EFFECTS OF PUBLIC LAW 480 PROGRAMS IN COLOMBIA: 1955-62

A progress report to the Economic Research Service of the United States Department of Agriculture, under Contract No. 12-17-0017-52, Project No. 11252-21

by

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UNIVERSIDAD NACIONAL DE COLOMBIA

Medellin-Colombia
October 1962

A brief summary of the findings and conclusions of this report will be found in chapter X, beginning on page 162

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This report was prepared for the Economic Research Service and the Foreign Agricultural Service of the United States Department of Agriculture under contract with the Michigan State University in cooperation with Universidad Nacional de Colombia. It is an independent study, and is published in the form in which it was submitted. The views expressed herein are those of the contractor and do not necessarily reflect those of the United States Department of Agriculture.

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This progress report under Contract No. 12-17-10017-52 between the Michigan State University Department of Agricultural Economics and the Economic Research Service of the U.S. Department of Agriculture would have been impossible without major contributions from many individuals other than the two authors who are committed to accepting responsibility for the findings.

In a sense, this research began in mid-1960 in East Lansing when Lawrence Witt and James Goering began discussing plans for the latter to spend some 14 months in Colombia, working under cooperative relations with the Facultad de Agronomía at Palmira and with financial support from a Ford Foundation grant to Michigan State University. This assignment produced a doctoral thesis entitled "United States Agricultural Surplus Disposal in Colombia", and a Michigan Agricultural Experiment Station bulletin with the same title, now in the process of publication.

These exploratory efforts by Dr. Goering, now assistant professor of agricultural economics at the University of California, working with the guidance and collaboration of Dr. Witt, led to a request that Michigan State University pursue further studies of the P.L. 480 program in Colombia, both with respect to an appraisal of current performance, and more especially with respect to the evaluation of future alternatives. At this stage, Richard Wheeler arrived in Medellin, Colombia, to continue Michigan State University's 10-year effort toward assisting the National University's Facultades de Agronomía at Medellin and Palmira in strengthening their programs of teaching, research, and extension. He found a willingness on the part of Dean Carlos Garcés and the Departamento de Economia y Ciencias Sociales to continue the pattern of cooperative research undertakings which had been established earlier while Garland Wood had been stationed with the Medellín Facultad. Thus, a contract contemplating a joint research effort involving Michigan State University, the Universidad Nacional de Colombia, and other Colombian institutions was signed in May 1962 after negotiations which involved Raymond Christensen and Frank Barlowe of the U.S.D.A. Economic Research Service.

The first draft of this progress report was prepared in July and August of 1962 by Dr. Witt, during the course of a visit to Colombia. He made liberal use of the materials assembled by Dr. Goering, but was able to include new data,

substitute revised series to take account of changes in the official statistics, and develop several areas not covered by Dr. Goering's report. Modifications were made in this draft with substantial assistance from Professor Francisco J. Ortega A., economist at the Centro de Estudios sobre Desarrollo Económico of the Universidad de los Andes in Bogotá, and from Professor Guillermo A. Guerra E., of the Departamento de Economía y Ciencias Sociales at the Facultad de Agronomía in Medellín. Additional changes resulted from the final editing and re-writing of certain sections by Dr. Wheeler.

Numerous other persons have assisted in providing data, insights and hypotheses. Many who were interviewed by Dr. Goering and Dr. Witt are listed in specific footnotes; others who made general as well as specific contributions include Dr. Henery Hopp, U.S. Agricultural Attaché in Colombia; Mr. Richard Smith, Assistant Agricultural Attaché; Dr. Wallace Atherton of the Universidad de los Andes; Dr. Antonio Posada of the Corporacion Autonoma Regional del Valle del Cauca, formerly a member of the Colombia Planning Commission; Dr. Enrique Latorre and Dr. Camilo Jaramillo of the Banco de la República; and Dr. Alfredo Vélez of the Instituto National de Abastecimientos.

Dean Garcés is due special thanks for the working facilities and pleasant environment provided for the study in Medellín. Mrs Cande Rodriquez and Eric Witt worked diligently to produce the preliminary drafts within a limited time schedule, while Mrs. Rosita de Silva and Miss Aura Alvarez produced the final report from what was sometimes a difficult copy.

Medellín, Colombia — Lawrence W. Witt

October 1962 — Richard G. Wheeler

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Chapter I.

INTRODUCTION

Historically, Colombia has been an important market for United States agricultural products. Receipts from the sale of coffee have financed the purchase of a wide range of industrial and agricultural commodities. The major farm commodities imported have been cotton, barley, malt, wheat, flour, vegetable oils, and animal fats and oils. In 1955, Colombia was the fifth largest Latin American importer of U.S. farm products. The special export programs under P.L. 480 have helped to maintain exports to Colombia at high levels. Between 1955 and December 1961, U.S. agricultural commodities with some 77 million dollars (export value) moved to Colombia under Titles I and III of P.L. 480. After the programs in Brazil and Chile, this is the largest in Latin America—though small relative to the programs in India and Pakistan.

The purpose of this report

This report attempts to evaluate the effects to date of special agricultural imports upon the Colombian economy. Substantial emphasis is given to the recent effects of the program upon Colombian agricultural production and agricultural policy. Also of much importance in this report are the effects upon consumers and consumer prices. The latter effects have resulted partly from changes in price policy and partly from increased availabilities of processed food and fiber products. Other areas of concern are foreign trade patterns, the balance of payments, and the relation of local currency uses to inflation and the pattern of economic development. Further research under this study will provide a basis for a subsequent report on the prospective developments and alternatives.

Procedures

The operation and functioning of the programs encompassed under P.L. 480 have impacts upon various sectors of the economy. These effects will differ with local customs and economic practices, as well as with price, production, credit and monetary policies. Moreover, changes in these policies take place from time to time to adjust to the current problems and situations. Inevitably, judgements are required as to the nature of those policies that would have prevailed in the absence of the P.L. 480 imports.

Specifically, certain hypotheses will be presented which appear to be relevant to the Colombian economy. These will be tested against appropriate data, results of other studies, and for consistency within the study. Where appropriate, judgements as to the probable policy alternatives in the absence of the P.L. 480 program will be made and so indicated.

Colombian statistics have been improving in recent years, yet they do not provide long series of data which are consistent over time. Even import-export data present problems of under-enumeration of some products and for some periods of time, but this is a minor concern for the principal P.L. 480 commodities. More serious are the limitations of data on prices, production and consumption--basic to the studies of demand and supply elasticities. Pending the completion of a major study of food consumption now in process at the Universidad de Los Andes under a contract with the Foreign Agricultural Service, USDA, and an improvement in the statistical reliability of other data, primary attention will be given to qualitative rather than quantitative estimates. In most areas of analysis, moreover, the size of the P.L. 480 program is too small relative to the total economy to warrant quantitative estimates; the effects may be smaller than the year to year statistical errors in the data analyzed.

Size and nature of Title I programs.

Colombia was an early participant in P.L. 480 programs, the first agreement having being signed June 23, 1955. Colombian interest in the program was heightened by the downturn in world coffee prices and the reduction of foreign exchange earnings during the late fifties. As the P.L.480 program continued and expanded, Colombia participated substantially. Five separate Title I agreements had been signed by December 1961, and nearly all of the scheduled purchases had been completed as of July 1962. Another P.L. 480 agreement under consideration in mid-1962 offered promise of becoming the first Title IV agreement for Colombia. Additional quantities of food have entered Colombia under Title III arrangements. Meanwhile there have been no imports into Colombia under section 550 and 402 of the Mutual Security Act.

The dates and commodity composition of the five Title I agreements are shown in Table I-1. Wheat (as grain or flour) is the major product in four of the five agreements, and constitutes about half the value of all commodities programmed. Cotton is the next most important product. It appeared in the first four agreements, but was no longer required after 1959, in view of the results from Colombia's program to encourage domestic cotton production.

The third commodity group of importance is composed of fats and oils, which continue to be in relatively short supply.

The commodities actually programmed for shipment do not conform exactly with the amounts in the agreements. Small amendments have been made because of changing demand and supply conditions.

Table I-1 Quantities and values of commodities included in Title I agreements for Colombia, 1955-59

Date of agreement	Commodity	Quantity	Value: In U.S. dollars	Value: In Colombian pesos (estimated)
		(metric tons)	(millions)	(millions)
June 23, 1955	Wheat	20,000	1.6	
	Cotton	1,996	1.6	
	Edible oils	2,950	1.0	
	Dairy products	500	0.7	
	Ocean transportation	--	0.4	
	Total value		5.3	13.25
December 20, 1955	Wheat	50,000	3.4	
	Cotton	7,351	6.0	
	Edible oils	4,300	1.5	
	Ocean transportation	---	0.7	
	Total value		11.6	29.0
April 16, 1957/a	Wheat	150,000	10.8	
	Flour	26,250	3.0	
	Cotton	4,500	3.0	
	Edible oils	5,000	1.84	
	Ocean transportation	---	1.76	
	Total value		20.4	112.0
March 14, 1958	Cotton	3,910	2.8	
	Edible oils	6,800	2.5	
	Dairy products	500	0.2	
	Tobacco	500	0.5	
	Ocean transportation	---	0.45	
	Total value		6.45	45.15
October 6, 1959	Wheat	270,000	18.2	
	Flour	84,000	5.0	
	Tobacco	500	1.1	
	Soybean and/or cottonseed oil	11,000	3.4	
	Ocean trasnportation	---	3.9	
	Total value		31.6	202.24
Total for five agreements			75.35	401.64

a/ The April 16, 1957 agreement originally stipulated that 64.4 per cent of the total value (equivalent to 13.14 million dollars) would be financed with local currency and the equivalent of 7.26 million dollars would be financed by Colombia in U.S. dollars. The agreement was later amended to provide for the equivalent of 15.94 million dollars in peso financing and 4.46 million dollars in actual dollar payments.

SOURCES--The quantities and dollar values are taken from copies of the original agreements. Peso values are from E.E. Keenan, Economic Program Officer: Status of P.L. 480 Funds, 6/30/60 (Bogotá: U.S. Embassy, July 25, 1960 mimeo.), p. 1.

As Colombian cotton production expanded, the cotton import program was halted. Since March 1960, the Colombian Government has ceased ordering flour, preferring to process the wheat in domestic mills so as to enforce blending requirements more easily, to have the use of by-products for animal feeds, and to encourage local employment. No flour has been delivered since December 1961. Feed grains, on the other hand, were added to the program by agreement between the contracting parties. Some 55,000 metric tons of corn and sorghum have been purchased, somewhat more than was contemplated when the feed grain amendment was first proposed. (See Table I-2).

Imports of Title I commodities into Colombia would be expected to show some lags due to shipping time. There are several other discrepancies, but on the whole the quantities agree, and on this basis, the peso values shown in Table I-3 may be accepted as reasonably accurate. The major discrepancy is for feed grains, where Colombian figures show less corn and more sorghum, and a larger total. The Colombian estimate of Title I receipts is shown in Table I-3.

The various Title I agreements have included stipulations requiring the maintenance of commercial marketings. Beginning with the 1957 agreement, this provisión was spelled out in greater detail so as to protect commercial imports from other countries. The 1957 agreement stated:

> Commercial imports shall be (1) for each of the three U.S. fiscal years of 1957, 1958 and 1959, a minimum of 62,500 metric tons of wheat (or wheat equivalent) from all sources, of which not less than 18,000 tons of wheat and 3,150 tons of flour will be from the United States; (2) for the fiscal year of 1957, a minimum of 7,300 tons of edible oils and 5,000 bales of cotton from the United States; and (3) such quantities of the above commodities from other supplying countries as will not disrupt trading patterns. /1

1/ U.S. Department of State: Agreement with Memorandum of Understanding Between the United States of America and Colombia, in Treaties and other International Acts Series 3817 (1957) p. 7. Statements of a similar nature can be found on p. 6 of the March 14, 1958, agreement and on p. 6 of the October 6, 1959, agreement.

Table I-2. Total shipments of Title I commodities to Colombia, January 1, 1955 to December 31, 1961

Commodity	Quantity	Market value
	(thousands of metric tons)	(thousands of dollars)
Wheat	299.69	20,275
Flour	58.55	5,094
Corn	41.09	2,167
Sorghum	10.48	481
Cotton	16.89	11,930
Tobacco	.84	1,582
Dairy products	.74	258
Cottonseed oil	8.98	3,451
Soybean oil	22.28	5,999
Totals	459.54	51,237

SOURCE- USDA Foreign Agricultural Service: Title I P.L.480--Total Amounts Programmed and shipped through Dec. 31, 1961, SDS-4-62 (Washington: March 13, 1962 processed), pp. 7-8.

Table I-3. Colombian imports of Title I Commodities and estimated values, 1955-61

Commodity	Value in dollars	Quantity	Estimated peso value
	(in millions)	(in metric tons)	(in millions)
Wheat	23.7	347,976	130.1
Wheat flour	2.9	50,834	38.5
Cotton	11.6	16,827	44.2
Cigarettes	1.7	314	10.2
Fats and oils	10.0	33,193	53.8
Feed grains	3.3	54,999	22.4
Dairy products	0.3	819	2.2
Totals	53.5		301.4

SOURCE- Statistical report obtained through the courtesy of Jorge Arana, Instituto Nacional de Abastecimientos, supplemented by reports from the American Embassy in Bogotá.

One other item is of special interest. In allocating pesos to their various uses, as summarized in Table I-4 no provision has been made for peso grants to the Colombian Government. All of the pesos are designated for loans or other specific use and are flowing into these uses. Eventual repayment to the United States is expected from the agency or firm receiving the loan. Thus the Title I program in Colombia, with one exception, actually conforms to a long term lending operation at favorable interest rates, with the dollars being loaned to purchase farm products and with repayments to be made subsequently. The exception is that repayment may be either in dollars or in pesos at the choice of the Colombian Government, which can probaly be expected to pay in pesos. Since the volume in pesos is increasing, it may be a very long time before the U.S. Government is able to recover all the dollars. Assuming that U.S. legislation permits this procedure, the recovery probably will be made by spending pesos in Colombia for normal United States expenditures, thus saving the conversion of dollars to pesos which otherwise would occur. A further decrease in the value of the peso relative to the dollar would reduce the eventual amount of dollar recovery. The reduction would then become, in effect, a grant to the Colombian economy. If the dollar were devalued relative to the peso, the opposite would occur.

Table I-4. Allocation of Colombian pesos as provided in the Sales Agreements.

Item	Total allocation /a	Percentage allocation
	(thous.dol.)	(percent)
Common defense (Sec. 104-c)	80	0.1
Loans to private enterprises (Sec.104-e)	11,270	15.9
Loans to Colombian Government (Sec.104-g)	41,180	58.1
United States uses /b	18,360	25.9
Totals	70,890	100.0

a/ At the deposit rate of exchange and based on market value including ocean transportation.

b/ Includes uses under sections 104 (a),(b),(f),(h),(i),(j),(k),(l),(m),(n),(o), and (p).

SOURCE- U.S. Congress: The 14th Semiannual Report on Activities of the Food for Peace Program carried on under Public Law 480, 83rd Congress, as Amended; House Doc. 223, 87th Congress, 1st Session (Washington: 1961), p 81.

Size and nature of Title III programs

In evaluating the effects of P.L.480 upon food consumption in Colombia, Title III must be considered. The program in Colombia is one of the two largest in Latin America. This program provides aid for needy persons who are unable to purchase adequate amounts of food. The program has been of particular assistance to destitute persons fleeing rural violence and to children in schools and orphanages. Table I-5 indicates the pounds of food authorized for each of the years from 1955 through 1961 and the corresponding dollar values. The decline in value since 1958 does not reflect a reduction in the program; rather it reflects the smaller quantities of high value commodities, such as cheese. Actually, the quantity of food has increased. In the 1954-56 period, powdered nonfat milk and processed cheese made up the bulk of the distribution in Colombia. In 1956 and thereafter, wheat flour and corn meal were available. In many parts of the country, arrangements were made to process the flour into bread, and to distribute bread and reconstituted milk. Since the discontinuance of cheese shipments, wheat flour and powdered milk have been major components of the program.

The records in Colombia are not completely consistent with those shown in the semi-annual reports of P.L. 480. In any case, Table I-6 shows the substantial increase in the value and number of people affected. Over 3,200,000 persons, or approximately 25 percent of the population, are receiving help, if no allowance is made for possible duplication.

The Title III food supplies have been distributed by two organizations, CARE and CARITAS, except for 1954 - 1955 when the United Nations Children's Fund was also functioning.

Table I-5. Title III commodity donations authorized for Colombia, fiscal years 1955-61

Year	Quantity	Value
	(thous. pounds)	(thous.dol.)
1955	4,381	946
1956	13,982	3,164
1957	16,860	2,872
1958	39,816	7,378
1959	33,862	4,180
1960	25,775	2,488
1961	44,926	4,880
Totals	179,602	25,908

SOURCE-- U. S. Congress:The 14 th Semiannual Report on Activities of the Food for Peace Program Carried on Under Public Law 480. 83rd Congress, As Amended; House Doc. 223, 87th Congress, 1st Session Washington: 1961), p. 106.

Table I-6. Quantities of commodity donations under Title III in Colombia, and estimated numbers of recipients under the CARE and CARITAS programs, 1954-62 and scheduled for 1963

Fiscal Year	Quantity	Estimated recipients CARE	Estimated recipients CARITAS
	(pounds)	(number)	(number)
1954	1,377,500	226,436	-0-
1955	2,927,000	108,289	-0-
1956	7,774,411	40,000	893,370
1957	15,977,298	51,454	833,986
1958	36,948,400	512,172	600,000
1959	43,969,526	838,124	670,000
1960	45,974,934	877,875	830,000
1961	52,472,000	1,114,625	760,000
1962	95,227,000	1,344,941	1,029,082
1963(Scheduled)	140,216,000	1,621,644	1,640,000

SOURCE-- Records of the U.S. Embassy, Bogotá.

The CARE program.

The Colombian CARE program had a modest beginning in 1954 when the organization signed a contract with the Colombian government to assist in a school feeding program. Early operations were undertaken without the benefit of Title III donations. After the legislation was broadened and the program was given more impetus, operations in Colombia expanded greatly. The program now ranks as one of the largest under CARE supervision.

The Colombian CARE program is designed to fit the structure of the Colombian government-- a federal system with a high degreee of regional political autonomy. Instead of the usual country-wide distribution program which CARE uses in other countries, the agency has signed contracts with individual departments or states. The first of these was signed in 1955 with Valle del Cauca. It provided for daily distribution of 25 grams of cheese per person to occupants of hospitals, anti-tubercular centers, and welfare institutions. In addition, each of 127,000 public school children received one pound of cheese and 2 pounds of milk monthly./2

In 1957, food programs were initiated in the Bogotá area and in the departments of Caldas and Antioquia. These feeding programs have been continued to the present. They are designed to reach children in public schools, charity patients in hospitals and institutions, needy families, and pregnant and nursing mothers.

In addition to the departmental feeding programs, CARE is carrying on a country wide "Food Crusade" package program for needy families. To qualify for these packages, families must consist of five or more members with clinical evidence

2/ CARE: CARE in Colombia, (New York: April 1959, mimeo.) p.4.

of nutritional deficiencies. The order of priority is as follows:

(a) Families with pre-school children,

(b) families with children under fifteen where economic conditions do not permit an adequate diet,

(c) families with expectant mothers, and

(d) refugee families who are victims of political violence. 3/

In 1958, 60,000 packages were distributed. This was increased to 150,000 packages in 1959 and continued at the same level in 1960. 4/ The 1958 and 1959 packages contained powdered milk, wheat flour and corn meal. The 1960 packages also included tins of pre-cooked pork meat and packages of ground coffee. The coffee was donated by the Colombian Federation of Coffee Growers. The CARE food distribution program in Colombia for the years 1958-60 is summarized in Table I-7.

The geographic locations of the CARE departmental programs are among the areas of greatest need. The department of Valle del Cauca has been receiving thousands of refugees from outlying areas affected by violence. Many families are homeless and children are greatly undernourished. In Caldas, the program also finds many needy recipients. This department is the heartland of the Colombian coffee country, food prices are relatively high, and the area has been the scene of much violence.

The Bogotá school feeding program serves many slum-area children. Some are so needy that they come to the school lunch room for supplementary feeding on holidays and Sundays. The public school feeding program in Colombia reaches the lowest income groups, since parents with even very modest incomes will send their children to the better equipped, better staffed, private schools.

3/ Ibid., p. 9.

