	16½	16	16	20½
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30	35
1873.												
Common rice ...	30	30	30	29	27	25½	24	24	24	23	14	15½
Indian-corn ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16	19
Pulses ...	22	22	20	20	21	21	20½	20	20	20	14	17
Wheat ...	17	14	11	18	18	18	17	14	14	14	10	13½
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16	19
1874.												
Common rice ...	16	11½	10	9	10	10	12½	14	18½	17½	26	33
Indian-corn ...	21	18½	12	11½	11	11½	14	19½	26	31	35½	38
Pulses ...	19	12½	11½	11½	11	12	16½	17	21	20	30	35
Wheat ...	16	11½	10½	8½	8	9	11½	12	13	18	14½	18
Millet ...	22	14	12½	12	11½	12½	16½	19½	23	31	35½	42

\* No quotations before 1872 available.





HAJEEPORE SUB-DIVISION.—(Continued.)

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1872.												
Common rice ...	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Indian-corn ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pulses ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1873.												
Common rice ...	18	21	20	18	17	16	16	16	14½	16½	20	11½
Indian-corn ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pulses ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ...	18	13	15	14	16	15	14½	13½	12	15	16½	13
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1874.												
Common rice ...	11	11	10½	9½	9½	9½	9½	10½	10	16½	20	22
Indian-corn ...	13½	15½	15½	14½	15	16	16½	.....	21	25	28	29
Pulses ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Millet ...	13	13	13	12½	12½	13	13½	15½	15½	15	15½	16

SEETAMURHEE SUB-DIVISION.

1868.												
Common rice ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Indian-corn ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pulses ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1869.												
Common rice ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Indian-corn ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pulses ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1870.												
Common rice ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Indian-corn ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pulses ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1871.												
Common rice ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Indian-corn ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pulses ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1872.												
Common rice ...	.....	.....	.....	.....	21	19	21	21	22	22	23	25
Indian-corn ...	.....	.....	.....	.....	25	25	27	27	40	42	46	46
Pulses ...	.....	.....	.....	.....	25	23	25	25	24	24	25	25
Wheat ...	.....	.....	.....	.....	27	25	25	23	21	20	20	20
Millet ...	.....	.....	.....	.....	37	34	37	35	42	42	44	44
1873.												
Common rice ...	26	25	23	23	23	22	20	20	21	20	15	13
Indian-corn ...	46	46	42	42	42	40	38	38	38	34	22	18
Pulses ...	25	25	25	25	25	25	20	20	20	.....	.....	.....
Wheat ...	20	20	18	19	19	19	18	16	16	12	12	12
Millet ...	44	44	41	41	41	40	38	38	37	34	25	18
1874.												
Common rice ...	11½	10	10	9	9	11	16	18	14½	21	30	35
Indian-corn ...	16½	13½	14	12½	12½	13	17	21	30	34½	41	42
Pulses ...	15½	12½	14	13½	13	14½	17	20	20	20	21½	22½
Wheat ...	11½	11	10½	10	10½	11½	15	17	14	13	16	18
Millet ...	16½	10½	14	14	13½	14	17	22½	30	35	45	45

Statement showing the average Prices-current in the District of Mozufferpore from 1868-72.

SUB-DIVISION.	Kind of grain.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Mozufferpore ...	Common rice ...	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
	Indian-corn ...	21·2	21½	20·8	20·4	19·6	19·2	18	18·1	18·2	19	20·6	21
	Pulses ...	30·6	30·2	30·6	29·8	28·2	27·8	26·5	25·5	31·2	30·2	31	31
	Wheat ...	16·6	15·2	16·4	16·4	16·6	17	17	16	16	14·8	15·2	15·2
	Millet ...	16·2	16·2	16·6	18	18·6	18·4	19·2	17·3	18·8	18·2	19·6	18·2
		20·8	20·2	30·6	20·6	28·2	27·4	27	27	31	29·8	31·2	31·8

Statement showing the average Prices-current in the District of Mozufferpore from 1868-72.—(Continued.)

Sub-Division.	Kind of grain.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Hajeepore	Common rice ...	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
	Indian-corn ...	...	...	...	...	...	...	...	...	...	...	...	...
	Pulses ...	...	...	...	...	...	...	...	...	...	...	...	...
	Wheat ...	...	...	...	...	...	...	...	...	...	...	...	...
	Millet ...	...	...	...	...	...	...	...	...	...	...	...	...
Seetampurhee	Common rice ...	...	...	...	...	...	...	...	...	...	...	...	...
	Indian-corn ...	...	...	...	...	...	...	...	...	...	...	...	...
	Wheat ...	...	...	...	...	...	...	...	...	...	...	...	...
	Millet ...	...	...	...	...	...	...	...	...	...	...	...	...
District average	Common rice ...	21'2	21'4	20'8	18'7	18'9	17'7	17'8	18	18'4	19'2	19'9	20'8
	Indian-corn ...	30'6	30'2	30'6	29'8	26'6	26'4	26'7	26'2	35'6	36'1	38'5	38'5
	Pulses ...	16'6	15'2	16'4	16'4	20'8	20	21	20'5	20	19'4	20'1	20'1
	Wheat ...	16'2	16'2	16'6	19	21'9	21'1	20'1	18'8	17'8	17'2	17'4	18
	Millet ...	29'8	29'2	30'6	29'6	32'6	30'7	32	31	36'5	35'9	37'6	37'8

## PATNA.

Prices-current in the SUDDER SUB-DIVISION.—Number of seers of 80 tolahs retailed for a rupee.

Kind of grain.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1869.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	15-8	15-4	16-8	16	16	13-8	14	16	17-8	17	18	22
Indian-corn ...	35	24-8	26-4	23-8	18-4	.....	.....	25	35	30	31-8	32
Pulse ...	19	23-2	20	20	17	15	14	13	13	12½	14-8	14
Wheat ...	14	14	16-8	16-8	16-4	13-8	14	14	14	12-4	13	11
Millet ...	...	...	...	...	...	Not given.						
1870.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	20	21½	22	20-12	20	20	17-12	19-8	22	24-8	24	27
Indian-corn ...	34-8	39	39	32	32	30	.....	30-12	38	36	32	34
Pulse ...	14-4	20	31	30	24-8	25	22-8	22-8	21	25-8	25	29
Wheat ...	11	11	16	18-8	19	18	18	17-8	19	20	22	23
Millet ...	...	...	...	...	...	Not given.						
1871.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	25	24-8	23	23	24	24-8	23	24	25	20	22	21-4
Indian-corn ...	36	31	32	32	33	40	37-8	40	35	26	29	35
Pulse ...	31	30	34	35	36	40	40	40	35	32	26	35
Wheat ...	24	23	25	24	25	25	26	25	25	23	22	23
Millet ...	...	...	...	...	...	Not given.						
1872.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	21	23-4	20-9	20-7	20-5	18-6	19	19	21	19-8	20	25
Indian-corn ...	26	32	27-9	33-5	32-6	28-5	30	45	35	32	35	38-12
Pulse ...	30	32-8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ...	20	22	20-5	20-7	20-5	19-5	17-8	17	19	15	17	17
Millet ...	...	...	...	...	...	Not given.						
1873.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	24	23-8	22-4	21	17-12	17	18	16	16	12	14	14
Indian-corn ...	35	36	40	34	34-8	27	26-8	24-8	28	13	17	18
Pulse ...	...	...	...	...	...	Not given.						
Wheat ...	16	13	17	16	16	16	17	15	14	11	14	17
Millet ...	...	...	...	...	...	Not given.						
1874.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	12	13-8	12	12-8	12	13	14	17	14	19	24	27
Indian-corn ...	15	16-8	18-8	17	17	17	17	20	20	23	23	28
Pulse ...	...	...	...	...	...	Not given.						
Wheat ...	16	16	16	16	16	17	16-12	17	17	18	19	19

## BEHAR SUB-DIVISION.

1869.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	14	14	16	16	12	12	14	14	14	13	13	23
Indian-corn ...	20	19	19	18	15	15	15	15	15	20	24	30
Pulse ...	20	17	18	17	18	15	15	15	15	16	.....	17
Wheat ...	14	14	15	14	13	13	13	13-8	13-8	13-8	13-8	12-8
Millet ...	...	...	...	...	Not given.							

BEHAR SUB-DIVISION.—(Continued.)

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1870.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	22	22	22	20	21	18	17	16½	18	20½	22	30
Indian-corn ...	30	30	34	35	35	28	24	35	38	39	39	41
Pulse ...	17	17	30	28	28	28	23	22	24	25	25	28
Wheat ...	12½	12½	20	21	21	20	19-8	18	19	21	21	24
Millet ...						Not given.						
1871.												
Common rice ...	30	25	26	23½	23½	22½	24	25	25	26	26	27
Indian-corn ...	41	41	40	40	39	38	36	37	37	35	35	35
Pulse ...	28	28	28	28	30	32	33	34	34	35	35	35
Wheat ...	24	24	22	22	24	23½	25	26	26	28	28	28
Millet ...						Not given.						
1872.												
Common rice ...	25	25	Not revd.	21-4	23	23	18	18	18	19	23	26
Indian-corn ...	35	35	Not revd.	not sold.	20	23	20	20	20	32-5	36	40
Pulse ...	32	32										
Wheat ...	23	23		20-5	18	19	18	18	18	16	18	18
Millet ...						Not given.						
1873.												
Common rice ...	23	23	23	18	17	16	17	15	15½	14½	12½	13½
Indian-corn ...	31	27	30	28	28	26	26	22	20	17	16	15
Pulse ...						Not given.						
Wheat ...	16	13	18	18	18	16	16	14	13½	12½	12	12½
Millet ...									25	17½	22	
1874.												
Common rice ...	10½	12	11½	12	10	11½	10½	12	13	16	24	25½
Indian-corn ...	14	14	14	15	15	14	15	24	24	22	28	30
Pulse ...						Not given.						
Wheat ...	12	12½	14	14½	13	13½	13½	14	15	16½	18	17
Millet ...	14	14	17	16	16	15	16	15½	15	21	20	25

DINAPORE SUB-DIVISION.

1869.												
Common rice ...	15-8	15	15	15-13	13-8	12-8	13	12	20	13	14	17
Indian-corn ...	23-8	24-8	24	21	18	17	17	16-8	30	.....	27	29-8
Pulse ...	18-8	18-8	18-8	17	15	13	12-8	12-8	12	10	11	11
Wheat ...	14	13-8	15	16	13	13-12	14	15	13-8	11-4	12	11
Millet ...						Not given.						
1870.												
Common rice ...	19	19-8	20	19-8	19	18	17	17-8	19	20	20-8	24-8
Indian-corn ...	30-8	35	36	30	31	28	28	27	28	30	30	34
Pulse ...	13-8	16	30	23	25	22-8	22	21-8	20-8	30	30	35
Wheat ...	11	11	18	18	18-8	18-8	17-8	17-12	19-8	20	21-8	22-8
Millet ...						Not given.						
1871.												
Common rice ...	23-8	23	23	22-8	22-8	22-8	20-8	21	19	20	20-8	20-8
Indian-corn ...	31	30-8	31-8	32	32-8	32-8	32-8	.....	23	26-8	27	27
Pulse ...	36	35	41	43	43	46	46	42	36	40	41	40
Wheat ...	23	23-8	23-8	24-8	25	25-8	26	26	23	24	23	23
Millet ...						Not given.						
1872.												
Common rice ...	19	20-8	18-6	19	17-7	17-7	16-8	16-8	17-8	17-8	19	21
Indian-corn ...	26	25-8	.....	.....	.....	.....	.....	.....	33	31	33	36½
Pulse ...	30	33	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ...	21	19-8	17-7	18-6	18-6	18-6	18	16-8	15-8	15-8	17	17
Millet ...						Not given.						
1873.												
Common rice ...	20-8	20-8	21	19	17-8	17	17	15-8	16	19½	12½	13
Indian-corn ...	33-8	33-8	34	32	.....	.....	.....	.....	23	17½	16-8	18
Pulse ...						Not given.						
Wheat ...	15-8	15	17	17-8	17	16-8	16	15-8	14	12-8	13	16-8
Millet ...						.....	.....	.....	19-8	19-8	.....	.....
1874.												
Common rice ...	12-4	11-8	12-4	11-12	11-8	11-12	12-4	11	12½	15½	19	20-8
Indian-corn ...	15-4	16	17-8	16	16	16-8	16	17-8	20	23	30	27-8
Pulse ...						Not given.						
Wheat ...	15-4	15	15-8	15-8	15-12	16	16-8	16	14½	18	18-8	19-8
Millet ...	17-8	18	10-8	18-8	18	20	19	18½	15	22-8	23	29











## SARUN.

Prices-current in the CHUPRAH SUB-DIVISION of the District of Sarun.—Number of seers of 80 tolahs retailed for a rupee.

Kind of grain.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1868.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	27	28	26	24	26	24	22	21	19	18	15	16
Indian-corn ...	38	38	38	36	37	37	30	29	29	29	24	22
Pulses ...	26	28	25	24	24	23	23	18	16	16	12	13
Wheat ...	28	27	22	17	22	23	19	19	15	16	13	12
Millet ...	No information in the office.											
1869.												
Common rice ...	16	16	17	16	15	14	14	12	16	16	15	19
Indian-corn ...	23	22	22	21	19	16	15	14	21	27	27	29
Pulses ...	15	15	14	15	13	12	11	12	10	9	9	9
Wheat ...	12	12	13	15	14	13	13	12	14	11	11	11
Millet ...	No information in the office.											
1870.												
Common rice ...	19	20	21	21	20	21	19	19	21	22	20	18
Indian-corn ...	29	29	33	31	27	26	24	25	25	29	32	31
Pulses ...	8	9	18	18	18	18	18	18	18	18	18	20
Wheat ...	10	11	16	17	18	18	17	17	17	19	19	20
Millet ...	No information in the office.											
1871.												
Common rice ...	22	21	22	22	23	23	23	22	21	21	19	19
Indian-corn ...	31	27	28	31	30	32	33	35	31	30	25	25
Pulses ...	20	20	20	20	22	25	24	20	17	18	18	18
Wheat ...	21	21	20	20	21	22	24	24	23	23	20	20
Millet ...	No information in the office.											
1872.												
Common rice ...	20	19	15	18	18	18	17	18	20	20	19	20
Indian-corn ...	25	23	20	24	24	.....	.....	.....	30	30	32	32
Pulses ...	18	18	16	17	15	15	14	14	14	14	14	14
Wheat ...	20	19	17	15	16	17	16	16	16	16	14	13
Millet ...	No information in the office.											
1873.												
Common rice ...	22	22	22	19	16	16	16	16	15	13	11	13
Indian-corn ...	31	32	33	27	24	22	22	22	22	22	16	18
Pulses ...	15	15	20	19	18	18	18	16	15	14	13	14
Wheat ...	14	12	13	14	14	14	14	14	13	11	12	13
Millet ...	.....	.....	.....	.....	32	31	30	30	28	25	21	18
1874.												
Common rice ...	12	12	12	12	12	12	13	13	13	15	21	26
Indian-corn ...	15	15	15	16	15	16	17	18	19	22	25	27
Pulses ...	13	14	12	13	13	14	14	13	13	13	12	13
Wheat ...	13	14	14	14	14	14	15	15	15	16	16	17
Millet ...	17	17	17	16	15	15	18	19	21	23	25	27

## SEWAN SUB-DIVISION.

1868.												
Common rice ...	27	25	20	20	22	22	21	20	18	18	15	16
Indian-corn ...	40	32	30	28	32	32	32	32	23	27	25	23
Pulses ...	25	25	23	21	21	21	20	20	16	15	14	15
Wheat ...	27	25	18	16	21	24	22	22	17	13	12	13
Millet ...	No information in the office.											
1869.												
Common rice ...	16	16	16	16	12	13	12	12	13	14	13	16
Indian-corn ...	26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pulses ...	15	15	15	15	13	13	11	10	10	10	9	9
Wheat ...	13	14	13	14	13	14	14	14	13	12	12	12
Millet ...	No information in the office.											
1870.												
Common rice ...	17	18	18	18	18	18	17	19	20	22	18	19
Indian-corn ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pulses ...	8	8	10	10	15	15	15	17	17	19	17	17
Wheat ...	15	12	12	15	17	16	15	21	23	21	20	21
Millet ...	No information in the office.											
1871.												
Common rice ...	21	10	10	18	18	18	19	21	21	18	19	19
Indian-corn ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pulses ...	17	18	18	18	18	18	20	19	18	19	19	19
Wheat ...	22	23	23	22	22	23	25	25	25	25	22	22
Millet ...	No information in the office.											
1872.												
Common rice ...	18	18	18	18	19	18	15	16	17	16	17	18
Indian-corn ...	.....	.....	.....	.....	.....	.....	29	19	20	15	20	20
Pulses ...	10	16	16	16	18	16	16	15	16	16	16	16
Wheat ...	21	21	20	20	22	20	20	17	20	16	17	16
Millet ...	No information in the office.											





**BHAGULPORE DIVISION.**













SOOPool SUB-DIVISION.—(Continued.)

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1870.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	28	28	28	28	28	28	28	28	28	28	28	28
Indian-corn ...	.....	.....	48	48	48	48	48	48	48	50	48	48
Pulses ...	10	9	14	14	14	14	14	14	14	14	14	14
Wheat ...	16	16	16	16	24	20	20	20	20	25	20	20
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1871.												
Common rice ...	28	28	28	28	25	25	25	25	26	23	22	22
Indian-corn ...	50	56	47	52	48	48	48	50	48	48	48	48
Pulses ...	17	17	14	14	14	14	18	18	18	20	20	20
Wheat ...	23	19	18	18	26	24	26	26	28	25	25	25
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1872.												
Common rice ...	.....	.....	33	26	24	22	18	21	18	20	20	40
Indian-corn ...	.....	.....	56	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pulses ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ...	.....	.....	33	31	31	27	20	20	20	20	20	20
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1873.												
Common rice ...	40	32	30	29	27	25	24	24	24	24	13	13
Indian-corn ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pulses ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ...	20	16	16	25	26	24	24	22	22	22	13	12
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	34	19	20
1874.												
Common rice ...	11	10	10	9	9½	10	10	11	19	25	26	26
Indian-corn ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pulses ...	.....	.....	.....	10	12	12	12	12	13	14	14	14
Wheat ...	11	11	11	13	11	11	11	11	14	12	12	12
Millet ...	14	13	13	12	12	12	13	13½	32	35	35	35

Statement showing the average Prices-current in the District of BHAGULPORE from 1868 to 1872.

SUB-DIVISION.	Kind of grain.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Bhagulpore	Common rice ...	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Sr s.	Srs.	Srs.
	Indian-corn ...	24'8	24'8	25'2	24	23	20'2	21	20	19	20'2	20'6	20'6
	Pulses ...	34'2	33'2	34	36'2	36'4	35'7	29'7	35'2	34	33'6	33	32'2
	Wheat ...	21	21'2	24'2	24'4	23	23'4	21'6	21'6	21'8	21'8	21'4	21'8
	Millet ...	18'8	19'6	18'6	22'4	21	20'4	20'6	19'6	18'4	17'4	17'8	17
Banksa	Common rice ...	24'3	25	25	22	22	20'8	21'4	20'2	21'2	23	23'8	25'8
	Indian-corn ...	31'7	35	35'2	33'3	33	30'7	33	45	34	43'8	36'2	36
	Pulses ...	14'7	17	16	18'5	18'7	17'5	16'2	16	18	18'2	19'8	17'6
	Wheat ...	14'3	14	19'5	18	18	16	16'8	16'2	15'2	16	17'2	16'8
	Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Muddhepoora	Common rice ...	21'7	24'7	21'7	22	21'5	23	22'8	22'8	22'8	26	20'6	22'5
	Indian-corn ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Pulses ...	16'3	15'7	17'5	15'7	16'3	19'4	18'4	18	21'2	17'2	15'8	14'5
	Wheat ...	18'3	17'7	19	23'5	27'5	26'2	25'6	25'6	25'4	23'8	22'6	20
	Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Soopool	Common rice ...	25'7	26'7	27'5	25'5	24'2	27	25'6	24'8	24'4	22'4	22'6	26'6
	Indian-corn ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Pulses ...	13'3	14'3	14'7	14	13'8	10'5	15'2	20	15	16'5	16	15
	Wheat ...	19'7	18'7	21	22'9	25'2	28	26'2	26'8	24	33'6	22	22
	Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
District average	Common rice ...	24'1	25'3	24'8	23'4	22'7	22'7	21'0	21'8	22'9	21'0	23'0	
	Indian-corn ...	39'1	37'4	39'5	39	38'5	39'3	38	42'1	39'8	45'2	41'7	41'7
	Pulses ...	16'3	17	18'1	18'1	18	20	17'8	18'0	19	18'4	18'2	17'2
	Wheat ...	17'8	17'5	19'5	21'5	22'9	22'7	22'3	22	20'7	20'2	19'9	18'7
	Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....





Statement showing the average Prices-current in the District of Purneah from 1868-72.

SUB-DIVISION.	Kind of grain.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Sudder ...	Common rice ...	Srs. 29 2	Srs. 29	Srs. 29 2	Srs. 29	Srs. 28	Srs. 28 8	Srs. 25 6	Srs. 24 6	Srs. 23	Srs. 23 2	Srs. 27	Srs. 26 6
	Indian corn ...	35	31	31	...	...	...	...	30	36	25	29	31
	Pulses ...	19 2	21 4	20 6	21 7	26 7	29 5	19	29	22	21	19 5	17 7
	Wheat ...	21	23	22 8	23 8	25 2	27 8	19 6	19 2	21 4	20 6	20 4	18 2
	Millet ...	...	...	...	...	...	...	...	...	...	...	...	...
Kissengunge ...	Common rice ...	33 8	34 4	33	31 2	30	28 8	28 2	28 4	26 4	27 4	29 4	29
	Indian corn ...	...	...	...	...	...	...	...	...	...	...	...	...
	Pulses ...	18 2	18 2	18 9	20 6	19 6	19 9	22 9	22 1	24 1	22 5	20 3	14 8
	Wheat ...	14 4	14 1	16 2	19	18 4	18 3	18 2	17 8	17 9	16 4	14 4	14 4
	Millet ...	...	...	...	...	...	...	...	...	...	...	...	...
Arrareah ...	Common rice ...	34 4	34 4	34 4	33 4	31 6	29 4	31 4	36 4	39	37 8	38	37 8
	Indian corn ...	...	...	...	...	...	...	...	...	...	...	...	...
	Pulses ...	21 8	21 8	21 8	21 8	21 8	20 6	20 2	20 2	20 4	20 4	20 4	20 4
	Wheat ...	39 2	39	39	38 2	36	33	32	32	32	32	32	32
	Millet ...	...	...	...	...	...	...	...	...	...	...	...	...
District average	Common rice ...	32 5	32 6	32 2	31 2	30	29	28 4	29 8	29 5	29 5	31 5	31 1
	Indian corn ...	35	31	31	...	...	...	...	...	...	...	...	...
	Pulses ...	19 7	20 5	20 4	21 4	22 7	23 3	20 7	23 1	22 2	21 3	20 1	17 6
	Wheat ...	24 9	25 4	26	27	26 5	26 4	23 3	23	23 8	23	22 3	21 5
	Millet ...	...	...	...	...	...	...	...	...	...	...	...	...

## SONTHAL PERGUNNAHS.

Prices-current in the SUDDER SUB-DIVISION of the District of Sonthal Pergunnahs.—  
Number of seers of 80 tolahs retailed for a rupee.

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1868.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Rice in ordinary use ...	35	.....	.....	.....	35	34-10	32	32	32	32	32	29
Indian corn ...	60	.....	.....	.....	60	60	55	40	40	40	54	19
Pulses ...	16	.....	.....	.....	20	19	18	17-8	19	20	25	16
Wheat ...	14	.....	.....	.....	20	20	20	19-4	20	20	20	14-8
1869.												
Rice in ordinary use ...	28-4	27	27	27	27	27	27	26-8	24	24	25	19
Indian corn ...	39	33	32	32	30	24	24	23	78	76	49	47
Pulses ...	12	14	14	14	14	12	14	13	17	14	13	14
Wheat ...	13	13	18	13	13	11	10	10	10	10	10	11
1870.												
Rice in ordinary use ...	24	24	24	24	22	20	20	20	21	22	24	23
Indian corn ...	35	32	32	32	32	32	35	35	37	70	75	62
Pulses ...	12	12	14	14	16	15	14	14	15	15	16	18
Wheat ...	10	10	10	10	12	12	12	12	12	12	16	16
1871.												
Rice in ordinary use ...	32	30	30	30	29	30	28	29	30	28	28	31
Indian corn ...	63	65	65	60	62	61	60	60	71	72	70	50
Pulses ...	20	20	20	20	18	20	18	17	13	16	16	16
Wheat ...	16	16	16	16	20	20	16	17	15	16	16	15
1872.												
Rice in ordinary use ...	30	29	.....	25	33	21	22	20	19	18	19	21
Indian corn ...	40	40	.....	39	42	39	33	31	50	.....	40	40
Pulses ...	16	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ...	16	15	.....	13	14	14	15	15	15	15	15	14
1873.												
Rice in ordinary use ...	24	23	23	21	18	17	16	17	19	15	13	14
Indian corn ...	50	40	40	40	40	30	28	27	27	30	30	30
Pulses ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ...	14	14	14	14	14	15	14	13	13	10	11	11
1874.												
Rice in ordinary use ...	13	11	11	11	10	10	11	10	10	10	12	20
Indian corn ...	20	16	16	10	13	13	10	12	34	35	32	35
Pulses ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ...	11	11	11	12	11	10	10	10	11	12	12	13



GODDA SUB-DIVISION.

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1868.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	29	28	28	28	28	28	28	28	28	28	28	28
Indian corn ...	45	45	45	45	45	45	45	45	45	45	45	62
Pulses ...	20	20	20	20	20	20	20	20	20	20	20	20
Wheat ...	20	20	20	20	20	16	16	16	16	26	16	26
1869.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Common rice ...	.....	.....	.....	.....	15	16	22	15	15	15	18½	25
Indian corn ...	.....	.....	.....	.....	.....	.....	35	16	40	50	40	40
Pulses ...	.....	.....	.....	.....	18	19	16	16	16	16	14	14
Wheat ...	.....	.....	.....	.....	18	13	19	11	11	12	12	12
1870.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Common rice ...	26	26	28	28	28	25	24	20	25	27	28	28
Indian corn ...	40	35	40	40	40	38	40	38	40	45	43½	43½
Pulses ...	14	14	12	12	20	18	15	13	14	15	20	20
Wheat ...	11½	10	8	8	16	13	14	10	12	12	15	15
1871.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Common rice ...	38	38	35	30	33	33	34	34	40	37	30	.....
Indian corn ...	50	50	55	50	50	50	50	50	80	60	40	.....
Pulses ...	16	16	16½	20	20	20	20	16	30	26	20	.....
Wheat ...	16	14	16	24	24	24	16	24	24	25	25	.....
1872.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Common rice ...	32	.....	28	26½	26½	21-5	17½	17½	.....	17	18	25
Indian corn ...	44	.....	35	40	40	27-8	.....	.....	.....	35	35	35
Pulses ...	16	.....	20	27½	27	18-6	17½	.....	.....	14	14	14
Wheat ...	14	.....	13½	20	20	18-6	15	15	.....	15	13	12
1873.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Common rice ...	25	25	16	17	20	16	16	.....	.....	11	10	18½
Indian corn ...	40	35	35	30	30	30	25	.....	.....	25	30	25
Pulses ...	16	15	14	17	20	16	14	.....	.....	16	15	18½
Wheat ...	13	13	11	20	18	20	18½	.....	.....	.....	10	12½
1874.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Common rice ...	18	15½	10	10	10	8	8	12½	11-4	11	11	24
Indian corn ...	18½	16½	16½	15	16	12½	10	15	50	50	50	37
Pulses ...	15	4	18-12	15	15	12-8	10	15	15-10	12½	12½	15-10
Wheat ...	9½	11	14-10	11½	11	.....	10	14	.....	12-8	12-8	15-10

RAJMEHAL SUB-DIVISION.

1868.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Common rice ...	35	30	30	29	28	27	27	25	25	22	22	17
Indian corn ...	50	50	50	55	55	55	55	55	60	60	40	28
Pulses ...	26	22	22	25	24	28	26	25	25	24	24	17
Wheat ...	28	26	26	30	30	28	28	25	24	22	19	14
1869.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Common rice ...	18	18	18	18	16	16	16	15½	17½	21	20	24
Indian corn ...	30	27	26	26	25	21	21	20	32½	32½	30	35
Pulses ...	18	18	18	18	18	16	14	13	13	13	9	9
Wheat ...	14	14	14	14	16	14	13	12	13	13	12	12
1870.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Common rice ...	25	24	25	25	21	20	19	18	20	21½	22	26
Indian corn ...	35	32½	32½	32½	40	40	35	35	35	35	35	40
Pulses ...	15	15	16	16	16	16	14	14	11½	14	14	16
Wheat ...	13	11	10	10	16	16	16	16	16	17	17	22
1871.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Common rice ...	26	30	30	28	28	28	27	27	22	22	22	25
Indian corn ...	40	40	40	40	40	40	45	50	50	45	45	45
Pulses ...	16	24	24	25	30	30	30	30	25	25	25	25
Wheat ...	22	32	32	30	25	25	25	25	25	25	25	24
1872.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Common rice ...	26	25	24	19	22	18	18	17	18	18	18	21
Indian corn ...	45	40	40	35	37	30	32	40	40	40	40	45
Pulses ...	25	25	25	20	20	18	18	18	18	18	18	22
Wheat ...	24	23½	23½	25	21	18	18	17	16	17	17	16
1873.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Common rice ...	20	20	20	20	18	18	20	20	20	16	14	13
Indian corn ...	45	40	40	40	37	37	25	25	40	20	16	18
Pulses ...	16	18	18	18	18	18	18	18	18	18	18	16
Wheat ...	16	12	12	16	20	18	18	16	14	14	13	12
1874.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Common rice ...	11	10	10½	12	9	9	9	9	11	12	12	16
Indian corn ...	16	13½	14	17	.....	.....	.....	.....	30	30	30	32
Pulses ...	16	16	16	12	8	8	8	8	10	12	12	16
Wheat ...	12	12	12	16	14	14	14	14	15	16	16	18



RAJSHAHYE DIVISION.