4/ CARE Mission in Colombia: CARE programs in Colombia, 1958-1960, (Bogotá: 1961), pp. 4,7, and 10.

Table I-7. CARE departmental feeding and Food Crusade programs, 1958-1960

Year	Program	Recipients	Value	Powdered milk	Wheat flour	Cheese	Corn meal	Pork
				Commodities included				
		(thousands)	(thous. dols.)	(millions of pounds)				
1958	Departmental feeding	453	4,394	8.54	2.58	5.20	--	--
	Food Crusade	59	300	.27	.30	.42	.30	--
1959	Departmental feeding	773	2,956	5.20	5.06	--	1.72	--
	Food Crusade	140	750	1.35	.75	----	1.50	--
1960	Departmental feeding /a	774	3,515	10.58	5.84	--	2.67	--
	Food Crusade/b	140	863	---	.67	--	1.83	.50
	Totals	2,319	11,878	25.94	15.20	5.62	8.02	.50

a/ Plus 500,000 pounds of rice.

b/ Plus 150,000 pounds of coffee.

SOURCE-- CARE Mission in Colombia: CARE Program in Colombia, 1958-1960 (Bogotá: 1961), pp. 2-9.

The Catholic Relief Service program

This food distribution program was initiated in Colombia in December 1955, when the Catholic Relief Service contracted with Caritas Colombiana to undertake distribution responsibilities./5 CARITAS is an official agency of the Catholic Church in Colombia, and is charged with the task of supervising and coordinating programs of social work among the Colombian people. By virtue of its affiliation with the Church, this distribution program has developed along different organizational lines than the CARE operations. From three central storage warehouses located in Cali, Barranquilla, and Bogotá, distributions are made quarterly to the 48 ecclesiastical jurisdictions of Colombia. Each jurisdiction has a program coordinator in charge of receiving and controlling the distributions of surplus commodities within his area.

Beneficiaries of the program fall into three main categories:(1) Catholic charitable institutions directed or supervised by religious communities, priests, or lay personnel; (2) official and semi-official institutions supported by the national or departmental government; and (3) needy families. The feeding program for needy families has been the most important outlet for surplus foods. It is concentrated in the larger cities having serious social problems. Many of these problems stem from the influx of refugees from areas of violence. The only large school-feeding program is in the Department of Caldas, and reaches approximately 30,000 children. The Bogotá distribution program is also significant. This cafeteria operation supplies 50,000 rolls and 50,000 portions of milk daily to needy individuals.

The managers of the CARITAS food donation program claimed to be reaching about 500,000 beneficiaries daily between 1955 and 1959. In 1960 the program was stepped up to reach nearly 600,000 recipients daily. Future plans emphasize a "deepening" of the present program through larger daily portions, instead of a significant "widening"

5/ The Catholic Relief Service is the overseas operation branch of the U.S. National Catholic Relief Service.

to reach more people, although Table I-6 suggests an increase in numbers as well.

The task of distributing commodities is under supervision of local church leaders. Much of the physical labor is done by some 6,000 lay people associated with the CARITAS program. The quantities and types of surplus foodstuffs distributed are shown in Table I-8.

Internal transportation and distribution costs of the CARITAS Catholic Relief country program are financed through Colombian sources. The Colombian government, through a direct grant to CARITAS, pays all interior freight, warehousing, and port charges. Administration expenses are met through an annual levy on each ecclesiastical jurisdiction. The levy is based on the economic status of the jurisdiction rather than on the quantities of commodities distributed to the area. Costs of the school feeding program in Caldas are met in part by a departmental apropriation to CARITAS. The Bogotá cafeteria program has been assisted by a monthly gift of 12,000 pesos from the national food procurement agency, INA (Instituto Nacional de Abastecimientos). This allotment is sufficient to meet the cost of baking the 50,000 rolls distributed daily.

Program coordination.

The two programs have many characteristics in common. The local cost of the CARITAS program is somewhat lower than the corresponding CARE program, because of the donated services provided by lay members of the Catholic church. In some cases the two operate in the same general geographical areas, but for the most part, a rough division of labor has evolved for the major operations. With the expansion in both programs so that a fifth of the total population is included, there are cases of overlap and duplication. Also there are evidences that abuses in the scheduled programs have increased with the expansion. Some Title III food has appeared in stores

Table I-8 Quantity and value of foods distributed under the CARITAS program, December 1955 to December 1961

Kind of food	December 1955 to December 1959		1960		1961	
	Quantity	Value	Quantity	Value	Quantity	Value
	(mil.lbs.)	(million pesos)	(mil.lbs.)	(million pesos)	(mil.lbs.)	(milion pesos)
Wheat flour	14.8	1.9	7.3	5.8	9.9	7.9
Corn flour	17.1	13.7	5.9	4.8	8.2	6.5
Milk	28.1	112.6	2.1	8.3	8.3	33.2
Rice	1.0	0.9	5.0	4.5	1.4	1.2
Bulgor wheat	---	---	---	---	1.1	1.1
Cheese	5.8	23.2	---	---	---	---
Fats and oils.	---	---	---	---	1.5	3.8
Totals	68.6	152.3	20.3	23.4	30.4	53.7

SOURCE- Caritas Colombiana: Bulletin Number 6.(Bogotá: November and December 1961).

and bakeries, and some has been distributed at reduced prices through local village representatives with no concept of the program objectives/6.

6/ Based on several news stories in El Tiempo, Bogotá, July 15-25, 1962; reports from consumers interviewed by workers from the Universidad de los Andes; and on several discussions with local CARE and CARITAS representatives.

Chapter II

ECONOMIC DEVELOPMENT HIGHLIGHTS

Internationally, Colombia is known as a major producer and exporter of high quality, mountain-grown coffee. In addition to coffee which constitutes some 80 per cent of exports, Colombia sells other raw materials -- petroleum, bananas, gold, and recently sugar and cotton. Despite this apparent dominance of agriculture, less than half the work force is engaged in agriculture and only a third of the national income is derived from agricultural production.

The rate of economic development, however, is related clearly to the importation of capital goods. The ability to import the tools and machinery for development depends on three principal conditions: (a) the import earnings from the sale of raw materials, (b) loans, grants, and other foreign assistance, and (c) the manner in which the government allocates the available foreign exchange. The capacity to import since 1952 is shown in Table II-1, compared with the price of coffee in New York. Despite the difficulties imposed by the adverse movement of the terms of trade, Colombia has been able to maintain a significant rate of economic development. In part this has been due to a severe and effective rationing of foreign exchange, in part to timely loans and assistance from abroad, and also to the vigorous internal efforts of the Colombian people.

The mountainous terrain and the resulting communication and transportation difficulties have hampered the economic integration of the country. While regionalism has decreased in recent years, these problems continue to limit the extent to which specialization and division of labor can occur.

Table II-1. Colombia's capacity to import as related to the export price of coffee, 1952-60

Year	Price of Manizales coffee in New York: Actual	Price of Manizales coffee in New York: Index	Index of import capacity
	(cents per pound)	(1952 = 100)	(1952 = 100)
1952	57.0	100.0	100.0
1953	60.2	105.6	132.3
1954	80.0	140.4	146.7
1955	64.6	113.3	127.0
1956	74.0	129.8	112.6
1957	63.9	112.1	103.0
1958	52.3	91.8	92.3
1959	45.2	79.3	94.2
1960	44.9	78.8	92.5

SOURCES--Food and Agricultural Organization: The World Coffee Economy, Commodity Bulletin Nº 33 (Rome: 1961)

Departamento Administrativo Nacional de Estadística: Boletín Mensual de Estadística Nº 111 (Bogotá: June 1960), p. 60.

They also make inevitable pockets of poverty which are largely outside the main stream of economic development. The centers of development are the three principal cities--Bogotá, Cali, and Medellín -- each with its own special industries and characteristic environment. The expansion of these cities through migration, and their interaction with other cities and with the surrounding countryside, are integral parts of Colombia's development.

The rate of economic development

The gross national product of Colombia has increased from 7,860 million pesos in 1950 to 26,418 million in 1960. (Table II-2). These figures, however, include a substantial degree of price inflation. The growth in gross national product in real terms was nearly 60 percent, as shown in Table II-3. These data indicate that in each of the last ten years there has been an increase in gross national product. There was also an increase of 208 pesos in real income per capita between 1950 and 1960, with small declines only in 1957 and 1958. An even more striking testimonial to the vigor of the Colombian economy is that the 1955 to 1961 achievements in aggregate and per-capita incomes were recorded despite depressed coffee prices, reduced quantities of coffee exports and difficult foreign exchange problems.

The rate of economic growth was higher in the first half of the decade, averaging 2.5 percent per year for 1950-55 on a per-capita basis, compared with 0.1 percent for 1955-59. An increase of 2.5 percent was realized in both 1959 and 1960, however, in contrast to the virtual stagnation, on a per-capita basis, for the years 1956-58. A higher rate of international aid for the years after 1958 (See Chapter VII) assisted in countering the decline in export revenues, but at least as important were the efforts of the Colombian Government and private sectors to adjust to and overcome the limitations of reduced exchange earnings.

Table II-2 Gross national product and national income, at current prices, 1950 - 1960

Year	Gross national product /a	National income
	(million pesos)	(million pesos)
1950	7,860	6,837
1951	8,941	7,658
1952	9,651	8,276
1953	10,735	9,212
1954	12,759	10,935
1955	13,250	11,246
1956	14,863	12,658
1957	17,811	14,797
1958	20,683	16,459
1959	23,472	19,082
1960	26,418	21,822

a/Net of payments abroad for factors of production.

SOURCE- Banco de la República, Departamento de Investigaciones Económicas: Cuentas Nacionales 1950-1960 (Bogotá:1962 mimeo.), pp.1-2.

Table II-3. Gross and per-capita national product at 1958 prices.

Year	Gross national product	Per-capita product
	(million pesos)	(pesos)
1950	14,689	1,322
1951	15,147	1,322
1952	16,102	1,363
1953	17,081	1,402
1954	18,262	1,454
1955	18,976	1,466
1956	19,746	1,481
1957	20,186	1,469
1958	20,682	1,459
1959	22,129	1,514
1960	23,042	1,530
Average annual rates of change:	(percent)	(percent)
1950-1954	6.1	2.5
1955-1958	0.3	0.1
1959-1960	5.7	2.5
1950-1959	5.7	1.6

SOURCE-- Banco de la República, Departamento de Investigaciones Económicas: Cuentas Nacionales, 1950-1960 (Bogotá: 1962 mimeo.), p. 12. Population data from Table II-4 were used in calculating per-capita product.

Population

The 1962 population of Colombia is estimated at 16 million people. The rate of population growth has been increasing, from about 2.2 percent during the period between 1938 and 1951 to the present annual rate of about 2.8 percent. A strong rural-urban migration has added to the problems faced by the cities in providing jobs and living facilities. It has also presented agriculture with more difficulties in providing the farm products needed in urban centers. In 1951, about 38.5 percent of the people lived in urban areas; by 1962 this had increased to over 47 percent (Table II-4). This shift resulted from both push and pull effects--the pull of improved economic and cultural opportunities in the urban areas, and the push of civil unrest and occasional violence in rural areas. The urban growth is expected to continue, helping to make Colombia one of the more urbanized countries in South America.

This rapid growth of population requires a higher rate of aggregate development in order to maintain per-capita incomes. The existing social overhead capital is already strained to capacity in many areas. Substantial additions are being made to educational facilities, partly to take care of the sheer increase in the number of youngsters of school age, and partly to permit a larger percentage of these children to be educated, thus upgrading the educational level of the Colombian people. In many other areas too, facilities are being expanded--electricity, transportation, water, sewage, housing and so on.

The population increase is also pressing hard against the productivity of Colombian agriculture. Though production of some commodities has increased, the increase in aggregate production of farm products has failed to keep pace with the growth in population.

Table II-4. Population of Colombia and distribution by rural and urban sectors, with projections, 1951 to 1975.

Year	Total population (thousands)	Urban (percent)	Rural (percent)
1951	11,459	38.5	61.5
1952	11,814	39.2	60.8
1953	12,180	40.0	60.0
1954	12,557	40.7	59.3
1955	12,946	41.5	58.5
1956	13,334	42.2	57.8
1957	13,747	43.0	57.0
1958	14,173	43.8	56.2
1959	14,612	44.6	55.4
1960	15,065	45.5	54.5
1961	15,546	46.3	53.7
1962	16,028	47.3	52.7
1963	16,525	48.2	51.8
1964	17,037	49.1	50.9
1965	17,565	50.1	49.0
1966	18,129	51.0	49.0
1967	18,709	51.9	48.1
1968	19,308	52.8	47.2
1969	19,926	53.8	46.2
1970	20,564	54.8	45.2
1971	21,235	55.9	44.1
1972	21,914	57.0	43.0
1973	22,409	58.7	41.3
1974	23,126	59.8	40.2
1975	24,039	60.5	39.5

SOURCE- Rafael Prieto D. and Francisco J. Ortega A.: Colombia-Proyecciones de Población y Métodos Empleados 1951-75, Resumen (Bogotá: Universidad de los Andes, Centro de Estudios sobre Desarrollo Económico, Nov. 1961. mimeo.) Tables 4 and 5.

Two implications of these trends are relevant to this study. The first is the development challenge of finding and creating jobs in the cities for the combination of rural migrants and new entrants into the labor force. The proportion of the labor force and national income related to agriculture will probably continue to decline. In absolute terms, however, agriculture will need to send much more food to the cities -- partly by marketing the quantities formerly consumed on the farm by recent migrants, and partly by producing and marketing additional supplies for a growing total population. The second challenge, then, is for the farm sector to produce a larger total output with a relatively or even absolutely smaller work force.

Agricultural development

Agricultural employment has declined from about 54 percent of the country's active population in 1951 to 49 percent in 1959. Similarly, agricultural output has declined as a proportion of gross national product --from 40 percent in 1950 to 35 percent in 1960. Such changes are to be expected in a country undergoing vigorous development, but one may question whether or not agriculture is contributing as much as it should to total development. This is especially true since the slow growth in total agricultural production has occurred despite relatively favorable price policies (see Chapter III) plus protection against competing imports.

In the 1953-59 period, the output of Colombian industry increased 66 percent, while population increased 20 percent. In contrast, agricultural production increased 14 percent. Consequently, per-capita agricultural production appears to have fallen three percent in the period between 1947 and 1956-58, with the per-capita production of basic foodstuffs declining by 13 percent. The production of sugar, rice, barley, cotton, tobacco, and rubber, however, rose more rapidly than population.

One must be careful in generalizing from aggregate data which are subject to substantial statistical errors. It is not easy to estimate the production of individual commodities, nor to combine these totals into measures or indexes of total output. Also the count of workers in agriculture may include some whose time is partly or wholly occupied with the kinds of non-agricultural employments that are available to many living in rural areas (in towns with less than 2,500 inhabitants as well as in the open country). There is a reason to expect that rural people are, and will be, working more and more at jobs outside of agriculture, as the nation becomes more industrialized. Virtual unemployment, moreover, is easily concealed in rural areas.

Despite these considerations, productivity per agricultural worker is clearly low. Some of the problem has been attributed to defects in agrarian structures--a fact that has led to the current program for land reform. But lagging production is also fostered by low technological levels, marketing difficulties, and a shortage of capital (both physical and human). Specific instances have demonstrated that substantial progress can be made with a combination of technical assistance, adequate credit, favorable prices, and the availability of such non-farm inputs as sprays and fertilizers.

A United Nations study estimates that each agricultural worker contributed 1,507 pesos to the gross national product, compared with 5,898 pesos in industry./1 The Colombian Planning Board provides a different set of estimates. For the years 1957-59 and in terms of 1958 pesos, per worker productivity in some sectors is much lower: only 1,570 pesos for "cottage industries", for example, and 3,533 pesos in the construction industries (Table II-5). Thus it is not sufficient

1/ United Nations Department of Economic and Social Affairs: Analysis and Projections of Economic Development, III. The Economic Development of Colombia, E/CN .12/365 (Geneva : 1957) p.17.

Table II-5. Preliminary estimates of employment and productivity by economic sectors, 1957-59

Economic sector	Employment	Production per employed individual
	(thousands)	(1958 pesos)
Agriculture	2,269	3,237
Mining	69	11,261
Manufacturing industry		
Factories	234	11,982
Crafts	473	1,570
Construction	209	3,511
Sub-total	3,254	3,798
Commerce	329	9,468
Communication and transportation	192	6,762
Electricity, gas and water	18	8,110
Other services	781	5,034
Grand total	4,574	4,558

SOURCE— República de Colombia, Consejo Nacional de Política Economica y Planeación: Plan General de Desarrollo Economico y Social, primera parte (Bogotá: Dic.1961), p. 112.

to transfer workers from agriculture to urban occupations; rather, efforts should be made to expand emplyment,in the areas where marginal productivity is relatively high. The "value added"data in Table II-5, of course, measure average productivity rather than marginal productivity and they measure the combined productivity of a man plus certain other accompanying resources, which consist mostly of land in the case of agriculture, and mostly of capital in the case of industry.

Industrial development

Economic growth activities in Colombia depend heavily upon individual investment decisions in the private sector. The government does influence these decisions in a number of ways--by policies to restrict certain imports, by policies to encourage an expansion of credit for certain activities, by making public investments in overhead capital, by exchange rules which change the net costs and profits of imports and exports, and by general monetary and fiscal policies. Only in 1958 were arrangements made for a National Planning Agency, and the first comprehensive plan was printed in 1961 for the four years period 1961-64. This represents an effort to outline a more logical, nationally integrated program of development.

Much of Colombian industry is closely allied with primary production, as would expected. About 42 percent of industrial production is represented by the foodstuffs industry. Another 20 percent is represented by beverages, tobacco, and textiles. This emphasis is not unexpected, since Colombian consumers spend a substantial part of their income on food, fiber and tobacco.

About a fifth of Colombia's gross national product is derived from industrial production. An additional 15 percent stems from commerce and finance. Construction activity represents 3 to 4 percent. (Table II-6). Continued growth in manufacturing and several related sectors is

Table II-6. Percentage composition of gross internal production by sector of origin at 1958 prices.

Sector	1950	1952	1954	1956	1958	1960
			(percent)			
Farming	40.0	39.5	36.0	35.2	36.7	34.7
Fishing	0.1	0.1	0.1	0.1	0.2	0.2
Forestry	0.3	0.3	0.3	0.4	0.4	0.4
Mining	3.8	3.8	3.7	3.8	3.8	4.1
Manufacturing	13.9	14.0	14.8	15.6	16.2	16.7
Construction	2.8	2.6	3.8	3.9	3.4	3.2
Commerce	12.8	12.7	14.2	12.9	12.1	12.8
Transportation	5.3	6.1	6.4	6.7	5.7	6.2
Communications	0.5	0.5	0.6	0.6	0.7	0.7
Electricity, gas and water	0.5	0.6	0.6	0.7	0.7	0.9
Financial	1.8	2.0	2.2	2.6	2.1	2.2
Rentals net of housing	5.2	4.9	4.7	4.8	5.1	5.3
Personal services	8.0	7.7	7.4	7.6	7.7	7.6
Government services	5.0	5.2	5.2	5.1	5.2	5.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

SOURCE: Banco de la República, Departamento de Investigaciones Económicas: Cuentas Nacionales 1950 - 1960(Bogotá: 1962 mimeo.), p. 15.

helping to make Colombia one of the more industrialized nations of Latin America. Moreover, the rate and consistency of growth places Colombia among the leaders in relative growth in Latin America.

Colombia's industry is largely geared to the production of nondurable consumer's goods. To make this production possible, a major part of the country's exchange earnings are used in the purchase of capital goods, raw materials, and intermediate products for these industries. During the early 1950's when exchange earnings were substantial and rising, there were few restrictions on the use of foreign exchange. Government policy facilitated capital imports through lower tariffs and favorable exchange rates. This enabled many factories to become equipped with substantial quantities of modern machinery, with significant increases in productivity. In the years since 1950, over 80 percent of the imports consisted of products for expanding industry. Durable and nondurable consumer items have accounted for about 13 percent of imports but they fluctuate in accordance with the level of exchange earnings and balance-of-payments conditions. Such items are the first to come under import restrictions when exchange becomes tight.

Monetary and exchange measures

The general price level increased significantly during the 1950's. An increase in the supply of money appears to have been a primary factor contributing to this inflation. The increase was very substantial -from less than a billion pesos in 1950 to more than 5 billion in 1961. The rise in the general price level has been less than in the money supply, although in this period there were two devaluations of the peso. The devaluation of 1951 brought the peso-dollar ratio from 1.95 to 2.50, while that of 1957 lowered the ratio further to 4.05. In the subsequent free dollar-peso market, a gradual decline to about 8.50 occurred. It is important to note that indirect controls were established after the 1957 devaluation. These included the requirement for deposits against imports, which decreased the nominal money supply. The indirect controls help to explain why the relation between the money supply and the general price level has not been as close as might have been expected otherwise. The deposits against imports reached 800 million pesos (See Table II-7). Other measures were taken to counter the 5 to 10 percent per year inflation-restrictive fiscal policies and a higher rediscount rate. There were budget surpluses in most of the years, two of the deficits occurring during the free-spending era of the Rojas Pinilla regime.

Investments

The productivity of the Colombian economy is partially dependent upon the amount of investment which occurs. The investment coefficient (the ratio of gross investment to gross national product) averaged approximately 20 percent in the early 1950's, rose to nearly 25 percent during the period 1954 -1956, but has since fluctuated between 16 and 17 percent./3

The size of this coefficient is not unfavorable, but large annual fluctuations are disruptive of sound economic growth. These fluctuations are due partly to variations in exchange earnings which result from sharp changes in quantities and prices of Colombian exports. The decline in the capacity to import (presented in Table II-1) has posed serious

3/ República de Colombia, Consejo Nacional de Política Económica y Planeación, Departamento Administrativo de Planeación y Servicios Técnicos: Plan Cuatrienal de Inversiones Publicas Nacionalés- 1961-64 (Bogotá: 1960) p.30.

Table II-7. Changes in the means of payment and in wholesale prices, 1950-61

Year	Money supply /a	Index of money supply	Index of wholesale prices/b
	(millions of pesos)	(1950 = 100)	(1950 = 100)
1950	962.3	100.0	100.0
1951	1,119.9	116.4	107.9
1952	1,309.3	136.1	106.6
1953	1,548.6	160.9	112.8
1954	1,846.9	191.9	120.7
1955	1,933.7	200.9	121.6
1956	2,415.3	251.0	131.9
1957	2,744.4	285.2	163.9
1958	3,317.9	344.8	192.2
1959	3,715.9	386.1	210.7
1960	4,102.6	426.3	219.5
1961	5,112.4	531.3	233.9

SOURCE--Banco de la República: Informe Anual del Gerente a la Junta Directiva, 1960-1961 (Bogotá: no date) p. 96.

a/ Includes money and checking accounts.

b/ See also the index in Table III-2, which suggests a somewhat slower rise in prices.

problems to Colombia. Not only have imports been carefully controlled but also the nation's financial reserves overseas have declined. Gold and dollar holdings of the central bank fell from $270 million in 1954 to 153 million in 1955./4 The resulting strains upon the country's balance-of payments necessitated stringent import restrictions, particularly upon consumer items and products whose exclusion would do a minimum of harm to the growth of the economy. However, it was 1957 before strong action began to have its effect. It is useful to note that these exchange problems coincided with the initiation of a United States agricultural export program permitting the purchase of farm supplies with pesos rather than with scarce dollars.

4/ Departamento Administrativo Nacional de Estadística: Boletín Mensual de Estadística Nº 123 (Bogotá: Junio 1961) p. 143.

Chapter III

AGRICULTURAL PRICE AND PRODUCTION POLICIES

For thirty years, the Colombian Government has been following an agricultural policy of self-sufficiency. A wide variety of measures have been used to implement this policy--tariff protection, exchange controls, import quotas and embargoes, internal price supports, technical assistance, and special credit assistance./1 Not all products have been included at any one time and the measures used have varied with the circumstances. For a few products and for varying periods of time, special arrangements have been made to facilitate imports. This was true for cotton fiber during the early fifties, when the exchange rate applicable to such imports was more favorable than for imports in general. In a sense it can be said that the arrangements recently applicable to wheat imports are more favorable than for agricultural imports in general.

During the early period of this policy of self sufficiency, i.e. between 1931 and 1950, the policy tended to be implemented through general arrangements affecting prices and production. Tariff and trade measures were used as well as a variety of exchange ratés, and ocassionally embargoes or slow moving approval of import licenses. In later years, more complex and comprehensive measures have been used, providing for price guarantees, liberal credit, technical assistance, the creation or improvement of market facilities and financing to purchase and withhold seasonal surpluses for a period of time, and in some cases virtually complete intervention in the production, marketing, and processing of the product. Where useful, these programs have included trade policy measures as well, including import control and export subsidies.

1/ One source for more detailed information on Colombia's early agricultural policy is Antonio J. Posada's unpublished Ph.D. thesis: Economics of Colombian Agriculture, (Madison: University of Wisconsin, 1950).

The encouragement of domestic agricultural production in Colombia generally takes little account of the prices at which specific commodities are trading in the world market. If it appears that domestic production of an important commodity can be expanded or initiated, the possible saving of foreign exchange becomes a strong motivation and the desire for import substitution usually becomes dominant. Even when commodities are purchased in the world market, they are likely to be purchased through semi-official channels, and sold at local prices so as not to disturb greatly internal price relationships. The possible profits from such operations enhance the operating revenues of the importing organization and are used to further stimulate domestic production.

Support prices or price goals for agricultural commodities have been, and still are, above world prices. This has been true at times for some of Colombia's own export products, such as sugar and cotton. The latter crop has moved into world markets with an export payment comparable to that which the United States is paying on cotton exports. The relationships between domestic farm prices and world prices are continually changing, due to the fluctuations in the world market, due to changes in the value of the Colombian peso, and due to variations in the price objectives of official policy as shown by the announced support prices. These factors limit the validity of comparing domestic and world prices. Yet a comparison for eight important crops for 1959 clearly reveals the general pattern of relationships (Table III-1).

The above policies apply particularly to commodities produced or imported for domestic consumption, including Title I commodities. A word must be added about the policies which apply to agricultural export commodities, particularly since the emphasis on all-embracing commodity organizations (see below) started with coffee. Aside from this, there are a long series

Table III-1. Comparison of 1959 internal price support levels with world market prices for selected farm products.

Commodity	1959 support prices/a			World prices per metric ton	
	As announced		Equivalent price per metric ton	In dollars/b	Equivalent in pesos/c
	Price	Unit			
	(pesos)	(kilos)	(pesos)	(dollars)	(pesos)
Cotton	5.07	1	5,070	601	4,621
Corn	55.00	125	440	50	384
Wheat	129.00	140	921	60	461
Barley	85.50	125	864	50	384
Soybeans			800	85	654
Rice	105.00	125	840	110	846
Wheat flour	---		1,306	79	608
Potatoes	45.00	125	360	58	446

a/ The support level used is that for the top grade of each commodity.

b/ World dollar prices are average 1959 export prices, FOB principal ports of export as reported by Food and Agricultural Organization: El Estado Mundial de la Agricultura, 1961 (Roma: 1960), p. 202.

c/ Computed from the world dollar price using an exchange rate of 7.69 pesos = 1.00 dollar, the average dollar sale in 1959. Cf. Revista del Banco de la República, Aug. 1960, p. 1077.

of specific regulations applying to the export of farm products. Four principal objectives may be noted; they are not necessarily internally consistent.

Probably the most important objective is to ensure that some of the export earnings from coffee are available for other national purposes. To this end, a specific but varying amount of the foreign exchange earned from coffee sales is transferred to the Banco de la República at a fixed exchange rate, usually less than the free rate. This becomes an export tax, with the proceeds available to assist in the importation of desired products.

The second of the four objectives is to provide a measure of internal price stability to the producers of export products, insulating them to some degree from the wide fluctuations common in the markets for so many world-traded raw materials. By varying the amounts of coffee receipts which must be sold at a fixed exchange rate to the central bank, and the amount of exchange which can be sold in the free market, the internal price movements of export commodities can be dampened. In 1932, a coffee export premium of ten percent of the official exchange helped to raise internal prices in a low price period. Also contributing to this policy of internal price stability is the devaluation of the peso, which often has been associated with a period of low export prices. Devaluation tends to raise the peso price of exports compared to domestic products.

A third objective is the ecouragement of exports, so as to increase foreign exchange earnings. The coffee premium of 1932 is one example. The recent export payment on cotton is another. A third recent example may be found in the degree of freedom accorded to exchange earnings from bananas. The proportion of these earnings that must be turned in to the Banco de la República is relatively low, as compared with coffee, leaving a relatively large proportion that can be sold at the higher price in the free market.

The fourth general objective is the desire to limit exports so as to protect domestic consumers from shortages. The virtual embargo on the export of cattle is a case in point, although a contraband trade to higher priced Venezuelan markets does exist. Export restrictions have been applied in recent years to rice, cacao, beans, wheat, milk and milk products, beef, pork, cattle, horses, goats, sheep, vegetables, oilseeds and cake, barley, hides, and leathers./2 Because of relatively high prices, few of these commodities would enter world markets. Small amounts, however, might move in border trade with Venezuela. Obviously, some compromise is necessary between policies to stimulate exports and policies to protect domestic consumers.

The Commodity Organizations

One of the prominent features of Colombian agricultural policy is the system of semi-official commodity organizations which tend to cover a wide range of activities affecting a particular commodity. This program finds its origin in 1927 with the creation of the Federación Nacional de Cafeteros. This organization was assigned the task of integrating and coordinating the various parts of the industry. Its activities have ranged from technical assistance and credit to marketing and exporting. It has developed its own experimental station, extension workers, coffee purchasing stations, processing and warehousing facilities, export operations, and a system of statistical reporting. In recent years, it has attempted to expand its program to include the minor commercial crops and food crops of farmers who are principally coffee growers, and to use its substantial resources to develop social welfare programs in coffee-growing areas.

2/ USDA Foreign Agricultural Service: Colombia- Annual Agricultural Policy Report Nº. 215 (Bogotá: U.S. Embassy, June 23, 1960), p. 19.

The Instituto de Cereales, which began operations in May 1962, is concerned primarily with wheat, barley, and corn. Its functions appear to be comparable to IFA and broader than Procebada, which it has absorbed. The list of farmers' commodity organizations includes the Federación Nacional de Cultivadores de Cereales (FENALCE), which presumably will be related informally to the Instituto de Cereales; the Federación Nacional de Arroceros, concerned with rice; and the Asociación Nacional de Cultivadores de Caña de Azúcar (ASOCAÑA), including producers of sugar.

The most important of these organizations, from the point of view of Title I commodities, is INA.* This agency, tracing its history to 1944, is not as single-minded a commodity organization as the Cafeteros or the others mentioned above. The Board of Directors of INA includes the Minister of Agriculture, the Manager of the Caja Agraria, the Manager of the Banco de la República, the Manager of the Cafeteros, and two other members designated by the President of the Republic. As a result, INA tends to be responsive to consumer interests as well as to producers interests, and tends to develop compromise policies, whereas the other organizations primarily reflect producer and (often) processor interests. The funds used by INA are completely independent from the national budget, being generated by its current operations.

The other organization of major interest in a review of Title I programs is IFA. It was organized in 1947 or 1948, primarily through efforts of the textile industry, to replace the National Cotton Board and to encourage the domestic production of cotton fiber. Its revenues come from a levy (tax) collected at the gin on cotton fiber and cottonseed, an assessment on cotton used by textile mills, and a contribution from the Ministry of Agriculture. The new Instituto de Cereales may come to play an important role related to Title I commodities in the future.

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* Instituto Nacional de Abastecimientos

Commodity price policies and technical programs

While emphasis centers on the price policies of these organizations, it should be emphasized that their activities are diverse. They provide technical assistance, conduct or sponsor research to improve production, work to improve marketing and storage facilites, and provide grading and statistical services. INA tends to concentrate on marketing and storage functions, and provides few services directly to producers. In the programs of IFA, Procebada, and the Cafeteros, the implementation of price support policies and the advancement of the economic interests of producer-clients have been important elements, but these agencies have also given much attention to a variety of other services. The diverse activities have generated internal points of view affecting the position of the commodity organizations on economic and other matters.

INA is the national instrument for importing food commodities and sometimes other farm products. Its revenues stem mainly from the gross mark-up in the purchase and resale of the imported commodities. It also purchases in the domestic market when supplies are large and prices low, stores the products for a time, and resells when the prices have risen. The volume of domestic purchases, however, has been very small, averaging some 5 percent of the total production. Even so, the agency has sometimes been subjected to consumer criticism for waiting too long to resell, thus forcing a sizable price rise. Some of INA's revenues have been used to construct storage facilities so as to give INA more ability to smooth out internal seasonal price fluctuations. Some have been used to offset losses in its price support operations, and to pay administrative expenses. A substantial amount has been transferred to the Caja for its use as the agent of INA in a number of commodity stimulation and seed improvement programs.

The program of IFA moved rather slowly prior to 1957. Until then, a favorable exchange rate for the importation of cotton provided little incentive to domestic production. In fact, the government developed regulations requiring that textile mills use specific quantities of domestic cotton, in this way insuring a market for the higher priced (and often lower quality) domestic product. In mid-1957, the government established an import exchange rate close to the free dollar market. Further peso depreciation in 1957 made imported cot ton more expensive and raised fears of short supplies in the minds of the textile manufacturers. The textile industry, having seen cotton double in price, exhibited a much stronger interest in expanding domestic production. With their support, IFA was able to raise price guarantees as a means of stimu lating cotton production. Previous tests had provided knowledge and a supply of seeds of desirable varieties, mostly from the U.S. Favorable prices, seeds of adapted varieties, the expansion of ginning and marketing facilities, and technical help, especially to some 400 or 500 large farmers who produce two thirds of the crop, have greatly stimulated the production of cotton. Since 1959, in fact, Colombia has produced more than domestic consumption and has had to seek ways of selling in the world market. IFA's relations with the textile industry and large scale producers have made the organization politically powerful and it has been able to follow a fairly independent price policy.

Agricultural price support operations are generally administered by each agency, but with some supervision by the Superintendent of Economic Regulation, who has the general authority to administer price controls. Politically powerful IFA has had little difficulty in gaining approval for the price supports it deemed desirable for the commodities under its control-cotton and sesame. The breweries have been able to secure adequate barley supplies by establishing support prices which are favorable relative to wheat prices. Improved varieties and technical services are provided through Froccbada, which the breweries sponsor. Rice, Wheat, Corn, and bean prices are supported by INA, which for a variety of reasons has not pursued equally aggressive price policies.

Each of these organizations is attempting to attain an adequate output of the farm products for which it bears responsibility. To do so, each urges programs to expand the productivity of the land devoted to that crop; it also seeks to increase the amount of land each farmer devotes to the crop, and to attract new producers. In so doing, an economic power struggle is waged among these organizations. Increases in the area of cropland devoted to one crop often mean decreases in the area used for other crops. A major proportion of Colombia's cropland, moreover, is committed for a considerable period, either to perennial crops, or to annual crops whose production involves substantial investments in facilities that are more valuable in use than abandoned. These areas, accordingly, show little response to the intense competition for output substitution. For those lands where output substitution is possible, climate, water control projects, or other attributes limit the substitution possibilities to a very few crops. In addition, only a small minority of the farmers are sensitive to price fluctuations and have a technical and managerial capacity to shift quickly from one crop to another. The economic power struggle, then, concentrates on the limited area in which shifts must take place, if each organization is to fulfill its desired production quota.

To only a very limited extent do any of these organizations follow policies which lead to a greater commercialization of the agricultural economy, by attracting into the money economy the thousands of farmers who are substantially self-sufficient. These farmers are not influenced significantly by price policies, and only to a limited extent, and then often indirectly, by technical change. Inducing such farmers, and they are the majority, to expand production or shift crops will require much more than higher prices.

The role of the several agencies in determining price support levels for individual commodities leads to a poorly coordinated price program, with frequent distortions of price relationships among commodities. The particular level of support often is based partly upon the economic power of the industry members and partly upon unreliable cost data, gathered hastily and with little regard to other economic circumstances. An organization with substantial political power will establish a price that is relatively high. Resource competitors will then try to close the gap. The results are unstable prices and unstable production patterns in those geographical areas where product substitution is possible, and where producers shift rapidly to the crop which is momentarily most profitable. Trends in official support levels, presented in Table III-2, indicate which agencies have had the power and the desire to raise prices in recent years. Only INA has a responsibility to represent both consumers' and producers' interests. The lag of wheat and bean prices behind other agricultural prices may be one of the contributing factors behind the establishment of the Instituto de Cereales. It, in turn, may seek higher prices in the belief that they will induce back into wheat production the cool climate lands lost to barley and bring back into corn production the warm climate lands lost to cotton and oil seeds. A related goal would be to induce higher yields through improved practices on present or additional hectares of wheat and corn.

The existence of separate commodity agencies also creates problems in staffing and supporting an adequate program for the extension of technical information. It also means that extension personnel are unevenly distributed over the agricultural areas of the country, and that a significant flow of ideas from research to the field is only obtained with great difficulty.

Table III-2. A comparison of trends in official price support levels for selected agricultural commodities and the general price level, 1954-61.

Item /a	1954	1955	1956	1957	1958	1959	1960	1961
				(1954 = 100)				
General price level /b	100	100	103	119	135	147	162	170
Wheat	100	100	100	113	139	150	150	150
Cotton	100	100	123	163	163	192	192	192
Barley	100	108	122	129	161	178	178	188
Corn	100	100	114	114	157	157	157	157
Potatoes/c	100	98	98	98	113	113	113	
Beans /c	100	94	104	109	112	112	112	154
Sesame/c	100	117	142	225	230	230	230	230

a/ Prices are for the top grade of each commodity.

b/ A somewhat more rapid increase in the general price level is suggested by the index appearing in Table II-7.

c/ Prices for these commodities were not supported prior to 1958; hence the index is computed on the basis of prices received by farmers.

SOURCES--Ministerio de Hacienda y Crédito Público, Hernando Agudelo V., Ministro: Memoria de Hacienda—Presentada al Congreso Nacional de 1960 — Tomo Principal (Bogotá: Dec. 1960) p. 98. Also a similar report for 1961, p. 127.

USDA Foreign Agricultural Service: Colombia --Annual Agricultural Policy Report Nº.215 (Bogotá: U.S. Embassy, June 23, 1960), p. 13.

Instituto Nacional de Abastecimientos, Departamento Técnico: Historia de los Precios de Trigo, Maíz, Ajonjolí, Fríjoles y Papa (Bogotá: 1961).

Instituto de Fomento Algodonero, Departamento de Investigaciones Económicas: Colombia--Algodón y Oleaginosas--Economía y Estadísticas (Bogotá: 1960).

Suggestions for improving this situation have been made in various reports; means of implanting these proposals have not yet been adequately attained./3

Other policies

There are many other aspects of Colombian agricultural policy that would need to be considered for completness. These involve agricultural credit policies of the Caja Agraria, the program of land reform recently put into operation by INCORA, the import and export policies, the programs of investment in overhead capital related to agriculture such as the water control systems of the Corporación del Valle del Cauca, the program to produce fertilizer domestically, and others. A number of these programs involve Title I local currency and will be discussed in Chapters VIII and IX. The peso income which INA has collected through imports and the uses of these pesos will be reviewed briefly in Chapter IV. A review of import and export policies for farm products can be better integrated into the general balance of payments situation if deferred to Chapter VII. It is now appropriate to turn to the effects of the P.L. 480 program upon agriculture, the subject of the next chapter.

3/ Comision de Educación Agrícola Superior: Educación Agrícola Superior en Colombia (Bogotá: Universidad Nacional de Colombia, Abril 1961).

Chapter IV

THE COMMODITY IMPACT ON AGRICULTURE

The "commodity impact" which arises from the inflow of agricultural products into the recipient economy perhaps has been most worrisome to P.L.480 program evaluators. They fear that possible lower agricultural prices will have deleterious effects upon agricultural growth. A related concern is that government authorities in the recipient countries may view the program as a device which permits deferring agricultural development and lowering the priorities for public investment in agriculture.

A conceptual approach

The importation of additional supplies of a commodity being produced within the country would be expected to have relatively adverse price effects for local producers. If the general price level were stable, then internal free market prices of P.L.480 commodities would decline. If the general price level were rising, as it was in Colombia during the period under study, then the prices of P.L. 480 commodities would rise less than the average of all prices or all farm prices. A possible exception would occur if the P.L. 480 imports were used to meet a temporary shortage.