SOOPOL SUB-DIVISION.—(Continued.)

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1870.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	28	28	28	28	28	28	28	28	28	28	28	28
Indian-corn ...	.....	.....	48	48	48	48	48	48	48	50	48	48
Pulses ...	10	9	14	14	14	14	14	14	14	14	14	14
Wheat ...	16	16	16	16	24	20	20	20	20	25	20	20
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1871.												
Common rice ...	28	28	28	28	25	25	25	25	26	23	22	22
Indian-corn ...	50	56	47	52	48	48	48	50	48	48	48	48
Pulses ...	17	17	14	14	14	18	14	18	18	20	20	20
Wheat ...	23	19	18	18	26	24	26	26	28	25	25	25
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1872.												
Common rice ...	.....	.....	33	26	24	22	18	21	18	20	20	40
Indian-corn ...	.....	.....	56	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pulses ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ...	.....	.....	33	31	31	27	20	20	20	20	20	20
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1873.												
Common rice ...	40	32	30	29	27	25	24	24	24	24	13	13
Indian-corn ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pulses ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ...	20	16	16	25	26	24	24	22	22	22	12	12
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	34	19	20
1874.												
Common rice ...	11	10	10	9	9½	10	10	11	19	25	26	26
Indian-corn ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pulses ...	.....	.....	.....	10	12	12	12	12	13	14	14	14
Wheat ...	11	11	11	13	11	11	11	11	14	12	12	12
Millet ...	14	13	13	12	12	12	13	13½	32	35	35	35

Statement showing the average Prices-current in the District of BHAGULPORE from 1868 to 1872.

SUB-DIVISION.	Kind of grain.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Bhagulpore	Common rice ...	Srs. 248	Srs. 248	Srs. 252	Srs. 24	Srs. 23	Srs. 202	Srs. 21	Srs. 20	Srs. 19	Srs. 202	Srs. 206	Srs. 206
	Indian-corn ...	..... 342	..... 332	..... 34	..... 362	..... 364	..... 357	..... 297	..... 352	..... 34	..... 336	..... 33	..... 322
	Pulses ...	..... 21	..... 212	..... 242	..... 244	..... 23	..... 234	..... 216	..... 216	..... 218	..... 218	..... 214	..... 218
	Wheat ...	..... 188	..... 196	..... 186	..... 224	..... 21	..... 204	..... 206	..... 196	..... 184	..... 174	..... 178	..... 17
Banka	Common rice ...	..... 243	..... 25	..... 25	..... 22	..... 22	..... 208	..... 214	..... 202	..... 212	..... 23	..... 238	..... 258
	Indian-corn ...	..... 317	..... 35	..... 352	..... 333	..... 33	..... 307	..... 32	..... 45	..... 34	..... 438	..... 362	..... 36
	Pulses ...	..... 147	..... 17	..... 16	..... 185	..... 187	..... 175	..... 162	..... 16	..... 18	..... 182	..... 198	..... 176
	Wheat ...	..... 143	..... 14	..... 195	..... 18	..... 18	..... 16	..... 168	..... 162	..... 152	..... 16	..... 172	..... 158
Muddehpoora	Common rice ...	..... 217	..... 247	..... 217	..... 22	..... 215	..... 23	..... 228	..... 228	..... 228	..... 26	..... 206	..... 225
	Indian-corn ...	..... 183	..... 157	..... 175	..... 157	..... 163	..... 194	..... 184	..... 18	..... 212	..... 172	..... 158	..... 145
	Pulses ...	..... 183	..... 177	..... 19	..... 235	..... 275	..... 262	..... 256	..... 256	..... 254	..... 238	..... 226	..... 20
	Wheat ...	..... 183	..... 177	..... 19	..... 235	..... 275	..... 262	..... 256	..... 256	..... 254	..... 238	..... 226	..... 20
Soopool	Common rice ...	..... 257	..... 267	..... 275	..... 255	..... 242	..... 27	..... 256	..... 248	..... 244	..... 224	..... 228	..... 206
	Indian-corn ...	..... 183	..... 143	..... 147	..... 14	..... 138	..... 195	..... 152	..... 20	..... 15	..... 105	..... 16	..... 15
	Pulses ...	..... 197	..... 187	..... 21	..... 222	..... 252	..... 28	..... 262	..... 268	..... 24	..... 236	..... 22	..... 22
	Wheat ...	..... 178	..... 175	..... 195	..... 215	..... 220	..... 227	..... 228	..... 22	..... 207	..... 202	..... 199	..... 187
District average	Common rice ...	..... 241	..... 258	..... 248	..... 234	..... 227	..... 227	..... 227	..... 219	..... 218	..... 229	..... 219	..... 230
	Indian-corn ...	..... 391	..... 374	..... 395	..... 39	..... 385	..... 393	..... 38	..... 421	..... 398	..... 452	..... 417	..... 417
	Pulses ...	..... 17	..... 181	..... 181	..... 18	..... 20	..... 178	..... 189	..... 19	..... 184	..... 182	..... 172	..... 172
	Wheat ...	..... 178	..... 175	..... 195	..... 215	..... 220	..... 227	..... 228	..... 22	..... 207	..... 202	..... 199	..... 187





Statement showing the average Prices-current in the District of Purneah from 1868-72.

SUB-DIVISION.	Kind of grain.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Sudder ...	Common rice ...	Srs. 29.2	Srs. 29	Srs. 29.2	Srs. 29	Srs. 28	Srs. 28.8	Srs. 25.6	Srs. 24.6	Srs. 23	Srs. 23.2	Srs. 27	Srs. 26.6
	Indian corn ...	35	31	31	...	...	...	...	30	36	25	29	31
	Pulses ...	19.2	21.4	20.6	21.7	26.7	29.5	19	27	22	21	19.6	17.7
	Wheat ...	21	23	22.8	23.8	25.2	27.8	19.6	19.2	21.4	20.6	20.4	18.2
	Millet ...	...	...	...	...	...	...	...	...	...	...	...	...
Kissengunge ...	Common rice ...	33.8	34.4	33	31.2	30	28.8	28.2	28.4	26.4	27.4	29.4	29
	Indian corn ...	...	...	...	...	...	...	...	...	...	...	...	...
	Pulses ...	18.2	18.2	18.9	20.6	19.6	19.9	22.9	22.1	24.1	22.5	20.3	14.8
	Wheat ...	14.4	14.1	16.2	19	18.4	18.3	18.2	17.8	17.9	16.4	14.4	14.4
	Millet ...	...	...	...	...	...	...	...	...	...	...	...	...
Arrareah ...	Common rice ...	34.4	34.4	34.4	33.4	31.6	29.4	31.4	36.4	39	37.8	38	37.8
	Indian corn ...	...	...	...	...	...	...	...	...	...	...	...	...
	Pulses ...	21.8	21.8	21.8	21.8	21.8	20.6	20.2	20.2	20.4	20.4	20.4	20.4
	Wheat ...	39.2	39	38.2	36	33	32	32	32	32	32	32	32
	Millet ...	...	...	...	...	...	...	...	...	...	...	...	...
District average	Common rice ...	32.5	32.6	32.2	31.2	30	29	28.4	29.8	29.5	29.5	31.5	31.1
	Indian corn ...	35	31	31	...	...	...	...	30	36	25	29	31
	Pulses ...	19.7	20.5	20.4	21.4	22.7	23.3	20.7	23.1	22.2	21.3	20.1	17.6
	Wheat ...	24.9	25.4	26	27	26.5	26.4	23.3	23	23.8	23	22.3	21.6
	Millet ...	...	...	...	...	...	...	...	...	...	...	...	...

SONTHAL PERGUNNAHS.

Prices-current in the SUDDER SUB-DIVISION of the District of Sonthal Pergunnahs.—  
Number of seers of 80 tolahs retailed for a rupee.

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1868.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Rice in ordinary use ...	35	.....	.....	.....	35	34-10	32	32	32	32	32	29
Indian corn ...	60	.....	.....	.....	60	60	55	40	40	40	54	19
Pulses ...	16	.....	.....	.....	20	19	18	17-8	19	20	25	16
Wheat ...	14	.....	.....	.....	20	20	20	19-4	20	20	20	14-8
1869.												
Rice in ordinary use ...	28-4	27	27	27	27	27	27	26-8	24	24	25	19
Indian corn ...	39	33	32	32	30	24	24	23	78	76	49	47
Pulses ...	12	14	14	14	14	12	14	13	17	14	13	14
Wheat ...	13	13	13	13	13	11	10	10	10	10	10	11
1870.												
Rice in ordinary use ...	24	24	24	24	22	20	20	20	21	22	24	28
Indian corn ...	35	32	32	32	32	32	35	35	37	70	75	62
Pulses ...	12	12	14	14	16	15	14	14	15	15	16	18
Wheat ...	10	10	10	10	12	12	12	12	12	12	15	16
1871.												
Rice in ordinary use ...	32	30	30	30	29	30	28	29	30	28	28	31
Indian corn ...	63	65	65	60	62	61	60	60	71	72	70	60
Pulses ...	20	20	20	20	18	20	18	17	13	16	16	16
Wheat ...	16	16	16	16	20	20	16	17	15	16	16	16
1872.												
Rice in ordinary use ...	30	29	.....	25	33	21	22	20	19	18	19	21
Indian corn ...	40	40	.....	39	42	39	33	31	50	.....	40	40
Pulses ...	16	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ...	16	16	.....	13	14	14	15	15	15	15	15	14
1873.												
Rice in ordinary use ...	24	23	23	21	18	17	16	17	19	15	13	14
Indian corn ...	50	40	40	40	40	30	28	27	27	30	20	20
Pulses ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ...	14	14	14	14	14	15	14	13	13	10	11	11
1874.												
Rice in ordinary use ...	13	11	11	11	10	10	11	10	10	10	12	20
Indian corn ...	20	16	16	16	13	13	10	12	34	35	32	35
Pulses ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ...	11	11	11	12	11	10	10	10	11	12	12	13







RAJSHAHYE DIVISION.



DABAD.

1868 to 1874—(Number of seers of 80 tolahs retained for a rupee.)

June.	July.	August.	September.	October.	November.	December.
17½ to 31½ 22 to 30 21½ to 28 21½ to 28	17½ to 29½ 31 to 40 21½ to 41 20½ to 26½	18 to 28½ 40 20½ to 38 20 to 26	22 to 28½ 38 24 to 38 20 to 2½	21 to 28½ 33½ to 38 23 to 38 18 to 27½	18½ to 36 37 21½ to 35 15½ to 23½	18½ to 36 29½ to 35 18½ to 35 12 to 26½
15 to 18½ 19 to 26 17 to 26½ 13 to 25	11½ to 19½ 18 to 26½ 14½ to 24 10½ to 13½	11 to 18½ 18 to 25 13½ to 20 10 to 13½	16½ to 19½ 19 to 35 13 to 21 10 to 13	16 to 21½ 18 to 25 11 to 19 10 to 13½	16 to 25½ 16½ to 40 1 to 15 10½ to 12½	17½ to 26½ 18½ to 20 11½ to 23½ 11 to 12½
18 to 24 19 to 25 14½ to 25 15 to 18½	19 to 25 13½ to 25 13½ to 23 15½ to 18½	16½ to 23½ 20 to 23 11½ to 22 13½ to 18½	18 to 24½ 20 to 22 12½ to 22½ 13 to 17	19½ to 25½ 25 10 to 25 14½ to 18	22½ to 30 ..... 15 to 28 15 to 20	23 to 36 19 to 28 16 to 40 15½ to 22
23 to 38 20 to 40 29½ to 45½ 21½ to 28½	22 to 32 17 to 38 30 to 47½ 17 to 26	21 to 27½ 20 to 35 31½ to 50 20½ to 27	22 to 34 20 to 35 15½ to 45 22 to 26	22½ to 23 22 to 38 40 to 50 25 to 20½	20 to 27 20 to 38 20 to 40 18 to 25	25 to 29 40 38 to 60 16 to 24
18½ to 27½ 32½ to 40 39½ to 40 17½ to 21½	18 to 20½ 40 28 to 32 18 to 20	18 to 27½ 31 28 to 32 15 to 27	19 to 28 32 21½ to 32½ 13½ to 27½	19 to 23 30 25 to 35 15 to 19½	19 to 28 32 13 to 32 13½ to 23	22 to 29 35 22 to 33½ 13½ to 19
18½ to 21 32 25 to 40 14½ to 19	16 to 23 32 24 to 40 14 to 17	16 to 22 31 21½ to 40 14 to 16½	15 to 22 32 20 to 40 14 to 16	13 to 23 25 17 to 25 11½ to 16	13 to 16 25 16 to 32 11 to 16	12 to 16 22 15 to 32 12 to 14
18 to 12 18 14 to 17 12 to 13½	11½ to 13½ 19 14½ to 17 12½ to 14	11 to 23½ 18 14½ to 17 11½ to 14½	10 to 13 15 16 to 17 12½ to 14½	11 to 16½ 18 16 to 17 12½ to 15	13 to 25½ 18 11 to 27 13 to 15½	16 to 25½ 23 14½ to 20 14 to 16

the District of MOORSHEDABAD from 1868-72.

June.	July.	August.	September.	October.	November.	December.
Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
24.1	21.4	20.9	23.1	22.1	24.3	26.2
26.6	29.3	28.3	29.4	28.5	31.5	29.9
30.5	27.5	26.4	20.6	27.7	20.6	30.9
21.6	18.3	19	18.5	18.1	17.5	17.1

the month of January 1868—it will be understood that the price was 23½ seers at one place at one time of the month, the course of the same month.

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DACCA DIVISION.





## DACCA DIVISION.

### DACCA.

*Prices-current in the DISTRICT OF DACCA.—(Number of seers of 80 tolahs retailed for a rupee.)*

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
1868.												
Common rice ...	29	29-2	32	31-5	31-2	25	26-7	28-8	24-5	23-5	20-8	19-5
Pulses ...	31-3	30	30	30	29	22-2	22	19-6	18	19	17-8	17-7
Wheat ...	14-3	16-2	19-2	19	19	19-5	29	19-4	19	19	18-6	16
1869.												
Common rice ...	20	22	24	22	18-8	17-7	16-7	18-4	17-2	16	17	21
Pulses ...	18	18	18	19	18-6	18-7	18-5	17-8	16-2	16-7	16	16
Wheat ...	14	13-7	13	13	13	13	13	13	12-2	12	12	11-2
1870.												
Common rice ...	24	24	24	23	20-6	18-2	20-4	21	23-7	24-2	25	25-5
Pulses ...	14	14	13-7	13	13	13	13	13-5	14	14	14	14
Wheat ...	11	11	11	11	11	11	11	11	11	11	11	11
1871.												
Common rice ...	22-6	22-2	23	21-2	20-7	21-2	26-6	28-7	28	22	25	26
Pulses ...	14	14	15	16	20	30	32-4	42-5	40	40	60	40
Wheat ...	11	11	12	18	18	18	18	21	21	20	12-5	15
1872.												
Common rice ...	30	32	.....	29-2	28-2	26-1	30	32	32	32	32	32
Pulses ...	40	50	.....	16-3	17-6	15-7	16	16	16	15	13-3	12-6
Wheat ...	15	20	.....	16-3	17-6	15-7	16	16	16	15	13-3	12-6
1873.												
Common rice ...	32	32	32	30	29	29	28	25	25-5	23-5	15-3	16-7
Indian-corn ...	.....	.....	23	24	21-5	21	.....	.....	.....	.....	.....	.....
Wheat ...	12-5	12	12	12-5	12	12-6	13-5	13-2	12-5	11-5	10-7	10-4
1874.												
Common rice ...	17-2	15-5	13-2	15-6	12-5	11-9	14	14-6	13-5	14-2	16-2	19-3
Wheat ...	10-9	12-7	12-6	13-7	12-7	11	11-2	11-4	12-1	12-4	12-6	13-3
Millet ...	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

*Statement showing the average prices current in the DISTRICT OF DACCA from 1868-72.*

	Kind of grain.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
District average {	Common rice ...	Srs. 25-1	Srs. 25-8	Srs. 25-7	Srs. 25-3	Srs. 23-9	Srs. 21-6	Srs. 24	Srs. 25-7	Srs. 24-6	Srs. 23-5	Srs. 23-9	Srs. 24-8
	Pulses ...	23-4	25-2	19-1	19-5	20-1	20-9	21-4	23-3	22	22-8	24-4	21-9
	Wheat ...	13	14-3	13-8	15-4	15-7	16-4	16-6	16	16-8	15-4	13-5	13-1

## FUREEDPORE.

*Price current in the SUDDER SUB-DIVISION of the District of Fureedpore.—  
(Number of seers of 80 tolahs retailed for a rupee.)*

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1868.												
Common rice ...	Srs. 30	Srs. 29	Srs. 29	Srs. 28	Srs. 28	Srs. 28	Srs. 29	Srs. 29	Srs. 28	Srs. 28	Srs. 28	Srs. 28
Pulses—												
Muttur... ..	20	20	21	21	21	21	21	21	20	20	20	20
Khesaree ...	21	20	22	22	22	22	22	22	22	22	21	21
Moong ...	17	17	17½	17½	16	16	16	16	16	16	16½	16½
Kalai ...	24	24	24	24	24	24	24	24	23	23	22	22
Wheat ...	21	21	22	22	20	20	20	20	20½	20½	20½	20½
1869.												
Common rice ...	30	30	29	28	27	26½	27	27	27½	27½	27½	28
Pulses—												
Muttur ...	20	19	20	22	21	21	21	21	21	20	20	20
Khesaree ...	21	21	22	23	23	23	23	22	22	21	21	21
Moong ...	16	16½	16½	16½	17	17	16½	16½	16½	16	16	16
Kalai ...	24	24½	24½	24½	24	24	24	24	24	23½	23½	23½
Wheat ...	20	19	19	21	21	21	21	20	21	20½	20	20

## SUDDER SUB-DIVISION.—(Continued.)

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1870.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	24	23½	23½	23½	22	22½	22½	23½	23½	24½	20½	24
Pulses—												
Muttur ...	20	19½	19½	19½	20	18	19½	20	20	20	20	20
Khesaree ...	21	21	20½	22½	20	21½	21½	20½	20	20½	21½	21½
Moong ...	16½	16½	16½	16½	16½	16½	16½	16	16	16	16	16½
Kalai ...	22	22½	23½	22½	22½	22½	22½	22½	22	22	22	21½
Wheat ...	21½	20½	21½	22	22½	22½	22	22	22	22	21½	21½
1871.												
Common rice ...	23½	22½	22	22	22½	22½	22½	23½	23½	23½	22½	23½
Pulses—												
Muttur ...	18	18	18	18	20	20	20	19½	19½	19½	18	18
Khesaree ...	19½	19½	18	18	21½	21½	21½	20½	20	20	19½	19½
Moong ...	16½	16½	16½	16½	15½	15½	15½	15½	16	16	16½	16½
Kalai ...	21½	22	22½	22	22½	22½	22½	22	21½	21½	21½	21½
Wheat ...	22	22	22½	22½	20	20	20	20	21½	21½	22	22
1872.												
Common rice ...	19½	18	17½	17½	17½	17½	17½	17½	18	18	18	19½
Pulses—												
Muttur ...	19½	20	20	20	19½	19½	20	20	20	19½	18	19½
Khesaree ...	18	19½	19½	20	20	20	19½	19½	18	18	18	18
Moong ...	16	16½	16½	16½	16	16	16	16	15½	14	14	16
Kalai ...	22½	22½	22½	22½	22½	22½	22½	22½	22½	22	22	22
Wheat ...	16½	17½	17½	17½	17½	17½	17½	17½	17½	17½	16½	16½
1873.												
Common rice ...	22	22	21	21½	20	20	20	21½	21½	20½	20½	22½
Pulses—												
Muttur ...	20	20½	21½	22	20	20	19½	19½	19½	20	20	20
Khesaree ...	22½	22½	24½	28½	21½	21½	21½	20½	22	22	22	22½
Moong ...	16	16	16½	16½	15½	15½	15½	15½	15½	15½	15½	16
Kalai ...	26½	27½	28½	28½	26½	26½	26½	26½	26½	26½	26½	25½
Wheat ...	16	16½	16½	16½	16	16	16	16	15½	15½	15½	15½
1874.												
Common rice ...	13½	13½	16	17½	13½	13½	12½	12½	12½	12	11½	13½
Pulses—												
Muttur ...	24	24	26½	26½	24½	24½	23½	23½	23½	22½	22½	22½
Khesaree ...	26½	26½	26½	26½	26½	26½	25½	24½	24½	22	22	21½
Moong ...	14½	15½	15½	16	13½	13½	13½	14	14	14	14	14½
Kalai ...	20	20	20	20	20½	20½	20½	20½	21½	21½	21½	21½
Wheat ...	13½	13½	14½	14½	20	20	17½	17½	16½	13½	14½	14

## MADARIPORE SUB-DIVISION.

1868.												
Common rice ...	30	30	30	29	29	27	20	19	19	27	19	19
Pulses—												
Khesaree ...	18	14	13	10	10	18	19	18	19	19	20	21
Moosoor ...	16	16	15	15	15	14	14	13	13	13	13	12
Moong ...	.....	.....	.....	13	14	15	.....	.....	.....	.....	.....	18
1869.												
Common rice ...	26	25	20	19	20	15	15	14	15	15	15	15
Pulses—												
Khesaree ...	.....	.....	.....	20	16	20	18	.....	15	16	15	16
Moosoor ...	.....	.....	14	14	.....	.....	13	13	.....	13	13	13
Moong ...	.....	14	.....	.....	14	.....	14	14	14	14	12	.....
1870.												
Common rice ...	20	19	19	28	28	20	19	20	18	18	28	28
Pulses—												
Khesaree ...	.....	.....	.....	.....	.....	14	14	.....	13	14	14	14
Moosoor ...	.....	8	.....	8	14	13	.....	9	13	12	10	.....
Moong ...	.....	14	10	10	9	13	13	.....	14	.....	.....	9
1871.												
Common rice ...	20	27	20	20	20	19	18	18	17	20	27	27
Pulses—												
Khesaree ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	18	.....
Moosoor ...	15	15	17	.....	20	21	21	20	20	20	30	30
Moong ...	.....	15	12	14	14	17	17	18	19	18	18	17
1872.												
Common rice ...	30	30	30	30	30	29	20	20	30	30	30	30
Pulses—												
Khesaree ...	14	.....	16	18	20	20	20	20	20	.....	.....	.....
Moosoor ...	.....	.....	.....	.....	15	15	13	17	.....	.....	.....	.....
Moong ...	21	28	.....	14	14	12	15	15	14	.....	.....	.....

MADARIPORE SUB-DIVISION.—(Continued.)

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1873.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	27	26	26	28	26	26	25	26	26	27	26	26
Pulses—												
Khesaree ...	30	24	23	23	.....	.....	.....	.....	31	31	30	31
Moosoor ...	14	13	11	8	.....	.....	.....	.....	14	11	14	11
Moong ...	14	13	14	14	.....	.....	.....	.....	.....	15	13	14
1874.												
Common rice ...	17	18	18	15	15	13	17	17	17	20	21	22
Pulses—												
Khesaree ...	14	14	11	9	9	15	17	14	13	13	13	12
Moosoor ...	7	8	10	7	7	13	15	13	9	11	10	9
Moong ...	12	12	15	15	14	13	13	13	13	13	13	13

GOALUNDO SUB-DIVISION.

1868.												
Common rice ...	22½	22½	22½	24	24	24	22½	22½	22½	22½	24½	24½
Pulses ...	49	49	48	48	49	49	48	48	48	48	46	46
Wheat ...	32	32	31	31	32	32	32	31	30	30	30	30
1869.												
Common rice ...	24	24	23	23½	21	22½	22½	22½	22½	21	21½	21
Pulses ...	41	40	41	42	42	43	41	40	40	39	39	40
Wheat ...	26	26½	27	27	28	28	27½	26	26½	26	25	25
1870.												
Common rice ...	20½	21	21½	21	20	20½	20	19½	19½	22	22½	22½
Pulses ...	39	39	40	41	40	40½	39	38	38	38	37	37
Wheat ...	26	25½	27	27	27½	28	27	26½	26	26	25	25
1871.												
Common rice ...	25	26	27	26½	26½	25	26	27	27½	26½	27	26
Pulses ...	36	36	35	37	38	37½	37	38	36½	36	35	35
Wheat ...	24½	25	25	27	27½	25	24½	24	23	22	22½	23
1872.												
Common rice ...	24	24½	25	24½	24½	24	23½	23½	23½	23½	23	23
Pulses ...	32	32	32	33	33	35	34	32½	34	33	32	32
Wheat ...	24	24	24	24½	25	25½	25	25	24	24	23	23
1873.												
Common rice ...	22	22½	22	22½	21	20	19½	17	16	16	16½	16
Pulses ...	30	29	28	28	27	27	25	25	24	24	24	24
Wheat ...	23	22	22	21	20	20	20½	19	18	17½	17	16
1874.												
Common rice ...	15½	15	14½	14½	14	14½	13	14	16	17	17	16½
Pulses ...	23	23	23	22	22	22	21	22	23	22	24	24
Wheat ...	14	14	13	13	13	14½	13½	16	15	14	14	14

Statement showing the average prices current in the DISTRICT OF FUREEDPORE from 1868-72.

Sub-Division.	Kind of grain.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Sudder	Common rice ...	Srs. 25'4	Srs. 24'7	Srs. 24'3	Srs. 23'9	Srs. 23'5	Srs. 23'5	Srs. 23'8	Srs. 24'2	Srs. 24'2	Srs. 24'2	Srs. 23'3	Srs. 24'6
	Indian-corn ...	19'7	19'8	20'1	20'3	20'2	20'1	20'2	20	19'8	19'5	19'2	19'2
	Wheat ...	20'1	20	20'5	21'1	20'3	20'5	20'1	19'9	20'5	20'7	20	20'1
Madaripore	Common rice ...	25'2	26'2	23'8	25'2	25'4	22	18'4	18'2	19'8	22	23'8	23'8
	Pulses ...	16'5	16'6	13'7	13'8	16'1	18'3	17'6	16'6	16	15'5	15'9	16
Goalundo	Common rice ...	23'2	23'6	23'8	23'9	23'2	23'2	22'8	23	23'1	22'7	23'7	23'4
	Pulses ...	38'4	38'2	38'2	40'2	40'4	41	39'4	38'5	38'3	38'8	37'8	38
	Wheat ...	26'5	26'6	26'8	27'3	28	27'7	27'2	26'5	25'9	25'6	25'1	25'2
District average	Common rice ...	24'6	24'8	23'9	24'3	24	22'9	21'6	21'8	22'3	22'9	23'6	23'9
	Pulses ...	25'2	25'2	24'3	24'7	25'5	24'4	25'7	25'3	25	24'6	24'3	24'4
	Wheat ...	23'8	23'8	23'6	24'2	24'1	24'1	23'6	23'2	23'2	23'1	22'5	22'6

## BACKERGUNGE.

Prices current in the SUDDER SUB-DIVISION of the District of BACKERGUNGE.—  
(Number of seers of 80 tolahs retained for a rupee.)

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.
1871.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	.....	21'8	22	21	22	22	20	20	18'8	20	20	21
Pulses ...	.....	12'8	12'4	13	14	12	12	12	12	14'8	12	12'8
Wheat ...	.....	13'8	13	13'8	14	13'8	13'8	13	14	17	13'8	13
1872.												
Common rice ...	23	22'8	21'8	27	24'2	23'3	26	27	27	27	27	28
Pulses ...	12	12'8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ...	13-8	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1873.												
Common rice ...	29	31	28	28	27	26	27	26	26	20	14'14	18
1874.												
Common rice ...	16-8	15	16	15	14	13	15	14	13'8	13	17	16
Pulses ...	.....	13'4	13	13	13	13	13'8	14	13'8	13	13	13

## PEROZEPURE SUB-DIVISION.

1868.												
Common rice ...	19	19	18	18	17	17	17	16	15	15	16	16
Pulses ...	13	13	13	13	13	13	13	13	13	13	13	13
1869.												
Common rice ...	17	17	19	20	19	16	15	14	14	13	16	18
Pulses ...	13	13	13	13	13	13	13	13	13	13	13	13
1870.												
Common rice ...	20	20	20	18	18	18	18	20	21	21	23	24
Pulses ...	13	13	13	13	13	13	13	13	13	13	13	13
1871.												
Common rice ...	22	20	20	21	21	21	21	21	21	20	19	20
Pulses ...	12	12	12	12	12	12	12	12	12	12	12	12
1872.												
Common rice ...	22	24	26	26	25	25	24	24	24	22	22	22
Pulses ...	12	12	12	12	12	12	12	12	12	12	12	12
1873.												
Common rice ...	22	22	23	23	23	22	21	20	19	18	17	16
Pulses ...	12	12	12	12	12	12	12	12	12	12	12	12
1874.												
Common rice ...	15	13	15	15	15	13	15	16	19	14	14	16
Pulses ...	12	12	12	12	12	12	12	12	12	12	12	12

## PATUAKHALLY SUB-DIVISION.

1873.												
Common rice ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	24	16'8
1874.												
Common rice ...	16'8	13'2	14'4	14'4	14'4	10'8	13'2	13'2	13'2	13'2	14'4	19'2

## SHABAZPORE SUB-DIVISION.

1868.												
Common rice ...	16	16	14	13	13	13	12	12	13	13	14	14
Pulses or dall ...	10	10	15	18	18	16	16	16	12	12	12	12
1869.												
Common rice ...	16	16	15	14	13	13	13	14	13	13	13	13
Pulses or dall ...	12	12	16	16	21	21	18	18	18	14	14	14
1870.												
Common rice ...	15	15	15	14	14	14	13	16	16	16	16	16
Pulses or dall ...	16	16	16	18	18	18	15	15	15	15	15	15
1871.												
Common rice ...	20	20	20	18	18	18	18	18	18	18	19	19
Pulses or dall ...	16	16	22	22	21	21	20	20	16	16	16	16
1872.												
Common rice ...	14	14	14	12	12	10	10	10	11	11	12	12
Pulses or dall ...	10	10	12	14	14	12	12	12	12	12	12	12
1873.												
Common rice ...	16	16	16	14	14	12	12	12	14	14	13	14
Pulses or dall ...	12	12	13	13	15	14	14	14	16	16	16	16
1874.												
Common rice ...	21	21	21	19	19	19	18	18	18	18	16	16
Pulses or dall ...	12	12	16	18	18	16	16	16	14	14	13	13

Statement showing the average prices current in the District of BACKERGUNGE from 1868-72.