A lag of prices for the Title I products would be expected to result in a decline in farm income and a shift of acreage from Title I crops to the production of other commodities--the extent depending on the nature of the product-product substitution relationships and the extent to which resource inputs would be reduced. Under some circumstances, the effect would be seen primarily as a reduction in the local farm income derived from a P.L. 480 commodity. This would be the case were supply very inelastic--that is, if there were no alternative use for the human and physical resources committed to this commodity. Under other circumstances, there could be a sharp decrease in production and large shifts to alternative crops. If the demand for these alternative crops were quite elastic (perhaps because imports were reduced), gross and net revenue might keep in step with the rest of the economy. However the income from the specific P.L. 480 crop would drop substantially.

There are circumstances, however, in which these effects would be at least partially concealed.

One case would be a situation with rapid technological advance, resulting in increased yields, reduced costs, or both. If the technological advance were sufficiently rapid, and if the price lag induced by Title I imports were not too great (the balance between the two could be at various rates of price decline and technical change), then farmers could find themselves benefitting from technical advance and losing through price lags, with relatively small changes in their gross or net income position. Such a result would require that demand be relatively elastic (close to unity), that cost savings be great, or that the requests for Title I commodities had been calculated on an extremely conservative basis.

A second case in which the effects of P.L. 480 imports might be mitigated would be through government or other programs which guaranteed and supported favorable prices, absorbing the losses through general revenues. In such cases, prices might increase at a rate, relative to the general price level, accepted as appropriate in the policies followed by the relevant agency.

Furthermore, various improvements might be made in the marketing, storage, and transportation systems to provide real gains for the producers. Prices at harvest time might be strengthened relative to previous seasonal lows, or the costs of marketing might be reduced, either in money or in time spent in making deliveries. In this way, also, the income-decreasing effects or the possible lag in income growth attributable to P.L. 480 imports might be mitigated.

There are indications that each of these situations has been operative in the Colombian agricultural economy.

A more subtle possible impact involves judgement as to the urgency with which the government approaches the process of agricultural expansion. For example, the Colombian Government through the Ministerio de Agricultura and the related semi-official agencies could decide that it is willing to be more or less permanently dependent upon wheat imports--hopefully through P.L.480, but through commercial markets if necesary. It could halt programs to increase wheat production or continue present programs but without any great effort or enthusiasm. It could give public investment priorities to other crops and to industrial development. It might even encourage some restructuring of the willingness of the Caja Agraria and private banks to make loans.

Relative size of the program

A starting point in examining the commodity impacts of P.L. 480 upon Colombian agriculture is to note the extent of these imports relative to total agricultural imports and domestic production. Table IV-1 makes this comparison for the years 1955 to 1960. In value terms, Public Law 480 transactions have been small relative to agricultural imports or domestic production. In this 6-year period, P.L. 480 imports accounted for 7.8 percent of total agricultural imports and had a value equal to less than 1 percent of domestic production.

A second comparison relates annual P.L. 480 imports of specific commodities to domestic production. The usefulness of this comparison rests on the view that while P.L. 480 imports are small relative to aggregate production, specific commodity imports may be substantial when related to domestic production of these products. Table IV-2 compares imports with domestic production of wheat, cotton, and edible oils. Other commodity shipments through P.L. 480 were very small relative to domestic production.

Table IV-1. P.L. 480 imports, total agricultural imports, and total agricultural production, 1955-60.

Year	P. L. 480 imports/a		Total agricultural imports	Agricultural contribution to gross national product	P.L. 480 imports as percent of agricultural imports	P.L. 480 imports as percent of agricultural production
	Dollar value	Peso value				
	(million dollars)	(million pesos)	(million dollars)	(million pesos)	(per ent)	(percent)
1955	4.3	10.9	77.8	4,600.7	5.5	.24
1956	12.1	30.0	86.2	4,476.9	14.0	.67
1957	5.0	25.5	82.4	5,168.0	6.1	.49
1958	3.8	26.4	66.0	6,387.2	5.8	.41
1959	9.4	59.8	56.9	7,086.1	16.5	.84
1960	8.5	56.3	52.8	8,402.8	16.1	.67

a/ These statistics are approximate , and need to be used with caution. Part of the difficulty is the changing dollar-peso tatio, and the fact that records in early Agreements were kept in dollars, Moreover, the third agreement was partly paid in dollars.

SOURCES--P.L.480 import values were estimated by comparing INA reports, U.S. Embassy records on peso payments, quantity imports according to records of the U.S. Agricultural Attaché, and U.S.D.A. records of shipments.
República de Colombia, Consejo Nacional de Política Económica y Planeación., Departamento Administrativo de Planeación y Servicios Técnicos: Plan Cuatrienal de Inversiones Públicas Nacionales--1961-64 (Bogotá: Diciembre 1960) p. 70.
Banco de la República, Departamento de Investigaciones Económicas: Cuentas Nacionales, 1950-60 (Bogotá: 1962 mimeo.) p. 7.

Table IV-2. P.L. 480 imports as related to domestic production of wheat, cotton, and edible oils, 1955-61

Year	Domestic production			P.L. 480 imports			P.L. 480 imports as a percentage of domestic production		
	Wheat	Cotton fiber	Edible oils/a	Wheat /b	Cotton fiber	Edible oils/c	Wheat	Cotton fiber	Edible oils
	(thous.metric tons)			(thous.metric tons)			(percent)		
1955	147	24.7	10.6	22	1.8	3.0	15	8	28
1956	140	22.5	10.8	56	7.7	3.6	40	34	33
1957	110	20.6	12.5	63	3.1	4.6	58	15	37
1958	150	25.9	14.8	28	4.1	0.5	20	16	3
1959	145	56.4	23.8	86	0	8.7	60	--	36
1960	145	68.7	29.1	63	0	13.9	43	--	48
1961	142	71.3	--	100	0		70	--	

a/ Includes cottonseed, soybean, and sesame oils.

b/ Includes flours.

c/ Includes cottonseed and soybean oils.

SOURCE --Records of the U.S. Embassy, Office of the Agricultural Attaché, Bogotá.

Wheat imports through P.L.480 ranged from 15 percent of Colombian production in 1955 to 60 percent in 1959, and to 70 percent in 1961. On the average, wheat imports equaled about 35 percent of domestic production. Cotton imports through P.L. 480 were made only in the period 1955-58. These imports equaled 18 percent of Colombian production during that period. P.L. 480 edible oils shipments loom large relative to domestic production. In the 6-year period 1955-60, these imports equaled a third of domestic production but ranged up to 48 percent in 1960.

For the present no attempt will be made to compare the volume of Title I imports with the volume of displaced commercial imports, if any, Attention will first be turned toward price, production, and income effects of the imports. Indirectly, this will give some notion of the extent to which the P.L. 480 commodities (a) were additional to commercial purchases which would have been made in any case, (b) were partly additional to, and partly substitutes for, commercial purchases, or (c) were largely substitutes for commercial purchases.

Prices

The P.L. 480 imports did not result in a visible fall in prices, as might have been expected under equilibrium conditions in a free market, since they came at a time when the Colombian economy was experiencing a substantial rise in the general price level. Policies for agriculture permitted, and in some cases initiated, advances in agricultural prices, although the policy makers strove to keep farm and food prices at reasonable levels.

INA established price goals for wheat, beans, corn, and potatoes, but encountered difficulties in holding prices at these levels because of storage problems and seasonal shortages. Intervention in the market was thus of limited effectiveness, and the actual prices of commodities reflect supply and demand changes to a considerable degree.

Average farm prices for several important farm products in Colombia appear in Table IV-3 for three time periods: (a) prior to P.L. 480 (1950-51), (b) at the begining of the program (1954-55), and(c) after several years of the program (1959-60). Note that wheat and cotton have been important Title I commodities, and that the prices for sesame, a major source of edible oil, would be related to the imports of cottonseed and soybean oils, which were also imported under Title I.

Farm prices for none of the commodities listed in Table IV-3 rose more than 20 percent between 1950-51 and 1954-55, while prices of potatoes and beans declined. During the P.L. 480 period, all prices increased more than 30 percent, but great variations are evident among commodities. Prices for cotton and barley rose more than 70 percent; sesame prices increased 122 percent. Wheat, corn, potato, and bean prices increased between 35 and 54 percent.

The increase in the general price level was intermediate among these price changes. From 1954 through 1960, one index of the wholesale price level, including both consumption and investment items, rose 62 percent. /1 Thus farm prices for wheat, corn, potatoes, and beans rose less than the general price level, while sesame prices rose about twice as much.

Production

The production changes appearing in the second part of Table IV-3 are related to the price increases, as would be expected. Cotton and barley production more than doubled after 1954; sesame production increased 67 percent. The production of wheat, corn, and potatoes increased less than 6 percent,

1/ See Table III -2.

Table IV-3. Farm price and production changes for selected agricultural commodities, 1950-60

Item	Wheat	Cotton-fiber	Barley	Corn	Potatoes	Beans	Sesame
			(pesos per metric ton)				
Average Prices							
1950-51	615.0	2,535	332.5	285.0	309.5	1,130.0	588.0
1954-55	680.0	2,550	390.0	315.0	265.0	1,050.0	637.0
1959-60	920.0	4,400	703.0	485.0	357.0	1,530.0	1,412.0
Percent change,							
1954-55 to 1959-60	+35.3	+72.5	+80.2	+54.0	+34.7	+45.7	+121.7
			(thousands of metric tons)				
Average Production							
1950-51	116.0	7.5	53.3	732.6	455.0	38.0	9.2
1954-55	146.5	26.3	58.5	809.9	657.5	59.5	9.3
1959-60	146.7	62.5	119.0	854.7	669.0	50.0	15.5
Percent change,							
1954-55 to 1959-60	+0.1	+137.6	+103.4	+5.5	+ 1.7	-16.0	+66.6

SOURCES-- Unpublished data of the Banco de la República, Departamento de Investigaciones Económicas: "Estadística del Valor de la Producción a Precios Corrientes de Cada Año, 1950-1960"(Bogotá: 1961).

Instituto de Fomento Algodonero, Departamento de Investigaciones Económicas: Colombia--Algodón y Oleaginosas--Economía y Estadística, 1960 (Bogotá: 1961), p.9.

while bean production declined 16 percent from 1954-55 levels. Not all the production changes can be related to acreage adjustments resulting from price changes; improved varieties and other technological advances contributed to higher yields.

A sharp contrast appears among the P.L. 480 Title I commodities. Wheat production has expanded but little since 1954, whereas cotton production has increased 138 percent. Along with the increase in production of cotton (and cottonseed), there has been an increase in the production of sesame, a close substitute for P.L. 480 edible oil imports which equalled a third of domestic production. Thus, the production trends are not easily explained on the basis of relative quantities of Title I imports. Reference to price support and development programs is needed.

Wheat development program 2/

Colombian wheat production has consistently fallen short of domestic requirements for many years. This has occurred despite internal prices which usually were substantially in excess of the cost of imported wheat. The gap between rapid population growth and sporadic production increases has required sizable imports of wheat and wheat flour.

Production statistics of uncertain reliability suggest that harvests during the fifties were substantially larger than those of the thirties and forties. Production continued to increase during the early fifties, although the exact magnitude of the increase depends on the authority chosen. Estimates for 1960 range from 145 to 153 thousand tons, compared with a low of 102 thousand tons in 1950. The estimates of the Caja Agraria and INA are shown in Table IV-4. Probably the Caja figures are the more accurate, primarily because of the agency's relations in providing seed wheat for growers, and also because the totals are compiled by adding estimates made in the various local offices.

Although yield data are subject to some of the same

2/ Based largely upon Theodore J. Goering's unpublished manuscript: Wheat Production in Colombia (Palmira: Facultad de Agronomía, Sept. 22, 1961).

Table IV-4. Colombia: Total wheat production and area harvested as reported by two different sources, 1950-60

Year	Total production		Area harvested	
	Caja Agraria	I.N.A.	Caja Agraria	I.N.A.
	(thousands of metric tons)		(thousand hectares)	
1950	102	not avail.	144	not avail.
1951	130	not avail.	174	not avail.
1952	140	not avail.	188	not avail.
1953	145	not avail.	175	not avail.
1954	146	not avail.	195	not avail.
1955	147	166.5	195	211.7
1956	150	160.0	132	203.4
1957	184/a	158.0	170	180.3
1958	156	129.0	178	121.8
1959	150	130.7	160	116.9
1960	153	145.0	170	135.6

a/ Other estimates for 1957 have been as low as 100 thousand tons.

SOURCE--Caja de Crédito Agrario Industrial y Minero. Departamento de Investigáciones Económicas: Estimativos de Producción de Trigo (Bogotá: Marzo 14, 1961 mimeo).
____________: Carta Agraria Nº 80 (Bogotá: Enero, 1962).
L. Lorinez: Area y Producción de Trigo en Colombia en los Ultimos 5 Años, (Bogotá: Instituto Nacional de Abastecimientos, Febrero 22, 1960 mimeo).

limitations as aggregate production data, it seems clear that yields have increased during the past decade. The 1950-52 average yield was probably not far from 730 kilograms per hectare. Yields toward the end of the decade probably averaged 150 to 200 kilos higher, although the reported increases for some years are too large to be credible.

While a number of factors have contributed to the increase, the most important item probably is the varietal improvement by the Departamento de Investigaciones Agrocpecuarias of the Ministry of Agriculture. This governmental agricultural research organization has been financially and technically assisted by the Rockefeller Foundation. The newly developed varieties produce more wheat, provide better bread flour, and are more resistant to diseases. The yield potential of the new varieties is very great, as indicated by table IV-5 which compares "Menkemen 50" with two native varieties. "Menkemen 50" was the first variety released to producers. The latest variety is "Diacol Nariño" which has given outstanding results. The Caja Agraria in its multiplication campaign planted 2,530 hectares and obtained an average yield of 3.2 tons. The actual yield differences on farms are likely to be smaller than those shown; still the differences are impressive.

A minority of the wheat farmers, however, appear to be using improved seeds. Table IV-6 shows the distribution of seed in the three major wheat growing departments. Since each ton of seed will sow about 10 hectares of land, the total distribution represents about one fourth of the 1961 planted area. While some farmers may save and plant their own seed, it is probable that many of those using improved seeds will buy anew each year.

The recent support price at about twice the world level, the new seed varieties and improved cultural practices, plus some improvement in marketing facilities, all encourage an

Table IV-5. Yields of "Menkemen 50" wheat in comparison with two Colombian varieties

Variety	Geographical location		
	Tibaitatá	Bonza/a	Isla/b
	(kilograms per hectare)		
Bola Picota	1,977	313	531
Ble Tendre	2,033	720	765
Menkemen 50	3,555	1,960	1,651
	(percent)		
Increase of Menkemen 50 over Bola Picota	80	526	211
Increase of Menkemen 50 over Ble Tendre	75	172	116

a/ Under conditions of severe rust

b/ Low yields due to drought

SOURCE--Ministerio de Agricultura, Oficina de Investigaciones Especiales, as reported in the study by the United Nations Department of Economic and Social Affairs: Analysis and Projections of Economic Development, III. The Economic Development of Colombia, Report E/CN.12/365 (Geneva: 1957), p. 171

Table IV-6. Distribution of improved seed wheat in Colombia, 1953-61

Year	Cundinamarca	Nariño	Boyacá	Total
		(metric tons)		
1953	147	--	--	147
1954	1,039	--	--	1,039
1955	105	8	--	113
1956	597	42	--	639
1957	480	76	43	599
1958	1,029	361	220	1,610
1959	1,440	1,250	360	3,050
1960	1,206	621	322	2,149
1961	1,730	1,230	370	3,330

SOURCE-- Data supplied by the Departamento de Fomento Agrícola de la Caja Agraria, Bogotá.

increase in wheat production. On the other hand, the area available for wheat production is limited, and the crop competes with such cool climate products as barley, potatoes, and milk. Also, many wheat growers are primarily subsistence farmers who do not change cultural practices rapidly in response to price changes or other incentives.

Meanwhile, population continues to expand. Imports of wheat in 1950-54 provided for about 30 percent of Colombia's consumption. for 1959-61, a comparable figure was well over 40 percent. It appears unlikely that Colombia will be able to provide much more than half the wheat needed for domestic concumption; in fact it is more likely that consumption will increase faster than production, making Colombia more and more dependent upon imports.

Barley development program

While advances were being made in wheat varieties and wheat yields, even greater changes were occuring in barley. The Funza variety was first distributed to farmers in 1954; by 1961, improved varieties represented about 95 percent of the total barley seeded. The fluctuations in hectares sown and in yield are shown in Table IV-7. The change in yield is far greater than the change in area seeded. The substantial changes in barley yields and production can be traced to three important factors: (a) a clear, favorable and timely price policy; (b) the opportunity to market the entire crop through purchasing offices of Procebada; and (c) the technical assistance available as a result of close coordination between research and development.

Cotton development program

The rapid increase in cotton production, to a level exceeding domestic consumption, has been widely hailed in Colombia as an example of what can be done with high guaranteed prices and an aggresive commodity organization to push a development program; yet a very similar program functioning even longer has not come close to equating wheat production with domestic consumption.

Table IV-7. Barley area, production, yield and use of improved seeds, 1950-61

Year	Area	Production	Average yield	Proportion of area planted with improved seeds
	(hectares)	(metric tons)	(kilos)	(percent)
1950	43,910	50,470	1,149	--
1951	47,000	56,200	1,196	--
1952	51,000	61,000	1,196	--
1953	62,900	79,000	1,255	--
1954	53,000	65,000	1,226	0.02
1955	43,000	52,000	1,209	2.0
1956	50,000	57,000	1,140	20.0
1957	48,000	60,000	1,250	50.0
1958	43,250	75,000	1,734	70.0
1959	60,500	115,000	1,900	90.0
1960	56,300	125,382	2,227	91.0
1961	48,140	99,390	2,064/a	95.0

a/ The year 1961 was one of very unfavorable climatic conditions.

SOURCE-- Unpublished data from Asociación para el Fomento del Cultivo de la Cebada.

There are a number of circumstances that help to account for the dis-similar results of two apparently similar programs.

One of these is the fact that domestic cotton prices rose considerably more than wheat prices between 1955 and 1959. The sharp advance in cotton prices followed peso depreciation and a less favorable exchange rate policy that materially raised the cost of imported cotton to the important textile industry of Antioquia. The effect was not the same in the case of domestic wheat prices, which had generally been held well above import prices.

A second contrast is in the area that was potentially availa-able for increasing plantings. The cool climate lands suitable for wheat are limited, and much of the area has been affected by the urban growth of Bogotá, which has increased its demands for other cool climate products such as milk, potatoes, barley, beans, and a number of fruits and vegetables. On the other hand, a relatively large percentage increase in cotton acreage was possible on the low elevation lands, and the available area of these lands was being expanded by irrigation and dreinage programs, access roads, and railroad links. Competing drops on these lands, more-over, were not generally producing sufficient gross returns to make them aggresive competitors with cotton.

A variety testing program has led to identification and planting of cotton superior in both yield and quality. The ten-fold increase in total production during the 1950's is the joint result of the expanded area and higher yields (Table IV-8). Note that the large expansion of area begining in 1958 followed the sharp 1957 upturn in domestic cotton prices.

Table IV-8. Planted area, yield, and total production of cotton, 1950-61

Year	Area planted	Av. yield of fiber	av. yield of seed and fiber	Production of seed and fiber
	(hectares)	(kilos)	(kilos)	(metric tons)
1950	36,325	230	582	21,425
1951	39,700	163	479	19,002
1952	55,163	192	574	31,668
1953	67,080	254	754	50,556
1954	82,280	339	976	80,286
1955	84,050	294	834	70,103
1956	68,578	329	935	64,125
1957	63,000	327	918	57,864
1958	77,000	332	950	73,165
1959	131,371	429	1198	157,356
1960	152,151	451	1272	193,661
1961	152,004	469	1291	196,372

SOURCE--Theodore J. Goering: Cotton Production in Colombia (Palmira: Facultad de Agronomía, 1962 mimeo), pp.3 and 5, based on data from IFA.

The impact on farm income

The sizable increases in production of cotton and edible oils suggest that Title I imports of these commodities have probably had negligible effects on the output and income of domestic producers. But the Title I wheat bought and distributed by INA, probably for a variety of reasons, surely must have helped to keep market prices down and to reduce the pressure for increasing support prices to encourage domestic production. Since barley could not be imported for local currency, sizable increases in both support and market prices were allowed to take place, /3 with the result that production increased from 65,000 to 123,000 metric tons between 1954 and 1960. /4 Meanwhile, wheat production stayed relatively constant at 150,000 tons as the use of higher yielding varieties helped to offset a decline of 25,000 hectares in planted area. One of the major impacts of Title I, then, was a reduction in the area of wheat, and and some increase in the area

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3/ Assuming that bread is a more beneficial component of the diet than beer, this action has welfare implications. Increasing the price of barley raises the price of beer, since around 85 percent of Colombian barley is used by the breweries; increasing the price of wheat raises the price of bread. If bread is a more important food expenditure at lower income levels than beer, then welfare is enhanced by holding wheat prices down and letting barley prices increase.

4/ Unpublished data of the Banco de la República, Departamento de Investigaciones Económicas: Estimación del Valor de la Producción a Precios Corrientes de Cada Año, 1950-60 (Bogotá: Enero 1961).

of barley, on the cool climate lands./5 The shift from wheat to barley production was made with little difficulty, however, and there is no indication that the producers suffered serious economic loss.

Table IV-9 indicates that gross revenue from barley production increased steadily since 1955. Wheat revenues show less rapid, more erratic, increases. Total revenue from the two crops has grown steadily during this time except for the decline in 1957 occasioned by smaller wheat receipts. Because cool climate producers had readily available substitute uses for their land and equipment, the P.L. 480 impact upon Colombian wheat growers was easily absorbed.

Promotional revenues

The analysis to this point has focused upon possible detrimental effects to Colombian agriculture from Public Law 480. Of equal importance is a consideration of possible benefits from the program. Of significance in this regard are the _cuotas de fomento_, or commodity promotional taxes, levied on imported farm products and on some processing operations within the country. Also of importance are the profits realized by INA in its purchase and

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5/ Another point of significance in considering price disturbances from agricultural imports is the preference of Colombian millers for imported wheats. In earlier years, the domestic price for Colombian wheat was substantially above world levels. Those millers able to import wheat had a substantially lower raw material cost than those using Colombian wheat. In addition, the milling quality of imported wheat was preferred. To offset this, the Colombian Government established mixing requirements of minimum use specifications, similar to those established for domestic cotton, prior to 1958 (See Chapter III), as a prerequisite for receiving imported wheat. The result was, and is, an uneconomical cross shipment of domestic and imported wheat in order to conform to regulations. This situation, however, is not the result of Title I wheat imports; it is the result of any wheat imports into an economy with prices fixed above world levels.

Table IV-9. Gross farm receipts from barley and wheat, 1955-60

Commodity	1955	1956	1957	1958	1959	1960
			(millions of pesos)			
Barley	20.8	29.8	28.8	44.8	72.5	95.4
Wheat	95.6	95.2	76.0	135.4	134.9	130.7
Total	116.4	125.0	104.8	180.2	207.4	226.1

SOURCE-- Unpublished data of the Banco de la República, Departamento de Investigaciones Económicas: Estimación del Valor de la Producción a Precios Corrientes de Cada Año, 1950-1960 (Bogotá: Enero 1961).

resale of imported commodities. Each has been a useful source of revenue for government aid programs to Colombian agriculture.

The policy goal of agricultural self-sufficiency has been pursued vigorously for a number of years in Colombia. This goal prompted Colombian authorities to use P.L. 480 pesos in agricultural projects. It is also the motivating factor for the "fomento"programs currently underway for cacao, wool, barley, wheat, tobacco, and oil crops. Financing of these campaigns is achieved in part by contributions from the national budget, but the largest source of funds is the promotional tax levied on imports of these articles. 6/

Public Law 480 imports have assisted these campaigns inasmuch as these commodities produced nearly 36 million pesos of promotional revenues. Table IV-10 lists the P.L. 480 commodities on which promotional taxes were levied, the taxes per unit, and the total resulting revenues. The average annual revenues have been nearly 6 million pesos, whereas the Ministry of Agriculture budget during the same period averaged 7.96 million pesos per year. 7/ In other words, promotional taxes levied on P.L. 480 imports provided funds equivalent to nearly 75 percent of the central government's agricultural budget.

These revenues are transferred to a special fund in the Ministry of Agriculture (the Fondo de Fomento Agropecuario) and then allocated to various branches in the Ministry or to the semipublic agencies with responsibilities for individual commodity campaigns. An example is the Instituto de Fomento Tabacalero, the organization in charge of the national tobacco campaign. In 1958, the income of this organization was over 9 million pesos. 8/ Of this total, 5.9 million pesos (65 percent)

6/ In most cases this tax is in addition to relatively high import duties.

7/ Banco de la República: "Proyecto de Presupuesto para 1961", Revista del Banco de la República (Bogotá: Agosto de 1960), p. 591.

8/ República de Colombia, Consejo Nacional de Política Económica y Planeación, Departamento Administrativo de Planeación y Servicios Técnicos: Plan Cuatrienal de Inversiones Públicas Nacionales--1961-64 (Bogotá: 1960), p. 107.

Table IV-10. Promotional tax revenues from P.L.480 imports, 1955-60

Commodity	P.L.480 imports to which taxes were applicable/a	Promotional tax per kilo	Revenue
	(kilos)	(pesos)	(pesos)
Wheat	267,813,000	0.10	26,781,300
Wheat flour	28,141,000	0.10	2,814,100
Cotton	14,987,000	0.03	449,610
Cigarettes	314,000	/b	5,944,288
Total			35,989,298

a/ Fomento taxes have been applied to cotton and oils imports since 1956. Figures for cotton include P.L.480 imports only since that date.

b/ A tax of 0.40 pesos per pack, equivalent to about 19 pesos per kilo.

SOURCES-- U.S. Embassy, Office of the U. S. Agricultural Attaché: Colombian Agriculture (Bogotá: June 1960), pp. 26-30.
República de Colombia: Arancel de Aduanas (Bogotá: Librería Voluntad, Ltda., 1959), pp.326-328.

represented promotional taxes on P.L. 480 cigarettes. These funds are used in promoting the Colombian tobacco industry through developing improved varieties, establishing experimental farms, and studying domestic and foreign market conditions.

Another promotional tax is levied on all wheat flour milled in Colombia. An estimate of this revenue from P.L. 480 wheat imports can be computed. Assuming a conservative extraction rate of 75 percent, the 267 million kilograms of imported P.L. 480 wheat produced approximately 200 million kilos of flour. With the tax of 10 centavos per kilogram of flour, another 20 million pesos were produced for promoting the Colombian wheat industry./9 This money is collected by the central bank, then administered by the Caja Agraria. A large proportion of the funds is employed in the seed improvement campaign.

Import and resale policies

A third source of revenue, produced through P.L. 480 imports, results from the wide differentials between INA's buying and selling prices for these commodities. In its import operations, INA buys products at low world market prices, then resells them to Colombian distributors at considerably higher prices. In the past, a large part of INA's financial resources have flowed from the P.L. 480 program. Because INA had monopoly control of wheat and flour imports, the organization also found Title I imports provided a unique means of financing its other operations. In the importation and domestic resale of wheat and flour, INA realized a gross return of more than 13 million pesos per year. This revenue was a powerful incentive for the organization and the Colombian Government to refrain from a vigorous price policy in wheat.

For wheat imports under Title I sales agreements, INA paid an average price per metric ton of 702.44 pesos. The selling price in the Colombian market averaged 914.53 pesos per ton, producing a gross mark-up of 212.09 pesos. The flour import operation, although smaller in size, yielded higher per-unit mark-ups. The cost to INA averaged 823.72 pesos per ton; the

9/ Ibid, p. 99.

average selling price was 1,305.75 pesos, with a per-ton difference of 482.03. Edible oil imports in 1959 were also a source of revenue for INA. The buying price was approximately 2,100 pesos per ton; the selling price in the domestic market was 3,200 pesos. Table IV-11 compares the receipts with INA's total income and expenditure.

Distribution of revenues

Revenues from Title I imports make up a considerable portion of INA expenditures. A large share of these expenditures is used in price support activities, involving the purchase and storage of domestically produced farm products during periods of temporary surplus and their resale at a later time. Although the effectiveness of the operation has been limited in the past by inadequate storage facilities, it has done much to correct three conditions that plague Colombian agriculture--temporary market gluts, product loss through deterioration and lack of storage, and severe seasonal price fluctuations.

In 1953 it was estimated that 7.8 percent of total agricultural production was lost due to poor storage conditions./10 Heaviest losses have been of those commodities for which INA has price and storage responsibilities. More recent estimates indicate that total losses amounted to 5.6 percent of 1959 production./11 Although the customary caution with estimates must be taken, it is reasonable to assume that INA has assisted in reducing losses of agricultural products.

Some INA funds are transferred to the Caja Agraria and are invested in the programs carried on by the Caja: (1) colonization

10/ United Nations Department of Economic and Social Affairs: Analysis and Projections of Economic Development, III—The Economic Development of Colombia, Report Nº E/CN. 12/365 (Geneva: 1957), p.180. Losses in some areas ranged much higher. In the Cauca Valley in 1948, losses were estimated at 37 percent of total corn production, 26.5 percent of bean production and 18 percent of rice production.

11/ Unpublished joint report by the United Nations Economic Council for Latin America and the Consejo Nacional de Política Económica y Planeación.

Table IV-11. Yearly income of INA, income produced from P.L.480 purchase-sale operations, and expenditures of funds.

Year	Total income	Income from P.L.480 wheat, oil, and flour/a	Expenditures: Total	Expenditures: Operating	Expenditures: Transfer to Caja	Expenditures: Investment	P.L.480 income as percent of total expenditure
		(millions of pesos)					(percent)
1955	n.a.	4.7	n.a.	n.a.	n.a.	n.a.	--
1956	n.a.	11.9	n.a.	n.a.	n.a.	n.a.	--
1957	20.0	14.4	21.4	11.0	5.8	4.6	67.3
1958	19.5	6.9	23.3	11.8	5.2	6.3	29.6
1959	48.4	27.6	33.4	11.0	20.2	2.2	82.6
1960	70.0	12.7	46.0	14.8	20.0	11.2	27.6

a/ These figures are computed using a 6-year average profit per ton for wheat and flour sales. Since prices of any given year may deviate from this average, the yearly income data are aproximations. A total profit figure for the entire period, however, would be exact.
This column records only profits resulting form wheat, flour and oil sales. Smaller revenues were produced by other P.L. 480 imports.

SOURCE:- Total INA income and expenditure breakdown are from República de Colombia, Consejo Nacional de Política Económica y Planeación, Departamento Administrativo de Planeación y Servicios Técnicos: Plan Cuatrienal de Inversiones Públicas Nacionales--1961-64 (Bogotá: December 1960), pp. 111-112.

and parcellization; (2) drainage and water control; and (3) general agricultural inprovement. In past years, most of these funds have gone into the third category. An important endeavor in this regard is the seed improvement campaign for wheat. In 1960, INA transferred 3.2 million pesos to the Caja for this campaign./12 According to calculations based on estimates from DIA and the Caja, as much as 60 percent of the total wheat area in the country may have been planted with improved seed from the Caja or from private sources in 1961.

The third use of INA funds is investment in additional storage facilities. To complete a new construction program initiated in 1960, the organization has requested and received a loan of 28 million P.L. 480 pesos made available under section 104(g) (see Chapter VIII). With this supplement to its own funds, INA can complete a storage system which it considers adequate to meet the future needs of its support program.

The principal results

The objective of this chapter has been to examine some direct influences of P.L. 480 upon Colombian agriculture. The behavior of prices, production, and income for the various commodities was examined separately from the promotional activities based on taxes and other charges assessed against imports.

One apparent result of the P.L. 480 program has been a less vigorous price policy for wheat than for barley, accompanied by a reduction of wheat acreage and an increase in barley yields and production. The income effect has been slight because of the ease with which producers were able to shift between the two crops and because of certain technological changes which helped to mitigate these effects. As a further consequence, the program to improve wheat varieties (heavily financed by the Rockefeller Foundation) provided less spectacular results than might have

12/ Instituto Nacional de Abastecimientos: Informe Presentado al Señor Presidente de la República, Doctor Alberto Lleras, y a los Miembros de la Junta Directiva (Bogotá: 1961), p. 95.

been expected when the plant breeding program was started. Instead of bringing substantial increases in farm income, the new varieties helped to keep income from falling.

In contrast, prices and production of cotton and edible oils increased substantially. Part of the reason is a shift in Colombian policy away from relaying upon cotton imports to the favoring of import substitution; this ocurred despite the favorable Title I terms of sale (only 5000 bales a year were received from the U.S. commercial market, and perhaps an equal amount from other suppliers, compared with 71,500 bales programmed under Title I over about a five-year period). An expanding internal demand contributed to the incorporation of these higher cotton prices into the structure of the Colombian economy.

The difference between the wheat and cotton programs appears to rest on two primary factors. The first is the relatively greater potential for cotton expansion in 1957, compared with the previous price and production history, including the reversal of import policies. The second is the political factor, whereby the textile mills and Federación Nacional de Algodoneros, in view of changed import rules, found it convenient to form a strong political alliance. This, in turn, led to a series of upward domestic price adjustments, a substantial development budget, and an aggressive program for IFA.

The analysis of the peso use, accumulated from what was virtually an import tax, suggests that the harmful effects upon agricultural production and incomes may be overshadowed by the possible benefits from the use of promotional revenues. Promotional taxes are viewed largely as additions to funds earmarked for agricultural development. Certainly the increase in revenue for the Ministerio de Agricultura would have been far smaller without such "import taxes". These were important, since they expanded and supplemented public investment in a sector where private capital in search of high returns is less likely to enter. More attention will be given to these views in Chapter IX.

Could these same promotional activities have been financed, had Title I pesos not been available? If imports had been the same without the Title I agreements, the same revenue would have been available since it is based on imports, not on Title I programs. However, the question is posed in terms of a decline of imports by about the amount purchased under Title I.

Promotional revenues from cotton were the smallest of the four categories presented in Table IV-8. It seems reasonable to assume that these funds would have been secured from other sources, without P.L. 480. In 1959, IFA had an income of some 40 million pesos, none of which came directly from Title I pesos and little if any, indirectly, through the Ministry of Agriculture.

Pesos for the cigarette program came from Title I agreements of 1958 and 1959. The revenue from the 40 centavos gross markup probably could not have been obtained directly from higher consumer prices for domestic cigarettes, despite the substantial inelasticity of the demand; rather, such an attempt would have led to a great increase in contraband traffic. The other primary source, both for wheat and tobacco, would have been the national budget. In view of the small share the Ministry of Agriculture has received —amounting to only some 3 percent of the total, and much of this because of Title I revenues-- it seems unrealistic to expect that a large share of these promotional revenues could have been derived from other sources. The flow of pesos listed in Table IV-8 was a relatively painless way of extracting additional revenues from the national economy--revenues which would not have been available under other than conditions of an extreme food and agricultural emergency.

Chapter V

THE COMMODITY IMPACT ON CONSUMPTION

One of the objectives of P.L. 480 is to make available additional quantities of food and fiber to the recipient country, and to encourage the consumption of these additional commodities. Several purposes may be served by this increased consumption. It may enhance the health of the working force and increase labor productivity. It may stimulate a feeling of well being on the part of those sharing the additional food and fiber. The additional supplies may restrain price increases, thus providing a slight surplus of income over consumption. This income can be devoted (a) to the purchase of additional food, (b) to providing a larger market for industrial products, or (c) to capital formation through appropriate taxation or stimulation to private saving.

The conceptual approach

An increase in the amount of a commodity available will induce an increase in its consumption (a) if the price is reduced relative to other products--the extent of change depending upon the values of the cross elasticities; (b) if the commodity has been rationed, formally through coupons or informally through shortages; or (c) if an increase in quality occurs without a corresponding increase in price. There are clear indications that both conditions (a) and (c) have been operative, and some indication that Title I supplies prevented condition (b) from becoming a reality, at leat to the extent of informal rationing.

Colombia and the United States entered Title I agreements from two somewhat different points of view. Colombia was especially interested in reducing some of the pressures upon its declining foreign exchange earnings. The United States, on the other hand, was interested in increasing shipments of surplus commodities to Colombia, while maintaining existing commercial markets. In negotiation, the United States specified a minimum level of commercial imports, based on historical purchases. Colombia thus lost some flexibility in allocating her foreign exchange, but she received sizable quantities of P.L. 480 commodities and was able to hold the per-capita level of food consumption relatively steady at a time when she was beset by the related problems of an increasing population and a declining per-capita production of food, particularly of wheat and edible oils.

Under these circumstances, Colombia might have increased her commercial purchases of wheat, probably through additional borrowing from abroad plus a reallocation of foreign exchange expenditures; she might have chosen either formal or informal rationing of wheat and perhaps bread; she might have permitted a higher price for wheat and bread; and she might have rearranged her agricultural price programs so as to encourage a shift to wheat from other products.

It is not possible to specify rigorously which of these alternatives would have been chosen had Title I arrangements not been possible. The last chapter discussed why the physical and economical situation was unfavorable to a program of complete self-sufficiency in wheat. There are also reasons on the consumption side limiting the degree to which Colombia can produce her own wheat. Certain types of wheat are imported for special uses, such as in spaghetti, macaroni, and for crackers. Without imports, the quality and consumer acceptance of these products would diminish sharply. More important are the automated ovens which are geared to a type of flour which has a high water absorptive capacity. Using domestic flour probably would require substantial expense in adjusting and possibly rebuilding these ovens; even then the product would be less acceptable.

Here again, the procedure will be to examine consumer prices as related to the volume of P.L.480 and total imports. This will provide a qualitative sense of relations in the retail market and will show whether or not there was an effective increase in quantities available. The question of whether there was a net saving in foreign exchange and a loss in commercial markets for foreign suppliers under the actual situation, compared with the situation in the absence of Title I, will be deferred to chapters VI and VII.

The previous chapter pointed out that the production expansion program for wheat as less vigorous than for cotton, barley and certain oil crops. The lack of a strong technical program for wheat farmers who tend to think traditionally, coupled with a price policy which did not encourage the larger, price-conscious farmer, has ment that some areas have shifted to other crops. In other cases, large-scale holdings have continued in livestock production despite the larger revenues to be gained from a shift to wheat production.

This combination of forces means that Colombia is producing less wheat than she would probably have produced if faced with the necessity of making current dollar payments for wheat. Most of the wheat imports are additional to probable commercial purchases, but in part they substitute for wheat that might have been grown in Colombia under more aggressive production policies. Only a part of the Title I imports, then, represents a net increase in wheat and flour for Colombian consumption.

Donation programs under Title III are designed to provide food to individuals and families in very low income brackets. Most of these people are able to purchase very little of the imported food. Instead they depend on local, low cost food supplies such as yucca and plantains. For such consumers, the intake level of Title III commodities has been increased by nearly the full extent of the commodities provided. Discrepancies would be due to faulty program administration and to the impossibility of completely freezing the previous food budget expenditures of the recipients.

Elasticity of demand

Although any precise use of price or income elasticity coefficients would obviously be unwarranted in this analysis, the income elasticities of demand for major food products appearing in Table V-1 may provide helpful background. Other estimates made for Colombia by the Economic Commission for Latin America showed larger figures than indicated here. A major problem in Colombia is the weighting needed to attain a national average, and the significance of that average for the particular purpose. In Medellín, for example, corn is far more important than wheat. In the rural areas at medium and low elevations, wheat is far less important than locally produced carbohydrates. If the distribution of wheat (or other products) is concentrated in certain areas, elasticities other than those shown in Table V-1 may be appropriate.

Consumer prices

Between 1954 and 1961, the general level of food prices increased by 77 percent. During the same period, the cost of living for workers rose 74 percent and the cost of living for employees rose 71 percent./1 One index of wholesale prices rose 94 percent, and another index of the general price level rose 70 percent. Thus it is appropriate to say that food prices kept roughly in step with the rise in the general price level (Table V-2). Any difference in the rate of advance, however, may have been in the wrong direction for economic development. Food and fiber should be absorbing a smaller share of the budget, and food prices should lag behind general prices so as to provide an ever-increasing surplus of personal income over subsistence.

1/ Banco de la República: Revista del Banco de la República, Números 368 and 412 (Bogotá: Junio 1958 and Febrero 1962), pp. 717 and 209, respectively.

Table V-1. Estimated income elasticities for major food products.

Product	Income elasticity
Sugar	1.21
Pork	0.95
Rice	0.78
Beef	0.52
Wheat flour	0.34
Plantains	-0.078
Corn	-0.17
Potatoes	-1.10
Beans	-1.52
Cassava (yuca)	-2.78

SOURCE-- Calculations of the Centro de Estudios Sobre Desarrollo Economico of the Universidad de los Andes Bogotá. These calculations are based on time series analysis, with about ten observations. Another study in process under a USDA-FAS contract, will provide similar estimates based on consumer budget data, which can be compared with these.