SUB-DIVISION.		Kind of grain.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	
Sudder	Common rice	...	Srs. 23	Srs. 23.5	Srs. 22	Srs. 24	Srs. 23	Srs. 22.5	Srs. 23	Srs. 23.5	Srs. 23	Srs. 23.5	Srs. 23.5	Srs. 24.5	
		Pulses ...	...	12	12.5	12	13	14	12	12	12	14.5	12	12.5	
		Wheat ...	...	13.5	13.8	13	13.5	14	13.5	13.5	13	14	17	13.5	13
Perozepore	Common rice	...	...	20	20	20.1	20.1	20	19.4	19	19	18.2	19.2	20	
		Pulses ...	...	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6
Dukhin Shabaz-pore	Common rice	...	...	16.2	16.2	15.6	14.2	14	13.6	13.2	14	14.2	14.2	14.8	
		Pulses ...	...	12.8	12.8	16.6	17.6	18.2	17.6	16.2	16.2	14.6	13.8	13.8	13.8
District average	Common rice	...	...	19.7	19.9	19.2	19.4	19	18.5	18.4	18.8	18.7	18.6	19.1	
		Pulses ...	...	12.5	12.6	12.4	13.4	14.9	14	13.6	13.6	13.1	13.6	13.8	13
		Wheat ...	...	13.5	13.8	13	13.5	14	13.5	13.5	13	14	17	13.5	13

MYMENSINGH.

Prices current in the SUDDER SUB-DIVISION of the District of Mymensingh.—(Number of seers of 80 tolahs retailed for a rupee.)

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1868.	Srs. 32	Srs. 32	Srs. 32	Srs. 33	Srs. 33	Srs. 32.8	Srs. 32	Srs. 26-12	Srs. 23-8	Srs. 20-12	Srs. 22-4	Srs. 21-12
Common rice ...	...	...	...	...	...	...	...	...	...	...	...	...
Pulses—	...	...	...	...	...	...	...	...	...	...	...	...
Boot ...	11-4	11-4	12	12	12-8	13-8	12-4	12	12	12-4	12-4	9
Rohur ...	22	22	22	24	24	24	24	25	24-8	24-8	24	24
Moong ...	12-8	12-8	13	13	13	11-8	12-4	12	12-4	12	12	12-4
Mashkalai ...	24	24	23-8	23-8	23-8	23	23	23	20	20	20	20
Muttur ...	23	23	23	30	30	30	31	29	30-8	29-8	29	28-8
Khesaree ...	28-4	28-4	28-8	31	31	31	32	31-8	31	30	30	30
Wheat ...	16	16	16	16	16	16	16	16	16	16	16	16
1869.	Srs. 23	Srs. 23	Srs. 23	Srs. 22-4	Srs. 18-8	Srs. 18	Srs. 18	Srs. 18	Srs. 19	Srs. 19-12	Srs. 25	Srs. 25
Common rice ...	...	...	...	...	...	...	...	...	...	...	...	...
Pulses—	...	...	...	...	...	...	...	...	...	...	...	...
Boot ...	8-8	10	10	9	11-8	11	10	10-10	10-10	11	11	12-4
Rohur ...	20	20	21	21	21	22	22	22	21-8	21-8	21-8	21-8
Moong ...	12-4	14-8	11-8	11-8	11-8	12	11-8	11-8	11-8	11-8	12-4	12-4
Mashkalai ...	22	22	19	18	16-8	16	14-8	14-8	14-8	14-8	15	14-8
Muttur ...	18	18	17	17	17	18	18	17	17-4	17-8	17	17
Khesaree ...	18-8	18-8	18-12	19	19	18-12	18-12	18-12	18-8	18-8	18	18
Wheat ...	16	16	16	16	16	16	16	16	16	16	10-4	11
1870.	Srs. 25-12	Srs. 25-12	Srs. 24	Srs. 23-8	Srs. 23-4	Srs. 20-8	Srs. 20-8	Srs. 21-12	Srs. 24-6	Srs. 27-8	Srs. 30	Srs. 27-8
Common rice ...	...	...	...	...	...	...	...	...	...	...	...	...
Pulses—	...	...	...	...	...	...	...	...	...	...	...	...
Boot ...	12-4	14-8	14-8	14-8	12-12	16	16	16-4	20	20-8	18	18
Rohur ...	35	35	34	30	30	32	31-8	31-8	31	31	30	30
Moong ...	15	16	16	14-8	15	13-8	16	16	16	18	19	19
Mashkalai ...	16	21-8	21-8	20	20	20	23	23	23	23	23	26-10
Muttur ...	21	21	21	22	22	22	22-8	21	21-8	21-4	21-4	21
Khesaree ...	22	22-4	22-8	21	23	23-4	23-8	23	23	23-4	22	22
Wheat ...	11	11	11	11-5	12-4	12-3	12	12	12	12	13	11-12
1871.	Srs. 25-6	Srs. 23-6	Srs. 22-10	Srs. 24-8	Srs. 25	Srs. 24-4	Srs. 25-4	Srs. 27-12	Srs. 30-10	Srs. 30	Srs. 29	Srs. 30-2
Common rice ...	...	...	...	...	...	...	...	...	...	...	...	...
Pulses—	...	...	...	...	...	...	...	...	...	...	...	...
Boot ...	14-4	16-4	18	20	20	18	19	21	17-8	18	18	18
Rohur ...	30	30	30	32	33	34	31	31	31-8	30	30	30
Moong ...	18	16	16	18	18	18	16	16	16-8	16-8	14-8	14-8
Mashkalai ...	26-10	28	32	28-8	28-8	28-8	26-10	28-8	28-8	28-8	28-8	28-8
Muttur ...	22	23	23	25	25	25	24	23	23	23	23-4	23-4
Khesaree ...	22-8	22-8	22	23	24	24	23	23	23-4	22-8	22-12	22-18
Wheat ...	18	18	18	17-12	17	17	16-4	16-12	20	20	19	18
1872.	Srs. 31	Srs. 31-8	Srs. 32	Srs. 32	Srs. 32-2	Srs. 31-10	Srs. 32	Srs. 29	Srs. 26	Srs. 27	Srs. 28-8	Srs. 32
Common rice ...	...	...	...	...	...	...	...	...	...	...	...	...
Pulses—	...	...	...	...	...	...	...	...	...	...	...	...
Boot ...	19	20	19	20	18	16-9	18	17-12	16	17	17	18
Rohur ...	30	30	30	30	29	21	13	19	19-8	19-4	19	19
Moong ...	16	16	14-8	16	15	15	14-8	14-8	13-5	13-8	14-8	14-8
Mashkalai ...	32	32	28-8	28-8	28-8	28-8	26-10	25-8	23-8	23-8	25-8	23
Muttur ...	22-4	22-4	22-4	23	23	21	21	21	22	22	22	22-4
Khesaree ...	23	23	23	24	24	22	22	21-8	22-8	22-8	23	23
Wheat ...	17	16	15	15-12	16	13-5	16	12-12	13	12	12	12

## SUDDER SUB-DIVISION.—(Continued.)

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1873.												
Common rice ...	Srs. 32	Srs. 32	Srs. 31-8	Srs. 32	Srs. 32	Srs. 31	Srs. 28-12	Srs. 25-4	Srs. 23-4	Srs. 18	Srs. 17	Srs. 14-12
Pulses—												
Boot ...	19	18-8	18	19	20-8	19	18	17-12	17-8	14-8	9-6	9-12
Rohur ...	18	18	18	19	19-4	19-4	19-8	18	17-8	17-12	18	18
Moong ...	15	14-8	15	15-5	13-8	13-8	14-8	15	16-4	13-8	13-5	13-4
Mashkalai ...	25-8	23	23	23	23	23	22-12	23	23	20	20	21
Muttur ...	15	14	14	13-12	15	14-12	15	14-8	14	14	14	14
Khesaree ...	15	15	15	14	15-4	15-4	15-4	15	15-4	15-8	15	15
Wheat ...	11-8	11	9-14	9-12	12-12	12-12	13	13	12-8	11-10	10-2	10
1874.												
Common rice ...	18-10	18-4	13-6	16-13	13-7	11-3	11-14	12-4	12	12-13	15-5	12-8
Pulses—												
Boot ...	11-11	12-12	13-4	14-2	13-5	13-3	12-8	13-5	12-6	11-7	11-14	13
Rohur ...	18	18	18-4	18-8	18-4	18-12	18-12	18-8	18-4	18-4	18-4	18-8
Moong ...	16	16	16	15	15	15	15	15	15-8	15-4	15-4	15-4
Mashkalai ...	26	26	26	26	26	26	26	26	25-8	25	25-12	25-13
Muttur ...	11	11	11	11-4	11-8	11	11	11	11-4	11-4	11-3	11-13
Khesaree ...	11-8	11-8	12	11	11-4	11-8	11-12	11-12	11	11	11-4	11-4
Wheat ...	10	10-13	11-5	11-2	11-8	11-14	10	10	12-11	10-5	11-1	12

## ATTEA SUB-DIVISION.

1868.												
Common rice ...	31	30	32	30	30	28	33	32	30	30	33	30
Pulses, gram ...	21	20	22	20	20	20	20	17	15	20	20	20
Wheat ...	32	32	30	31	30	30	30	22	22	30	29	30
1869.												
Common rice ...	26	25	27	26	26	23	20	16	15	15	20	23
Pulses, gram ...	12	12	20	18	18	20	15	14	13	15	13	14
Wheat ...	28	25	20	20	19	18	17	15	15	15	12	15
1870.												
Common rice ...	20	23	25	25	23	23	23	21	22	24	24	24
Pulses, gram ...	15	10	10	15	15	15	12	10	12	13	14	14
Wheat ...	15	14	14	15	15	16	16	15	15	15	15	15
1871.												
Common rice ...	23	23	22	23	21	22	27	26	30	27	28	28
Pulses, gram ...	15	15	13	15	15	15	18	20	20	18	18	14
Wheat ...	16	16	15	18	20	21	20	25	30	28	25	15
1872.												
Common rice ...	35	33	33	32	36	36	40	38	35	30	30	30
Pulses, gram ...	18	18	14	14	12	12	12	12	12	12	12	12
Wheat ...	14	12	13	13	13	16	16	16	20	12	14	14
1873.												
Common rice ...	30	29	31	31-1	30	25-1	23	21-1	20	18-1	17	15
Pulses, gram ...	14	13	13-4	15-1	15-1	15-1	16	16	16	15-1	14	14
Wheat ...	15	13-1	15-1	16-4	16-1	16-1	16	15	14	13-1	13	13
1874.												
Common rice ...	16	15-1	12-1	13-1	11-12	10-1	13-4	14-1	13	13-4	15-1	18
Pulses, gram ...	11	12	10-1	10	10	15	16	15	13	12	12	12
Wheat ...	12	12	12	12	13	12-12	12	11-4	13	13	12-1	13

## KISHOREGUNGE SUB-DIVISION.

1868.												
Common rice ...	37-10	35-8	35-8	35-8	35-8	35-8	35-8	37-10	37-10	37-10	37-10	37-10
Pulses—												
Moong ...	13-0	13-0	13-0	13-0	13-0	14-8	14-8	14-8	14-8	14-8	14-8	14-8
Mashkalai ...	22-13	22-13	22-13	22-13	22-13	22-13	22-13	22-13	22-1	22-1	22-1	22-1
1869.												
Common rice ...	37-10	37-10	37-10	37-10	40	40	40	40	42-10	42-10	42-10	42-10
Pulses—												
Moong ...	16	16	16	16-13	16-13	16-13	16	16	16	16	16	16-13
Mashkalai ...	20	20	20	20	24-0	24-0	24-0	24-0	24-0	24-0	26	26
1870.												
Common rice ...	26-10	26-10	26-10	26-10	29-1	29-1	29-1	29-1	29-1	29-1	29-1	29-1
Pulses—												
Moong ...	16	16	16	16	16	16	16-13	16-13	16-13	16-13	16-13	16-3
Mashkalai ...	20-10	20-10	20-10	24-0	24-0	24-0	24-0	24-0	24-0	24-0	24-0	24-0
1871.												
Common rice ...	22-13	22-13	21-5	22-13	25-9	21-5	25-9	25-9	24-0	24-0	26-10	25-9
Pulses—												
Moong ...	20	16	16	16	14-8	14-8	14-0	13-5	13-5	14-8	14-8	16
Mashkalai ...	22-13	21-5	21-5	20-10	22-13	21-5	21-5	22-13	21-5	21-5	21-5	29-1

KISHOREGUNGE SUB-DIVISION.—(Continued.)

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1872. Common rice ...	Srs. 26-10	Srs. 32	Srs. 30-7	Srs. 28-4	Srs. 26-10	Srs. 32	Srs. 26-10	Srs. 33-8	Srs. 29-2	Srs. 24-9	Srs. 24-9	Srs. 36-8
Pulses—												
Moong ...	17-12	16	16-3	15-3	15-3	14-8	14-8	13-5	13-5	13-5	14-8	14-8
Mashkalai ...	25-9	27-3	24-9	24-9	22-13	22-13	22-1	20	20	21-5	24-9	24-9
1873. Common rice ...	32	32	30-10	29-1	29-1	26-10	25-1	22-15	21-5	17-12	20	17-12
Pulses—												
Moong ...	22-13	22-13	16	16	16	15-13	14-3	14-3	14-8	14-3	14-8	14-8
Mashkalai ...	27-13	32	30-7	30-7	30-7	29-1	27-13	27-13	26-10	22-13	22-13	24-9
1874. Common rice ...	18-13	17-13	16	16-13	16-13	13-5	12-5	13-5	15-4	13-5	13-5	17-12
Pulses—												
Moong ...	15-9	17-2	23-13	17-12	17-12	17-13	17-3	17-3	16-13	16-13	16-13	16
Mashkalai ...	22-13	22-13	26-10	32	32	30-7	30-7	30-7	30-7	29-1	29-1	27-13

JAMALPORE SUB-DIVISION.

1868. Common rice ...	32	31	30	30	30	29	29	28	28	27	26	25
Pulses ...	18	19	20	20	19	19	18	17	15	15	16	16
Wheat ...	15	15	16	18	19	17	16	18	18	19	18	16
1869. Common rice ...	25	25	24	24	24	24	23	23	22	22	21	20
Pulses ...	19	18	19	19	20	21	20	18	17	17	16	15
Wheat ...	16	16	16	16	17	18	20	20	20	18	17	15
1870. Common rice ...	35	35	35	33	33	33	33	33	32	32	32	30
Pulses ...	16	17	17	18	18	18	18	18	18	16	16	16
Wheat ...	15	15	14	15	15	16	16	14	14	14	14	14
1871. Common rice ...	32	33	33	33	30	30	40	40	40	40	40	40
Pulses ...	16	16	17	17	18	18	15	15	16	16	15	16
Wheat ...	14	14	15	15	17	14	13	13	14	15	14	14
1872. Common rice ...	35	35	35	32	32	32	32	32	22	30	27	28
Pulses ...	17	17	18	19	20	20	18	17	17	17	15	15
Wheat ...	14	14	14	16	16	16	16	16	13	15	15	15
1873. Common rice ...	32	30	31	32	32	24	25	24	22	17	16	16
Pulses ...	16	17	18	17	16	16	16	15	16	15	15	15
Wheat ...	15	15	15	10	10	12	12	12	12	12	12	12
1874. Common rice ...	16	18	15	12	12	10	13	18	15	16	18	21
Pulses ...	15	15	15	15	16	15	14	14	13	12	13	14
Wheat ...	10	10	10	11	11	11	11	13	12	12	12	12

Statement showing the average prices current in the DISTRICT OF MYMENSINGH from 1868-72.

SUB-DIVISION.	Kind of grain.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Sudder ...	Common rice ...	Srs. 27-4	Srs. 27-2	Srs. 26-3	Srs. 27-2	Srs. 27-2	Srs. 25-4	Srs. 24-4	Srs. 24-6	Srs. 24-4	Srs. 24-3	Srs. 25-8	Srs. 27-3
	Pulses ...	20-6	21-2	21	20-9	21-4	21	20-6	20-5	21-2	20-5	20-6	20-3
	Wheat ...	16-6	16-4	16-2	15-2	15-4	14-8	15-2	14-6	15-4	15-2	14-2	15-8
Attea ...	Common rice ...	27	26-8	27-8	27-2	27-2	26-4	28-6	26-6	26-4	25-2	27	27
	Pulses ...	15-2	13-8	15-8	16-4	16	16-4	14-6	14-6	14-4	15-6	15-4	14-8
	Wheat ...	21	19-8	18-4	19-2	19-4	20-2	19-8	18-6	20-4	20	19	17-8
Kishoregunge ..	Common rice ...	30-2	31	30-2	30-2	31-4	31-6	31-4	33-2	32-6	31-6	32	34
	Pulses ...	20-7	20-1	19-8	19-6	19-3	19-1	19-1	19-8	18-6	18-8	19-4	20-4
	Wheat ...	14-8	14-8	15	16	14-8	16-2	16-2	16-2	15-8	16-2	15-6	14-8
Jamalpoore ...	Common rice ...	31-8	31-8	31-4	30-4	29-6	29-6	31-4	31-2	28-4	30-2	29-2	28-6
	Pulses ...	17-2	15-4	18-2	18-6	19	19-2	17-8	17	16-6	16-2	15-6	15-6
	Wheat ...	14-8	14-8	15	16	14-8	16-2	16-2	16-2	15-8	16-2	15-6	14-8
District average	Common rice ...	29-1	29-2	29	28-7	28-9	28-7	29-2	28-9	27-9	27-9	28-4	29-2
	Pulses ...	18-4	17-6	18-7	18-8	18-9	18-9	18-2	17-7	17-9	17-7	17-7	17-7
	Wheat ...	17-1	16-6	16-2	16-6	16-5	17	17	16-4	17-2	17-1	16-2	16-1





CHITTAGONG DIVISION.



## CHITTAGONG DIVISION.

### TIPPERAH.

*Prices current in the HEAD-QUARTERS of the district of Tipperah.—(Number of seers of 80 tolahs retailed for a rupee.)*

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1868.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	42.5	41.2	36.2	38.7	37.5	28.7	28.7	36.2	26.6	26.9	25.5	24
Pulses ...	17	18	19	20	18	11	18	18	18	17	15	15.2
Wheat ...	14	15	15	16	16	12	14	14.8	14	13.2	13	13
1869.												
Common rice ...	25.2	25	26.6	26.6	26.2	21.9	20.4	20.8	21.2	21.2	21.1	27.9
Pulses ...	18	18	18	17	17	16.5	14.6	14	14	14	11	10
Wheat ...	13	13	13	13	13	12.1	11.2	11.2	11.2	11.2	10.8	10.7
1870.												
Common rice ...	32	33.2	34	33.6	29.7	23.6	24	25.2	25.5	32	35.6	36
Pulses ...	10	10	10	15.6	14.7	14	14	15	14	14	14	14.4
Wheat ...	16.7	10	8	10.8	11	11	11	11	11	.....	.....	11
1871.												
Common rice ...	26.2	26.2	26.2	26.2	25	25	27.8	29	29	29	29	35
Pulses ...	16	16	16	22	22	25	25	32	32	32	32	25
Wheat ...	14	14	15	15	15	15	15.2	16	16	16	16	11
1872.												
Common rice ...	35	37.5	.....	34.9	33.7	30.3	32.5	32.5	32.5	32.5	31.2	32.5
Pulses ...	27.5	32	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ...	14	14	.....	12.8	12.1	12.1	13	10	12	12	11	11
1873.												
Common rice ...	32.5	32.5	29.2	32.5	32.5	30.2	29	25	24.5	21	20.2	17.5
Wheat ...	11	9.5	10	10.2	9.7	10.5	11.7	12	12	10.5	9	9.5
1874.												
Common rice ...	19.1	15.1	14	15.6	14.8	13	13.2	13	12.7	12.6	18	24
Wheat ...	10.3	9.8	10	11	11	10	10	10	10.7	11	10.6	10.6

### BRAMANBERIA SUB-DIVISION.

1868.												
Common rice ...	21	22	22	20	19	18	18	20	21	20	19	19
Pulses ...	16	15	14	22	22	22	20	20	20	19	19	19
1869.												
Common rice ...	20	21	23	21	19	20	20	21	19	19	18	20
Pulses ...	19	19	18	20	22	22	21	20	19	17	15	16
1870.												
Common rice ...	25	30	32	31	30	33	34	36	33	34	32	34
Pulses ...	14	13	13	15	18	18	18	15	14	14	14	14
1871.												
Common rice ...	30	27	22	22	22	23	26	26	26	26	26	26
Pulses ...	11	11	12	12	16	16	16	16	16	16	16	16
1872.												
Common rice ...	30	35	40	40	35	35	33	32	31	33	32	34
Pulses ...	16	16	16	16	20	22	22	22	22	23	20	20
1873.												
Common rice ...	34	34	33	32	28	28	28	27	28	26	20	22.5
Pulses ...	20	22	20	20	20	16	16	15	15	12	10	9
1874.												
Common rice ...	19	15	16	18	16	14	15	15	13	17	20	21
Pulses ...	9	8	8	8	8	10	9	9	9	9	8	8

Statement showing the average prices current in the DISTRICT OF TIPPERAH  
from 1868-72.

Sub-Division.	Kind of grain.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Head-quarters	Common rice ... ..	Srs. 32.2	Srs. 32.6	Srs. 30.7	Srs. 32	Srs. 30.4	Srs. 25.9	Srs. 26.7	Srs. 28.7	Srs. 26.9	Srs. 28.3	Srs. 28.5	Srs. 31.1
	Pulses ... ..	17.7	18.8	15.7	18.7	17.9	16.6	17.9	17.7	19.7	19.2	18	16.1
	Wheat ... ..	13.1	13.2	12.7	13.5	13.4	12.4	12.9	12.7	12.8	13.1	12.7	11.3
Bramanberia ...	Common rice ... ..	25.2	27	27.8	26.8	25	25.8	26.2	27	26	26.2	25.4	26.6
	Pulses ... ..	15.2	14.8	14.6	17	19.6	20	19.4	18.6	18.2	17.8	16.8	17
	Wheat ... ..	13.1	13.2	12.7	13.5	13.4	12.4	12.9	12.7	12.8	13.1	12.7	11.3
District average	Common rice ... ..	28.7	29.8	29.2	29.4	27.7	25.8	26.4	27.8	26.4	27.2	27	28.8
	Pulses ... ..	16.4	16.8	15.1	17.8	18.7	18.3	18.6	18.1	19	18.5	17.4	16.5
	Wheat ... ..	13.1	13.2	12.7	13.5	13.4	12.4	12.9	12.7	12.8	13.1	12.7	11.3

## HILL TIPPERAH.

Prices current in the AGURTOLLAH SUB-DIVISION (or Head-Quarters) of the District  
of Hill Tipperah.—(Number of seers of 80 tolahs retained for a rupee.)

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1868.	Srs. 37½	Srs. 29	Srs. 37½	Srs. 32	Srs. 35½	Srs. 32½	Srs. 25½	Srs. 25½	Srs. 23½	Srs. 23½	Srs. 22	Srs. 20½
Common rice ...	22	22	19	18½	18½	21	21	21	21	21	21	21
Pulses ...	21	23½	24½	22½	20½	17½	15½	15½	14½	14½	14½	19
1869.	22	22½	22	22	21	21	21	21	20	17½	16	16½
Common rice ...	21	25½	27½	27½	23½	21½	20½	20	22	23½	23½	24½
Pulses ...	17½	16½	16	16	15	14½	13½	13½	13	12½	12½	12½
1870.	25	25	25	25	24	20½	20	21	21	21	21	26½
Common rice ...	12½	13½	14½	16	17½	20	20	21	21	21	21	21
Pulses ...	32	37½	40	37½	42½	37½	40	40	33½	30	40	40
1871.	22½	21	20	20	21	21	21	21	21	21	21	21
Common rice ...	.....	.....	.....	10½	10½	11	11	10	11	.....	11	11
Pulses ...	40	40	35½	40	37½	32	26½	23½	23	20	20	20
1872.	22½	22½	22½	22½	22½	20	20	20	20	20	17½	17½
Common rice ...	11½	10½	10½	10½	10½	10½	10½	10	10	8	.....	.....
Pulses ...	18	13½	16	16	16	18½	13½	13½	13½	13½	17½	22½
1873.	17½	20	16	16	17½	17½	17½	17½	15½	16	16	16
Common rice ...	8	8	8½	8	.....	.....	10	8	8	8	8	8
Pulses ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Statement showing the average prices current in the DISTRICT OF HILL TIPPERAH  
from 1868 to 1872.

Sub-Division.	Kind of grain.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Agurtollah (Sudder.)	Common rice ... ..	Srs. 27.5	Srs. 28.1	Srs. 30.9	Srs. 28.9	Srs. 29.2	Srs. 25.9	Srs. 24.3	Srs. 24.4	Srs. 22.9	Srs. 22.5	Srs. 24.3	Srs. 26.1
	Pulses ... ..	19.1	18.1	18.3	18.5	18.4	19.5	19.3	19.5	19.2	18.6	18.3	18.4
	Wheat ... ..	...	...	...	10.5	10.5	11	11	10	11	...	11	11

CHITTAGONG.

Prices-current in the SUDDER SUB-DIVISION of the District of Chittagong.—(Number of seers of 80 tolahs retailed for a rupee.)

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1868.												
Common rice ...	Srs. 30	Srs. 30	Srs. 26	Srs. 27	Srs. 24	Srs. 23	Srs. 22	Srs. 21	Srs. 20	Srs. 21	Srs. 21	Srs. 23
<b>Pulses—</b>												
Khesaree ...	16	16	16	16	15	14	14	16	16	16	15	13
Moong ...	8	8	8	8	8	8	8	7	7	7	7	7
Kalai ...	13	12	13	13	13	13	13	13	13	13	13	12
Peas ...	12	11	11	11	11	11	11	11	11	11	11	8
Urhur ...	12	12	8	9	8	8	8	8	8	8	8	8
Boot ...	8	8	8	8	8	8	8	8	8	8	8	8
Moshoor ...	11	11	11	11	11	11	11	11	11	11	11	11
Wheat ...	18	18	18	18	18	18	18	18	13½	14	15	14½
1869.												
Common rice ...	20	21	20	15	15	14	13½	16	17½	18	18	21
<b>Pulses—</b>												
Khesaree ...	14	14	16	16	16	14	13	13	13	13	13	11
Moong ...	8½	7	7	7	7	6½	6½	6½	6½	6½	6½	6½
Kalai ...	10½	12	13	13	12½	12	13	13	13	13	13	13
Urhur ...	9	8	8	8	8	8	8	7	6½	6½	6½	6½
Boot ...	7	7	7	7	7	6	7	6½	6½	6½	6½	6½
Moshoor ...	11	11	11	10½	10½	10½	11	10	10	10	10	9
Peas ...	.....	11	11	11	11	11½	11	11	11	10	10½	10½
Wheat ...	14	14	14	15	13	11	13	9	8½	9	9	9
1870.												
Common rice ...	21	22	22	22½	21	18	17½	20	22	25	24	25
<b>Pulses—</b>												
Peas ...	9	9	10½	10½	11	10½	8	8	8	8	8	8
Khesaree ...	9	8½	14	15	16	14	12	12	12	12	13	12
Moong ...	6½	6½	6½	6	6	6	6½	6½	6½	6½	6½	6½
Kalai ...	11½	13	14½	14½	14½	14	12	12	12	12	11	9
Urhur ...	5½	7	6½	6½	7	7½	7	7	7	7	8	8
Boot ...	5½	6	5½	5	5	5½	5½	5½	5½	5½	5½	6½
Moshoor ...	9	9	8	7	8	8	8	8	8	8	8	8
Wheat ...	8½	7	11½	10	11	10½	10½	12½	10	15	9	12
1871.												
Common rice ...	26	22	21	19	20	18	20	25	26	27	27	27
<b>Pulses—</b>												
Peas ...	10½	10	10	11	10½	10½	11	11	12	12	12	13
Khesaree ...	12	13	14	16	16	16	17	18	20	20	20	21
Moong ...	7	6½	7	7	7	7	7	7	7	7	8	8
Kalai ...	9	10½	10½	10½	11	13	10½	12	12	12	13	13
Urhur ...	8	8	8	7	8	8	8	8	8	8	8	8
Boot ...	6	6	6	7	8	6½	7	7	8	8	8	8
Moshoor ...	9½	10	10	10	10½	10½	11	11	12	12	13	13
Wheat ...	10½	10½	11½	10	14	13	13	14	13	13	13	13
1872.												
Common rice ...	27	27	27	25	23	23	23½	22	23	23	23	27
<b>Pulses—</b>												
Moong ...	8	7	7	.....	.....	.....	.....	.....	.....	.....	.....	.....
Boot ...	8	8	8	.....	.....	.....	.....	.....	.....	.....	.....	.....
Urhur ...	8	8	7	.....	.....	.....	.....	.....	.....	.....	.....	.....
Kalai ...	13	13	13	.....	.....	.....	.....	.....	.....	.....	.....	.....
Moshoor ...	13	13	13	.....	.....	.....	.....	.....	.....	.....	.....	.....
Peas ...	13	13	13	.....	.....	.....	.....	.....	.....	.....	.....	.....
Khesaree ...	21	21	20	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ...	13	13	13	13½	14	15	14	15	14	15	14	15
1873.												
Common rice ...	26	25	23	24	24	24	24	21	20	24	20	16
Wheat ...	12	10	8	11	13	13	11	9	10	10	8	8
1874.												
Common rice ...	18	17	16	18	15	14	16	16½	14	17	20	20
Wheat ...	9	9	10	12	12	12	12	12	9	9	10	9½

Cox's BAZAR SUB-DIVISION.

1868.												
Common rice...	27	24	20	24	24	20	20	14	16	19	16	16
<b>Pulses—</b>												
Moong ...	5	5	5	5	5	5	5	5	5	5	5	5
1869.												
Common rice...	19	18	16	13	10	11	10	10	10	11	12	10
<b>Pulses—</b>												
Moong ...	5	5	5	5	5	5	5	5	5	5	5	5

## COX'S BAZAR SUB-DIVISION.—(Continued.)

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1870.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice...	16	16	16	16	16	16	16	17	19	22	22	27
Pulses—												
Moong ...	5	5	5	5	5	5	5	.....	.....	.....	.....	.....
Kalai ...	.....	.....	.....	.....	.....	.....	.....	16	10	16	16	16
1871.												
Common rice...	25	25	22	26	22	20	20	20	22	22	26	32
Pulses—												
Kalai ...	12	12	16	16	16	12	12	12	16	16	14	8
1872.												
Common rice...	28	28	30	31	28	30	30	32	31	32	32	37
Pulses—												
Moong ...	11	12	11	.....	.....	.....	.....	.....	.....	.....	.....	.....
Kalai ...	18	21	24	16	16	16	16	16	16	16	16	16
1873.												
Common rice...	33	33	34	32	28	25	22	22	23	24	24	23
Pulses—												
Kalai ...	16	16	16	16	16	16	16	16	16	16	16	16
1874.												
Common rice...	21	21	18	20	17	17	16	15	18	19	20	21
Pulses—												
Moong ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Kalai ...	16	16	16	16	16	16	16	16	16	10	16	5

Statement showing the average prices-current in the District of Chittagong from 1868-72.

SUB-DIVISION.	Kind of grain.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Sudder	Common rice ...	Srs. 24.8	Srs. 24.4	Srs. 23.2	Srs. 21.7	Srs. 20.6	Srs. 19.2	Srs. 19.2	Srs. 20.8	Srs. 21.7	Srs. 23	Srs. 22.6	Srs. 24.6
	Pulses ...	11.9	12.1	10.2	10	10	9.8	9.7	9.8	10	9.9	10	9.7
	Wheat ...	12.8	12.5	13.5	13.3	14	13.5	13.7	13.7	11.8	13.2	12	12.7
Cox's Bazar	Common rice ...	23	22.2	20.8	22	20	19.4	19.2	18.6	19.6	21.2	21.6	25.6
	Pulses ...	8.3	8.7	9.7	9.4	9.4	8.6	8.6	10.3	10.4	11.6	11.2	10
District average	Common rice ...	23.9	23.3	22	21.8	20.3	19.3	19.2	19.7	20.6	22.1	22.1	25.1
	Pulses ...	10.1	10.4	10	9.7	9.7	9.2	9.2	10.3	10.2	1.7	10.6	9.8
	Wheat ...	12.8	12.5	13.5	13.3	14	13.5	13.7	13.7	11.8	13.2	12	12.7

## NOAKHOLLY.

Prices-current in the HEAD-QUARTERS SUB-DIVISION of the District of NOAKHOLLY.

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1868.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	30	32	26½	.....	.....	.....	24	24½	23½	.....	18	18
1869.												
Common rice ...	20	22	22½	21½	22	18	16½	17½	17	16	16½	20½
1870.												
Common rice ...	22½	25	22½	24	22	20½	22½	24	22½	25	26	24½
1871.												
Common rice...	22	22	22	23½	22	23	22½	23	23	23	23	23
1872.												
Common rice ...	28	28	24	26	24	24	24	27	27	24	24	23
1873.												
Common rice ...	25	27	26½	25	24	24½	25	23	23	23	18½	16
1874.												
Common rice ...	17½	18½	14½	15	15	12½	13½	12½	11½	12½	14½	19½

Statement showing the average prices current in the District of NOAKHOLLY from 1868-72.

STATION.	Kind of grain.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Head-quarters ...	Common rice	Srs. 24.1	Srs. 25.5	Srs. 23.5	Srs. 23.7	Srs. 22.5	Srs. 21.1	Srs. 21.9	Srs. 23.1	Srs. 22.6	Srs. 22	Srs. 21.5	Srs. 21.5

**BURDWAN DIVISION.**













Statement showing the average prices current in the district of Burdwan from 1868-72.—(Continued.)

Sub-Division.	Kind of grain.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Jehanabad	Common rice ...	Srs. 24	Srs. 25	Srs. 24	Srs. 22	Srs. 22	Srs. 21	Srs. 21	Srs. 20.7	Srs. 20.8	Srs. 20.5	Srs. 21	Srs. 21.7
	Indian-corn ...	...	...	...	...	...	...	...	...	...	...	...	...
	Pulses ...	16.5	16.5	19	17	17	17	17	16	16	16	15.7	15.7
	Wheat ...	14	13.5	13.3	14.3	14.3	14.3	14	14	14.3	14.3	14.3	14.5
	Millet ...	...	...	...	...	...	...	...	...	...	...	...	...
District average	Common rice ...	24.6	25	26.2	24.4	24	22.8	22.1	21.7	21.9	22.2	22.6	23
	Indian-corn ...	...	...	...	...	...	...	...	...	...	...	...	...
	Pulses ...	18.1	19.3	20.2	19.5	19.4	19	18.6	18.3	17.6	17.5	17.1	17.3
	Wheat ...	16.9	16.8	17.2	17.4	17.8	17.1	16.4	16.3	16.1	15.8	15.1	15.7
	Millet ...	...	...	...	...	...	...	...	...	...	...	...	...

BANKOORA.

Prices current in the DISTRICT of BANKOORA.—Number of seers of 80 tolahs retailed for a rupee.

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1868.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	32-6	32-6	33-1	33-5	33-5	32-8	28-1	25-6	25	25-8	26-4	24
Indian-corn ...	29-4	32-5	37-4	37-4	35-8	32-8	31-2	34-2	34	34-5	35	38-4
Millet ...	36-5	35	35-1	35-6	35-6	34-8	30-8	27-6	28	34	38-7	30-5
Pulses ...	18-2	18-6	18-5	18-6	19-2	19-5	19-8	19-8	19-2	20-8	22-6	20-4
Wheat ...	16-3	16-5	16-8	17-1	17-6	17-8	17-8	17-8	15-5	16-6	16-8	14-1
1869.												
Common rice ...	21-9	23-8	24-1	25-5	24-9	22-9	22-4	22-8	19-7	21-6	22-5	23-8
Indian-corn ...	29-4	32-5	37-4	37-4	35-8	32-8	31-2	34-2	34	34-5	35	38-4
Millet ...	18-3	19	23-1	24-1	24-2	23-9	17-7	17-5	15-4	14	12-5	13-7
Pulses ...	18-3	19	23-1	24-1	24-2	23-9	17-7	17-5	15-4	14	12-5	13-7
Wheat ...	12-5	12	15-5	16-4	16-4	14	12-4	12-2	11-6	11-6	11-9	11-9
1870.												
Common rice ...	25	25-2	24-8	25	25-2	24	22-2	22-1	23-9	23-1	24-3	26-1
Indian-corn ...	...	...	...	...	...	...	...	...	...	...	...	...
Millet ...	39	39-3	39-9	39-6	38	38	32-8	32	33-5	43-1	39	30-2
Pulses ...	14	15-3	15-9	18	18-5	17-5	17-2	17-4	17-5	18-1	18-5	18-7
Wheat ...	12-5	11-2	14-1	14-4	13-8	13-8	13-8	14	14	14-1	15-6	16
1871.												
Common rice ...	26-8	27	26-7	26-8	25-9	23-9	.....	25-9	27	.....	22	28
Indian-corn ...	...	...	...	...	...	...	...	...	...	...	...	...
Millet ...	31-9	33-2	35	32-8	30-2	28-3	.....	35	36	.....	22	32
Pulses ...	19-3	20	20-7	21-2	21-3	21-2	.....	23	23-5	.....	20-5	20-8
Wheat ...	17-9	18-7	20	20-6	20-4	20-2	.....	20	20-5	.....	16-5	16-8
1872.												
Common rice ...	28-5	29	.....	22-6	22-8	19-1	14-8	15-5	15-5	16-2	18-2	19-2
Indian-corn ...	...	...	...	...	...	...	...	...	...	...	...	...
Millet ...	32	32-5	.....	27-1	28-8	25-4	24-4	24-5	27	27	27-0	33
Pulses ...	21	21-5	.....	16-4	14-5	15-3	14-3	14-2	14	14-5	14-0	14-2
Wheat ...	17-5	18-8	.....	16-4	14-5	15-3	14-3	14-2	14	14-5	14-0	14-2
1873.												
Common rice ...	19-6	20-1	20	20-2	19-7	17-5	16-4	18	15-9	15-5	14-8	15-7
Indian-corn ...	...	...	...	...	...	...	...	...	...	...	...	...
Millet ...	32	31-8	33-7	34-7	33	31-2	29-2	29-6	28	31-2	26	19-3
Pulses ...	...	...	...	...	...	...	...	...	...	...	...	...
Wheat ...	14	12-7	17-5	17-5	16-5	15-5	13-2	13-1	13-3	12	11-6	12-3
1874.												
Common rice ...	14-4	13-6	13-6	13-5	12-8	12-5	12-5	11-0	12-6	13-7	14-8	17-5
Indian-corn ...	20	18-0	18-5	18-0	17-0	17-5	15-8	10	23-5	20-0	28-8	20-8
Millet ...	...	...	...	...	...	...	...	...	...	...	...	...
Pulses ...	...	...	...	...	...	...	...	...	...	...	...	...
Wheat ...	12-2	12-4	12-3	14-4	13-3	12-7	12-8	13	13-1	13-7	13-0	11-1

















PRESIDENCY DIVISION.



PRESIDENCY DIVISION.

24-PERGUNNAHS.

Prices current in the SUDDER SUB-DIVISION of the District of 24-Pergunnahs.—  
Number of seers of 80 tolahs retailed for a rupee.

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1868.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	18-12	20	20	20	23-12	21	16	17-8	20	20	14-5	18
Pulses ...	18	18	19	20	20	19	19	18	19	18	18	16
Wheat ...	22-12	20	16	20	11-8	20	18	18	18	18	16	15
1869.												
Common rice ...	19	19	20	20	18	16	17-12	17-12	17-12	16	20	22-10
Pulses ...	15-4	13	13-5	13-5	13-8	11-4	12-5	12-8	11-4	11-5	11-4	11-4
Wheat ...	13-5	12-5	12-5	12-6	12-4	12-5	11-6	10-8	11-4	11-5	11-4	11-4
1870.												
Common rice ...	14-8	21-8	20	20-9	18-12	18-2	18-6	20	20	20	23-8	24-12
Pulses ...	10	10	10-8	13-5	13-5	11-4	12-4	12-4	12-8	12-4	12-4	13-4
Wheat ...	10	10	8-12	9	13-5	12-4	13-5	13-4	13-5	13-4	13-5	16
1871.												
Common rice ...	20	22-5	21-4	20	20	20	21-4	20	20	20	20	20
Pulses ...	16	14-8	15-4	17-12	20	20	21-4	21	20	19	19	19
Wheat ...	16	17-12	19	17-12	17-12	20	20	20	20	16	16	13
1872.												
Common rice ...	20	22-12	22-12	21-4	21-4	20	20	18-12	18-12	20	20	19
Pulses ...	17-12	20	20	20	20	17-12	18	19	20	20	20	18-12
Wheat ...	13-2	16	17-12	17-12	17-12	17-12	17-12	13-4	14	20	12-12	12-8
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20	22
1873.												
Common rice ...	17	17	18-12	20	18	18	18-12	18-8	18	17-12	13-5	13
Pulses ...	20	20	20	20	20	20	20	20	20	15	13	13
Wheat ...	12-8	12	10	16	16	14-4	13-4	13	12-8	10-8	11	11
1874.												
Common rice ...	14-8	13-5	15	14-8	13-5	13-5	14	13-12	14-8	17-12	16	18-4
Pulses ...	13-5	13	12-8	13-5	13-5	13-5	14	16	14-8	14	16	16
Wheat ...	11-4	10-8	11-8	12	10-8	11	11-8	12-5	11	.....	11-8	12-8

BARASET SUB-DIVISION.

1871.												
Common rice ...	21	22	22	22	22	22	20	20	21	17½	18	20
Wheat ...	16	14	14	16	16	16	16	16	16	16	16	16
1872.												
Common rice ...	22½	22½	22½	22½	21½	21	20	20	20	20	21½	22½
Wheat ...	16	16	16	16	18	18	18	18	17	17	17	18
1873.												
Common rice ...	25	25	25	22½	20	20	20	22	22½	22½	18½	17½
Wheat ...	12½	12	13	15	15	13	13½	13½	12½	12½	12½	10½
1874.												
Common rice ...	16½	13½	15	13½	13½	13	13	13½	13½	12½	13	16
Wheat ...	11½	11½	11½	11½	13½	12	12	12	13	12½	13	13

BUSSEERHAT SUB-DIVISION.

1870.												
Common rice ...	.....	.....	.....	.....	.....	.....	.....	20	19	20	24	26
Pulses ...	.....	.....	.....	.....	.....	.....	.....	13	13	13	13	13
1871.												
Common rice ...	24	26	26	26	22	25	22	22	20	18	20	23
Pulses ...	13	13	13	13	13	13	13	13	13	13	13	13
1872.												
Common rice ...	23	22	18	20	20	21	21	21	21	18	22	28
Pulses ...	13	13	13	14	19	16	16	17	17	17	17	17
1873.												
Common rice ...	20	20	20	20	23	22	23	23	18	14	16	17
Pulses ...	17	17	17	17	20	16	16	16	16	13	13	13
1874.												
Common rice ...	17	17	16	14½	14½	12-8	18-6	12-12	13-0	12	14-0	13
Pulses ...	11	11	11	11	11	11	11	11	10	10	11	11

## SATHKIRA SUB-DIVISION.

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1871.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	.....	.....	.....	20	20	22	22	22	18	17	21	21
1872.												
Common rice ...	20	20	18	25	24	24	25	25	23	22	20	23
1873.												
Common rice ...	22	23	23	22	24	25	23	23	19	17	16	18
1874.												
Common rice ...	18	14	16	16	15	14	13	12	13	14	16	16

## BARRIPORE SUB-DIVISION.

1869.												
Common rice ...	.....	.....	.....	.....	.....	.....	.....	13½	14½	15	17½	20
Pulses ...	.....	.....	.....	.....	.....	.....	.....	13½	13½	13	11	7½
Wheat, atta ...	.....	.....	.....	.....	.....	.....	.....	6½	8	6½	6½	6½
1870.												
Common rice ...	20	20	20	20	20	20	19	20	20	20	22½	22½
Pulses ...	7½	7½	7½	7½	7½	7½	7½	7½	11	11	11	11
Wheat, atta ...	6½	5½	5½	7½	7½	7½	6	6	8	8	7	7
1871.												
Common rice ...	22½	25	25	25	25	25	20	20	18	20	22½	22½
Pulses ...	11	11	11	12	11	11	11	11	11	12	12	12
Wheat, atta ...	8	8	8	10½	8	9	8	8	8	8	10	10
1872.												
Common rice ...	22½	23	23	20	20	20	20	20	20	17½	15	13½
Pulses, grain ...	16	16	16	18	18	18	18	18	18	16	13	13½
Wheat, atta ...	9	7	8	8	8	8	8	8	8	8	8	7
1873.												
Common rice ...	14½	13½	14½	12½	12½	11½	11½	11½	11½	11	11½	12½
Pulses, grain ...	13½	14½	14½	14	14	14½	14½	14	15	14	14	14
Wheat, atta ...	7	7	7	8	8	8	8	8	8	8	8	8

## BARRACKPORE SUB-DIVISION.

1868.												
Common rice ...	21	19-8	20	20	19	19	19	19	19	19	16	16
Indian corn ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pulses ...	22	22	22	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ...	22	19-8	14-12	16-4	17	17-12	16	16	14-8	14	14	11-4
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1869.												
Common rice ...	16	16	16	16	18	16	16	16	16	18	18	18
Indian corn ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pulses ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ...	11	10-12	11-8	11-8	12-1	11-12	10-8	11	11-8	11-8	10-14	10-3
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1870.												
Common rice ...	20	20	20	17-8	18	18	19	20	20	23	25	25
Indian corn ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pulses ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ...	8	8-8	11-8	17-8	18	17	17-8	18	18	18	22	24
Millet ...	.....	.....	.....	12	12-8	12-8	12-12	13	12-12	12-14	14-4	15
1871.												
Common rice ...	24	22	22	22	20-8	20	23-8	24	22	21	21	21
Indian corn ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pulses ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ...	16-8	17-12	18	18-12	20	17	18-8	19	18	16-4	14	15
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1872.												
Common rice ...	21	23	23	23	23	23	21	21	21	21	19	20
Indian corn ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pulses ...	32	32	32	32	32	32	32	32	32	32	29-8	27
Wheat ...	16	10	15	10	14	14	15	14	14	18-2	18-4	20
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

\* No record available.







NUDDEA.

Prices current in the SUDDER SUB-DIVISION of the District of Nuddea.—Number of seers of 80 tolahs retailed for a rupee.

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.
1868.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	22-14	23-11	24-10	23-11	24-6	23-11	20-0	20-0	18-13	18-13	18-13	16-14
Pulses—												
Matar ...	30-8	32-0	35-8	35-8	32	33-11	37-9	32-0	30-8	29-2	29-2	29-2
Kalie ...	22-14	24-10	24-10	24-10	22-14	24-10	22-14	22-14	22-14	24-21	24-10	24-10
Musur ...	29-2	32-0	33-11	37-9	37-9	35-8	35-8	32-0	32-0	29-2	29-2	30-8
Gram ...	21-14	22-14	24-10	22-14	22-10	21-14	21-14	21-14	21-14	20-0	21-14	20-0
Arhar ...	22-14	22-14	24-10	22-14	21-14	21-14	21-14	20-0	20-0	22-1	21-14	20-0
Mug ...	14-9	14-9	13-5	13-5	11-14	10-0	10-0	10-0	8-14	9-7	8-15	12-5
Khesari ...	33-11	35-8	35-8	37-9	35-8	37-9	37-9	35-8	32-0	30-8	30-8	30-8
Wheat ...	22-14	22-14	24-10	24-10	22-14	22-14	23-11	22-14	22-14	18-13	20-0	15-4
1869.												
Common rice ...	17-5	16-14	17-12	17-12	17-12	15-11	15-4	14-9	15-4	16-0	16-0	16-0
Pulses—												
Matar ...	26-14	26-14	26-14	26-10	26-10	22-14	22-14	20-0	17-12	16-14	16-0	16-0
Kalie ...	23-14	23-11	23-11	22-14	21-6	20	20-0	19-6	16-14	16-14	15-4	14-9
Musur ...	26-14	26-14	26-14	32-0	30-8	22-14	22-14	20-0	16-0	14-9	14-9	14-9
Gram ...	17-12	14-9	14-9	14-9	14-9	13-5½	13-5½	12-12	12-9	11-14	11-7	10-11
Arhar ...	20-0	20-0	20-0	16-14	14-9	14-9	13-5½	10-11	10-11	10-11	10-11	10-11
Mug ...	11-7	11-7	11-7	11-7	11-7	10-11	10-11	10-0	8-14	8-14	8-14	8-14
Khesari ...	29-2	27-14	32-0	30-8	30-8	24-10	23-11	21-6	18-14	17-12	16-0	16-0
Wheat ...	15-4	13-5½	13-5½	15-5½	13-15	13-5½	13-5½	12-5	11-7	11-7	11-7	11-7
1870.												
Common rice ...	18-14	18-14	20-0	18-14	18-14	17-12	17-12	17-12	16-14	20-0	20-0	20-0
Pulses—												
Matar ...	17-12	26-11	22-14	21-6	20-0	17-12	17-12	18-14	17-12	18-14	18-14	22-14
Kalie ...	16-0	14-4	11-7	11-7	10-11	10	10-0	10-5	9-7	9-7	14-9	12-13
Musur ...	16-0	24-10	26-11	21-6	21-6	18-14	18-14	20-0	20-0	20-0	20-0	26-11
Gram ...	10-11	10-11	16-14	16-0	15-4	13-15	13-15	13-5½	13-5½	13-5½	14-9	15-4
Arhar ...	17-12	20-0	21-6	20-0	18-14	17-12	17-12	18-5	17-12	17-12	17-12	20-0
Mug ...	11-7	10-11	10-11	10-11	10-11	10-0	9-7	9-7	9-7	9-7	8-14	10-11
Khesari ...	18-14	18-14	26-11	23-12	22-14	20-0	20-0	20-0	20-0	21-6	21-6	26-11
Wheat ...	9-7	9-7	11-14	14-9	13-15	14-9	14-9	14-9	14-9	14-9	16-0	17-12
1871.												
Common rice ...	21-6	20-0	20-0	21-6	15-14	18-14	19-6	20-10	20-10	20-10	18-14	19-6
Pulses—												
Matar ...	32-0	33-12	40-0	40-0	40-0	40-0	40-0	45-12	45-12	45-12	40-0	33-12
Kalie ...	24-10	24-10	24-10	24-10	24-10	24-10	25-10	24-10	24-10	26-10	24-10	22-14
Musur ...	32-0	33-12	45-12	42-10	42-10	42-10	42-10	49-4	45-12	45-12	40-0	40-0
Gram ...	18-14	17-12	21-6	24-10	24-10	24-10	29-2	29-2	29-2	30-1	26-10	26-14
Arhar ...	26-11	29-2	29-2	29-2	29-2	29-2	29-2	29-2	29-2	27-8	20-0	20-0
Mug ...	14-9	14-9	14-9	14-9	14-9	14-9	14-4	13-5	13-5	11-8	10-7	10-7
Khesari ...	33-12	34-8	45-12	45-12	45-12	45-12	45-12	53-5	53-5	40-0	45-12	45-12
Wheat ...	21-6	20-0	22-14	22-14	22-14	21-6	24-10	24-10	24-10	24-10	16-12	16-14
1872.												
Common rice ...	19-6	20-0	20-0	20-0	17-12	18-14	18-14	18-0	17-12	17-12	17-12	17-12
Pulses—												
Matar ...	33-12	33-12	33-12	40-0	40-0	40-0	33-12	33-12	33-12	33-12	33-12	33-12
Kalie ...	22-14	24-10	24-10	25-10	24-10	22-14	22-14	25-10	22-14	24-10	25-10	26-10
Musur ...	40-0	40-0	40-0	45-12	32-0	32-0	32-0	29-2	29-2	29-0	26-11	29-2
Gram ...	26-11	26-11	26-11	29-0	29-0	28-0	26-10	26-10	24-10	24-10	24-10	24-10
Arhar ...	20-0	20-0	20-0	20-0	17-12	16-0	16	15-4	15-4	15-4	16-0	17-12
Mug ...	12-5	13-5½	13-5½	12-5	12-5	11-7	11-7	11-7	11-7	11-7	11-7	17-12
Khesari ...	45-12	45-12	45-12	45-12	42-10	45-12	42-11	45-12	42-10	45-8	42-10	40-0
Wheat ...	16-14	16-14	17-12	21-6	17-12	17-12	16-13½	16-0	14-8	14-8	14-8	14-8
1873.												
Common rice ...	20-0	20-0	20-0	20-0	18-14	17-12	17-12	17-0	17-12	16-3	13-5	13-1
Pulses—												
Matar ...	40-0	32-0	33-12	32-0	32-0	24-10	26-11	21-10	20-10	20-0	17-5	17-12
Kalie ...	32-0	32-0	29-2	29-2	29-2	29-2	26-11	28-0	26-11	26-11	21-6	21-6
Musur ...	26-11	26-11	33-12	32-0	29-2	24-10	26-11	24-10	21-6	20-10	17-5	17-12
Gram ...	24-10	26-10	26-11	29-2	26-11	26-11	22-14	20-0	20-0	16-13½	15-4	15-4
Arhar ...	20-0	20-0	20-0	20-0	18-14	18-14	20-0	17-12	16-0	16-0	16-0	16-0
Mug ...	18-14	17-12	17-12	17-12	17-12	16-12	14-8	14-8	14-8	14-8	14-8	14-8
Khesari ...	45-12	45-12	42-10	40-0	33-12	28-0	29-2	26-11	24-10	21-6	20-0	18-14
Wheat ...	13-5½	11-14	14-8	16-16½	15-4	15-4	14-8	14-8	13-0	12-12½	11-7	11-7
1874.												
Common rice ...	12-5	11-7	11-7	11-7	11-0	10-5	11-0	10-5	10-7	13-5	10-10½	14-8
Pulses—												
Matar ...	20-0	17-12	20-0	18-14	18-14	17-12	17-12	17-12	16-14	16-14	16-14	16-14
Kalie ...	20-0	17-5	17-12	17-12	16-14	16-0	16-14	16-14	16-0	16-0	16-0	17-12
Musur ...	20-0	19-0	20-0	18-14	17-12	15-4	16-0	16-0	16-0	16-0	16-0	16-0
Gram ...	15-4	14-9	15-4	15-4	15-4	15-4	15-12	16-0	15-9	15-4	15-4	18-13
Arhar ...	22-12½	17-5	16-0	20-0	17-12	16-14	16-14	16-14	16-0	15-4	15-4	15-4
Mug ...	12-13	13-5	13-5	13-5	13-5	13-5	14-9	14-9	13-5	13-5	13-5	13-5
Khesari ...	20-0	20-0	21-14	21-14	21-14	18-14	18-14	18-14	17-12	17-12	17-12	17-12
Wheat ...	12-13	12-5	15-4	14-9	13-5	12-5	13-5	12-5	12-5	12-5	12-5	15-4

KOOSHTEA SUB-DIVISION.

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1868.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	26	25	22	22	30	30	29	24	24	24	24	24
Indian-corn ...	14	11½	11½	11½	12½	12½	12½	12½	11½	13½	13½	14½
Pulses ...	37½	37	38	39	37	36	36	37	36	37½	37	38½
Wheat ...	26	25	24	25	26	24	24	22	24	23	26	26
Millet ...	42	41	43	44	40	41	43	42	43	44	44	42
1869.												
Common rice ...	20	21	24	24	24	24	22	20	19	18	19	20
Indian-corn ...	13	11½	12	11½	12	11½	11½	11½	10½	12	11½	12
Pulses ...	25	26½	26½	29	25½	21½	19	20½	20½	20½	20½	21
Wheat ...	21	22	20	22	20	21	19	20	22	23	22	23
Millet ...	41½	40½	43	43	43	45	46	47	45	44	45	43
1870.												
Common rice ...	24	24	24	20	21	20	22	22	20½	24	26	24
Indian-corn ...	11½	12	11	11	11½	12	12½	11	11½	11½	12	11½
Pulses ...	24½	23½	23	21	20½	21½	22½	22½	21½	21½	22½	27
Wheat ...	20	20	20	18	18	18	17	20	20	20	19	20
Millet ...	43	39	40	43	44	40	41	42	41	41	39	39
1871.												
Common rice ...	25	27	28	22½	23	25	25	24	25	24	25	26
Indian-corn ...	15½	13	12½	13½	12½	12½	12½	12½	12	12	12	12½
Pulses ...	36½	40½	42	42½	41	39½	39½	42½	40½	38½	39	42½
Wheat ...	24	24	24	24	26	28	27	24	23	23	26	26
Millet ...	40	41	42	42	42	46	45	45	43	43	42	40
1872.												
Common rice ...	28	28	27	28	28	28	28	30	25	29	20	28
Indian-corn ...	14	12½	13½	13	12½	11	12	12½	11½	12	13	12½
Pulses ...	37½	36½	38	42	39½	39	37½	35½	37½	36	39½	40½
Wheat ...	40	40	43½	43½	45	44½	44	41½	47½	45½	43	43½
Millet ...	23	24	23	23	25	27	26	26	24	22	23	22
1873.												
Common rice ...	23	21	19½	20	21	21	22	23	23	23	22	22½
Indian-corn ...	11½	12	11½	11½	11	11½	12½	13	11½	12½	12½	12½
Pulses ...	33	32	32½	33	31½	30½	32½	34½	31	29½	32½	32
Wheat ...	20	22	21	22	22	20	19	18	18	19	20	20
Millet ...	41½	41	42½	44	46	46½	45	45½	45½	47½	46½	45
1874.												
Common rice ...	19	19	18	14	14	14½	13	12½	14	16½	15	18
Indian-corn ...	13	13½	14	14	14½	13	13½	15½	15½	16	14	14½
Pulses ...	23½	23½	22½	22½	21½	22	21½	22	22½	21½	21½	22
Wheat ...	16	22	23	20	21	20	21	22	23	20	20	21
Millet ...	38	38	37	36	39	38	38	38	35	36	36	37

MEHERPORE SUB-DIVISION.

1868.												
Common rice ...	14	14	15	16	17½	18½	19	20	20	20	20	20
Pulses—												
Moong ...	11	11	11	11	24	8½	8½	7½	8½	8½	8½	.....
Kalai ...	.....	.....	.....	.....	26	26	26	26	25	26	26	.....
Chola ...	20	20	24	30	29	29	32	32½	26½	26½	26½	26½
Matar ...	.....	.....	32	32	40	32	32	31	31	31	32	32
Moshoor ...	.....	.....	11	.....	.....	.....	.....	.....	.....	.....	46	.....
Urhar ...	25	24	24	24	.....	26	26	24	24	24	24	24
1869.												
Wheat ...	.....	.....	.....	11	.....	.....	.....	32	32	26½	31	31
Common rice ...	19	18	19	21	23	23	22	21	20	19	18	18
Pulses—												
Moong ...	8½	8½	8½	8½	6½	6½	.....	.....	.....	6½	6½	6½
Kalai ...	.....	.....	.....	.....	.....	23	.....	.....	25	23	.....	.....
Chola ...	20½	20	20	20	21	.....	11	.....	11	6½	6½	6½
Matar ...	32	.....	.....	36	.....	.....	.....	32	32	32	.....	.....
Moshoor ...	.....	.....	.....	32	32	.....	.....	.....	26½	.....	.....	.....
Urhar ...	24	23	22	22	.....	20	.....	.....	.....	80½	.....	.....
1870.												
Wheat ...	20	20	.....	.....	18	16	16	16	16	30½	30½	30½
Common rice ...	10	20	20	19	10	19	18	18	19	19½	19½	19½
Pulses—												
Moong ...	11½	11½	11½	11½	.....	12½	.....	13	13	12½	12½	13
Chola ...	14	.....	.....	.....	16	.....	.....	16	16	18	18	.....
Moshoor ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	18	18	.....
Urhar ...	13½	.....	.....	.....	.....	23	.....	20	20	.....	.....	20

MEHERPORE SUB-DIVISION.—(Continued.)