Table V-2. General price level changes compared with price changes for selected consumer items, 1953-60.

Year	General price level	Food/a	Bread	Vegetable shortening	Beef	Milk	Cotton cloth
				(1954 = 100)			
1953	91	90	95	106	85	93	99
1954	100	100	100	100	100	100	100
1955	100	96	102	104	105	110	100
1956	103	105	107	110	102	113	103
1957	118	132	117	167	110	132	119
1958	134	145	131	201	127	155	137
1959	147	152	142	213	143	163	134
1960	162	160	140	217	165	163	136
1961	170	177	--	--	--	--	--

a/ Includes 15 food items of basic importance to the Colombian diet.

SOURCES--Ministerio de Hacienda y Crédito Público, Hernando Agudelo V., Ministro: Memoria de Hacienda - Presentada al Congreso Nacional de 1960 - Tomo Principal (Bogotá: Dec. 1960) p. 98. Also a similar report for 1961, p. 127.

Banco de la República: Revista del Banco de la República Números 368 & 412 (Bogotá: Junio 1958 and Febrero 1962) pp. 723 and 215 respectively.

Records of the U.S. Embassy, Office of the Agricultural Attaché, Bogotá.

Between 1955 and 1960, Title I imports of wheat, edible oils, and cotton represented about 20, 11, and 9 percent, respectively, of domestic consumption. Total annual imports of wheat averaged 74 percent higher in the 1955-61 period than in 1950-54; total annual imports of edible oils rose 57 percent, while cotton imports fell 38 percent. Thus the scale of the Title I program was large enough to affect supplies and prices of three individual consumption items appearing in Table V-2. The retail prices of bread, vegetable shortening, and cotton cloth have, of course, been affected by many other factors, including a retail price control program established in 1957. This program has been of limited effectiveness, however, because enforcement has been difficult and evasion widespread. Prices of food and cotton cloth rose about as much between 1957 and 1960 as between 1954 and 1957.

The 40-percent rise in bread prices between 1954 and 1960 was considerably less than the rise in the general price level. This is not surprising in view of the additional amounts of wheat flour available, partly as a result of the sizable P.L.480 imports.

Additional factors must be considered in explaining the 117 percent rise in the price of vegetable shortening between 1954 and 1960. Title I imports of edible oils are large relative to domestic production but small relative to total consumption. Commercial imports since 1954 have been substantial, coming in over a high tariff, vigorously enforced. They rose almost 50 percent between 1950-54 and 1955-60, mostly in the latter years of the period. Domestic production did not increase greatly until 1959 and 1960. Support prices for cotton and sesame nearly doubled between 1954 and 1960 and soybean support prices rose substantially between 1958 and 1960. These price relationships suggest that imports supplied only a part of a deficit in supplies, and, in fact, that the total supplies available grew less rapidly than did the demand. Larger imports, a larger volume of domestic production or both would have been necessary to keep prices in line with the general price level or with foods in general. Part of the increase in vegetable oil prices reflects the increased farm price supports for sesame and soybeans--higher support prices, however, followed a recognition of shortages and represented an effort to encourage greater domestic production. Without any knowledge of the process by which Title I agreements were reached, it still may be concluded that the Colombian Government was modest in its request for edible oils, or that the U.S Government was loathe to allocate larger amounts, perhaps because U.S. surpluses were small or non-existent when some of the agreements were consummated.

The situation for cotton appears more confusing. The price increase for cotton cloth between 1954 and 1960 was 36 percent--about the same as for bread and considerably less than the increase in the general price level. Yet there was a 92 percent increase in official cotton support prices and an 80 percent increase in average farm prices between 1954-60. At least three explanations would be possible.

One possibility might be that the rise in the price of raw cotton reflected a combination of a large increase in the price of seed for edible oil and a modest increase in the price of cotton fiber. This explanation must be discarded, however, because the price of cotton fiber shows much the same increases as does the raw cotton. (Table V-3).

A second psosible explanation would be that the efficiency of the cotton mills has increased substantially, either through fuller use of mill capacity, or through operational efficiencies, partly gained by modernization of equipment./2

Textile facilities in Latin America were recently surveyed by a mission of the Economic Commission for Latin America. One of the members of the mission points out that Colombia has by far

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2/ This explanation was suggested by Sr. Juan B. Londoño, Distribuidora de Algodón Nacional, Departamento de Investigaciones Económicas and by Dr. Gabriel Poveda, Economist in the Medellín office of Asociación Nacional de Industriales (Medellín: July 13, 1962).

Table V-3. Index of cotton fiber prices,f.o.b. gin.

Year	Index
	(1954 = 100)
1951	99.7
1952	103.8
1953	103.5
1954	100.0
1955	100.0
1956	101.4
1957	130.1
1958	163.1
1959	183.0
1960	185.8
1961	186.0

SOURCE-- Data provided by Sr. Juan B. Londoño,Distribuidora de Algodón Nacional,Departamento de Investigaciones Económicas (Medellin: July 13,1962).

the highest proportion of automatic equipment in its textile mills of any nation in Latin America--95 percent automatic and only 5 percent mechanical. He also notes. (in translation)"The greatest possibility for export is found in Brazil because of its excess capacity and in Colombia because of its combination of excess capacity and modern machinery."/3 Dr. Poveda claims that Colombia's excess capacity was transitory, but supports the case for modern equipment. He also points out that raw material cost has constituted an increasing share of gross revenues. Averaging around 50 percent between 1951 and 1958, raw material cost now equals more than 60 percent of revenues, as shown in Table V-4. The change has been largely at the expense of the profit margin. Clearly the increasing efficiency of the textile mills and the decrease in the farm-consumer price spread is a major reason for the relatively small increase in cotton cloth prices.

A third explanation to be considered is that the price index is based on a type of cotton cloth which has slowly deteriorated in quality since 1954. While this explanation is possible, particularly in view of efforts at price control, the general trend has been toward improved textile quality during a period when the mills have been installing modern machinery and improving efficiency.

One may conclude that the most significant retail price effect from P.L. 480 has been upon bread prices. Wheat imports under P.L. 480 averaged 20 percent of domestic consumption at a time when domestic production was increasing little. Their influence in holding down bread prices was strengthened by the "blend price provision" of the 1957 Title I Agreement. This provision, applied to shipments made in 1958 and thereafter, limited the markup on the U.S. wheat and flour imports sold in the Colombian market. It required that all wheat and flour imports from the U.S. be sold

3/ Ing. Aurelio Lobaton:"La Industria Textil del Algodón" in Comercio Exterior (México:Banco Nacional de Comercio Exterior, March 1962), pp. 169-70. The Spanish text is as follows: 'La mayor posibilidad de exportación la tienen Brasil por su exceso de capacidad y Colombia por la combinación de su exceso de capacidad y lo moderno de su equipo".

Table V-4. Raw material cost as a proportion of gross sales in the textile industry, 1950 - 1962

Year	Proportion
	(percent)
1950	41.4
1951	49.0
1952	51.1
1953	49.4
1954	47.3
1955	46.9
1956	48.6
1957	51.9
1958	61.0
1959	60.4
1962 est.	63

SOURCE-- Instituto de Fomento Industrial: Cuadros Estadísticos (processed, undated), Table 62.

at a price at least as low as the average of (a) the C.I.F. cost of commercial imports, plus taxes, fees and other charges, and (b) the C.I.F. cost of Title I wheat and flour without these charges. Colombian purchasers were thus able to buy U.S. wheat and flour at less than commercial prices. Some of these savings were passed on to consumers as lower bread prices. This agreement found a certain commercial response in the pressures on INA to keep the prices of basic foods from rising "too rapidly."

Title III and the consumer

Title III donations are directed to needy consumers. They do not pass through market channels, unless aberrations occur and the program breaks down. Ordinarily, the program has provided help to individuales with limited purchasing power. Since much of the food consists of rolls and reconstituted milk distributed to schools and other institutions, immediate consumption ensues.

United States legislation requires that the donated food packages be marked as a gift from the people of the United States. Where distribution is through food centers, wall posters convey the same information. Still, many of the beneficiaries are iliterate and have little cognizance of the purpose behind the gift. Others, better educated, are quite conscious of the program and have received it well. As noted, a number of agencies and governmental units have assisted in the program.

The effects of the program are hard to evaluate. With respect to health, a preliminary medical assessment of the CARE program in Antioquia indicated that children's consultation in health centers decreased 50 percent due to school lunch and family feeding./4 School attendance, instead of dropping off after the first months, was maintained at high levels, perhaps because of better health, perhaps because of the attraction of CARE-distributed milk, cheese and rolls.

4/ CARE Mission in Colombia: CARE Program in Colombia, 1958-1960 (Bogotá: 1961), p.8.

A small 1959 study of the CARITAS feeding program in Bogotá investigated the impact upon retail trade. Retailers in the well defined program area were asked whether sales of flour and milk in their stores declined as the program came into being. Though the proprietors would be expected to be particularly sensitive to such additional food supplies, in no case did they indicate that sales had been affected.

There appear to be no important impact of Title III donations upon the commercial market in the short run, while nutrition and health appear to be favorable affected. Whether greater energy for daily work and a change in tastes towards more nutritious diet will ensue in the longer run remains to be tested. Perhaps one of the most important "side effects" is the stimulation of governmental and private agencies in Colombia to develop programs to meet the needs and problems of refugee and destitute groups. Individually through personal service, and organizationally through donations of pesos of materials, many Colombians are contributing to improving life for disadvantaged people. CARITAS in particular uses the services of many well-to-do women in distributing food. The Coffee Growers Federation, INA, Shellmar de Colombia and several departmental Governments have used administrative organizations of CARE and CARITAS to make contributions.

Per capita consumption

The rapid growth of population has made it difficult to maintain per capita consumption levels of food and fiber. The downturn in coffee prices aggravated the problem of providing adequate food supplies. P.L. 480 met a vital need for the economy at this time by permitting additional imports of edible oils, wheat flour, and cotton, when foreign exchange was sharply limited.

Per capita consumption estimates for wheat, oils, and cotton are shown in Table V-5. The consumption of Wheat was higher in 1959 and 1960 than the average for 1954-58, and considerably higher than in 1952-53. The consumption of edible oils increased through 1955 but declined throughout the P.L. 480 period, despite relatively large imports in 1960. Per capita consumption of cotton showed a fairly steady increase, but recently this has been based upon the rapid expansion of domestic production. In general, then, P.L. 480 imports prevented or reduced declines in per-capita consumption; they have not provided for large gains in consumption.

Actual per-capita consumption of P.L. 480 wheat has averaged about 3.7 kilograms per year, or about 20 percent of total consumption. Similarly, average annual per-capita consumption of P.L. 480 edible oil has been about 0.6 kilograms or about 12 percent of the total. This suggests that the Colombian people are better fed and perhaps better clothed than they would have been without the P.L. 480 program.

One cannot conclude, however, that the net effects of the program are measured by the differences appearing between the two columns for each commodity in Table V-5. Had there been no such program, agricultural policy would have been different, and would probably have aimed at more production of wheat. Foreign exchange might have been allocated differently, and the rate of industrial development in Colombia probably would have been lower.

The per-capita calorie consumption represented by the P.L. 480 Title I and Title III commodities appears in Table V-6. This table indicates that Title I commodities have been providing about 50 calories daily since 1956. This may be a significant marginal increase in the total diet; it should also be remembered that the protein associated with some of these foods may be more important than the calories.

Table V-5. Apparent per capita consumption of wheat, edible oils, and cotton, with and without P.L. 480 imports, 1951-60./a

Year	Wheat/b		Edible oils		Cotton	
	Including P.L.480	Excluding P.L.480	Including P.L.480	Excluding P.L.480	Including P.L.480	Excluding P.L.480
	(kilograms)					
1951	17.0	---	3.86	---	2.31	---
1952	16.7	---	4.25	---	2.30	---
1953	14.6	---	4.11	---	2.38	---
1954	18.4	---	5.28	---	2.52	---
1955	19.1	17.4	6.42	6.19	2.63	2.49
1956	18.7	14.5	6.07	5.81	2.70	2.11
1957	17.7	13.1	5.54	5.20	2.73	2.51
1958	18.9	16.9	5.09	5.05	2.88	2.59
1959	19.4	12.8	5.39	4.79	3.04	3.04
1960	19.6	16.3	4.71	3.79	2.95	2.95

a/ All stocks are disregarded in computing consumption with the exception of cotton where stock changes in lint cotton are considered.

b/ Includes the wheat equivalents of flour imports.

SOURCES--Computations are made from basic consumption data supplied by the Office of the U.S. Agricultural Attaché, U.S. Embassy, Bogotá. Population estimates were developed by the National Planning Commission.

Table V-6. Calories supplied per capita per day by P.L. 480 food imports, 1955-60

Item	1955	1956	1957	1958	1959	1960
	(calories per capita per day)					
Title I commodities						
Wheat /a	16	39	42	18	60	30
Oils /b	6	6	8	1	14	22
Sub-total	22	45	50	19	74	52
Title III commodities /c	not avail.	4/b	4/d	9	9	9
Total	not avail.	49	54	28	83	61

a/ Computed by using an estimate of 3,300 calories per kilogram of wheat equivalent, including flour.

b/ Computed by using an estimate of 8,840 calories per kilogram.

c/ Includes only calories from wheat flour, cornmeal, and powdered milk.

d/ Excluding the CARE program, which was small in these years.

SOURCES-- Computations are from records of the ffice of the Agricultural Atachê, U.S. Embassy, Bogotá, using population estimates developed by the National Planning Commission.

The impact, however, is more concentrated. The diets of higher income groups are probably unaffected by the greater availability of Title I commodities; most of the population living in rural areas is likewise unaffected. Thus some 30 to 40 percent of Colombia's population, mostly in the cities, receives the major impact of the increase in commodity availability.

The impact of Title III commodities is likewise fairly concentrated. Although the P.L. 480 commodities represent about 2.4 percent of average national consumption, the increase may be nearer to 10 percent for some families.

Chapter VI

EFFECTS ON FOREIGN TRADE

This chapter is primarily concerned with the changes occurring in Colombia's foreign trade, with special reference to Title I commodities. The balance-of-payments aspect of foreign trade will be considered in Chapter VII, which also will give attention to how foreign exchange might have been utilized in the absence of P.L.480.

General considerations

Each of the Title I agreements in Colombia has specified that a particular level of commercial imports would be maintained. Prior to 1957, the codicil was worded in terms of purchases from the United States; in later agreements the reference was broadened to include other free-world suppliers.

Imports of farm products have entered Colombia as well as many other countries more or less as a last resort when domestic supplies were inadequate. In consequence, there have been substantial variations in the annual level of imports from residual suppliers like the United States, Canada, and Peru. In 1950, for example, wheat imports were nearly 5o,000 metric tons and wheat flour imports were nearly 14,000 metric tons. In 1953, wheat imports dropped to 22,665 tons while flour imports increased slightly to 18,000 tons. Cotton imports dropped from 18,235 metric tons to 5,719 tons between 1952 and 1954. Imports of edible oils increased from 3,600 metric tons in 1951, to 18,000 tons in 1953.

The variations for individual exporting countries are even greater and not necessarily consistent with changes in the aggregate volume.

Imports of wheat from the United States were 511 metric tons in 1950 and over 23,000 tons in 1951 and 1952. Thus there is no obvious, clear-cut basis for defining normal commercial marketings, either in total or for any individual country. The choice of the base years becomes part of the negotiating process.

General pattern of trade

The export trade of Colombia is dominated by coffee (Table VI-1). The combination of coffee, bananas, and petroleum represented more than 97 percent of total exports in the 1952-55 period. This percentage has declined towards 90 percent recently, as cotton, sugar, and other products have moved abroad. More than two thirds of these exports have been going to the United States (Table VI-2). Other important customers for Colombian products are Germany, the United Kingdom, the Netherlands, Sweden, and Canada.

Colombia's import trade is dominated by manufactured articles. Many of these have been consumer durables such as vehicles, radios, and refrigerators. These items are now declining in importance as Colombian industries are becoming more and more able to supply them. Of continuing importance are the machinery, generators, and other equipment which provide a basis for further industrialization. Imports of agricultural products represent only 6 to 12 percent of total imports, but this percentage has increased since 1954, reflecting imports under P.L. 480 and the pressure of an expanding population upon the nation's agricultural resources.

As in the case of exports, the United States dominates the import trade (Table VI-3). Other important sources of imports are Germany, the United Kingdom, Sweden, France, and Canada. Germany in particular has increased her volume of trade during the last decade, partly at the expense of the United States.

Table VI-1. Colombian exports by commodities, 1951 -61

Year	Coffee	Crude Petroleum	Bananas	Others	Total
			(thousands of U.S. dollars)		
1951	359,782	73,542	8,778	21,195	463,297
1952	379,882	71,471	9,231	12,668	473,252
1953	492,256	76,295	11,500	16,081	596,132
1954	550,152	75,785	13,209	17,991	657,137
1955	487,386	61,484	16,349	18,177	583,896
1956	413,065	69,915	28,090	29,939	537,009
1957	388,788	76,295	21,914	24,111	511,108
1958	354,514	66,571	15,496	24,134	460,715
1959	361,246	73,292	13,876	24,590	473,004
1960	332,249	79,998	13,687	38,240	464,174
1961	307,827	68,189	14,494	36,633	427,143

SOURCE-- Departamento Administrativo Nacional de Estadística: Anuario de Comercio Exterior de 1960 (Bogotá: 1961).

____________________: Boletín Mensual de Estadística Número 132 (Bogotá: 1962).

Table VI-2. Colombian exports by country of destination, 1951-60

Year	United States	West Germany	U. K.	Holland	Sweden	Canada	Others	Total
				(millions of pesos)				
1951	880.0	61.5	4.0	7.1	14.2	19.7	706.5	1,093
1952	952.4	54.0	5.6	11.2	15.9	30.6	112.3	1,182
1953	1,192.8	72.7	1.1	17.7	19.8	36.8	149.1	1,490
1954	1,295.5	89.2	3.3	37.1	27.6	27.0	163.3	1,643
1955	1,076.5	110.1	11.5	32.0	33.3	21.8	213.8	1,499
1956	957.1	86.3	8.9	26.4	36.1.	35.9	192.3	1,343
				(millions of U.S. dollars)				
1957	358.8	37.1	7.6	9.2	13.6	8.4	76.4	511.1
1958	318.5	44.2	7.7	11.9	10.3	4.9	63.2	460.7
1959	322.9	45.3	25.0	20.5	11.2	8.0	40.1	473.0
1960	296.9	54.6	20.4	24.4	10.6	6.4	51.3	464.6

SOURCE-- Departamento Administrativo Nacional de Estadística: Anuario de Comercio Exterior, 1952 through 1960 (Bogotá).

Table VI-3. Colombian imports by country of origin, 1951-60

Year	United States	Germany[1]	U.K.	Sweden	France	Canada	Others	Total
				(millions of pesos)				
1951	644.0	77.8	45.7	17.9	25.8	19.5	158.1	988.8
1952	696.3	54.4	52.0	19.2	30.2	18.6	167.7	1,038.4
1953	844.5	86.2	60.5	22.1	93.8	20.1	239.6	1,366.8
1954	1,051.6	136.0	74.9	29.2	73.8	34.9	279.0	1,679.4
1955	1,050.2	161.0	72.4	3.3	50.5	42.8	263.0	1,673.2
1956	1,014.0	191.7	55.7	42.5	45.1	37.7	256.3	1,643.0
				(millions of U.S. dollars)				
1957	288.7	45.3	21.8	13.6	15.4	12.6	85.2	282.6
1958	237.6	46.4	17.0	13.4	13.2	12.3	60.0	399.9
1959	248.6	41.5	18.5	10.7	8.1	14.6	73.6	415.6
1960	296.1	53.4	30.4	11.6	5.4	13.3	98.4	518.6

SOURCE--Departamento Administrativo Nacional de Estadística: Anuario de Comercio Exterior, 1952 through 1960 (Bogotá).

Total trade in Title I commodities

A summary of total imports of wheat, flour, cotton, and edible oils is shown in Table VI-4. A comparison of the five years before P.L. 480 with the seven years thereafter shows contradictory trends. Imports of wheat as grain have more than doubled, while imports of flour have declined.

This shift is primarily a reflection of the desire to process wheat in national flour mills; to this end an embargo of flour imports was in effect during 1961 and 1962. Combined imports of wheat and flour have increased by an amount nearly equal to the P.L. 480 purchases.