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1871.												
Wheat	Srs. 13½	Srs. 19	Srs. 19	Srs. 21	Srs. 21	Srs. 20	Srs. 21	Srs. 23	Srs. 23	Srs. 23	Srs. 11	Srs. 22
Common rice	19	19	19	21	21	20	21	23	23	23	23	22
Pulses—												
Moong	12½	12½	16	13½	.....	13½	14½	14½	16½	16½	16½	14½
Kalai	26½	26½	27	25	26	26	26	26½	26½	26½	26½	26
Chola	.....	16	.....	.....	.....	.....	28	32	32	32	32	32
Moshoor	26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	32
Urhar	20	20	.....	.....	36	.....	.....	36	36	26½	.....	.....
1872.												
Wheat	.....	.....	.....	.....	.....	.....	.....	26½	.....	26½	26½	26½
Common rice	20	22½	22½	23	23	22½	24	24	.....	22½	22½	23
Pulses—												
Moong	13½	13½	.....	.....	13½	13½	13½	13½	13½	18½	13½	13½
Kalai	26	26½	26½	26½	32	32	26½	26½	26½	26½	26½	26½
Chola	32	.....	.....	32	40	40	40	40	40	32	32	26½
Urhar	.....	.....	.....	.....	.....	.....	20	20	20	20	20	20
1873.												
Wheat	25	25	25	25	.....	.....	.....	.....	.....	18	18	20
Common rice	23	23	23	20	20	20	22	18	16	16	16	16
Pulses—												
Moong	13½	.....	.....	.....	.....	.....	.....	23	23	23	17	16
Kalai	.....	32	32	32	32	32	32	32	32	.....	.....	.....
Chola	26½	32	32	32	32	36½	26½	26½	26½	26½	.....	.....
Urhar	.....	.....	.....	.....	.....	.....	.....	.....	.....	20	.....	.....
1874.												
Wheat	20	.....	.....	14	.....	.....	20	20	20	20	16	16
Common rice	13½	18½	14	13½	14	14	14	14	14	14	16	18
Pulses—												
Moong	16	16	.....	.....	13½	13½	.....	.....	.....	.....	16	16
Kalai	.....	.....	.....	.....	.....	.....	.....	.....	.....	46	16	16
Chola	.....	.....	.....	.....	.....	.....	.....	18	18	16½	17	17
Urhar	.....	.....	20	20	.....	.....	.....	16	16	17	17	17
Wheat	.....	.....	.....	14	.....	.....	.....	.....	.....	.....	.....	.....

CHOODANGAH SUB-DIVISION.

1868.												
Common rice	18	19	20	20	18	18	17	18	19	20	19	20
Pulses	20	18	20	23	20	20	18	17	16	15	13	13
Wheat	15	15	17	20	18	18	18	18	15	15	15	15
Millet	.....	.....	.....	.....	.....	.....	.....	64	64	64	.....	.....
1869.												
Common rice	20	20	20	20	17	18	20	18	17	17	23	23
Pulses	23	20	26	23	20	20	19	23	18	16	15	16
Wheat	15	15	15	16	16	16	16	15	15	15	15	15
Millet	.....	.....	.....	.....	.....	.....	49	53	53	.....	.....	.....
1870.												
Common rice	23	23	23	21	20	19	20	20	20	20	21	20
Pulses	20	18	20	16	16	15	15	13	12	12	12	12
Wheat	20	20	26	26	26	26	29	29	26	23	20	18
Millet	.....	.....	.....	.....	.....	.....	.....	40	47	53	49	.....
1871.												
Common rice	23	23	23	23	21	21	23	23	25	26	25	25
Pulses	26	23	20	16	15	13	13	13	12	16	13	11
Wheat	18	20	26	32	32	32	26	26	26	20	20	18
Millet	.....	.....	.....	.....	.....	.....	.....	47	53	53	64	.....
1872.												
Common rice	24	24	26	26	23	21	21	20	23	22	21	21
Pulses	23	20	16	15	13	15	13	13	13	15	13	13
Wheat	16	16	20	20	20	18	16	16	16	16	16	20
Millet	.....	.....	.....	.....	.....	.....	.....	64	53	47	40	.....
1873.												
Common rice	18	18	17	16	15	15	15	15	16	16	15	15
Pulses	20	16	18	16	16	13	13	13	14	13	12	11
Wheat	15	15	16	16	16	15	15	15	20	19	10	16
Millet	.....	.....	.....	.....	.....	.....	.....	40	43	47	47	.....
1874.												
Common rice	20	19	20	18	16	17	17	16	20	23	20	18
Pulses	28	26	23	23	20	20	20	18	16	15	23	20
Wheat	23	25	26	26	26	26	20	23	29	24	24	23
Millet	.....	.....	.....	.....	.....	.....	64	53	64	64	.....	.....

## RANAGHAT SUB-DIVISION.

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1868.												
Common rice ...	Srs. 24	Srs. 23	Srs. 20	Srs. 22	Srs. 22	Srs. 21	Srs. 21	Srs. 22	Srs. 19	Srs. 22	Srs. 22	Srs. 11
Pulses ...	24	23	24	22	22	22	24	22	22	21	21	22
Wheat ...	.....	.....	.....	.....	.....	.....	.....	.....	21	.....	.....	22
1869.												
Common rice ...	22	21	20	18	18	18	19	22	21	21	20	20
Pulses ...	22	22	20	20	21	21	22	21	21	18	16	10
Wheat ...	15	.....	15	.....	.....	.....	.....	.....	.....	.....	.....	17
1870.												
Common rice ...	20	20	19	19	19	20	21	20	20	21	20	21
Pulses ...	13	11	11	11	10	9	10	10	12	14	15	15
Wheat ...	.....	.....	.....	18	.....	.....	.....	.....	.....	.....	.....	24
1871.												
Common rice ...	21	20	20	20	20	21	20	21	21	20	20	21
Pulses ...	22	23	22	21	21	22	22	23	22	23	22	22
1872.												
Common rice ...	20	19	19	19	19	19	22	19	22	20	22	20
Pulses ...	22	22	21	22	22	22	22	20	24	23	22	23
Wheat ...	22	.....	.....	.....	21	.....	.....	.....	.....	.....	.....	23
1873.												
Common rice ...	20	19	19	19	19	18	17	16	16	16	14	14
Pulses ...	25	25	25	25	25	25	24	20	20	16	17	17
Wheat ...	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15
1874.												
Common rice ...	13	13	13	15	14	16	14	15	15	16	16	16
Pulses ...	16	16	16	16	16	16	16	16	16	19	23	23
Wheat ...	20	.....	.....	.....	17	.....	.....	.....	20	.....	.....	20

## BONGONG SUB-DIVISION.

1868.												
Common rice ...	23	23	21½	21½	24½	23	23	23	21½	21½	23	21½
Pulses (Kulal) ...	17½	17½	17½	18½	20	20	20	20	18½	18½	20½	20
1869.												
Common rice ...	23	20	20	20	21½	15½	16	15½	14½	23	21½	21½
Pulses (Kulal) ...	21½	21½	23	21½	21½	20	16	16	16	16	16	16
1870.												
Common rice ...	21½	21½	21½	20	17½	17½	17½	20	20	24½	24½	23
Pulses (Kulal) ...	20	17½	17½	16	18½	18½	12½	12½	12½	10½	13½	12½
1871.												
Common rice ...	24½	24½	23	23	24½	24½	24½	24½	23	21½	17½	20
Pulses (Kulal) ...	12½	12½	12½	12½	16½	17½	17½	17½	17½	16½	16½	17½
1872.												
Common rice ...	20	20	20	20	20	23	23	23	23	24½	26½	24½
Pulses (Kulal) ...	17½	17½	17½	17½	20	20	20	17½	18½	18½	18½	18½
1873.												
Common rice ...	20½	20½	20½	24½	20	20	23	23	26½	26½	21½	17½
Pulses (Kulal) ...	17½	20	20	20	20	20	17½	18½	18½	18½	18½	20
1874.												
Common rice ...	15½	15½	15½	15½	14½	14	18½	14	18½	18½	19½	15½
Pulses (Kulal) ...	17½	17½	17½	16½	16½	17½	16	16	16	16	16½	16½

Statement showing the average Prices current in the District of Nuddea from 1868-72.

SUB-DIVISION.	Kind of grain.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Sudder ...	Common rice ...	Srs. 20	Srs. 20	Srs. 20.6	Srs. 20.4	Srs. 19.6	Srs. 18.8	Srs. 18.2	Srs. 18.2	Srs. 17.8	Srs. 18.6	Srs. 18.2	Srs. 17.8
	Pulses ...	23.4	24.3	27.8	26	25	23.7	23.6	23.8	22.7	22.7	21.6	22.5
	Wheat ...	17.2	16.2	18	19.8	18.2	18	18.6	18	17.6	16.8	15.8	15.2
Kooshtea ...	Common rice ...	24.6	25	25	23.3	25.2	25.4	25.2	24	23.7	23.8	22.8	24.4
	Indian-corn ...	13.1	12.2	12	12.4	12.2	11.9	12.2	11.9	11.5	12.2	12.4	12.6
	Pulses ...	32.3	31	35.5	32.7	33.1	31.5	30.9	31.5	31.1	30.7	31.7	33.9
	Wheat ...	22.8	23	22.2	22.4	23	23.4	23.8	21.8	23.2	23.2	23	23.4
Meherpore ...	Millet ...	41.3	40.3	42.2	43	42.8	43.2	43.8	43.5	43.8	43.5	42.2	41.5
	Common rice ...	18.2	18.7	19.1	20	20.7	20.6	20.8	21.2	20.9	20.8	20.6	20.3
	Pulses ...	20.2	17.1	19.7	21	24.9	21.1	22.1	23.9	24.6	21.3	19.2	19.8
Chocodangah ...	Wheat ...	19.4	22.5	25	25	18	16	16	24.8	24	25.3	21.3	24.4
	Common rice ...	21.6	21.8	22.4	22	19.8	19.4	20.2	19.8	20.8	21	21.8	21.8
	Pulses ...	22.4	19.8	20.4	18.6	16.8	16.6	15.4	15.8	14.2	14.8	13.2	13
	Wheat ...	16.8	17.2	20.8	22.8	22.4	22	21	20.8	19.6	17.8	17.2	17.2
Banaghat ...	Millet ...	...	...	...	...	...	49	53.6	55	64.2	54	...	...
	Common rice ...	21.4	20.6	19.6	19.6	19.6	19.8	20.6	20.8	20.6	20.8	20.8	18.6
	Pulses ...	20.6	20	19.6	19.2	19.2	19.2	20	19.2	20.2	19.8	19.2	18.4
Bongong ...	Wheat ...	18.5	...	15	18	21	...	...	...	21	...	...	21.5
	Common rice ...	22.4	21.8	22.3	20.8	21.6	20.8	20.8	21.1	20.5	23	22.3	22
	Pulses ...	17.8	17.5	18	17.1	18.2	18.2	17.2	17.2	16.6	16.2	17.1	17

JESSORE.

Prices current in the SUDDER SUB-DIVISION of the District of Jessore.—Number of seers of 80 tolahs retailed for a rupee.

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	
1868.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	
Common rice ...	26-9	26-2	26	25-11	23-14	23-12	20	22	21-6	24-13	22-3	22	
Pulses ...	24-2	24	24	26-14	25-12	25	24-3	23	23	24	22	22	
Wheat ...	14-7	23-5	21-7	25-12	23-9	23-10	22-1	21	13-5	19-12	20	20	
1869.	Common rice ...	22	21-6	22-11	21	19-11	15-4	15-1	16-11	17-10	17-13	19-8	21-15
Pulses ...	22	22-4	23-6	23	22-14	21-4	18-1	17-12	10-12	16-5	15-11	18-5	
Wheat ...	20	19	13-15	11-14	12-4	13-15	18-14	12-4	18-12	10-3	9-15	9-10	
1870.	Common rice ...	22-11	24-7	26-9	22-13	21-7	21-4	21-14	21	23-8	27-13	19-12	29-15
Pulses ...	13	15-5	18-14	19-12	18-3	17-15	16-14	16-5	16	15-4	18-4	19	
Wheat ...	8-5	8-6	10-5	11-8	12-10	13	13-3	13-4	13-4	13-4	13-4	12-8	
1871.	Common rice ...	27-2	25-13	25-11	24-6	25-2	22-14	22-8	24-6	21-6	21-5	23	23
Pulses ...	18-4	20	22-12	31-3	32	32	32	34	35-6	35-6	31	32	
Wheat ...	13-5	14-12	15-14	18-12	20	20	17-4	20	20	20	18	14	
1872.	Common rice ...	22	24	25	28-3	22-6	21-6	25-8	32	29	26	26-5	26-2
Pulses ...	32	33	40	18-10	18-6	21-1	21-4	20	20	20-8	20	20	
Wheat ...	14	15	17	15-14	17-13	18-6	16	16	14-8	13-10	13-5	13-5	
1873.	Common rice ...	27-13	28-8	24-8	26-2	25-8	25-8	21-4	25-8	21-4	18-12	17-10	
Pulses ...	20	19	23-4	21-8	22-8	20-8	20	20-8	19	17	15-11	13-8	
Wheat ...	12-2	11	16	16	16	13-14	13-14	13	13-14	13	11-13	10-9	
1874.	Common rice ...	16-4	14-3	15-2	15-4	14-4	11-12	12-13	13-4	13	15-8	17-14	
Pulses ...	11-12	11-9	11-3	10-3	15-9	13-10	18-8	14-8	14-8	13	12-14	12-13	
Wheat ...	17-4	10-9	10-11	12-10	13-4	11-15	11-13	11-14	12-10	12-4	11-13	12-7	

## JHENIDAH SUB-DIVISION.

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1870.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	.....	.....	.....	22-12	21-12	20	20	20	20	20	20	20
Pulses ...	.....	.....	.....	17-12	17-12	16	16	16	16	16	16	16
Wheat ...	.....	.....	.....	13-5	12-10	14	14	14	14	14	14	14
1871.												
Common rice ...	28	25	23	23	23	20	20	20	20	18-12	18-12	18-12
Pulses ...	16	20	16	16	16	16	16	16	16	16	16	16
Wheat ...	14	14	16	16	16	16	16	16	16	16	16	6
1872.												
Common rice ...	18-12	18-12	18-12	20	21	21	24	30	30	30	29	29
Pulses ...	16	16	16	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ...	16	16	16	23	21	21	23	23	18-8	18-8	17	16
1873.												
Common rice ...	26-8	26-8	26-8	26	26	26-8	26-8	26-8	27	27	22-8	18
Wheat ...	16	16	20	20	20	20	20	20	20	20	20	14
1874.												
Common rice ...	17	17	18	16	16	12	14	13-8	13-8	13	15	18
Wheat ...	14	13	12-8	13-8	16	12	13	.....	.....	12-8	13	13

1868-69.—No information.

## NARAIL SUB-DIVISION.

1869.												
Common rice ...	.....	.....	.....	20	19-10	14-8	15-7	17-8	17	17-7	20	21-4
Pulses ...	.....	.....	.....	16	16	14-8	13-8	15-5	12-8	12-4	13	11-9
1870.												
Common rice ...	24-8	24-9	24-10	23-9	23	21-7	23	19-5	21-8	28	32	32
Pulses ...	11	10-2	10-12	12-2	10-8	10-8	10-5	11	10-5	10	10	10
1871.												
Common rice ...	30-2	29	29	26-12	26-8	24	22	20	19-8	21	22	20
Pulses ...	10	13	15	18	19	16	14	14	14	16	16	16
1872.												
Common rice ...	21	21	25	23	24	25-8	26	26	26	24-10	25-9	29
Pulses ...	20	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ...	.....	.....	.....	.....	20	20	20	20	16	15	14	13
1873.												
Common rice ...	29	29	28-8	28	26-10	26-10	25-9	26-8	26-8	26-8	20-4	17
Wheat ...	13	13	13	13	13	13	14-8	16	16	16	14	13
1874.												
Common rice ...	16-12	14	20-10	14-13	13	10-8	12	14-8	14	13-9	16-8	18-8
Wheat ...	13	13	13	13	13	13	13	13	13	1	13	13

1868.—No information.

## KHULNA SUB-DIVISION.

1872.												
Common rice ...	24	24	24	24	24	21	24	25	25	23	23	29
1873.												
Common rice ...	27	30	30	28	26	26	26	26	26	25	16½	17
1874.												
Common rice ...	17	15	18½	23	18	12½	12½	12½	12½	18½	18	17½

## BAGIRHAT SUB-DIVISION.

1870.												
Common rice ...	21	25	25	23	20	20	20	21	26	25	25	25
Pulses ...	20	20	22	22	22	15	15	15	15	15	15	15
1871.												
Common rice ...	23½	24	24	25	22	21	21	23	23	21	26	26
Pulses ...	16	15	15	18	17	17	17	17	17	17	17	17
1872.												
Common rice ...	20	26	20	20	20	20	20	20	18	18	19	19
Pulses ...	17	17	18	18	18	18	17	17	17	18	18	18
1873.												
Common rice ...	22	23	23	23	23	23	23	23	23	23	20	20
Pulses ...	18	18	18	18	17	17	17	17	18	18	18	18
1874.												
Common rice ...	14	14	18	17	16	14	15	13	12	12	19	23
Pulses ...	17	17	17	17	17	18	18	18	18	18	18	18

1868-69.—No information is available.



MAGOORA SUB-DIVISION.

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1872.												
Common rice ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	31
Pulses ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	40
1873.												
Common rice ...	31	31	31	27	26	26	24½	24	27	27	20½	18
Pulses ...	40	40	40	40	40	40	40	35	30	26	22	.....
1874.												
Common rice ...	17	15	15	15	15	12	12½	14	16	15	18	20

1868-69.—No information for previous years.

Statement showing the average Prices current in the District of Jessore from 1868-72.

Sub-Division.	Kind of grain.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Sudder ...	Common rice ...	Srs. 24	Srs. 24½	Srs. 24½	Srs. 24½	Srs. 22½	Srs. 21	Srs. 21	Srs. 23½	Srs. 23½	Srs. 23½	Srs. 24½	Srs. 24½
	Pulses ...	21½	23	27½	23½	23½	23½	21½	22½	21	22½	21½	21½
	Wheat ...	14	16	15½	16½	17½	17½	17½	16½	16½	15½	15	15½
Jhenidah ...	Common rice ...	23½	22	21	22	22	20½	21½	26½	26½	23	26	26
	Pulses ...	16	18	16	17	17	16	16	16	16	16	16	16
	Wheat ...	15	15	16	14	16½	17	17½	17½	16½	16½	15½	15½
Narail ...	Common rice ...	25½	25	26½	23½	23½	21½	21½	20½	21	22½	25	25½
	Pulses ...	13½	14½	13	15½	15½	13½	12½	12½	12½	13	12½	12½
	Wheat ...	...	...	...	...	20	20	20	20	16	15	14	13
Khulna ...	Common rice ...	24	24	24	24	24	21	24	25	25	23	23	29
Bagirhat ...	Common rice ...	23½	25	23	22½	20½	20½	20½	21	22	21½	23½	23½
	Pulses ...	17½	17½	18½	19½	19	16½	16½	16½	16½	16½	16½	16½
Magoora ...	Common rice ...	...	...	...	...	...	...	...	...	...	...	...	31
	Pulses ...	...	...	...	...	...	...	...	...	...	...	...	40
District average	Common rice ...	...	24½	23½	23½	22½	20½	21½	23½	23½	22½	24½	26½
	Pulses ...	...	18½	18½	18½	18½	17½	16½	16½	16½	16½	16½	21½
	Wheat ...	...	15½	16½	16½	15½	17½	18½	18½	18½	16	15½	14



CHOTA NAGPORE DIVISION.



# CHOTA NAGPORE DIVISION.

## HAZAREEBAGH.

*Prices-Current in the SUDDER SUB-DIVISION of the District of Hazareebagh.—Number of seers of 80 tolahs retailed for a rupee.*

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
<b>1868.</b>												
	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	26	24-8	26	25-11	26	23-8	24	22-2	20-2	21	18-8	17-3
Indian-corn ...	36	36	35-3	36-4	36-5	33-12	31-8	31-5	27-8	34-4	27-4	23-10
Pulses ...	18-8	18-2	18-4	18-5	18-4	17-11	17-8	16	14-4	15	14-2	13-10
Wheat ...	18	20	22-6	22-7	21-2	19-10	18-14	15-10	14-3	15	13	11-10
Millet ...	50	50	38-8	38-12	38-5	35-12	36	35	28-4	34-8	28	28-8
<b>1869.</b>												
Common rice ...	15-6	15-8	17-3	18-6	17-2	16-5	15-10	13-8	15-8	18-9	23-8	22-6
Indian-corn ...	21-12	20	20-6	22	20-9	18-12	17-7	17	26	29-4	29	28-8
Pulses ...	16	15-2	15-8	15-4	12-9	12	10	10-6	11-8	11-4	11-8	11-8
Wheat ...	11-6	11-5	11-6	12-4	12-10	11-4	10-1	9-4	9-6	9-15	11	11
Millet ...	27-9	21-8	22-8	25	24	22-14	21-1	20-12	24-10	36	34-5	33-12
<b>1870.</b>												
Common rice ...	22-3	20-2	19-13	20-6	18-14	16-10	16-13	16-8	20-7	21-4	22-8	23
Indian-corn ...	27-6	25-12	25-10	27-5	24-4	21-5	22	31-12	29-8	34	36-4	36
Pulses ...	9-11	9-8	13	14-2	14-5	12-2	12-9	12-10	12-14	13	13-12	12-8
Wheat ...	9-8	8	14-4	4	15	15-5	15-3	14-12	15-4	17-8	18	18-2
Millet ...	31-6	29-8	28-10	30-4	29	25-8	25-6	35-8	34	40	50-8	39
<b>1871.</b>												
Common rice ...	25-2	24-4	24-12	25-4	25-4	24-8	24-6	24	25-8	24-4	25-4	24-12
Indian-corn ...	35	30-12	29	33-12	31	33	32-12	31-14	33-5	41	34	33-5
Pulses ...	17	14-4	16-4	15-3	17-12	18-14	19-8	19-8	19-11	18-8	20-4	18-8
Wheat ...	19-8	19-12	20-8	21	21-12	23-12	22-2	20	21	25-4	24-12	23-12
Millet ...	42	36	37	36-9	38-4	40-8	40-6	40	40	40	41	39-9
<b>1872.</b>												
Common rice ...	24-8	25	24-12	24-8	23	20-14	19-15	17-12	17-1	18	17	18-4
Indian-corn ...	34-8	31-8	33-12	31	30	29	29-3	26-4	29-12	35	33	29
Pulses ...	20-4	20	20	19	21-8	20	17-5	16-10	18-9	20	20-8	23-12
Wheat ...	22-2	22	20	21	20	19-4	17-15	15-10	14-1	14-8	14	16-6
Millet ...	39-8	40	36	29	30	28-8	26-4	24-3	27-10	25	23-8	28
<b>1873.</b>												
Common rice ...	17	18	17	17-4	17	15-8	14-4	13-8	14-1	12-2	12-8	13-14
Indian-corn ...	29-8	24	24	24-6	22-8	21	20	19	20-8	19-12	17-8	17-8
Pulses ...	23-12	21-6	20-8	18	18	16	15	14	12-10	13	12-8	13-10
Wheat ...	13-8	13-11	15-8	17-4	16-4	14-4	13-4	12-4	12-4	10-10	9-12	11-2
Millet ...	27	23-13	25-8	25-8	23-8	19-12	20-8	20	23	22	19	19-6
<b>1874.</b>												
Common rice ...	13-5	12-10	12-6	12-10	11-11	12-9	13-11	13-8	15	16	18	22-8
Indian-corn ...	17-5	14-8	14-2	14-8	13-8	14	14-12	12-10	25	26-4	28-4	30-12
Pulses ...	14-8	12-8	12-10	12-6	12-4	13	12-10	12-10	13-14	13-10	15	17-4
Wheat ...	10-12	10-10	11-9	11-2	10-14	10-8	10-14	10-10	11	11-12	12-4	12
Millet ...	19-4	17-2	16-13	16-14	16-8	16-14	18-14	21-4	31-4	34-4	37	36

## CHUTTRA SUB-DIVISION.

<b>1868.</b>												
Common rice ...	30	24-12	28	26-8	24-10	24-5	25	21-6	17-8	17	18-2	15-8
Indian-corn ...	44	42	33	35-8	30-6	35-13	31	31	27-8	30	28-4	31
Pulses ...	25	25	23-4	25	21-3	31-4	19-12	18-8	16-8	17	15-8	14-10
Wheat ...	20	20-8	19-12	21-10	20	21-1	20-12	18	15-3	14-12	14	11-3
Millet ...	52	45	40-8	38	41-12	41-10	34	29-4	28	29-8	26	23-10
<b>1869.</b>												
Common rice ...	13-6	14-2	14	14-14	14-2	13-14	13-3	12-4	13-3	14-12	18-2	20-10
Indian-corn ...	16-12	17-12	18-12	16-12	16-8	15	14	13-2	23	25	28-4	28
Pulses ...	12-8	15-10	13-4	14-9	15-8	14	10-8	10-8	10-4	10	11-4	11-14
Wheat ...	9-9	10-5	10-12	11-9	12	11-8	10	9-10	10	10	10-8	10
Millet ...	23	23-5	21-4	23-12	21-2	20	18	16-4	19	27-8	31-4	30

CHUTTRA SUB-DIVISION.—(Continued.)

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1870.												
Common rice ...	Srs. 19-10	Srs. 19-4	Srs. 21	Srs. 18-10	Srs. 17-10	Srs. 16-1	Srs. 16-8	Srs. 17-10	Srs. 20	Srs. 21-5	Srs. 29	Srs. 31-5
Indian-corn ...	25	25	25	25-4	23-8	25-10	20	25-2	30	55	41-10	41-10
Pulses ...	11-4	11-8	13-5	17	14-14	14	14	14	14	14	14-4	16
Wheat ...	9-8	9	12-5	16-2	15-10	15	15-8	15-5	15-10	20	18-10	18
Millet ...	80	23-12	26-10	31	30	30	25	25-13	40	56	45	41-10
1871.												
Common rice ...	27-8	23-8	27-5	25-14	25	24-8	25	25	25	30	30-8	30
Indian-corn ...	36-10	40	40	40	40	36-3	37-10	40	45	45	42-8	40
Pulses ...	15	16-4	16	21	21-7	22-3	21-14	21-12	21-12	21-10	22-13	21
Wheat ...	18	18	18-10	21-3	21-10	22-11	23-12	23-12	23-12	25	25-14	23
Millet ...	40	40	40	41-4	45	45-13	45	45	48-10	50	46-4	45
1872.												
Common rice ...	27	25-6	25-7	27-4	27-8	23-4	20-13	21-6	19-10	22	19-8	21-6
Indian-corn ...	42-8	35	35	35	35	26-8	22-5	23-6	34	1-5	40	40-2
Pulses ...	19-8	20	20-8	23-8	26-2	23-2	20-11	19-2	20-7	21-8	23-8	24
Wheat ...	23-6	22-5	25	22-4	22	22-2	19-8	16-6	17-2	17	18	18-12
Millet ...	42-8	40	40	30	32-4	29	26-9	27-10	27-14	25	31-8	42
1873.												
Common rice ...	18-12	19-8	18-10	18	18-2	17-8	16-4	15	14-10	12-8	12-6	13-9
Indian-corn ...	32-12	30-5	31	23-5	29-10	21-10	20-10	18-8	18	16	15-10	15-5
Pulses ...	24-8	22	24	21	19-12	18-10	16-8	16	13-6	13-2	13-8	13-8
Wheat ...	16-4	16-4	16-1	18-4	17-4	15-14	15-2	13-2	12-7	12	11-4	11-1
Millet ...	31-15	31-4	29-4	30	32-8	23-10	26	20	21-14	19-2	17-4	19
1874.												
Common rice ...	12-14	12-13	12-4	12-12	11-6	12-1	13-4	13-8	16	15-5	19-1	27-5
Indian-corn ...	14-4	13-11	13-9	15-10	12-8	12-14	13-12	12-4	18-12	31-1	26-15	33-5
Pulses ...	15	11	14-8	13	12-10	13-1	13-8	12-8	14-14	12-5	15	16
Wheat ...	11-12	11-3	11-10	11-8	11-5	11-4	11-10	10-8	11-14	12-5	12	12
Millet ...	17-5	16-3	16-8	17-8	16-12	16-4	18-14	21-6	34-12	32	32	33-4

KHURRUKDIHA (IN THE SUB-DIVISION OF PACHUMBA).

1868.												
Common rice ...	32-10	33-12	30-10	30	29-12	29-5	29-8	26	26	26	20-6	20
Indian-corn ...	40	40	26-10	27-5	32	32-10	33	33-8	40	39-8	30-8	31-6
Pulses ...	21	22	22	22	25	25	22	20-8	18-8	18-12	16-4	15-13
Wheat ...	23	24-8	24-5	25	23	21-10	20-12	20-8	19	17-8	15-4	14-9
Millet ...	50	50	31-10	32	38	38-10	35-14	35-8	32	38-8	31-4	30
1869.												
Common rice ...	17-2	16-4	17-12	18-6	16-10	16-8	15	15-8	14-7	16-10	19	23-5
Indian-corn ...	24-6	21	25-3	23	20-12	18	16-8	17-12	30-3	33	39-8	40
Pulses ...	17-8	15	17-8	16	14-8	12	13	12-8	12-8	12-8	12-8	12-4
Wheat ...	13	12	14-2	14-14	14-4	13	12-8	12-8	12	12	12	11-4
Millet ...	32	27	28-9	29	27	21-15	20	22-2	26-4	37-8	39-12	40
1870.												
Common rice ...	23-4	21-8	21-12	22-8	21	20	19	19-2	20-8	26-10	28-5	32-10
Indian-corn ...	38-12	30-12	26-14	26-4	25	23	23-4	23-8	38	42	42	42
Pulses ...	12	11-8	14-6	14	15	15	13-4	14	14-4	15	16-4	16-8
Wheat ...	9-14	9	12-12	14-10	14-11	15	15-12	17-4	16-8	16	16-10	18-10
Millet ...	38-12	31	30-8	27-8	27	26	30-12	37-4	39	50	50	50
1871.												
Common rice ...	33	32	32	32	32	32-5	33	.....	.....	.....	.....	.....
Indian-corn ...	42	40	40	40	40	41-10	.....	.....	.....	.....	.....	.....
Pulses ...	18	18	19	22	22	20	22-5	.....	.....	.....	.....	.....
Wheat ...	18	19	19-8	22	22	22	24	.....	.....	.....	.....	.....
Millet ...	50	46-8	45	50	50-8	50	53-5	.....	.....	.....	.....	.....
1872.												
Common rice ...	.....	.....	.....	.....	27	24-12	23-10	10-14	20-7	19	18	23-12
Indian-corn ...	.....	.....	.....	.....	43	36-4	34-8	24-11	33-11	55	40	35-4
Pulses ...	.....	.....	.....	.....	33	21-8	22	19-2	19-10	22	22	23
Wheat ...	.....	.....	.....	.....	31	30	30-11	18-6	18-1	14-8	16	16
Millet ...	.....	.....	.....	.....	32	34	34	22-10	26-8	24	23-8	27
1873.												
Common rice ...	21-8	19-8	18-8	18-12	18	18-4	16-4	15-12	15-8	14-12	14-8	14-8
Indian-corn ...	34-4	30-8	28-8	28-4	24-8	26-12	26-4	21	21-10	17-4	16-12	17-8
Pulses ...	23	24-12	22	21-4	21-8	21	18	16	15-4	14	13	13-8
Wheat ...	17-4	12-4	14-12	15-12	16	16-8	15-8	14-8	13	12-8	11-12	11-10
Millet ...	31	25	25-8	25-8	24	21-12	21-8	10-8	10-12	23	20-5	20-4
1874.												
Common rice ...	15-2	13-2	13	12-12	11-10	12-2	14-2	.....	15-10	16	24	26-8
Indian-corn ...	18-14	14-1	14-8	14-0	13-5	13-8	15-12	.....	24	26-6	24-8	31-4
Pulses ...	14	12-10	12-4	12-12	13-8	14	14-8	.....	16	18	18-6	18
Wheat ...	12-10	11-12	11-12	13	11	11-10	13	.....	12-2	13	13	14-8
Millet ...	21-10	18-4	17-8	18	16	17-5	20	.....	33-5	30-4	36-10	40

No return received.

Statement shewing the Average Prices-Current in the District of Hazareebagh  
from 1868-1872.

Sub-Division.	Kind of grain.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
		Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Sudder ...	Common rice ...	25'6	21'8	22'4	22'8	22'4	20'4	20'2	18'8	19'8	20'6	21'4	21'2
	Indian-corn ...	31	28'8	28'8	30	28'4	27'2	26'6	27'6	29'2	34'8	32	30
	Pulses ...	16'2	15'4	16'6	17	16'8	16	15'4	15	15'2	15'8	16	16
	Wheat ...	16'2	16'2	17'8	16'2	18'2	17'8	16'8	15	14'8	16'4	16'2	16
Chuttra ...	Millet ...	38'2	35'4	32'6	32	32	30'6	29'8	31'4	37	35'2	35'4	33'8
	Common rice ...	23'6	21'4	23'2	22'6	21'8	20'4	20'2	19'6	19	21	23	23'8
	Indian-corn ...	33	31'8	30'2	30'6	30'8	27'8	25	26'6	31'8	31'2	35'2	33'8
	Pulses ...	16'8	17'6	17'6	20'6	19'8	19'	12'4	16'8	16'6	16'8	17'4	17'6
Pachumba ...	Wheat ...	16	16	16'8	18'6	18'2	18'4	18	16'6	16'4	17'4	17'4	16'2
	Millet ...	35'4	33'2	31'6	32'8	34	32'2	29'6	27'2	31'6	36'4	33'2	31'8
	Common rice ...	26'5	26	25'5	25'7	25'2	24'6	24	20	20'2	22	21'5	24'7
	Indian-corn ...	36'2	35'5	29'7	29'2	32'2	30	31'8	24'7	35'5	43'7	38	37'2
District average	Pulses ...	17	16'7	18'2	19	20'2	19'2	18'4	16'7	16'2	17	16'7	17
	Wheat ...	16	16'2	17'7	19'2	19	18'4	18'8	17'2	16'5	15	15	15
	Millet ...	42'7	38'5	34	34'7	35	34'2	35'4	30'2	30'5	37'5	35'7	36'7
	Common rice ...	25'2	23	23'7	23'7	23'1	21'8	21'4	19'4	19'6	21'2	21'9	23'2
District average	Indian-corn ...	33'4	32	29'5	29'9	30'4	28'3	27'8	26'3	32'1	36'5	35	33'6
	Pulses ...	16'7	16'5	17'4	18'8	18'9	18	15'4	16'1	16	19'8	16'3	16'8
	Wheat ...	16	16'1	17'7	18	18'4	18'2	17'8	16'2	15'9	16'2	16'2	15'7
	Millet ...	38'7	35'7	32'7	33'1	33'6	32'3	31'6	29'6	33	36'3	34'7	34'1





KHARSOWAH SUB-DIVISION.

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1868.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	32	32	28	28	28	24	24	20	20	24	32	40
Indian-corn ...	40	40	40	40	40	40	40	64	64	64	48	40
Pulses ...	20	20	16	24	24	24	16	16	16	16	16	16
Wheat ...	16	16	16	16	16	16	16	16	16	16	16	16
1869.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	40	36	32	32	24	24	24	24	24	24	32	48
Indian-corn ...	40	40	40	40	40	40	40	40	40	64	64	64
Pulses ...	16	16	16	24	24	24	16	16	16	16	16	16
Wheat ...	16	16	16	20	20	20	16	16	16	16	16	16
1870.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	48	40	40	36	36	32	28	24	24	24	28	40
Indian-corn ...	40	40	40	40	40	40	40	48	48	48	40	40
Pulses ...	12	12	12	20	20	20	20	16	16	16	16	16
Wheat ...	12	12	12	20	20	20	20	16	16	16	16	16
1871.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	40	32	32	32	32	28	28	24	24	28	28	40
Indian-corn ...	40	40	40	40	40	40	40	60	60	60	60	40
Pulses ...	16	16	16	24	24	16	16	16	16	16	16	16
Wheat ...	16	16	16	24	24	16	16	16	16	16	16	16
1872.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	40	36	36	36	32	32	32	28	28	32	32	34
Indian-corn ...	40	40	40	40	40	40	36	36	50	50	48	44
Pulses ...	16	16	16	16	24	24	24	22	22	22	22	20
Wheat ...	16	16	16	16	20	24	24	20	20	20	20	18
1873.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	40	36	36	36	32	32	32	28	28	32	32	34
Indian-corn ...	40	40	40	40	40	40	32	32	60	60	44	44
Pulses ...	16	16	16	16	20	20	20	16	16	16	16	16
Wheat ...	16	16	16	20	20	16	16	16	16	16	16	16
1874.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	40	36	32	28	28	24	24	24	24	20	20	32
Indian-corn ...	40	40	38	38	38	38	32	32	30	60	50	50
Pulses ...	16	16	16	16	20	20	20	16	16	16	16	16
Wheat ...	16	16	16	20	20	20	16	16	16	16	16	16

Statement showing the Average Prices-Current in the District of SINGBHOOM from 1868 to 1872.

SUB-DIVISION.	Kind of grain.	Jan.	Feb.	Mar.	April.	May	June.	July	Aug.	Sept.	Oct.	Nov.	Dec.
Sudder (Chye- bassa)	Common rice ...	36'4	35'2	32'6	32'2	32'2	31	30'8	30'4	32'2	36'6	34	37'3
	Pulses ...	18'8	19'2	18'8	19'2	19	18'4	18'4	18'2	18'2	18'2	17'8	18'6
	Wheat ...	17'2	16'8	16'8	16'8	17'6	17'4	17'2	17	17'2	16'8	16'8	17
Serakheyla	Common rice ...	30	30	30	30	28'4	28'4	27'2	26'4	26'4	26'4	26'8	28'4
	Indian-corn ...	24'6	24'6	24'6	24'6	23'3	23'3	23'3	23'3	23'3	23'3	23'3	23'3
	Pulses ...	13'6	13'6	13'6	14'8	16	16	16	16	16	16	16	15'2
Kharsowah	Common rice ...	15'4	15'4	15'4	15'4	16	16	16	16	16	16	16	16
	Indian-corn ...	40	35'2	33'0	32'8	30'4	28	27'2	24	24	26'4	30'4	40'4
	Pulses ...	40	40	40	40	40	40	39'2	39'2	32'4	37'2	32	45'6
District average	Common rice ...	16	16	15'2	21'8	22'2	21'8	18'4	17'2	17'2	17'2	17'2	16'8
	Indian-corn ...	15'2	15'2	15'2	16'2	20	19'2	18'4	16'8	16'8	16'8	16'8	16'4
	Wheat ...	15'2	15'2	15'2	16'2	20	19'2	18'4	16'8	16'8	16'8	16'8	16'4
District average	Common rice ...	35'4	33'4	32	31'6	30'3	29'1	28'4	26'9	27'8	28'8	30'4	35'8
	Indian-corn ...	32'3	32'3	32'3	32'3	31'6	31'6	31'2	31'2	37'8	40'3	37'6	34'4
	Pulses ...	16'1	16'2	15'8	18'5	19'4	18'6	16'9	17'1	17'1	17'3	17	16'8
	Wheat ...	15'9	15'8	15'8	17'1	17'8	17'5	17'2	16'3	16'6	16'5	16'5	16'4

Prices-Current in the SUDDER SUB-DIVISION of the District of

KIND OF GRAIN.		January.	February.	March.	April.	May.
	1869.	Srs.	Srs.	Srs.	Srs.	Srs.
Head-Quarter.	Common rice ...	30	30	30	28	28
	Indian-corn ...					
	Pulses ...	Rohur ... 24	Rohur ... 24	Rohur ... 24	Rohur ... 23	Rohur ... 23
		Beri ... 16	Beri ... 16	Beri ... 16	Jara ... 14	Jara ... 14
Roghonathpore.	Common rice ...	30	30	30	28	28
	Indian-corn ...					
	Pulses ...	Beri ... 16	Beri ... 16	Beri ... 16	Beri ... 12	Beri ... 12
		Jara ... 14½	Jara ... 14½	Jara ... 14½	Moog ... 12	Moog ... 12
Burra Bazar ...	Common rice ...	16	16	16	16	16
	Indian-corn ...	32	32	32	32	32
	Pulses ...	60	60	60	60	60
		Jara ... 13	Jara ... 13	Jara ... 13	Jara ... 13	Jara ... 13
Head-Quarter.	Common rice ...	30	32	32	32	32
	Indian-corn ...					
	Pulses ...	Rohur ... 20	Rohur ... 18	Beri ... 18	Rohur ... 21	Beri ... 16
		Jara ... 16	Jara ... 16	Rohur ... 19	Beri ... 17	Jara ... 13
Roghonathpore.	Common rice ...	10	8	14	13½	12
	Indian-corn ...	28	28	28	29	28
	Pulses ...	Beri ... 15	Beri ... 14	Rohur ... 17	Beri ... 14	Beri ... 11
		Jara ... 14	Jara ... 13	Beri ... 14	Jara ... 12	Rohur ... 16
Man Bazar ...	Common rice ...	10	9	10	12	12
	Indian-corn ...	34	32	32	34	34
	Pulses ...	10	40	40	40	40
		Jara ... 17	Jara ... 14	Rohur ... 24	Beri ... 12½	Beri ... 12½
Burra Bazar ...	Common rice ...	32	32	32	32	32
	Indian-corn ...	35	30	70	60	60
	Pulses ...	Jara ... 20	Jara ... 20	Jara ... 18	Jara ... 18	Jara ... 18
		Beri ... 18	Beri ... 18	Beri ... 17	Beri ... 17	Beri ... 17
Head-Quarter.	Common rice ...	32	32	32	34	32
	Indian-corn ...					
	Pulses ...	Rohur ... 20	Rohur ... 17	Rohur ... 20	Rohur ... 20	Rohur ... 18
		Beri ... 17	Beri ... 17	Beri ... 17	Beri ... 17	Beri ... 17
Roghonathpore.	Common rice ...	18	15	15	15	14
	Indian-corn ...	33	33	33	33	33
	Pulses ...	Beri ... 17	Beri ... 18	Beri ... 18	Beri ... 18	Beri ... 20
		Jara ... 14	Rohur ... 18	Rohur ... 20	Rohur ... 20	Rohur ... 20
Man Bazar ...	Common rice ...	11	11	11	14	14
	Indian-corn ...	28	28	28	30	28
	Pulses ...	Jara ... 12	Jara ... 12	Jara ... 12	Beri ... 16	Jara ... 14
		Beri ... 13	Beri ... 13	Beri ... 13	Moog ... 20	Beri ... 15
Burra Bazar ...	Common rice ...	56	82	32	32	32
	Indian-corn ...	75	70	70	75	75
	Pulses ...	Jara ... 18	Beri ... 18	Beri ... 18	Beri ... 15	Beri ... 15
		Beri ... 20	Moog ... 20	Moog ... 20	Moog ... 20	Moog ... 20
Head-Quarter.	Common rice ...	28	28	28	24	23
	Indian-corn ...					
	Pulses ...	Beri ... 21	Beri ... 21	Rohur ... 17	Boot ... 16	Boot ... 16
		Moog ... 17½	Moog ... 19	Moog ... 18		
	Wheat ...	16½	16	16	14	18

BHOOM.

Manbhoom.—Number of seers of 80 tolahs retailed for a rupee.

June.		July.		August.		September.		October.		November.		December.	
Srs. 28		Srs. 26		Srs. 25		Srs. 28		Srs. 28		Srs. 28		Srs. 30	
Rohur	21	Rohur	17	Rohur	16	Jara	12	Rohur	12	Beri	18	Rohur	15
Jara	15	Jara	12½	Jara	12	Beri	20	Jara	15	Beri	16	Jara	16
Beri	14	Beri	14	Beri	14	Rohur	18	Beri	20	Rohur	17	Beri	20
Moog	14	Moog	13	Moog	20	Moog	20	Moog	21	Moog	18	Moog	16
	25		25		24		25		10		9		10
	16		16		24		120		27		27		27
Beri	13	Beri	12	Beri	12	Beri	16	Beri	16	Beri	15	Beri	15
Jara	12	Rohur	14	Jara	14	Jara	13	Jara	14	Jara	14	Jara	14
Rohur	17			Moog	15	Rohur	14	Rohur	14	Rohur	12	Rohur	12
						Moog	17	Moog	17	Moog	16	Moog	15
	11		10		10		10		10		9		10
	32		32		32		32		32		32		36
	60		60		60		60		80		75		75
Jara	11½	Jara	11½	Jara	11	Beri	11½	Beri	18½	Beri	18½	Jara	20
Beri	12½	Beri	12	Beri	12	Moog	16	Moog	16	Moog	15	Beri	18
	16		16		16		15		14		14		13
	30		28		26		32		32		32		32
Rohur	18	Rohur	18	Rohur	18	Rohur	21	Rohur	20	Rohur	20	Rohur	20
Beri	13	Boot	12	Beri	14	Jara	13	Beri	18	Jara	13	Beri	18
Moog	14	Beri	13	Moog	14	Beri	18	Moog	21	Beri	18	Jara	15
		Moog	14	Boot	11	Moog	21		12½	Moog	20	Moog	20
	12		12		12		11		11		12		14
	30		26		26		28		27		30		32
	25		20		22		100		55		35		18
Beri	11	Beri	10	Beri	10	Beri	17	Beri	15	Beri	16	Beri	15
Rohur	16	Rohur	13	Rohur	14	Rohur	14	Jara	13	Jara	12	Jara	13
Boot	11	Moog	10	Boot	10	Moog	18	Rohur	14	Rohur	14	Rohur	16
Moog	13	Boot	10	Moog	14			Moog	17	Moog	18	Moog	17
	12		10		12		12		12		12		12
	34		32		32		32		24		28		32
	36		36		36		36		36		36		33
Beri	10½	Jara	10	Jara	10	Jara	10	Jara	10	Jara	10	Jara	12
Beri	11	Beri	11	Beri	11	Beri	11	Beri	16	Beri	12	Beri	13
Rohur	18	Moog	12	Moog	18	Moog	24	Moog	20	Moog	18	Moog	20
		Rohur	16	Rohur	16	Rohur	16	Rohur	12	Rohur	12	Rohur	12
	11		8		8		8		12		11		11
	31		31		31		31½		31½		31		40
	65		40		45		85		80		80		80
Beri	13	Beri	13	Jara	11	Jara	11	Beri	13	Beri	13	Jara	22
Moog	13	Moog	13	Beri	13	Beri	13	Moog	21	Moog	21	Beri	23
				Moog	21	Moog	20						
	11		11		11		11		11		11		11
	32		32		32		32		32		26		26
Rohur	18	Rohur	18	Rohur	18	Rohur	18	Rohur	20	Rohur	15	Rohur	15
Beri	18	Jara	16	Jara	16	Jara	16	Beri	18	Jara	16	Jara	16
Moog	17	Beri	18	Beri	20	Beri	20	Jara	15	Beri	22	Beri	22
		Moog	19	Moog	20	Moog	24	Moog	20	Moog	20	Moog	20
	15		16		16		16		14		13		13
	33		33		33		34		32		32		32
	20		20		20		24		20		28		28
Beri	15	Beri	15	Beri	15	Beri	16	Beri	15	Beri	18	Beri	18
Rohur	20	Rohur	20	Rohur	20	Rohur	20	Jara	13	Rohur	28	Rohur	20
Moog	16	Moog	16	Moog	16	Boot	16	Rohur	14	Boot	15	Boot	15
						Moog	16	Moog	16	Moog	18	Moog	18
	14		14		14		15		12		15		15
	28		28		28		34		32		32		32
	60		40		40		80		80		64		64
Jara	14	Jara	14	Beri	15	Beri	16	Jara	12	Beri	16	Beri	16
Beri	15	Beri	15	Moog	32	Moog	36	Beri	13	Moog	28	Moog	28
Moog	16	Moog	20	Rohur	20	Rohur	24	Moog	20	Rohur	24	Rohur	24
Rohur	24	Rohur	20			Boot	16	Rohur	12	Jara	15	Jara	15
	32		32		32		11		16		14		14
	75		70		70		32		40		32		32
Beri	15	Beri	15	Beri	15	Beri	15	Jara	22	Beri	15	Beri	15
Moog	20	Moog	16	Moog	16	Moog	20	Beri	23	Moog	24	Moog	24
	15		14		14		14		11		14		14
	22		20		19		20		20		23		27
							60		40		40		45
Boot	13	Boot	16	Boot	14	Boot	16	Boot	17	Boot	18	Boot	19
	13		16		15		13½		15		13		12

SUDDER SUB-

KIND OF GRAIN.		January.	February.	March.	April.	May.
Roghonathpore.	1872. Common rice ...	Srs. 33	Srs. 34	Srs. 32	Srs. 26	Srs. 26
	Indian-corn ...	28	28	28	16	16
	Pulses ...	Beri ... 18	Beri ... 18	Beri ... 17	Boot ... 16	Boot ... 16
	Rohur ...	20	Rohur ... 19	Rohur ... 20		
	Moog ...	18	Moog ... 18	Moog ... 18		
	Wheat ...	16	16	16	14	13
Man Bazar ...	1873. Common rice ...	32	30	28	29	27
	Indian-corn ...	24	54	48		
	Pulses ...	Jara ... 15	Jara ... 15	Beri ... 16	Boot ... 13	Boot ... 18
	Rohur ...	18	Moog ... 24	Moog ... 20		
	Moog ...	24	Rohur ... 16	Rohur ... 16		
	Wheat ...	14	14	14	14	13
Burra Bazar ...	1873. Common rice ...	30	32	32	29	29
	Indian-corn ...	72	70	70	59	44
	Pulses ...	Beri ... 15	Beri ... 15	Beri ... 15	Boot ... 13	Boot ... 13
	Wheat ...	20	Moog ... 20	Moog ... 20		
	Moog ...	14	14	14	14	14
	Wheat ...	26	24	24	24	23
Head-Quarter Purulia ...	1873. Common rice ...	45	40	40	40	23
	Indian-corn ...	20	20	22	23	22
	Pulses ...	Boot ... 11	Boot ... 12	Boot ... 16	Boot ... 16	Boot ... 16
	Wheat ...	24	23	24	22	21
	Common rice ...	30	28	24	24	30
	Pulses ...	Boot ... 22	Boot ... 22	Boot ... 22	Boot ... 20	Boot ... 19
Roghonathpore.	1873. Common rice ...	14	14	15	17	16
	Indian-corn ...	32	29	28	28	28
	Pulses ...	90	50	50	50	50
	Wheat ...	11	11	22	18	18
	Common rice ...	26	24	15	18	18
	Pulses ...	25	20	24	24	24
Burra Bazar ...	1873. Common rice ...	11	16	22	20	16
	Indian-corn ...	12	12	15	14	15
	Pulses ...	23	24	24	23	24
	Wheat ...	Boot ... 18	Boot ... 22	Boot ... 22	Boot ... 21	Boot ... 20
	Common rice ...	11	15	17	16	16
	Pulses ...	26	24	24	22	22
Raepore ...	1874. Common rice ...	40	40	40	40	40
	Indian-corn ...	20	14	15	16	20
	Pulses ...	Boot ... 16	Boot ... 14	Boot ... 16	Boot ... 18	Boot ... 16
	Wheat ...	16	14	15	16	16
	Common rice ...	15½	14½	14½	13	14
	Pulses ...	Boot ... 13	Boot ... 13	Boot ... 13	Boot ... 13½	Boot ... 11½
Head-Quarter Purulia ...	1874. Common rice ...	10½	11	12	12	10½
	Indian-corn ...	14	13	13	13	13
	Pulses ...	20	11½	13	13½	13
	Wheat ...	12	11	12	13	11
	Common rice ...	21½	16	16	16	14½
	Pulses ...	30	30	28	24	22
Burra Bazar ...	1874. Common rice ...	12	12	12	10	10
	Indian-corn ...	20	18	16	12	12
	Pulses ...	Boot ... 15	Boot ... 14	Boot ... 14	Boot ... 12	Boot ... 13
	Wheat ...	13	12	12	15	15
	Common rice ...	16	16	15	13	13
	Pulses ...	Boot ... 12	Boot ... 11	Boot ... 12	Boot ... 12	Boot ... 11
Jhalda ...	1874. Common rice ...	9	11	11	13	12
	Indian-corn ...	17	13	13	12	12½
	Pulses ...	Boot ... 12	Boot ... 12	Boot ... 12	Boot ... 14	Boot ... 13
	Wheat ...	12	12	13	13	13
	Common rice ...	20	18	16	17	16
	Pulses ...	Boot ... 15	Boot ... 14	Boot ... 14	Boot ... 12	Boot ... 13
Roghonathpore.	1874. Common rice ...	13	12	12	15	15
	Indian-corn ...	13	12	15	13	13
	Pulses ...	Boot ... 12	Boot ... 11	Boot ... 12	Boot ... 12	Boot ... 11
	Wheat ...	9	11	11	13	12
	Common rice ...	17	13	13	12	12½
	Pulses ...	Boot ... 12	Boot ... 12	Boot ... 12	Boot ... 14	Boot ... 13
Gobindpore ...	1874. Common rice ...	12	12	13	13	13
	Indian-corn ...	12	12	13	13	13
	Pulses ...	Boot ... 12	Boot ... 12	Boot ... 12	Boot ... 13	Boot ... 13
	Wheat ...	12	12	13	13	13
	Common rice ...	12	12	13	13	13
	Pulses ...	Boot ... 12	Boot ... 12	Boot ... 12	Boot ... 13	Boot ... 13

Statement shewing the Average Prices-Current

Sub-Division.	Kind of Grain.	Jan.	Feb.	Mar.
Sudder ...	Common rice ...	Srs. 31½	Srs. 31	Srs. 30½
	Indian-corn ...	35.7	41.6	43.3
	Pulses ...	17.1	17	16.9
	Wheat ...	13.3	13.3	14.3

DIVISION.—(Continued.)

June.		July.		August.		September.		October.		November.		December.	
	Srs.		Srs.		Srs.		Srs.		Srs.		Srs.		Srs.
Boot ...	25	Boot ...	24	Boot ...	19	Boot ...	20	Boot ...	19	Boot ...	30	Boot ...	24
	18		26		35		40		30		30		30
	15		16		16		11		19		18		20
	13		16		14		14		13		12		12
	25		.....		25		22½		20		30		32
Boot ...	18		.....	Boot ...	16	Boot ...	16	Boot ...	12	Boot ...	14	Boot ...	13
	12		.....		13		15		14		14		14
	27		26		24		22		22		24		32
Boot ...	44	Boot ...	40	Boot ...	40	Boot ...	80	Boot ...	75	Boot ...	60	Boot ...	60
	13		14		13		13		12		14		13
	18		15		13½		13		12		13		12
	21		18		18		18		15		17		16
Boot ...	40	Boot ...	19	Boot ...	18	Boot ...	17	Boot ...	20	Boot ...	13	Boot ...	13
	20		12		12		12		13		10½		11
	15		18		19		18		14		17		16
	18		24		24		24		17		.....		22
Boot ...	20	Boot ...	17	Boot ...	16	Boot ...	17	Boot ...	16	Boot ...	12	Boot ...	13
	15		12		22		12		12		10		11
	28		23		22		.....		18		18		18
	50		40		40		.....		32		32		30
Boot ...	18	Boot ...	18	Boot ...	18		.....	Boot ...	12	Boot ...	12	Boot ...	12
	18		18		15		.....		12½		12		12
	23		23		24		23		20		22		23
Boot ...	15	Boot ...	15	Boot ...	15	Boot ...	15	Boot ...	14	Boot ...	15	Boot ...	15
	15		15		15		15		15		13		13
	21		16		16		16		18		16		17
Boot ...	20	Boot ...	20	Boot ...	18	Boot ...	18	Boot ...	14	Boot ...	12	Boot ...	12
	15		15		13		14		13		11		11
	20		17		17		18		.....		15		16
	32		32		24		40		.....		.....		.....
Boot ...	20	Boot ...	20	Boot ...	20	Boot ...	20		.....	Boot ...	13	Boot ...	13
	14		14		14		14		.....		12		10
	14		13		13½		14		15	New ...	22		24
	11		11		11		11		28		28		28
Boot ...	11	Boot ...	11½	Boot ...	12	Boot ...	12½	Boot ...	13	Boot ...	13	Boot ...	13
	13		13½		12		12		11		10½		11
	12		11		11		11		11		27		28
Boot ...	11	Boot ...	11	Boot ...	11	Boot ...	11	Boot ...	14	Boot ...	15	Boot ...	14
	14½		14½		14½		14½		12		12		12
	20		18		18		16		16		16		New ...
Boot ...	10	Boot ...	10	Boot ...	10	Boot ...	10	Boot ...	50	Boot ...	50	Boot ...	50
	12		11½		11½		11½		11½		11½		10
	17		15		14		22		24		25		11½
	12		10		10		40		.....		.....		25
Boot ...	12	Boot ...	10	Boot ...	10	Boot ...	12	Boot ...	10½	Boot ...	12	Boot ...	7
	10		11		12		15		13		15		11
	13		13½		14		15½		16		18		17
Boot ...	10½	Boot ...	10	Boot ...	10½	Boot ...	12	Boot ...	11	Boot ...	11	Boot ...	12
	10		13		12½		19		11		11		12
	13		13		12½		13		.....		23		.....
	13		14		16		29		.....		27		.....
Boot ...	11	Boot ...	11	Boot ...	12	Boot ...	12		.....	Boot ...	17		.....
									.....		12		.....

in the District of Manbhoom from 1868-72.