Net imports of cotton ended in 1959, and exports averaged about 20,000 metric tons in the 1960-61 period. During 1956 through 1958, when most of the P.L. 480 imports were made, total cotton imports exceeded those of the immediately preceding and following years. Title I cotton imports have not created a new market for U. S. cotton, but there is no evidence to suggest that they made Colombia a competitive exporter.

Total imports of fats and oils were 57 percent higher during the P.L. 480 period than in the five previous years. Edible oil imports averaged about 18,000 tons in 1953-54 and again in 1959-60, but were much lower in the other years.

Title I commodity imports by country of origin

So much for the general volume of trade. It is now appropriate to examine the total imports of P.L. 480 commodities by country of origin. The question here is the extent to which the program changed the pattern of Colombia's purchases. There are several ways to approach this problem. One procedure is to look at the percentage shares of the market and how they changed over time. Another is to look at the changes in the total purchases from each country relative to the period prior to P.L. 480.

Table VI-4. Average annual imports of P.L.480 commodities into Colombia from all sources, 1950-54 compared with 1955-61.

Commodity	Average imports		Change, 1950-54 to 1955-61		Average imports under P.L. 480,1955-61
	1950-54	1955-61	Quantity	Percentage	
	(metric tons)	(metric tons)	(metric tons)	(percent)	(metric tons)
Wheat	40,970	94,533	+ 53,563	+ 131	49,710
Wheat flours	19,691	16,644	- 3,047	- 15	1,262
Cotton	14,880	9,300/a	- 5,580	- 38	3,365/a
Fats and oils	44,104	69,300	+ 25,196	+ 57	5,710/b

a/ Average of net imports of the five years from 1955 through 1959, There were net exports in 1960 and 1961.

b/ Average for the years 1955-60.

SOURCE-- Calculated from data in Tables VI-5 through VI-10, following.

In a somewhat static market, one might expect commercial purchases to remain at the same absolute level , with the United States increasing sales by the amount of P.L. 480 shipments. In a dynamic market with total trade in a given commodity increasing, all suppliers might be able to share in the increase, or the United States might gain a larger share through the contracts established while making P.L.480 shipments. Various country suppliers would have different concepts of what would be appropriate.

If total trade were declining, the problem would be more difficult. First of all one might ask whether there was an appropriate base for any P.L.480 agreement at all-- specifically for cotton, for example--since commercial markets obviously were nor mantained over the period. (An agreement for cotton might still have been appropriate for the years in which the program operated). In any case, the appropriate market share over a period when trade is declining is a sensitive and difficult question. Tables VI-5 through VI-9 list total imports of Title I commodities by country of origin. Shipments from the United States under P.L. 480 are shown separately. Data for total and P.L.480 imports of various fats and oils appear in Table VI-10.

Market shares

Changes in the U.S. share of total agricultural imports, and in the ratio of total agricultural imports to total imports, appear in Table VI-11. These data indicate that the United states share of Colombia's farm imports in 1959 and 1960 was higher than at the begining of the P.L. 480 program, but no higher than in 1951 and 1952.

Virtually all of the wheat and flour imports of the 1950's came from the United States and Canada (Table VI-12). Canada's share decreased sharply from 56 percent in 1951-54 to less than 10 percent in 1955-60, and the United States share increased from 39 to 89 percent. The United States was the only supplier of wheat in 1956, 1957 and 1960. Note that market shares varied

Table VI-5. Colombian imports of wheat, by country of origin

Year	United States			Canada	Ecuador	Other	Total
	Commercial	P.L.480	Total				
			(metric tons)				
1950	511	0	511	48,606	24	0	49,138
1951	23,898	0	23,898	23,249	15	0	47,162
1952	23,904	0	23,904	8,114	962	0	32,980
1953	1,842	0	1,842	16,819	4,004	0	22,665
1954	12,576	0	12,576	40,329	0	0	52,904
1955	15,383	22,242	37,625	14,951	0	0	52,576
1956	33,914	56,260	90,174	0	0	0	90,174
1957	48,464	55,784/a	104,248	0	0	1	104,249
1958	53,056	19,486/a	72,542	4,999	0	8,690	86,231
1959	0	72,877/a	72,877	22,000	0	0	94,877
1960	44,384	41,766	86,150	0	0	0	86,150
1961/b	48,013	79,561	127,574	19,901	0	0	147,475

a/ Of these totals, 61 percent was sold for pesos and 39 percent for dollars.

b/ Preliminary.

SOURCE--U.S.D.A. Foreign Agricultural Service: Colombian Agriculture (Bogotá: U.S. Embassy, July 1962 mimeo.) p. 26.

Table VI-6. Colombian imports of bread flour, by country of origin.

Year	United States			Canada	United Kingdom	Other	Total
	Commercial	P.L.480	Total				
	(metric tons)						
1950	5,352	0	5,352	8,552	0	2	13,906
1951	7,025	0	1,025	1,620	52	0	8,697
1952	10,072	0	10,072	1,109	12	12	11,205
1953	11,295	0	11,295	6,274	45	14	17,628
1954	5,957	0	5,957	7,649	0	25	13,631
1955	3,865	0	3,865	3,814	0	0	7,629
1956	1,730	0	1,730	70	0	4	1,804
1957	1,320	5,386	6,706	36	0	0	6,742
1958	4,136	5,905	10,041	2,824	0	0	12,865
1959	0	9,500	9,500	1,000	0	0	10,500
1960	710	7,258	7,968	1,547	0	0	9,514
1961/a	1,504	4,139	5,643	0	0	0	5,643

a/ Preliminary.

SOURCE-- U.S.D.A. Foreign Agricultural Service: Colombian Agriculture (Bogotá: U.S. Embassy, July 1962 mimeo.), p.26.

Table VI-7. Colombian imports of semolina and granular flour by country of origin

Year	United States			Canada	Germany	Other	Total
	Commercial	P.L.480	Total				
			(metric tons)				
1950	2,764	0	2,764	1,133	65	a/	3,962
1951	1,974	0	1,974	2,454	0	a/	4,428
1952	2,391	0	2,391	3,687	0	a/	6,078
1953	1,616	0	1,616	6,072	0	0	7,688
1954	993	0	993	10,214	27	0	11,234
1955	1,113	0	1,113	8,848	0	a/	9,961
1956	2,322	0	2,322	7,645	68	a/	10,035
1957	1,910	0	1,910	3,351	0	0	5,261
1958	3,583	0	3,583	756	0	0	4,339
1959	498	0	498	0	0	0	498
1960	10,669	8,009	18,678	0	0	0	18,678
1961b/	1,831	10,637	12,468	569	0	0	13,037

a/ Less than one metric ton .

b/ Preliminary.

SOURCE-- U.S.D.A. Foreign Agricultural Service: Colombian Agriculture(Bogotá: U.S. Embassy,July 1962 mimeo.),p.27.

Table VI-8. Total Colombian imports of wheat equivalent, including flours, by country of origin /a

Year	United States			Canada	Ecuador	U.K.	Ger.	Other	Total
	Commercial	PL 480	Total						
				(metric tons)					
1950	11,783	0	11,783	62,057	24	0	90	4	73,955
1951	36,397	0	36,397	28,907	15	72	0	b/	65,392
1952	41,214	0	41,214	14,775	962	17	0	18	56,986
1953	19,773	0	19,773	33,966	4,004	63	0	19	57,825
1954	22,229	0	22,229	65,139	0	0	38	35	87,440
1955	22,297	22,242	44,539	32,537	0	0	0	b/	77,077
1956	39,542	56,260	95,802	10,713	0	0	94	69	106,678
1957	52,950	63,265	116,215	4,704	0	0	0	1	120,920
1958	63,777	27,687	91,464	9,971	0	0	0	8,690	110,125
1959	692	86,071	86,763	23,389	0	0	0	0	110,152
1960	60,188	62,970	123,158	2,149	0	0	0	0	125,307
1961 c/	52,645	100,083	152,728	20,691	0	0	0	0	173,419

a/ Flour converted to wheat equivalent using a factor of 72 percent.

b/ Less than one metric ton.

c/ Preliminary.

SOURCE--Calculated from data of Tables VI-5, VI-6, and VI-7.

Table VII-9. Colombian imports of cotton, by country of origin

Year	United States: Commercial	United States: P.L. 480	United States: Total	Peru	Egypt	Mexico	Other	Total
	(metric tons)							
1950	15,234	0	15,234	3,330	0	1,086	1,785	21,485
1951	12,137	0	12,137	89	/a	321	1,302	13,849
1952	12,770	0	12,770	4,764	/a	105	596	18,235
1953	2,334	0	2,334	10,479	00	1,788	507	15,108
1954	2,193	0	2,193	2,327	20	580	599	5,719
1955	142	1,840	1,982	203	20	200	1	2,406
1956	851	7,740	8,591	3,796	20	0	-97/b	12,310
1957	11,164	3,060	14,224	350	155	0	0	14,738
1958	5,285	4,187	9,472	1,391	0	0	0	10,863
1959	2,946	0	2,946	1,404	52	912	868	6,182
1960	1	0	1	716	0	0	-24,104/b	-23,387/b
1961/c	1	0	1	0	0	0	-18,265/b	-18,264/b

a/ Less than one metric ton.

b/ Net exports.

c/ Preliminary.

SOURCE—U.S.D.A. Foreign Agricultural Service: Colombian Agriculture (Bogotá: U.S. Embassy, July 1962 mimeo.), p.27, and other records of the Agricultural Attaché.

Table VI-10. Colombian imports of fats and oils, by type. /a

Year	Raw tallow	Melted tallow	Copra	Lard	Edible oils
			(metric tons)		
1950	29	4,299	19,055	235	3,200
1951	795	941	32,983	1,501	3,600
1952	2,175	3,480	29,782	3,578	8,600
1953	1,079	6,669	19,361	1,079	18,000
1954	755	4,770	35,141	1,015	18,400
1955	1,302	5,773	68,586	1,258	9,500
1956	491	2,844	86,505	771	5,038
1957	769	4,770	64,223	417	7,738
1958	1,886	4,552	59,578	7	6,100
1959	51	8,765	28,346	5	13,000
1960	0	10,233	35,274	29	21,169
1961	0	11,171	29,970	70	900

a/ The United States supplied the following quantities of edible fats and oils under P. L. 480:

1955 - 2,950 metric tons
1956 - 3,570 " "
1957 - 4,646 " "
1958 - 500 " "
1959 - 8,687 " "
1960 -13,908 " "

SOURCE- National Statistics office data, as reported by the U.S.D.A. Foreign Agricultural Service: Colombian Agriculture (Bogotá: U.S. Embassy, July mimeo.) p. 30, with corrected data on P.L. 480 shipments.

Table VI-11. The relative importance of U.S. and other agricultural products in total Colombian imports, 1951-1960

Year	Colombian imports: Total	Colombian imports: Agricultural	Colombian imports: Agricultural from U.S.	Agricultural share of total imports	U.S. share of agricultural imports
	(millions of dollars)			(percent)	
1951	407.2	61.4	27.9	15.1	45.4
1952	414.2	58.4	27.9	14.1	47.8
1953	571.3	67.8	15.9	11.9	23.4
1954	654.1	94.0	30.6	14.4	32.5
1955	665.3	77.8	27.3	11.7	35.1
1956	402.9	86.2	29.3	14.3	34.0
1957	467.2	82.4	33.6	17.6	40.8
1958	399.9	66.0	25.6	16.5	38.7
1959	414.3	56.9	23.6	13.7	41.5
1960	518.6	52.8	24.8	10.2	47.0

SOURCE--República de Colombia, Consejo Nacional de Política Económica y Planeación; Plan Cuatrienal de Inversiones Públicas Nacionales--1961-1964(Bogotá: Dic. 1960),p.70.

U.S.D.A. Foreign Agricultural Service: Colombian Agriculture (Bogotá: U.S. Embassy, July 1962 mimeo), p.22

Departamento Administrativo Nacional de Estadística, Punto Central de Información (Bogotá).

Table VI-12. Market shares of the United States and competing countries for Colombian imports of wheat, wheat flour, cotton, and edible oils, 1951-61

Year	Wheat/a U.S.	Wheat/a Canada	Bread flour/a U.S.	Bread flour/a Canada	Cotton/a U.S.	Cotton/a Peru	Edible oils/b U.S.	Edible oils/b Other countries
	(per cent)							
1951	50.7	49.3	80.8	18.6	87.6	0.6	0.2	99.8
1952	72.5	24.6	89.9	9.9	70.0	26.1	0.7	99.3
1953	8.1	74.2	64.1	35.6	15.4	69.4	6.2	93.8
1954	23.8	76.2	43.7	56.1	38.3	40.7	0.9	99.1
1955	71.6	28.4	50.3	49.7	82.4	8.4	2.1	97.9
1956	100.0	0	95.9	3.9	69.2	30.6	2.7	97.3
1957	100.0	0	99.5	0.5	96.5	2.4	11.6	88.4
1958	84.1	5.8	78.0	22.0	87.2	12.8	3.6	96.4
1959	76.8	23.2	90.5	9.5	48.1	22.9	31.6	68.4
1960	100.0	0	91.3	8.7	0	100.0	34.5	65.5
1961	86.5	13.5	100.0	0	0	0		
Averages:								
1951-54	38.8	56.1	69.6	30.6	52.8	34.2	2.2	97.8
1955-60	88.8	9.6	84.2	15.7	63.8	29.5	13.8	86.2
Imports in 1955-1960 as percent of 1951-1954 imports	745.1	31.6	93.3	37.2	84.3	29.5	857.9	113.5

a/ Expressed as percent of total imports.

b/ Expressed as percent of imports of cottonseed oil, soybean oil, palm oil, and the oil equivalent of copra imports (assuming a 60 per cent oil yield from copra).

SOURCES--U.S. Embassy, Bogotá, Office of the Agricultural Attaché, Colombian Agriculture (Washington: U.S. Government Printing Office, 1960), pp. 26-27.

Departamento Administrativo Nacional de Estadística: Anuario de Comercio Exterior (Bogotá: annual issues, 1951-1959).

Instituto de Fomento Algodonero, Departamento de Investigaciones Económicas: Colombia Algodón y Oleaginosas--Información Estadística, 1959 (Bogotá: 1959), p. 53.

Interview with Luis Hernando Correa, Manager, Department of Economic Investigations, Instituto de Fomento Algodonero, Bogotá.

substantially in the years before P.L. 480, but that the division was generally in favor of Canada as the principal supplier. Imports of bread flour show the same trend but the changes are smaller.

Peru and the United States have been the major suppliers of cotton, with some shipments coming from Mexico and Egypt. Since Peruvian cotton is long-staple fiber and the U.S. cotton is a shorter staple length, the two products are not good substitutes. The relative shares of the declining imports changed slightly in favor of the United States. Peru's market share dropped from 34 percent in 1951-54 to 30 percent in 1955-60, and the United States share increased from 53 percent in 1951-54 to 64 percent thereafter. Neither country is now shipping to Colombia, although Peru held the market for a year longer.

Analysis of the oils situation is complicated by the variety of products coming from different countries. Somewhat arbitrary assumptions are needed for separating the edible oils from other fats and oils which have been reported in earlier tables. According to Table VII-12, the U.S. share of edible oils has increased from 2 percent in 1951-54 to 14 percent in 1955-60. Most of the cottonseed and soybean oil imports came from the United States between 1951 and 1960, and most of the increase in these oils came through Title I programs.

Trends in shipments

Whereas each country would probably like to maintain its percentage share of Colombian imports, the absolute level of shipments is perhaps a matter of even more economic importance. A given country could be gaining in actual shipments of wheat, for example, while loosing in its percentage share of an expanding market. Similarly the United States share of total Colombian wheat imports could be rising because of additional shipments under P.L. 480 during a period of constant commercial imports. This should hardly be cause for complaint by a country such as Canada, providing her absolute shipments were maintained. The lower line of Table VI-12 expresses 1955-60 shipments as a percentage of 1951-54 shipments. A figure of 100 percent, then, indicates no change in absolute shipments, and a figure larger than 100 percent indicates a gain over the period before P.L. 480.

Canada's sales of wheat and flour dropped to about one third of the earlier period. The United States greatly increased its sales of wheat but not of flour, for reasons indicated earlier. Both Peru and the United States showed declines in sales of cotton, but the decline was much greater for Peru. The United States and other countries have shared in larger shipments of edible oils, the percentage increase for the United States being very large, partly because the base quantity for 1951-54 was very small.

There are many factors which influence these market shares and changes in sales over time. The contacts made through Title I arrangements and through market development programs are elements in a changing market environment.

Prices, qualities, and availabilities also vary from time to time and affect purchase decisions. Canadian prices have been higher than U.S. prices in a number of recent bids, but the protein content of Canadian wheat is also higher.

As an importer, INA received bids from exporters in several countries. Price and quality are the major factors in INA's purchase decisions. Such decisions prior to Title I led to substantial year-to-year variations in sources of imports.

Chapter VII

THE BALANCE OF PAYMENTS -- PAST, PRESENT, FUTURE

The effect of Title I arrangements upon the balance of payments of the receiving countries can be very important or can be neutral, depending upon how the actual imports compare with the imports that would have been made in the absence of the program. Before discussing the probable effects of Title I imports upon the balance of payments, it is desirable to review briefly the actual Colombian situation between 1950 and 1962.

Earlier reference was made to the decline in Colombia's capacity to earn foreign exchange because of the decline in coffee prices, and the decline in recent years in the volume of coffee exports. The effect of these factors on the amount of foreign exchange available since 1955 is seen in Table VII-1.

The reduction in foreign expenditures which followed did not occur immediately, in part because of the almost inevitable lag in making adjustments, and in part because it was hoped that the coffee price drop would be temporary or mild. After it became clear that the decreases in exchange earnings were to be substantial for a considerable period of time, strong direct and indirect controls were initiated over the use of foreign exchange.

The years 1954 and 1956 were the high points of Colombian exports during the decade, with sales amounting to 763 and 738 millions of dollars. Merchandise imports were also high from 1954 through 1956, with an actual deficit on merchandise accounts in 1955 and 1956. In December 1956 and June 1957, estimates of the outstanding commercial credit on imports were 382 and 368 million dollars./1 Short term borrowings were necessary to finance the deficit, and drastic internal measures were taken to reduce the over-buying from abroad.

Although in August 1962 there were no data on the balance of payments to extend Table VII-1 beyond 1959, there were figures

1/ Banco de la República: XXXVIII Informe Anual del Gerente a la Junta Directiva, 1960-61 (Bogotá: Dic. 1961) p. 67.

Table VII-1. Total payments abroad and capacity to import, 1950-59

Item	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
	(in millions of current U.S. dollars)									
1. Exports of goods and services	437.5	526.4	514.6	670.9	763.0	657.3	738.4	667.3	607.8	635.9
2. Capital imports	21.5	46.9	73.8	73.3	108.3	46.2	63.9	241.2	140.2	124.9
3. Total earnings of foreign exchange	459.1	573.3	588.4	744.2	871.3	703.5	802.3	908.5	748.0	760.8
4. Payments for foreign imports	36.7	39.8	31.2	33.8	31.1	28.3	35.7	55.4	61.5	47.8
5. Exports of capital										
a) Repayment of principal	7.5	9.1	12.2	23.9	22.3	29.7	34.0	62.7	115.0	112.6
b) Other	34.9	28.7	28.4	41.1	71.7	28.2	40.7	52.6	54.3	13.6
6. Total capital movement	79.1	77.6	71.8	98.8	125.1	86.2	110.4	170.7	250.8	174.0
7. Import capacity (3 minus 6)	380.0	495.7	516.6	645.4	746.2	617.3	691.9	737.8	517.2	586.8
8. Imports of goods and services	407.9	482.6	476.8	626.3	743.4	759.0	751.8	601.1	511.1	528.8
9. Net difference (7 minus 8)	-27.9	13.1	39.8	19.1	2.8	-141.7	-59.9	136.7	6.1	58.0
10. Gifts and grants	- 0.8	14.0	-1.5	-1.9	-2.1	1.8	1.5	2.8	5.5	5.0
11. Total (9 plus 10)	-28.7	27.1	38.3	17.2	0.7	-139.9	-58.4	139.5	11.6	63.0
12. Compensatory financing	28.7	-27.1	-38.3	-17.2	-0.7	139.9	58.4	-139.5	-11.6	-63.0
13. Gold (increase)	-22.3	26.0	-27.7	-10.1	0.2	-0.1	28.4	-4.8	-9.6	-5.4
14. Short term assets	30.3	-51.6	-0.3	-21.9	81.1	93.4	-37.8	15.2	11.6	-46.3
15. Short term liabilities	20.7	-1.5	-10.3	14.8	80.2	46.6	67.8	-149.9	-13.6	11.3

SOURCE--República de Colombia, Consejo Nacional de Política Económica y Planeación; Balanza de pagos. 1950-1960 (Bogotá: undated c. 1961, (processed).

showing a reduction in export earnings in 1960 and 1961 of about 5 percent of the 1959 level./2 Imports on the other hand, increased by 20 and 30 percent, respectively, over 1959. As a result, the commercial balance of physical goods declined from +113.3 in 1959, to -16.2 in 1960, and to -36.7 in 1961, all figures in millions of dollars. While capital imports have helped to adjust the balance of payments, it would appear that the country may have been importing at a rate close to its import capacity, once more. The balance noted above does include Title I shipments as imports, however, although there is no corresponding export payment.