April.	May.	June	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
50'2	29'5	28'9	27'8	27'4	26'3	25	24'7	24'1
46'7	43'1	41'9	36'1	35'4	35	33'6	40'3	40'9
15'8	15'9	14'8	14'4	14'9	16'2	16'5	16'7	17'4
15	14'6	13'2	13'1	12'8	12'8	12'4	12'3	12'3

## Prices-Current in the SUDDER SUB-DIVISION of the District of

Kind of grain.	January.		February.		March.		April.		May.	
	Ranchee.	Lohardugga.	Ranchee.	Lohardugga.	Ranchee.	Lohardugga.	Ranchee.	Lohardugga.	Ranchee.	Lohardugga.
1868.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ... ..	29 25	38	30 40	36	29	33 25	26 50	32	27	32
Indian-corn ... ..	18	13 50	40	40	36	20	32	.....	31 50	24
Pulses ... ..	47 50	.....	16 20	14	16 25	17	15 25	15	16	17 33
Wheat ... ..	16	13 25	18 10	16	21	23 25	21 66	22 33	20	17 33
1869.										
Common rice ... ..	17 25	19 50	17	9 50	17 50	18 75	19 33	19 66	19 50	18
Indian-corn ... ..	30	17 25	30	21	28 75	24	30	24	40	32
Pulses ... ..	8 75	10 18	11 25	10	13	10 75	16	16	16	10 50
Wheat ... ..	8 50	9 75	9 50	8 50	16 25	10 50	12 33	11	11	11 50
1870.										
Common rice ... ..	28 81	29	23 75	26	24 37	26	22 25	26 75	21 12	26
Indian-corn ... ..	41 25	31 50	33 75	30	31	28 25	28 75	36 25	27	40 33
Pulses ... ..	14	12 75	14 75	10 50	15 50	12	15 75	14	15 50	12 33
Wheat ... ..	8 81	10 37	9 37	10 75	11 75	14	13 50	16	12 87	15
1871.										
Common rice ... ..	27	.....	26 33	.....	26 75	.....	26	.....	25 12	.....
Indian-corn ... ..	32	.....	32	.....	31 50	.....	35	.....	34 50	.....
Pulses ... ..	14	.....	12 33	.....	14	.....	13 50	.....	14	.....
Wheat ... ..	14	.....	14	.....	14	.....	15 75	.....	13 25	.....
Millet ... ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1872.										
Common rice ... ..	26	36	25	36	25	36	23	34 66	23 50	31
Indian-corn ... ..	.....	.....	.....	.....	.....	.....	30	30	29	28
Pulses ... ..	16	16	16	16	.....	16	.....	.....	.....	.....
Wheat ... ..	14	24	14	24	14	24	20 80	21 33	15 25	23 50
Millet ... ..	40	50	50	.....	60	50	.....	.....	.....	.....
1873.										
Common rice ... ..	20	.....	17 50	.....	17	24	17	23	17 50	28
Indian-corn ... ..	25	.....	28	.....	29	28	30	28	25	28
Pulses ... ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ... ..	10 50	.....	10	.....	15	16	16	24	14	20
Millet ... ..	.....	.....	.....	.....	.....	.....	.....	.....	30	.....
1874.										
Common rice ... ..	17 50	18	15 25	15 25	14 25	15 25	14	16	14	16 74
Indian-corn ... ..	16 40	18	15 66	17 50	16	17 75	15 75	17	15 40	19 20
Wheat ... ..	10 55	10 25	9 75	10 37	9 12	11 67	11 25	11 70	11	13 60
Millet ... ..	30 30	.....	28	.....	22	.....	25 50	.....	22 20	.....

DUGGA.

Lohardugga—Number of seers at 80 tolahs retailed for a rupee.

June.		July.		August.		September.		October.		November.		December.	
Ranchee.	Lohardugga.	Ranchee.	Lohardugga.	Ranchee.	Lohardugga.	Ranchee.	Lohardugga.	Ranchee.	Lohardugga.	Ranchee.	Lohardugga.	Ranchee.	Lohardugga.
Srs. 25 75	Srs. 32	Srs. 26	Srs. 30 66	Srs. 23 40	Srs. 28	Srs. 20 37	Srs. 22	Srs. 26 60	Srs. 29	Srs. 23 75	Srs. 24	Srs. 21 50	Srs. 24
31 25	.....	30 25	.....	21 40	32	23 75	.....	42	38 25	42 50	21	40	24
15 75	16	15 83	16	13 80	14 33	15 75	16	16	16	15	16	14 50	13 50
17	18 50	49 75	18 66	18	17	17	18	15	16 50	12	16	9 50	13 25
19 50	18	18 87	17 75	18 37	16 12	18 25	22 50	24 50	26 66	25 75	28	25 75	32
27 50	26	27 37	21 50	33 75	28 75	29 25	29 66	41 25	94 33	43 75	42 50	45	34
16 37	12 50	15 75	18	15 25	12 50	11 50	8	15	12	15	12 75	14 63	10 66
16	11	9 87	10 62	9 43	8 75	8 87	9	9 5	9 25	10 62	9	9 87	10
19 62	26	19 60	26 66	21	28 50	26 40	38	30 75	.....	23 75	.....	28 50	.....
26 25	48	30	38 66	30	41	40 80	48	37 50	.....	56 25	.....	47 50	.....
15 75	14	15 90	15 33	28 25	12 50	17 70	14 75	16 25	.....	14 50	.....	14	.....
12	14 50	12 75	15 33	12 75	15 50	15 20	15 50	14 75	.....	14	.....	14	.....
25	.....	24 80	.....	32 50	40	39 33	40	34	40	30	40	30	.....
36 25	.....	34 40	.....	32	.....	34 66	.....	40	.....	37	.....	36	.....
14	.....	18 20	.....	14	14	14	15 50	13	16	16	16	18	.....
16 75	.....	20 20	.....	27	33	23 66	32	26	32	18	32	20	.....
.....	.....	.....	.....	50	.....	.....	53	.....	40	.....	40	.....	.....
24	34 66	24	28	23	32	24	36	20	.....	22	.....	22	28
30	.....	16	.....	20	.....	30	.....	32	.....	23	.....	28	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
14 33	24	14	24	12	24	12	20	12	.....	11	.....	11 50	18
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
16 50	.....	16 50	.....	17 50	.....	16	28	16	15 30	16 50	16 50	17 87	17
20	.....	21	.....	22	.....	24	.....	.....	17	20	19 50	16 12	18
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
15	.....	14 50	.....	14	.....	13	16	12	15	16 33	14 75	9 75	19
38	.....	36 50	.....	39 50	.....	32	.....	29 50	17	30 50	20 62	29 25	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
15 50	17 50	16 75	20	18	19 25	21 25	28 40	25	26 66	24 25	27 99	26 50	36 75
16	17	17 25	17	17	21	24 75	24	36 20	35	32	31 83	31 25	17 50
11 12	13 50	11 60	14	11 70	13 75	12 62	17	10 20	13	8 75	13 55	9 50	13 50
22 50	.....	26	.....	26 80	.....	33	.....	43 60	.....	47 25	.....	47 25	.....

PALAMOW SUB-DIVISION.

Kind of grain.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1868.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	34'83	29	28'5	26	23'5	19'5	18'8	16'4	12'2	12'25	13'2	13'25
Indian-corn ...	85	49'83	52'66	.....	.....	.....	.....	.....	23'22	16	16'4	16
Pulses ...	20'83	24'83	26'33	26'33	23	19'33	19'3	18'2	13	12'8	12'4	10'8
Wheat ...	25'83	23'33	25	25'16	22'8	17'4	16'4	17'8	14'4	11'2	12'2	10'5
1869.												
Common rice ...	12'5	12	13'2	13'2	11'8	11'4	11'6	10'4	10'4	16'4	15'16	20'16
Indian-corn ...	14'5	14'72	15'6	15'4	13'4	13'6	12	12'2	27'6	26'5	20	29
Pulses ...	11'2	12	12'6	13'4	11'6	11'6	10	9'6	9'8	8'4	9'6	10'8
Wheat ...	10	9'4	11'8	14'4	10	8'2	8'2	9'2	9	8'8	7'8	11'3
1870.												
Common rice ...	17'9	19	18	17'3	17'3	16'5	16'3	19'1	21'27	22'2	24'9	23'1
Indian-corn ...	25'5	24'8	21'2	20'4	21'8	20'5	20	21'9	34'1	42'5	45'3	42
Pulses ...	12'5	14	14'4	14	18'8	17'6	14'4	16'1	16'4	17'5	17'3	16'4
Wheat ...	9'5	9'2	15'5	17	16'5	16	17'6	15'1	15'5	16'9	16'2	17
1871.												
Common rice ...	23'5	23'2	24'5	24'5	24	22'9	23'5	23'9	22'2	27'9	28'3	29'6
Indian-corn ...	26'2	26'7	29'4	36'2	31'5	28	18	21'3	41'2	41'3	40'6	40'8
Pulses ...	13'3	18'3	19'3	20'8	24'8	23'2	22'6	22'7	22'3	23'3	23'3	23'5
Wheat ...	15'2	16'5	20'4	23'1	23'5	22'5	22'6	22'2	22'6	23'8	23'5	23'6
1872.												
Common rice ...	23'4	25'3	26'7	23'32	22'34	20'51	19'73	19'81	21'35	21'56	17'76	20'01
Indian-corn ...	37'74	25'53	38'73	38'39	35'92	33'59	27	25'95	20'16	39'96	33'96	33'69
Pulses ...	23'85	38'87	27'44	30'10	29'31	28'92	27'01	24'59	22'50	23'06	22'01	23'38
Wheat ...	23'18	24'45	25'04	22'85	21'73	20'01	20'06	19'01	16'65	17'06	16'56	16'83
1873.												
Common rice ...	18'77	18'15	18'55	17'88	16'93	14'06	12'96	13'87	15'17	11'34	13	13'70
Indian-corn ...	35'62	28'4	28'86	22	20'88	18'27	16'58	19'20	26'52	19'18	16'77	15'98
Pulses ...	20'18	20'72	23'51	20'80	20'56	16'16	16'8	14'85	13'15	11'03	11'97	11'66
Wheat ...	16'97	15'68	15'90	17'95	15'34	12'97	12'43	12'48	13'11	10'88	11'05	11'53
1874.												
Common rice ...	12'90	11'74	12'14	11'53	11'05	11'56	13'47	12'85	13'61	15'04	18'92	23'18
Indian-corn ...	15'34	12'94	14'30	15'59	16'67	14'32	16'45	17'71	29'12	36'54	29'21	31'22
Pulses ...	13'22	11'27	13'95	15'4	16'18	11'12	15'16	16'12	15'85	16'13	16'77	16'25
Wheat ...	11'39	10'23	12'69	12'87	13'06	12'93	12'70	12'38	13'29	13'16	11'35	13'23

Statement showing the Average Prices-Current in the District of Lohardugga from 1868-72.

Sub-Division.	Kind of grain.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Head-Quarters.	Common rice	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
	Indian-corn	24'3	24'4	24'5	23'4	23'4	22'7	22'6	23'6	23'6	25'6	27'1	26
	Pulses	30'3	33'9	31'8	31'1	32'4	30'2	27'5	27'4	31'6	35'5	41'4	39'3
	Wheat	20	14	14'6	15'1	15'3	15'4	15'1	17'8	16'4	15	15'1	15'2
Ranchee	Common rice	12'2	12'9	15'3	18'7	14'4	15'1	21'29	15'8	16'3	15'4	13'3	12'9
	Millet	40	50	60	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Indian-corn	30'6	29'4	28'5	28'3	26'7	27'7	25'7	28'9	31'7	31'9	30'7	28
	Pulses	20'7	33'9	33'4	30'1	31'1	34	30'1	33'2	36'4	36'3	31'7	29
Lohardugga	Common rice	12'9	12'6	13'9	15	13'4	14'2	14'8	13'3	13'5	14'7	14'9	15'1
	Indian-corn	14'3	17'3	17'9	17'6	16'8	17	14'9	19'4	18'9	19'3	19	18'7
	Pulses	50	.....	50	.....	.....	.....	.....	50	52	40	40	.....
	Wheat	33'4	21'7	22'2	20'8	19'9	18'1	18	17'9	17'4	20	19'3	23'3
Palamow	Common rice	28	24'2	31'5	27'6	25'6	33'9	19'2	30'3	39'2	38'2	31'2	33'3
	Indian-corn	16'3	21'6	20	30'9	21'5	20'1	18'7	18'2	16'8	17	16'9	17
	Pulses	16'7	16'6	19'5	20'5	18'9	18'8	19'9	16'6	16'6	18'3	15'2	16'9
	Wheat	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
District average	Common rice	28'2	25'2	28'1	24'3	23'8	22'8	22'1	23'5	24'9	26'3	25'6	25'2
	Indian-corn	28'3	30'7	28'9	29'6	29'7	29'4	28'6	27	33'4	46	36'8	33'5
	Pulses	18'4	18'1	16'2	17	18'7	18'6	18'2	18'4	18'2	18'6	18'6	18'8
	Wheat	14'4	15'6	17'6	18'8	16'7	16'3	17'7	17'3	18'9	16'7	18'8	14'3
Millet	45	50	55	.....	.....	.....	.....	.....	50	52	40	40	.....



ORISSA DIVISION.



# ORISSA DIVISION.

## CUTTACK.

*Prices current in the CUTTACK SUDDER SUB-DIVISION of the District of Cuttack.—  
Number of seers of 80 tolahs retailed for a rupee.*

Kind of grain.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1868.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	32	32	33	32	32	32	32	32	32	29	21	25
Pulses ...	26	29	26	26	26	26	26	26	26	29	22	21
Wheat ...	16	18	21	21	21	21	21	21	21	21	16	13
Millet ...	26	22	24	11	11	11	11	11	11	14	21	21
1869.												
Common rice ...	25	25	25	28	24	21	22	22	20	18	33	35
Pulses ...	21	21	21	26	26	23	24	24	24	24	25	32
Wheat ...	12	12	12	12	14	14	9	9	8	8	8	7
Millet ...	21	21	21	21	21	21	21	21	18	20	29	29
1870.												
Common rice ...	34	37	35	37	34	28	32	32	26	32	33	32
Pulses ...	28	26	26	26	24	24	22	24	19	18	26	26
Wheat ...	8	11	8	11	11	11	11	11	13	12	13	13
Millet ...	21	14	11	10	11	11	11	20	17	17	21	20
1871.												
Common rice ...	33	33	33	32	32	32	32	32	37	37	29	32
Pulses ...	26	29	29	29	29	29	29	29	29	29	31	30
Wheat ...	12	13	13	13	13	10	13	15	20	20	21	20
Millet ...	20	21	20	21	21	21	21	22	24	24	21	21
1872.												
Common rice ...	28	32	32	30	29	25	16	22	21	34	38	34
Pulses ...	32	32	32	30	28	29	20	17	19	21	25	21
Wheat ...	20	13	18	17	17	16	16	18	17	18	18	16
Millet ...	21	21	21	15	11	16	16	16	17	11	16	.....
1873.												
Common rice ...	34	30	30	33	30	29	29	30	32	32	26	24
Pulses ...	32	30	29	29	28	26	25	26	28	26	23	26
Wheat ...	16	16	16	18	18	15	16	21	18	16	13	18
Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14
1874.												
Common rice ...	26	26	26	29	28	25	26	26	21	24	26	29
Pulses ...	26	26	28	29	28	26	25	25	22	22	23	22
Wheat ...	13	13	17	16	13	12	14	16	16	17	18	18
Millet ...	21	21	21	.....	17	17	17	17	21	21	21	21

No Indian corn in Cuttack.

## JAJEPORE SUB-DIVISION.

1868.												
Common rice ...	32	32	32	27	27	23	19	19	21	21	18	27
Pulses ...	22	23	22	21	21	21	17	19	21	16	21	21
Wheat ...	10	10	10	14	14	16	12	14	16	15	15	15
1869.												
Common rice ...	22	22	25	22	22	21	18	18	18	21	28	28
Pulses ...	23	23	22	23	23	23	20	21	21	21	21	23
Wheat ...	10	10	10	11	10	10	9	9	7	6	6	6
1870.												
Common rice ...	31	34	34	36	32	33	34	33	23	36	42	42
Pulses ...	25	27	27	31	25	23	23	23	21	20	21	23
Wheat ...	6	7	10	13	10	10	10	9	9	10	11	11
1871.												
Common rice ...	40	42	36	36	34	34	34	34	34	37	34	39
Pulses ...	22	31	34	34	34	34	28	31	31	28	31	34
Wheat ...	10	10	10	11	8	15	13	14	14	16	17	17
1872.												
Common rice ...	34	32	32	34	34	34	34	26	26	26	26	26
Pulses ...	23	23	23	22	23	22	22	21	21	21	21	21
Wheat ...	15	15	15	15	11	11	11	11	11	11	11	11
1873.												
Common rice ...	34	34	34	34	34	34	34	34	33	33	34	34
Pulses ...	31	23	31	31	31	31	31	23	24	24	22	31
Wheat ...	17	17	17	19	19	19	19	17	17	17	17	18
1874.												
Common rice ...	23	34	34	34	34	34	31	34	28	28	31	31
Pulses ...	23	23	23	23	26	23	21	21	21	21	18	18
Wheat ...	15	11	11	21	21	17	15	14	13	11	11	11

No millet or Indian corn in this sub-division.

## KENDRAPARAH SUB-DIVISION.

Kind of grain.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1868.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	.....	.....	.....	.....	.....	.....	22	20	.....	21	19	19
Pulses ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	13
Wheat ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	17	15
1869.												
Common rice ...	20	24	24	20	20	24	24	24	26	31	40	42
Pulses ...	15	16	12	12	12	24	24	24	24	24	24	24
Wheat ...	10	10	10	10	15	9	9	9	9	7	5	5
1870.												
Common rice ...	45	41	37	36	42	42	42	42	42	43	42	42
Pulses ...	24	29	25	25	25	25	25	26	27	24	24	24
Wheat ...	5	9	13	12	12	12	12	12	10	10	11	10
1871.												
Common rice ...	42	42	42	42	42	42	42	42	42	42	42	42
Pulses ...	28	24	39	39	39	36	33	30	31	34	39	37
Wheat ...	10	11	14	16	17	19	19	20	20	20	20	20
1872.												
Common rice ...	38	42	35	32	28	29	27	30	36	26	26	26
Pulses ...	33	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ...	20	20	21	18	16	17	18	16	16	16	16	16
1873.												
Common rice ...	42	42	42	42	42	42	42	42	42	48	48	42
Wheat ...	13	13	13	13	13	16	16	16	16	16	18	21
1874.												
Common rice ...	42	38	42	42	42	42	42	42	34	37	37	31
Wheat ...	16	16	16	23	23	23	23	17	14	13	13	13

There are no records showing retail prices of food prior to July 1868.  
No millet or Indian corn in this sub-division.

Statement showing the average prices current in the District of Cuttack from 1868 to 1872.

Sub-Division.	Kind of grain.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Sudder	Common rice ...	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
	Pulses ...	30'4	31'8	31'4	31'8	30'2	27'6	26'8	28	27'2	30	30'8	31'6
	Wheat ...	13'6	13'4	14'4	14'8	15'2	14'4	14	14'4	15'8	15'8	15'2	13'6
	Millet ...	21'8	19'8	19'4	15'6	15	16	16	18	17'4	17'2	21'6	23'7
Jajepore	Common rice ...	31'8	32'4	31'8	31	29'8	29	27'8	26	25'4	28'2	29'6	32'4
	Pulses ...	28	25'4	25'6	26'2	25'2	24'6	21'6	23	23	21'2	23	24'4
	Wheat ...	10'2	10'4	11	12'8	10'6	12'4	11	11'4	11'4	11'6	12	12
	Common rice ...	36'2	37'2	34'5	32'5	33	34'2	31'4	31'6	36'5	32'6	33'8	34'2
Kendraparah	Pulses ...	25	23	25'3	25'3	25'3	28'3	27'3	26'7	27'3	27'3	24'5	24'5
	Wheat ...	11'2	12'5	14'5	14	15	14'2	14'5	14'2	13'7	13'2	13'8	13'2
	Common rice ...	32'8	33'8	32'5	31'7	31	28'9	28'7	28'5	29'7	30'3	31'4	32'7
	Pulses ...	24'8	25'3	25'9	26'5	25'7	25'4	24'8	24'6	24'6	24'2	24'5	24'9
District average	Common rice ...	11'7	12'1	13'3	13'9	13'6	13'7	13'2	13'3	13'6	13'5	13'7	13'9
	Wheat ...	21'8	19'8	19'4	15'6	15	16	16	18	17'4	17'2	21'6	23'7
	Millet ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

## POOREE.

Statement showing the average prices current at the HEAD-QUARTERS of the District of Pooree.

Kind of grain.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1868.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	31'8	30'5	32	32'8	31'5	28'8	28'9	28'5	28'9	28	24'1	21'6
Pulses ...	14'2	13'4	17'1	24'3	22	19'3	18'8	18'4	18'4	18'8	18'1	16'7
Wheat ...	15'3	17'5	18'4	17	17	17	17	17'5	16'7	14	12'6	9'8
1869.												
Common rice ...	26'1	28'0	29'0	30'2	30'4	25'6	24'4	21'3	19'8	21'9	28'9	27'6
Pulses ...	14	14'4	14'7	17'3	17'1	12'8	14'2	13'9	13'8	11	13'9	13'4
Wheat ...	9'2	7'9	8	9'8	10'8	9'8	9'2	7'9	4'9	5'2	5'6	6'9
1870.												
Common rice ...	30'7	29'1	31'1	30'2	29'1	26'6	23'6	23'6	24'9	27'1	28	33'5
Pulses ...	14'4	14'1	15'7	18'3	19'4	18'7	18'7	19'9	17'3	18'8	18'8	18'5
Wheat ...	7'9	7'9	7'9	8'5	10'2	10'3	9'5	10'9	11'5	11'8	13'7	10'5

DISTRICT OF POOREE.—(Continued).

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1871.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	31.5	30.8	31.5	32.1	33.5	31.5	31.5	31.5	31.5	.....	27.6	23.6
Pulses ...	18.4	18.4	20.3	23.9	23.9	23.6	24.1	26.2	26.2	.....	27.6	23.6
Wheat ...	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	21	.....	14.4	14.4
1872.												
Common rice ...	23.6	27.6	.....	24.5	29	26	23.6	23	24.6	34.1	35.2	31.2
Pulses ...	23.6	18.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat ...	10.5	10.5	.....	14	15.2	15	14.4	13.1	13.1	14.6	16.3	17
1873.												
Common rice ...	30.5	35.1	36.7	40	35.5	32.8	34.1	36	34.1	32.8	30.8	23.7
Wheat ...	15	14.4	16.5	15.7	15.7	15.7	13.7	16.3	14.1	14.4	13.4	11.4
1874.												
Common rice ...	22	23.6	26.2	28.2	28.8	26.2	25	23.3	23.4	23.3	25.6	27.6
Wheat ...	11.1	12.4	11.5	12.4	12.3	11.8	11.8	12.8	14.7	13.4	14.4	14.7

KHOORDAH SUB-DIVISION.

1869.	.....	.....	.....	.....	.....	.....	22-5	25	23-10	21	39-2	42
Common rice ...	.....	.....	.....	.....	.....	.....	7-14	7-14	7-12	8-8	9-3	9-3
Pulses ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1870.												
Common rice ...	34-7	33-2	36-12	27-4	27-9	26-4	26-4	26-4	26-4	28-14	32-13	34-2
Pulses ...	8-8	9-3	9-3	11-13	11-13	10-8	10-8	10-8	10-8	9-3	11-2	11-13
1871.												
Common rice ...	34-2	28-14	28-14	27-9	27-9	27-9	27-9	28-14	31-8	27-9	23-14	28-14
Pulses ...	10-8	9-3	11-13	13-2	10-10	13-2	11-13	9-3	10-8	11-13	11-13	14-7
1872.												
Common rice ...	27-9	27-9	28-14	28-14	27-9	27-9	27-9	23-10	23-10	23-10	42-8	42
Pulses ...	10-8	11	10	11	11	11	11	12-8	12-8	12-8	9-3	9-3
1873.												
Common rice ...	42	35-7	35-7	34-2	34-2	34-2	36-12	36-12	28-6	36-14	36-14	23
Pulses ...	9-14	9-3	9-3	9-3	9-3	9-3	15-12	15-12	14-7	9	9	9
1874.												
Common rice ...	26	27-8	27-8	27-8	27-8	27-8	27-8	27-8	28-14	28-14	30	30
Pulses ...	9	10	10	10	10	10	10	10	10	10	9-3	9

Statement showing the average prices current in the DISTRICT OF POOREE from 1868 to 1872.

SUB-DIVISION.	Kind of grain.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Khoordah	Common rice ...	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
	Pulses ...	32	29.7	31.3	27.8	27.2	11	11.7	10.3	10	10.2	10.5	10.2
	Common rice ...	28.7	29.4	31.1	29.9	30.7	27.3	26.4	25.5	25.9	27.8	23.7	27.3
	Pulses ...	17.3	15.7	16.9	20.9	20.6	13.3	13.9	19.6	18.9	17.3	19.6	17.8
Sudder	Wheat ...	10.7	10.8	11.2	11.9	12.6	12.5	12.1	12	13.2	11.4	12.3	11.7
	Common rice ...	30.4	29.5	31.2	28.8	29	27.1	20.1	26.5	26.1	26.5	31.0	32
District average	Pulses ...	13.5	12.7	13.6	10.4	15.8	15	14.6	14.8	14.5	13.8	14.0	14.4
	Wheat ...	10.7	10.8	11.2	11.9	12.6	12.5	12.1	12	13.2	11.4	12.3	11.7
	Common rice ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

BALASORE.

Prices current in the SUDDER SUB-DIVISION of the District of Balasore.—Number of seers of 80 tolahs retailed for a rupee.

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1868.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	42	39	39	39	36	21	24	26	32	32	28	27½
Pulses ...	19	21	21	19	17	17	16	14	14	16	18	17
Wheat ...	11	14	16	16	16	16	16	16	16	16	16	14
1869.												
Common rice ...	25½	27	30	29	29	26	26	26	26	26	28	28
Pulses ...	18	18	18	20	19	18	18	18	18	18	18	18
Wheat ...	14	13	13	11	11	10½	9	9	7	9	9	9
1870.												
Common rice ...	32	33	33	32	32	32	32	27	29	29	32	34
Pulses ...	18	15	18	18	18	17	17	16	14	14	17	18
Wheat ...	6½	7	11	11	11	10	9	7	9	9	9	9
1871.												
Common rice ...	34	34	34	34	34	32	32	32	32	32	32	31
Pulses ...	22	23	21	21	16	16	14	14	14	16	16	18
Wheat ...	13	13	16	16	16	16	16	16	16	16	14	18
1872.												
Common rice ...	32	32	32	28	28	27	24	28	23	30	32	32
Pulses ...	18	13	16	13	13	12	12	8	10	10	10	10
Wheat ...	12	12	12	16	14	12	14	14	12	12	12	12
1873.												
Common rice ...	34	38	38	38	38	38	38	38	38	32	17	20
Pulses ...	10	10	10	10	10	10	10	10	10	10	10	10
Wheat ...	12	12	12	12	12	12	12	12	12	12	12	9
1874.												
Common rice ...	26	24	24	25	21	21	21	21	21	22	24	26
Pulses ...	13	13	11	9	9	10	11	11	10½	12	11	11
Wheat ...	10½	13	11	11	11	12	12	11	10	11	18	11

BHUDDRUCK SUB-DIVISION.

1868.												
Common rice ...	40	38	42	38	32	20	22	26	25	26	27	30
Pulses ...	16	20	20	20	.....	20	16	14	16	16	16	19
1869.												
Common rice ...	30	30	30	30	24	28	26	26	26	32	36	36
Pulses ...	21	16	22	24	24	22	22	22	22	22	22	22
1870.												
Common rice ...	40	44	40	40	44	48	42	36	40	50	44	50
Pulses ...	22	.....	22	22	.....	.....	.....	.....	.....	.....	.....	.....
1871.												
Common rice ...	45	50	45	45	38	38	38	38	44	42	32	32
1872.												
Common rice ...	32	32	32	36	36	32	32	32	32	40	40	40
Pulses ...	.....	.....	.....	14	10	10	8	8	10	.....	.....	.....
Wheat ...	.....	.....	.....	18	16	16	16	14	14	16	16	16
1873.												
Common rice ...	40	45	40	45	42	42	42	42	42	40	32	30
Wheat ...	16	16	16	16	14	14	14	14	14	14	14	14
1874.												
Common rice ...	30	34	34	36	26	32	32	26	26	26	26	36
Wheat ...	14	12	12	12	16	16	12	12	12	12	12	12

Statement showing the average prices current in the DISTRICT OF BALASORE from 1868 to 1872.

SUB-DIVISION.	Kind of grain.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Sudder ...	Common rice ...	Srs. 33'1	Srs. 33	Srs. 33'6	Srs. 32'4	Srs. 31'8	Srs. 27'6	Srs. 27'6	Srs. 27'6	Srs. 29'4	Srs. 29'8	Srs. 30'4	Srs. 30'8
	Pulses ...	19	19'6	18'8	18'2	16'6	16	15'4	14	14	14'8	15'8	16'2
	Wheat ...	11'8	11'8	13'6	14	13'6	12'9	13'8	12'4	12	12'4	13	11'4
Bhuddruck ...	Common rice ...	87'4	88'8	87'8	87'8	84'8	83'2	83	81'6	83'4	88	85'8	87'6
	Pulses ...	19'7	18	21'3	20	17	17'3	15'8	14'7	16	19	19	20'6
	Wheat ...	...	...	...	18	16	16	16	14	14	16	16	16
District average	Common rice ...	85'2	85'9	85'7	85'1	83'8	80'4	80'8	79'7	81'4	83'9	83'1	84
	Pulses ...	19'3	18'8	20	19'1	16'8	16'6	15'4	14'3	15	16'9	17'4	18'3
	Wheat ...	11'8	11'8	13'6	16	14'8	14'4	14'4	13'8	13	14'8	14	13'7

CUTTACK TRIBUTARY MEHALS.

Prices current in the Government Non-Regulation Killahs UNGOOL and BANKEE in the jurisdiction of Superintendent of Cuttack Tributary Mehals.—Number of seers of 80 tolahs retailed for a rupee.

UNGOOL.

Kind of grain.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1868.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.	Srs.
Common rice ...	15-12	15-12	15-12	15-12	15-12	31-8	31-8	31-8	31-8	31-8	31-8	31-8
Pulses ...	11-10	11-10	11-10	11-10	11-10	11-9	11-10	11-8	11-9	11-11	11-11	11-11
1869.												
Common rice ...	23-10	20	20	20	26-4	26-4	22-15	19-11	19-11	31-8	31-8	31-8
Pulses ...	12-15	12-15	12-15	12-15	14	12-11	12-11	12-11	12-11	12-14	12-14	12-14
1870.												
Common rice ...	23-10	20	20	20	26-4	26-4	19-11	19-11	19-11	19-11	23-10	23-10
Pulses ...	12-15	12-15	12-15	14	14	12-11	12-11	12-11	12-11	12-11	12-14	12-14
1871.												
Common rice ...	31-8	31-8	31-8	31-8	31-8	31-8	31-8	31-8	31-8	31-8	31-8	31-8
Pulses ...	14	14	14	14	14	14	14	14	14	14	14	14
1872.												
Common rice ...	23-10	23-10	23-10	23-10	23-10	23-10	23-10	23-10	23-10	23-10	23-10	31-8
Pulses ...	14	14	14	14	14	13	14	14	14	14	14	14
1873.												
Common rice ...	39-6	39-6	39-6	39-6	39-6	39-6	39-6	39-6	39-6	39-6	39-6	39-6
Pulses ...	14	14	14	14	14	14	14	14	14	14	14	14
1874.												
Common rice ...	39-6	39-6	39-6	39-6	39-6	31-8	31-8	31-8	31-8	31-8	31-8	31-8
Pulses ...	14	14	14	14	14	14	14	14	14	14	14	14

BANKEE.

1868.												
Common rice ...	32	32	32	32	24	30	30	30	30	25	25	25
Pulses ...	13-8	13-8	13-8	13-8	18	18	15-4	15	15-2	15-4	9-2	15
1869.												
Common rice ...	25	25	25	25	20	20	20	20	20	30	30	40
Pulses ...	15	15	15	15	15	15	15	15	15	15-4	15-4	20-10
1870.												
Common rice ...	40	40	40	32	32	30	30	32	30	37	35	35
Pulses ...	20-8	20-8	20-8	20-10	20-10	20-8	20-10	20-10	15	15	16-8	16-8
1871.												
Common rice ...	35	30	30	30	30	30	30	37-8	37	30	30	34
Pulses ...	16-8	18-8	18-8	18-8	18-8	20-8	20-8	34	34	34	34	28
1872.												
Common rice ...	34	32	32	30	30	30	26	26-4	26-4	40	48	48
Pulses ...	28	24	24	19	24-14	20-8	17-8	17-8	17-8	17-8	20-10	20-10
1873.												
Common rice ...	48	48	48	48	48	51	51	51	51	51	50	46
Pulses ...	23	23	23	23	23	23	23	23	23	30-12	28-4	28-4
1874.												
Common rice ...	34-13	42	42	42	42	42	42	42	42	42	42	42
Pulses ...	26-4	24-8	24-8	28-8	28-8	28-4	22	23	23	23	21-6	19-3

Statement showing the average prices current in the CUTTACK TRIBUTARY MEHALS from 1868 to 1872.

SUB-DIVISION.	Kind of grain.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Ungool ...	Common rice ...	Srs. 23-6	Srs. 22-2	Srs. 22-2	Srs. 22-2	Srs. 27-8	Srs. 27-8	Srs. 25-8	Srs. 25-2	Srs. 25-2	Srs. 27-0	Srs. 28-4	Srs. 30
	Pulses ...	13	13	13	13-2	13-4	13	13	13	13	13	13	13
Bankee ...	Common rice ...	33-2	31-8	31-8	29-8	27-2	28	27-2	29-2	28-6	32-4	33-0	36-4
	Pulses ...	18-6	18-2	18-2	17-2	19-4	18-8	17-8	20-4	19-2	19-3	19	20-2
District average	Common rice ...	28-4	27	27	26	27-5	28	26-5	27-4	26-9	30	29	33-2
	Pulses ...	15-8	15-6	15-6	15-2	16-4	15-9	15-4	16-2	16-1	16-2	16	16-6





COOCH BEHAR DIVISION.





## JULPIGOREE.

*Prices current in the JULPIGOREE SUDDER SUB-DIVISION of the District of Julpigoree.—  
Number of seers of 80 tolahs retailed for a rupee.*

Kind of grain.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1872. Common rice ...	Srs. 16	Srs. 16	Srs. 12	Srs. 16'7	Srs. 16'7	Srs. 13'9	Srs. 15	Srs. 16	Srs. 14	Srs. 14	Srs. 16	Srs. 16
Wheat ...	10	10	10	9'3	9'3	11'1	10	10	9	10	.....	10
1873. Common rice ...	22	24	24	20	16	16	20	18	17	16	16	18
Wheat ...	10	.....	10	12	10	11	12	12	10	9	9	9
1874. Common rice ...	16	11'5	12	14	10	10	11'2	11'2	12	15	22	26'6
Wheat ...	9	8	8	9	6'6	8	8	10	9'7	9	9'3	10

## BUXA SUB-DIVISION.

1872. Common rice ...	.....	.....	.....	.....	.....	.....	.....	20	.....	.....	23	26
1873. Common rice ...	31	31	30	30	23	16	16	20	.....	15	16	21
1874. Common rice ...	15	17	12	13	11	9	10	14	16	14	17	18

*Statement showing the average Prices current in the District of Julpigoree  
from 1868-72.*

SUB-DIVISION.	Kind of grain.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Sudder ...	Common rice ...	Srs. 16	Srs. 16	Srs. 12	Srs. 16'7	Srs. 16'7	Srs. 13'9	Srs. 15	Srs. 16	Srs. 14	Srs. 14	Srs. 16	Srs. 16
	Wheat ...	10	10	10	9'3	9'3	11'1	10	10	9	10	.....	10
Buxa ...	Common rice ...	.....	.....	.....	.....	.....	.....	.....	20	.....	.....	23	26
	Common rice ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
District average {	Common rice ...	16	16	12	16'7	16'7	13'9	15	18	14	14	19'5	21
	Wheat ...	10	10	10	9'3	9'3	11'1	10	10	9	10	.....	10





# APPENDIX II.

## RAINFALL.

*Statement showing the average monthly rainfall at Sub-divisional Head-quarters in each District of the Lieutenant-Governorship of Bengal.*

DIVISION.	DISTRICT.	SUB-DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
PAINA.	Patna.	Sudder ... ..	0.59	0.71	0.31	0.41	0.97	6.66	10.97	7.46	7.26	2.54	0.07	0.06	38.01
		Behar ... ..	0.50	0.81	0.23	0.36	1.57	5.56	14.68	11.60	6.24	3.25	0.01	0.07	44.88
		Barh ... ..	0.72	0.42	0.53	0.26	1.32	4.28	10.67	9.51	8.22	3.14	0.02	0.04	39.13
		Dinapore ... ..	0.78	0.12	0.20	0.41	0.80	7.64	11.25	9.67	9.17	2.73	...	0.08	42.85
	Cya.	Sudder ... ..	0.81	0.63	0.55	0.50	0.73	6.53	12.49	10.52	6.83	2.89	0.04	0.07	42.59
		Nowadah ... ..	0.23	0.90	0.55	0.39	1.88	7.17	12.92	13.25	8.57	2.63	0.03	0.21	48.73
		Aurangabad ... ..	0.84	0.47	0.32	0.49	0.70	5.05	13.12	13.08	7.17	2.75	...	0.29	44.28
		Sudder ... ..	0.89	0.56	0.63	0.76	1.22	7.68	13.87	9.94	10.18	2.70	0.21	0.06	48.70
	Shaha- bad.	Sasseram ... ..	0.32	0.59	0.17	0.12	0.62	6.69	14.88	11.48	6.48	5.17	...	0.12	46.64
		Buxar ... ..	0.71	0.26	0.39	0.21	0.65	5.86	11.78	10.69	8.35	3.58	...	0.19	42.67
		Bhuboah ... ..	0.46	0.36	1.68	0.16	0.98	7.35	15.36	14.50	7.73	3.80	...	0.16	62.54
Sudder ... ..		0.82	0.51	0.65	0.50	1.84	6.60	11.06	9.39	8.58	3.39	0.03	...	43.37	
Mozaf- erpore.	Seetamurhee ... ..	0.29	0.32	1.40	1.33	1.84	10.32	12.30	8.46	13.65	1.89	...	0.12	51.01	
	Hajipore ... ..	...	...	...	...	...	6.22	11.69	9.97	10.80	2.46	...	0.16	41.30	
Sarun	.....	0.96	1.05	0.39	0.49	1.80	7.45	10.21	10.14	11.75	3.82	0.03	0.63	46.76	
	Sudder ... ..	0.30	0.26	0.51	0.79	1.18	8.02	16.11	9.00	12.14	1.79	...	0.10	50.20	
Dur- bhanga.	Mudhoobunnee ... ..	...	...	...	1.35	1.75	8.40	11.36	7.83	14.49	2.19	...	0.01	47.38	
	Tajpore ... ..	1.06	0.20	0.60	0.79	1.19	7.33	11.60	7.32	10.20	1.41	...	0.03	41.73	
Chum- parun.	.....	0.60	0.34	1.50	0.45	2.98	8.35	11.75	10.39	11.93	8.16	...	0.35	56.80	
	Sudder ... ..	0.42	0.63	0.53	0.42	1.54	6.26	11.11	8.19	7.97	3.71	0.05	...	40.83	
Mon- etyr.	Begoo Serai ... ..	0.66	0.85	0.26	0.53	1.90	5.08	10.81	9.45	7.90	4.19	0.02	0.01	41.66	
	Jamooce ... ..	...	0.94	0.48	1.26	1.94	6.86	13.55	10.54	7.67	2.50	...	0.02	45.76	
Bhagul- pore.	Bhagulpore ... ..	0.42	0.46	0.43	1.17	1.91	7.26	10.66	8.08	7.41	4.77	0.04	0.09	42.70	
	Muddehpooora ... ..	0.50	0.92	0.48	1.84	3.40	7.65	12.59	9.66	12.40	7.29	...	...	56.73	
	Banka ... ..	0.62	1.24	1.35	0.55	6.68	6.60	11.18	7.97	11.27	3.72	...	...	51.18	
	Soopool ... ..	0.33	...	...	...	3.80	7.57	18.49	13.52	12.82	3.07	...	...	59.60	
Fur- nach.	Sudder ... ..	0.39	0.65	0.31	2.45	1.57	12.17	15.64	13.35	15.94	4.41	...	0.07	66.95	
	Sonthal Per- gunnahs.	Nya Doomka ... ..	0.09	0.94	0.97	1.02	3.36	8.86	14.39	12.27	10.75	3.27	0.01	0.04	65.97
Dinag- pore.	Deoghur ... ..	0.18	0.90	0.81	1.03	2.28	6.92	12.51	9.65	8.90	5.97	...	0.02	49.17	
	Rajmehal ... ..	...	0.44	0.62	0.91	1.55	8.14	10.56	7.94	14.12	3.48	0.40	0.04	48.20	
Mal- dah.	Sudder ... ..	0.20	0.73	0.80	2.52	7.28	19.35	16.90	13.71	13.23	6.36	0.16	0.04	81.28	
	Sudder ... ..	0.74	1.41	1.47	1.79	3.19	8.72	10.35	9.12	10.88	4.93	0.20	0.44	53.24	
RAJSHAHYE.	Moorshed- abad.	Sudder ... ..	0.35	0.94	1.07	2.20	3.97	9.51	10.17	9.52	9.45	6.04	0.18	0.09	53.49
		City Moorshedabad ... ..	0.28	1.21	0.67	0.97	2.88	9.97	8.81	9.37	10.76	5.14	0.04	...	50.10
	Jungypore ... ..	0.29	1.24	0.79	1.69	4.14	9.52	11.32	9.53	10.07	6.21	0.07	0.02	55.89	
	Raj- shahye.	Sudder ... ..	0.17	1.26	1.23	2.10	5.25	10.00	12.23	9.40	11.00	5.04	0.28	0.05	59.37
Natore ... ..		0.60	1.10	0.61	2.53	5.62	9.87	12.00	10.57	13.00	5.41	0.03	0.02	61.46	

Statement showing the average monthly rainfall at Sub-divisional Head-quarters in each District of the Lieutenant-Governorship of Bengal.—(Continued.)

DIVISION.	DISTRICT.	SUB-DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.	
RAJSHAHYE.—(Contd.)	Rungpore.	Sudder ... ..	0.36	0.35	0.99	3.24	9.34	22.58	17.86	12.90	12.23	5.30	0.28	0.13	85.56	
		Bhowanigunge ... ..	0.27	0.32	1.28	3.80	4.81	15.19	13.84	7.71	14.82	4.91	...	0.18	87.13	
	Bogra	Sudder ... ..	0.48	1.25	0.81	4.73	8.92	16.31	18.41	12.03	14.72	5.72	1.15	0.10	84.63	
		Pubna. ... ..	0.34	1.19	1.43	5.52	7.87	12.52	11.86	11.02	12.03	4.91	0.49	0.02	69.20	
	Burdwan.	Sudder ... ..	...	0.54	1.12	1.47	2.13	4.04	10.66	12.54	11.71	8.40	5.70	0.42	0.48	59.21
			Cutwa ... ..	0.49	1.72	1.39	1.19	4.26	10.23	9.34	12.90	8.01	4.29	0.05	0.01	53.88
			Culina ... ..	0.30	1.48	1.13	1.99	3.90	9.27	10.41	12.21	5.92	4.71	0.19	0.24	51.75
			Bood-Bood ... ..	0.28	1.28	1.59	1.23	3.11	9.45	11.34	13.00	7.15	5.01	0.19	0.08	53.71
			Raneegunge ... ..	0.35	0.80	0.97	0.98	2.36	9.38	12.94	11.63	8.31	3.56	0.32	...	51.57
			Jehanabad ... ..	...	...	...	...	4.12	8.68	10.05	12.93	10.46	6.43	...	0.12	62.73
BUDDWAN.	Ban-koora.	Sudder ... ..	0.42	0.93	1.59	1.85	3.00	9.55	11.92	10.40	7.75	4.45	0.18	0.07	52.11	
		Beer-ghoom.	Sudder ... ..	0.41	0.92	0.81	0.81	2.48	8.40	13.03	12.34	9.33	4.41	0.13	0.14	53.21
	Mid-nayore.	Sudder ... ..	0.80	0.54	1.79	1.50	5.42	11.34	10.94	10.95	8.91	6.98	0.50	...	59.67	
		Tumlook ... ..	0.34	2.27	3.68	2.94	4.06	7.77	12.04	10.07	7.60	7.13	0.06	0.28	58.23	
		Gurbetta ... ..	...	...	1.89	2.25	2.92	7.42	13.42	9.70	9.34	2.78	0.87	0.14	50.73	
		Contai ... ..	0.41	1.50	1.07	1.88	4.13	12.54	11.90	12.63	12.89	13.39	1.67	0.17	74.23	
	Hooghly.	Sudder ... ..	0.64	1.78	2.38	3.86	5.33	10.77	12.76	12.28	8.54	4.20	0.48	0.17	63.19	
		Serampore... ..	...	...	...	2.88	3.94	9.02	12.11	10.28	7.35	6.29	0.16	0.38	52.41	
	Howrah.	Sudder ... ..	0.42	1.77	3.02	2.42	3.73	13.56	12.14	12.24	10.70	5.43	0.40	0.13	65.96	
		24-Pergunnahs.	Sudder ... ..	0.24	1.74	2.04	2.11	4.60	11.81	11.93	11.99	9.11	7.07	0.36	0.12	63.12
Busseerhat ... ..	0.17		1.16	1.76	2.39	4.33	9.81	11.44	10.75	7.07	4.23	0.48	0.04	53.63		
Baraset ... ..	0.23		1.51	1.98	1.99	3.60	9.06	10.78	10.48	7.43	5.39	0.49	0.11	53.05		
Diamond Harbour ... ..	0.21		1.49	2.02	4.05	4.04	10.82	12.88	12.87	10.08	7.99	0.63	0.02	67.10		
Barrapore ... ..	0.10		1.01	1.21	3.12	6.25	10.35	12.87	13.11	8.58	7.59	1.91	0.01	66.11		
Satkhira ... ..	0.17		1.33	2.43	2.64	5.18	11.93	8.15	9.64	7.76	4.47	0.64	0.44	54.83		
Barrackpore ... ..	0.28		1.79	1.98	2.12	3.99	12.91	10.73	8.84	6.60	4.02	1.08	0.36	54.75		
Dum-Dum ... ..	0.18		1.14	2.13	2.43	5.32	9.14	11.33	9.70	9.01	5.42	0.12	0.16	56.08		
PRESIDENCY.	Nuddesa.	Sudder ... ..	0.51	1.11	0.87	3.82	6.98	10.66	9.72	9.43	7.40	4.50	0.31	0.14	55.45	
		Bongong ... ..	0.17	1.15	1.72	2.34	4.13	9.81	8.58	11.05	7.08	5.17	0.09	0.32	51.69	
		Meherpore ... ..	0.28	1.08	1.71	1.93	3.73	9.42	12.02	10.69	7.43	3.37	0.04	...	51.70	
		Choodangah ... ..	0.23	1.11	1.41	2.81	6.83	9.09	10.14	10.42	8.54	4.38	0.06	...	53.02	
		Kooshtea ... ..	0.26	0.87	1.29	2.03	5.66	9.62	10.29	8.34	9.29	3.96	0.05	0.07	52.53	
		Kanaghat ... ..	0.71	1.12	0.63	2.70	4.18	10.06	7.57	10.72	6.01	3.54	0.30	0.10	47.64	
	Jessore.	Sudder ... ..	0.35	0.64	1.72	4.09	6.90	12.88	10.44	11.09	9.12	6.03	0.70	0.06	64.03	
		Narail ... ..	...	...	...	4.07	8.09	11.35	9.87	11.57	8.45	3.67	0.02	0.20	57.29	
		Khoolna ... ..	...	...	2.25	3.03	5.05	12.61	11.16	12.00	9.21	6.40	0.15	0.16	60.61	
		Jhenidah ... ..	...	...	...	3.28	6.52	15.64	9.61	12.00	8.79	6.24	...	0.12	62.20	
Darjeeling.	Bagirhat ... ..	...	...	...	...	6.02	14.08	12.54	10.40	8.58	4.64	0.14	0.22	57.28		
	Mangorah ... ..	...	...	...	...	5.62	9.24	8.14	6.70	8.58	4.63	0.19	...	43.00		
COOCH BEHAR.	Darjeeling.	Darjeeling ... ..	0.50	1.27	1.60	4.38	6.42	26.53	28.19	25.07	17.73	8.45	0.20	0.10	121.34	
		Julpigore.	Sudder ... ..	0.50	0.30	2.03	4.66	8.59	20.01	25.86	24.05	27.31	7.98	0.02	0.02	131.03
Buxa ... ..	0.50		1.00	1.57	7.33	19.72	50.01	61.30	45.08	37.34	12.76	0.61	0.49	238.90		



Statement showing the average monthly rainfall at Sub-divisional Head-quarters in each District of the Lieutenant-Governorship of Bengal.—(Continued.)

DIVISION.	DISTRICT.	SUB-DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
CHOTA NAGPORE.	Haza-reebagh.	Sudder ... ..	0·31	0·71	0·70	0·44	1·14	8·12	14·32	14·13	8·57	3·69	0·21	0·06	52·40
		Pachumba ... ..	0·10	0·89	0·70	1·65	2·08	7·76	13·24	11·25	8·65	3·40	0·05	0·06	40·92
	Lohar-dugga.	Sudder ... ..	0·85	1·05	1·56	0·59	1·46	7·03	10·81	10·31	7·39	3·35	0·12	0·09	44·61
		Palamow ... ..	0·55	0·61	0·66	0·26	0·56	8·93	14·87	12·21	8·92	2·79	0·02	0·29	50·67
	Sing-bhoom.	Sudder ... ..	0·62	0·92	1·58	1·18	2·43	7·48	11·99	11·43	10·28	4·13	0·19	0·16	52·29
	Man-bhoom.	Sudder ... ..	0·42	0·79	0·83	0·95	1·25	8·79	9·37	10·85	7·08	4·33	0·09	0·18	44·83
ORISSA.	Cut-ract.	Sudder ... ..	0·51	0·56	1·10	1·55	1·93	9·90	11·50	11·21	9·04	6·35	1·10	0·56	55·31
		Jajpore ... ..	0·22	0·67	0·50	1·84	3·30	12·20	16·11	10·14	9·28	7·62	0·60	0·46	62·94
		Kendraparah ... ..	0·32	0·30	0·45	1·71	3·82	10·27	10·62	12·17	6·70	8·62	1·98	0·02	56·08
	Poo-ree.	Sudder ... ..	0·12	1·21	0·85	1·43	2·27	8·60	9·35	12·31	9·15	8·18	1·98	0·76	56·01
		Khoordah ... ..	0·13	0·74	0·80	1·60	1·90	12·93	13·41	12·96	9·78	9·09	2·26	0·16	65·79
	Bala-sore.	Sudder ... ..	0·90	1·29	1·66	2·69	4·19	11·06	9·90	11·89	12·94	7·71	0·84	0·13	65·20
Bhuddruck ... ..		0·45	1·40	0·47	2·01	4·52	7·80	11·28	9·50	8·56	4·57	1·43	0·03	52·02	
Cuttack Tri-butary Mehals.	Sumbulpore ... ..	0·53	0·46	0·62	0·29	1·02	10·51	14·88	12·68	7·12	4·03	0·06	0·09	52·29	
DACCA.	Dacca	Dacca ... ..	0·56	0·78	1·56	6·61	9·71	12·90	12·93	12·05	8·67	5·35	0·76	0·04	71·92
		Sudder ... ..	0·58	1·46	2·04	6·69	10·58	13·69	11·90	11·42	9·62	4·52	0·46	0·01	72·97
	Fureed-pore.	Madaripore ... ..	0·47	1·11	2·40	4·28	12·47	11·76	13·40	10·63	8·85	6·01	0·09	0·03	71·50
		Sudder ... ..	0·58	1·46	2·04	6·69	10·58	13·69	11·90	11·42	9·62	4·52	0·46	0·01	72·97
	Baker-gunge.	Burrisal ... ..	0·47	1·23	1·44	2·89	7·03	11·50	15·24	13·14	11·01	5·27	0·29	0·23	69·74
		Perozepore ... ..	0·27	1·33	1·58	2·04	6·38	13·77	13·01	11·77	10·03	5·53	0·46	0·11	66·13
Dowlutkhan	Sudder ... ..	0·23	1·22	1·31	2·92	8·68	16·61	21·94	21·02	11·96	7·26	0·19	0·20	83·94	
	Sudder ... ..	0·47	1·23	1·44	2·89	7·03	11·50	15·24	13·14	11·01	5·27	0·29	0·23	69·74	
Mymen-singh.	Jumalporo ... ..	0·25	1·58	0·72	4·12	7·75	14·96	13·50	12·92	15·07	4·32	0·03	0·21	75·43	
	Atia ... ..	0·17	1·37	2·19	4·16	5·98	16·46	10·43	9·68	12·82	6·18	0·04	0·04	69·43	
Kishoregunge	Sudder ... ..	0·56	1·27	2·93	4·67	9·44	19·81	15·16	11·07	16·76	7·03	0·18	0·63	89·51	
Tippo-rah.	Sudder ... ..	0·60	0·95	2·32	7·60	11·53	18·44	16·69	14·31	10·12	6·64	1·43	0·11	90·74	
	Brahmunberiah ... ..	0·69	1·43	6·03	5·03	11·72	13·25	11·68	10·73	12·30	5·32	0·02	0·09	73·29	
Chitta-gong.	Sudder ... ..	0·28	1·31	1·32	4·84	9·05	22·14	21·33	20·01	13·09	6·85	1·68	0·47	103·27	
	Cox's Bazar ... ..	0·34	0·21	1·76	3·00	13·29	35·05	37·77	23·62	14·97	10·81	0·69	0·33	141·72	
CHITTAGONG.	Chittagong Hill Tracts. Kholly.	Sudder ... ..	0·35	0·79	1·91	4·21	9·09	21·34	17·82	20·72	15·95	8·58	1·42	0·12	102·90
		Rungamuttee Hill	0·18	0·94	1·86	5·32	10·82	15·76	17·00	15·81	11·46	9·42	0·85	0·29	80·71







## APPENDIX III.

*Outturn of Paddy (unhusked rice) in standard maunds per acre, extracted from a "Note on Rice Statistics," compiled by Lieut. Otley, R.E., of the Irrigation Department.*

29. Outturn of paddy in maunds per acre.

*Pooree.*—Winter rice 13 maunds, early rice 13 maunds, spring rice 10 maunds. Dr. Hunter states that 50 maunds of paddy per acre is a good yield from first class land, the rent for which would be Rs. 4-12, but that the average from fair land may be put down at 28 to 36 maunds of paddy per acre.

*Cuttack.*—The ordinary outturn of ordinary rice land is 12 maunds and a favorable outturn for the third classes of land is 20, 15, and 8 maunds respectively. Dr. Hunter states that *early rice land*, paying a rent of about Rs. 3, gives an outturn of 14 maunds of paddy, and *winter rice land*, paying about the same rent, will give an outturn of 27 maunds of paddy.

Colonel Haig after detailing a number of estimates made in 1872, concludes thus :—"Taking  $12\frac{1}{2}$  maunds as the average yield (for ten years) of the higher and more sandy soils and  $18\frac{1}{2}$  (the ryots' estimate) for the low lands, the mean would be 15 maunds, which just agrees with the Embankment Committee's estimate."

Colonel Haig also mentions having seen fields in 1872 (a favorable year), with the following estimated outturns :—On high land  $16\frac{1}{2}$  maunds, on low lands  $32\frac{1}{2}$  maunds, and these he considered very near, if not quite, full crops. Mr. Toynbee's experiments in 1871 showed that "the average outturn of an acre of ordinary *sarud* rice land in Orissa in a good year was about 15 Calcutta maunds."

*Balasore.*—The outturn is as follows :—Early rice 12 maunds ; winter rice 18 maunds ; whilst in the fine plain of Salsapat, 40 square miles in extent, the outturn is 32 maunds. Dr. Hunter says that good land, at a rent of Rs. 3 per acre, yields from 17 to 21 maunds of paddy, and poor land, at a rent of Re. 1-8, yields from 9 to  $11\frac{1}{2}$  maunds of paddy.

*Midnapore.*—The average outturn for the upper alluvial plains is from 21 to 24 maunds, and in Hidgellee on the coast 36 maunds. Mr. Anderson, of Messrs. Watson and Company, says—"Aval shali, or the best land near the bunds, give ordinarily 40 maunds : in a very exceptional year they may give 48 maunds ; *doem shali*, or 2nd class lands, will give 33 to 36 maunds ; *soem shali*, or 3rd class lands, will give 18 to 30 maunds ; early rice land will also give about 18 to 30 maunds." Mr. Apjohn took the average outturn at from 24 to 36, according to quality of the soil. The maximum outturn ever known of the best lands in Hidgellee is stated at 54 maunds. Baboo Jodoo Nath Mookerjee estimates the average outturn at under 18 maunds per acre.

*Hooghly.*—The ordinary outturn is 24 to 30 maunds, the maximum outturn varying according to the part of the district from 24 to 48 maunds.

*Howrah.*—The average is 15 maunds and the maximum 18 maunds.

*24-Pergunnahs.*—The average is 15 to 27 maunds according to the quality of the soil. The maximum ever known was 48 maunds.

*Jessore.*—Winter rice 19 maunds ; early rice 13 maunds ; the maximum for the whole district is 40 maunds, but this is rarely attained : the country to the north-east only gives a maximum of 24 maunds.

Baboo Ramshunker Sen gives the average produce of rice land in the Jhenidah and Magoorah sub-divisions of Jessore at 27 maunds per acre, the average rent for such land being about Rs. 2-11-6 per acre.

In the Baghat sub-division the average produce is given as 30 to 39 maunds of paddy per acre, the rent for which ranges from Rs. 2-4 to Rs. 3-12. In another place he states "the ordinary produce of *boro* is 11 maunds, of *raida* 4 maunds, of *aous* 6 maunds, and of *amun* 13 maunds per standard beegah (one-third of an acre)."

*Nuddea.*—Average outturn 20 maunds of paddy per acre ; maximum 45 maunds.

In Colonel Searle's report the following averages are given :—By Collectors 23 maunds ; by sub-divisional officers 14 maunds ; by zemindars 15 maunds.

*Burdwan*.—Average outturn 15 to 24 maunds per acre ; maximum 27 maunds.

*Beerbhoom*.—Average outturn of the best rice lands 25 maunds, of the next best 20 maunds, and for the third 10 maunds. In a favorable year the maximum outturn would be respectively 27, 22, and 12 maunds.

*Bankoora*.—The ordinary outturn is 33 maunds ; the maximum about 38 maunds.

*Pubna*.—The ordinary outturn per acre of first rate rice land is 45 maunds, that of second rate land 24 to 27, and of third rate land 15 to 18 maunds.

*Maldah*.—The ordinary outturn of paddy per acre is 36 to 39 maunds ; the maximum 48 maunds.

*Dinagpore*.—An ordinary outturn of paddy from an acre of ordinary rice land may be stated to be from 15 to 18 maunds.

*Rungpore*.—Average outturn 25 to 30 maunds per acre ; maximum about 40 maunds.

*Rajshahye*.—From 27 to 33 maunds. The result of a very favorable season is 30 maunds of *aus*, 36 to 39 of *amun*, and 45 to 48 of *boro*.

*Patna*.—In the sudder division and sub-division of Behar the average outturn is from 10 to 13 maunds of paddy. In the west of the district from 8 to 10 maunds. The maximum known outturn is about 30 maunds.

*Gya*.—In the sudder division from 16 to 19 maunds, Shergotty 11 to 12 maunds, and Aurungabad 13 to 16 maunds. Maximum outturn 40 maunds.

*Shahabad*.—Average outturn from 16 to 24 maunds of paddy.

The average of 21 answers from zemindars to a circular issued by Mr. Levinge, the Engineer in charge of the Soane Irrigation Works, gives the average outturn at 12·9 maunds per acre ; Messrs. Burrows, Thomson and Mylne, of Behea, giving the outturn at 16 maunds ; Mr. Charles Fox, of Behea, giving it at 13 maunds, and Mr. Mackenzie, of Dehree Ghât, giving it at from 9½ to 16 maunds. Captain Heywood states the average at 14 maunds of paddy, or 9 maunds of rice.

*Tirhoot*.—The average is given as follows for different localities :—Sudder division 19, Hajipore 12½, Tajpore 15, Durbhunga 19, Mudhoobunnee 25, Seeta-murhee 19 ; maximum known 37 maunds.

*Sarun*.—The average outturn of paddy is about 19 maunds per acre.