Colombia was forced to meet its foreign exchange crisis in late 1956 and 1957 with a series of measures to increase the difficulty and cost of importing from abroad. Both exchange control and tariff measures were used. These measures to ration foreign exchange were supplemented by several additional procedures. Foreign loans were obtained to provide short-term or long-term relief from exchange pressure, but only after appropriate internal policy had been established. An Export-Import Bank loan came in 1958; an increase in foreign assistance grants in 1959. Internal programs of import substitution were emphasized to reduce the use of foreign exchange. The control over imports, of course, was a way of temporarily living from capital and consumer goods previously imported. Gradually, however, machines wear out and non-durables are used up in the household; unless supplies can be renewed, restrictions lead to inefficiency in production and gradual declines in the real level of living.

Increasingly, the desire for a substantial rate of economic development has become a major goal of public policy. The implementation of this policy has been reflected in special exchange rates for capital equipment and raw materials for many

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2/ Ibid. p. 71.

years--the certificate rate which generally provided foreign exchange at less than the free market price. During the middle 1950's, it applied to nearly all goods. With the reduction in exchange earnings in the late 1950's, a return to the policy of favorable treatment was inadequate; Colombia turned to controls over imports so as to assure reasonably adequate amounts of foreign exchange for the items considered most essential for development and for essential consumption.

General foreign exchange policies 3/

Prior to 1951, the nation had followed a fixed exchange policy. Between the 1951 devaluation and 1957, the same general policies were followed but at the new ratio of around 2.50, established during 1951. Imports, however, were purchased at two prices — one official and one unofficial. Imports which were favored as desirable and necessary could be purchased at the official exchange rate. Ohter imports could be financed only by the purchase of "black dollars", a semi-legal free exchange rate. This price, of course, varied with the circumstances. Much more important in discouraging imports (and the use of foreign exchange) were heavy taxes, tariffs, and embargoes levied against imports. Such measures did much to encourage Colombian self-sufficiency.

Actually, during the early fifties, the earnings from exports were large enough so that virtually no exchange difficulties existed for imported products. The "black dollar" tended to be of primary importance to smugglers, to tourists, and, most important, for the movement of capital; in other words, there were few restrictions on imports during this period.

Following the 1957 devaluation, many changes were made in trade and exchange policies. Two fluctuating exchange markets were established — one in certificados de cambios (certificates of exchange), and the other in capitales, for capital transactions. The capital market is used for making and reimbursing

3/ This section draws heavily from Fernando Gaviria: Moneda, Banca y Teoría Monetaria (Bogotá: 1956), and Memoria, V Reunión de Técnicos de los Bancos Centrales del Continente Americano (Bogotá: Banco de la República, 1957), pages 266-302.

capital investment, for tourist travel, and so on. The certificate market has operated through an auction or <u>remate</u> system for the purchase and sale of certificates. Only importers with approved aplications have been able to participate. Many imports have been prohibited under any circumstances; others have been severely restricted but could be brought in at high cost. Consequently the free dollar market has become more widely used.

Importantly, this also applies to capital. The imports qualifying for the <u>certificados de cambio</u> have been imports of capital goods, imports of raw materials for established industries, and for a very few consumer goods considered essential. Despite the severe restrictions, the price of the certificates has fluctuated considerably, with a generally upward trend from 4.80 in 1957 to 6.40 in 1959 and 1960. After staying at this price for some months, certificates again rose in price, and again stabilized; this time at a price of 6.70 pesos per dollar.

In 1957, there were also substantial changes in the tariff regulations affecting imports. Three classifications were established. Commodities in the first group were completely prohibited or embargoed. Articles in the second classification called <u>lista previa</u>, required previous approval of the <u>Superintendencia Nacional de Importaciones</u> -- in other words, these articles were subject to import licensing. The third group of commodities could be imported without limit. Lists are periodically revised to tighten or ease the importation of certain products. Tariffs, moreover, have been established for each of the latter two groups, with the levy being substantially higher for the commodities in the <u>lista previa</u>.

Monetary measures were also taken to reduce the inflationary force of the money in circulation. One step was to require all importers with debts abroad to deposit pesos with the Banco de la República against these debts. Some 500 million pesos were pulled out of the economy by this process. In addition, peso deposits were required against new imports, sometimes to the

~~extent of 150 or~~ 160 ~~percent of~~ the import value, thus adding to the counter-inflationary measures of this period.

All of the above policies developed out of a review of the fiscal and monetary situation of Colombia in 1957-- a review spurred by a strong International Monetary Fund recommendation that Colombia needed to revise its policies. Whether or not the change would have come, in any case, with the change in administration is of no importance to this report. The important point is that measures were taken in 1957 and have since been applied fairly rigorously to control the highly inflationary situation created during the middle 1950's.

Most of the agricultural products of interest to Title I are imported by INA, under a monopoly authority established in the original INA statute of 1944. The major exception is cotton. Imports of wheat and flour, oils, feed grains, and other food items are thus under centralized control. Private importation is prohibited. Cotton was one of the products favored by the certificate system. As devaluation occurred, however, the shift in prices made domestic cotton relatively less costly, and led to the cotton development program discussed in Chapter IV. With expanding domestic production, Colombia prohibited the importation of all but extra long fiber cotton. Even these imports soon ceased, or were limited to occasional purchases.

It is clear from the above that Colombia was passing through a severe exchange crisis during the period of the several Title I agreements. Had these agreements not existed, commercial imports of Title I commodities might have been reduced even further; alternatively, other imports might have been cut even more drastically in order to expand imports of Title I commodities to attend to the demand of the rising population. In reviewing these and other policies, first attention will be given to the less direct influences of the Title I program upon foreign exchange.

Future exchange problems

The restrictive measures taken in and after 1957 have helped a great deal to make the internal monetary system more stable and to reduce the pressure for a declining peso-dollar exchange rate. Several short-term stabilization loans made it possible to liquidate the commercial debt over a longer period. As the situation regularized, a number of long-term loans were negotiated. Applications for additional loans have been made, a financial consorcium for Colombian loans has been developed, and the reports of an international commission have been favorable. 4/ It appears likely that a number of sizable loans will be made in the next few years. Table VII-2 estimates the flow of long-term investments over the last nine years. Note the low point in 1957.

Loans, however, require the payment of interest and the repayment of principal. The volume of these commitments grew _ n so that over a fourth of the exchange earnings was committed to debt service by 1958 and 1959 (Table VII-3). Some small reductions in total debt were made in 1960 and 1961, but the percentage for debt service is still substantial. Title I agreements also appear in the future exchange situation. It will be recalled that all Colombian agreements have been loans --no grant funds have been provided. More than 290 million pesos, or some 50 million dollars, are scheduled for eventual payment, after excluding the pesos allocated for U.S. uses. A schedule published in 1961 indicates the expected pattern of repayments (Table VII-4). At her option, Colombia can make repayments in dollars or pesos. In view of other commitments on dollar loans, at least a substantial part of the Title I loans are likely to be repaid in pesos. These pesos, in turn, are likely to be reloaned and will for some time constitute part of the credit system of Colombia. Without new Title I loans, these pesos may eventually be used up in U.S. Government expenditures; with new Title I agreements, the volume of loans will increase.

4/ El Tiempo (Bogotá: July 18 and 19, 1962), p. 1.

Table VII-2. Economic assistance to Colombia by the U.S. government, international lending agencies, and U.S. private investors, 1951-60./a

Year	U. S. Governmet		World Bank (long term loans)	Net U.S. private invest-ment	Total
	I.C.A. (Technical assistance)	Export-Import Bank (long term loans)			
		(millions of dollars)			
1951	0.0	2.1	18.9	11.0	32.0
1952	0.7	2.6	25.0	20.0	48.3
1953	1.0	4.5	14.35	1.0	20.85
1954	1.2	0.0	5.0	33.0	39.2
1955	1.4	0.6	20.4	16.0	38.4
1956	1.3	0.2	16.5	24.0	42.0
1957	1.2	0.0	0.0	12.0	13.2
1958	1.3	83.7	2.8	- 8.0	79.8
1959	1.7	0.0	34.2	10.0	45.9
1960	1.9	25.0	25.0	not av.	51.9/b

a/ Excluding military assistance and P.L. 480 loans.

b/ Excluding net private investment.

SOURCES--International Cooperation Administration, Washington, letter from Margo Kranz, Colombian Desk, March 27, 1961.

U.S. Department of Commerce, Office of Business Economics, Washington, letter from Samuel Pizer, Balance of Payments Division, May 29, 1961.

International Bank of Reconstruction and Development: The World Bank in Latin America (Washington: March 1960), pp. 19-27.

________________: Press Release Nº 633 (Washington: May 10, 1960, pp. 1 and 3.

Table VII-3. Colombian foreign debt service and exchange earnings in selected years, 1951--59

Year	Foreign debt service	Foreign exchange earnings	Debt service as percent of earnings
	(millions of U.S. dollars)		(percent)
1951	13.3	456.5	2.9
1953	30.1	576.1	5.2
1955	36.0	531.5	6.8
1957	71.0	498.4	14.2
1958	130.2	446.0	29.2
1959	134.0	495.3	27.1

SOURCE--Banco de la República: XXXVII Informe Anual del Gerente a la Junta Directiva, 1959-60 (Bogotá: no date), p.157.

Table VII-4. Planned repayment schedule of P.L. 480 loans in Colombia, 1961-1970.

Year	January 1 debt	Payments during the year		
		Amortization	Interest	Total
		(thousands of dollars)		
1961	36,701	5	1,042	1,047
1962	36,696	592	1,304	1,896
1963	36,104	612	1,313	1,927
1964	35,492	639	1,335	1,974
1965	34,853	1,146	1,310	2,456
1966	33,707	1,197	1,270	2,467
1967	32,510	1,249	1,228	2,477
1968	31,261	1,305	1,180	2,485
1969	29,956	1,362	1,134	2,496
1970	28,594	1,420	1,083	2,503

Source --Banco de la República: XXXVII Informe Anual del Gerente a la Junta Directiva,1959-60(Bogotá:no date), p.158.

Import substitution and indirect effects of Title I programs

In addition to exchange and trade controls, Colombia has pursued a vigorous policy of import substitution as a means of easing exchange pressures. While small increases in export earnings may be expected from a number of minor products, no great increase is expected from coffee.

This view is justified by the low income elasticity (0.55) and low price elasticity (-0.25) of the U.S. demand for Colombian coffee,5/ and by the general conditions of world coffee supply which make any great increase in Colombian exports unlikely. The only other hope for increased export earnings involves the possibility of significant results from an international coffee agreement.

The effects of import substitution policies are illustrated in agriculture by the expansion of domestic cotton production and by the emphasis given to production of barley rather than wheat. Many examples are found in the industrial sector-- fertilizers, pharmaceuticals, paper, tires, steel and its products, and others. Colombia has attempted to encourage the expansion of industry in several ways. One facet has been the tightening of internal monetary and exchange policy, since a chaotic internal situation and rapidly rising debt service is not likely to attract foreign investments. A second element has been the favorable exchange rate applicable to capital, previously mentioned. A third element has been a protectionistic trade policy, limiting the outside competition for desired new manufacturers.

A number of projects for import substitution are among those that have been financed by Title I pesos. For financial and project details, see Chapter VIII.

The pharmaceutical industry is one of the newest and most rapidly developing in Colombia. Part of this rapid growth may

5/ These estimates are developed in United Nations Department of Economic and Social Affairs: Analysis and Projections of Economic Development, III. The Economic Development of Colombia, E/CN. 12/365 (Geneva: 1957), p.3.

reflect the 11.8 million P.L. 480 pesos which have been loaned to three large firms in the industry--Pfizer, Abbott, and Parke Davis. As a result of this development, pharmaceutical imports decreased from 21 million dollars in 1955 to 5 million dollars in 1959. Value of production within the country grew from 141 million pesos in 1957 to 203 million in 1958./6 Further increases are in prospect as the large new Abbott plant approaches full production in 1962./7

Loans to other industries have had (and will have) less substantial effects on the balance of payments. The 104(e) loans to Cartón de Colombia, a subsidiary of the Container Corporation of America, met about 18 percent of the construction costs of a new pulping plant which will utilize Colombia-produced hardwoods as the basic raw material for paper. The project will eliminate the need for pulp imports, thereby saving an estimated 1.2 million dollars annually in foreign exchange./8

The loan to Maizena, S. A., paid 37 percent of construction costs for a corn grinding plant in Colombia. In addition to packaged corn starch, the plant produces industrial dextrins and glucose, all of which were previously imported. As a result of new plant operations, starch production increased from 8,000 tons in 1958 to 16,260 tons in 1960, thereby permitting the restriction of corn starch imports, which fell to a C.I.F. value in 1960 of only 84 dollars./9

6/ Departamento Administrativo Nacional de Estadística: Boletín Mensual de Estadística Nº 123 (Bogotá: Junio 1961), p.11.

7/ Interview with Antonio Lattanzio M., General Manager, Abbott Laboratories de Colombia, July 11, 1961.

8/ These data were supplied by Gustavo E. Gómez, Branch Plant Manager, Cartón de Colombia, in an interview, July 3, 1961. The project increased pulp production 1,000 tons per month, or 12,000 tons yearly. It is estimated that each ton of pulp produced domestically saves 100 dollars in exchange; hence, a total estimated saving of 1.2 million dollars.

9/ Production data were supplied by J.W. Lochhead, Treasurer, Maizena, S.A., in an interview, May 3, 1961.

There are agricultural import substitution policies in other projects financed by Title I pesos, one of these being the large loan to the Corporación Autonoma Regional del Cauca (CVC). The project reclaimed land near Cali which was subject to periodic floods. One part of the area reclaimed has provided space for workers' subdivisions and the low cost expansion of Cali to the east. Much of the remainder is or will be used to expand crop-land. Cotton is probably the most important product in this area, followed by corn. Increased production of oilseeds and soybeans will reduce the nation's dependence on imported edible oil. Other projects in the CVC area also contribute to expanded agricultural production.

Another project using local currency is a large fertilizer plant plant near Barrancabermeja. The plant is designed to produce a tonnage larger than total 1961 fertilizer imports--some 145,000 tons of nitrogenous and mixed fertilizers./10 Fertilizer imports averaged about 9 million dollars annually during 1955-59,and reached 13 million dollars in 1961. About a third of the imports are nitrogenous fertilizer;/11 hence the plant may save as much as 5 million dollars annually in exchange.

Foreign excahnge savings from these projects occur only as the projects are completed and begin to function. Most of these projects have begun to save foreign exchange only in 1961 and 1962; meanwhile they have tended to increase the demand for foreign exchange.

Peso loans are generally employed in acquiring locally available materials or in paying local labor. But most projects also require capital goods which are not available locally and must be imported for dollars.

10/ República de Colombia, Consejo Nacional de Política Económica y Planeación, Departamento Administrativo de Planeación y Servicios Técnicos: Plan Cuatrienal de Inversiones Públicas Nacionales--1961-64 (Bogotá: Dic.1960), p.187.

11/ Gustavo Pérez A.: Estudio sobre las Características de Importación, Consumo y Producción de Fertilizantes Químicos en Colombia y Estimación de la Demanda en 1965 (Bogotá: Instituto de Investigaciones Tecnológicas, 1961), p.52.

This may be demonstrated by several examples. The fertilizer plant required machinery imports valued at 12 million dollars; equipment imports for the Cartón de Colombia project cost 4.8 million dollars; the Maizena plant required more than one million dollars worth of imported machinery. In some cases, these exchange needs have been financed by foreign capital which complemented the pesos borrowed in Colombia; in other cases, they have clearly created additional demands for exchange. It would require complete knowledge of the investment decisions, project by project, to calculate the net effect. Another indirect effect on the availability of foreign exchange results from the use of P.L. 480 pesos to meet obligations of the U.S. Government in Colombia. More than 25 percent of the pesos have been allocated for United States use, and a large share of these have gone for expenditures the United States would have made anyway. Without a P.L. 480 agreement, pesos would have been bought daily for routine purposes. To this extent, then, the Titla I agreements resulted in some reduction in Colombian foreign exchange earnings. At the same time, some of the U.S. expenditures would not have been made in the absence of Title I pesos. Some of the market development activities, for example, represented additions to aggregate U.S. activity in Colombia; moreover, some additional dollars were brought to Colombia by these projects. Finally, not all of the U.S. pesos were spent immediately; some are still being held for specific programs. Thus it is likely that the current loss of dollar earnings to Colombia is in the order of 12 to 15 percent of current Title I imports.

Direct effects on foreign exchange

The first and most obvious direct effect of Title I programs has been that imports could be increased without using additional exchange. In 1953, 100,000 dollars might have bought 50.000 bushels of wheat; in 1955 the same amount of foreign exchange coupled with a P.L. 480 agreement might have bought 90,000 bushels of wheat, the extra 40,000 bushels being paid for in pesos.

The provisions of Title I agreements required a maintenance of commercial purchases. Prior to the 1955 agreement, commercial purchases of wheat and cotton were declining, and purchases of oils were increasing. Conceivably an agreement could have been written in which there would have been no saving of foreign exchange; under other circumstances the saving could have been quite large--that is, Title I imports could have substituted for commercial imports. How the actual foreign exchange situation in 1955-62 compared with the probable situation in the absence of the Title I program will be examined below.

Had there been no P.L. 480 program, the alternatives available to Colombia would have included the following:

(a) Import the same amount as actually was imported, making payments through (1) a reallocation of exchange from other imports or (2) an increase in borrowing from abroad.

(b) Purchase imports commercially but reduce the total by all or most of the Title I quantities, and make one or more of the following internal adjustments: (1) an increase in bread, textile, and oil prices, accompanied by measures to encourage consumers to shift to locally produced commodities; (2) a formal rationing program for bread and perhaps other products; (3) an increase in farm prices, coupled with an aggressive technical program to increase planted area and yields, and to reduce storage and marketing losses.

(c) Reduce commercial purchases below the level actually attained in 1955-62 and pursue the alternatives under (b) even more aggressively. Thus the policy of expanding Colombian cotton production could have been started earlier; in this way, total cotton purchases would have been reduced for 1957 and 1958, instead of in late 1958 and thereafter.

(d) Attempt to pursue the policies outlined under (b) and (c) for a year or two, with a shift to policy (a) as consumer protests mounted and as bread, oils, and cloth shortages caused a serious internal political problem.

It is very difficult to specify which of the above policies would have been most likely. The actual political-economic decisions are made in an ever-changing flow of circumstances; as each decision is made, the circumstances affecting the next decision are modified. It is easier to point out some alternatives not available to Colombia than to specify the policy most likely to have been followed.

First of all, additional borrowing from abroad between 1955 and 1958 to purchase Title I commodities seems highly unlikely; Colombia already had over-bought and had exceeded her import capacity greatly. Substantial measures were being applied to compensate for earlier excesses.

Second, a system of formal rationing would pose many difficult or impossible problems. In view of the differences in the [illegible] structure of consumption in the city and in the country, in hot climates and cool climates, and between income groups, any rationing system would probably provide excess rations to some and wholly inadequate rations to others, resulting in widespread black markets in coupons or bread. Similar problems would appear for cotton cloth, and possibly for oils.

However beneficial the third, fourth and, fifth agreements may have been, it is difficult to see much reason for the first and second agreements from the point of view of foreign exchange problems. During 1955 and 1956, Colombia was less than careful in her use of foreign exchange. Many luxury products, including fine wines, perfumes, and expensive automobiles were being purchased. While the Title I purchases may have represented additional imports, exchange could have been made available for the farm products listed in the first two agreements, had Colombia wished to do so./12

It appears that the most probable policy would have included

12/ Based upon interviews with officials of the Banco de la República, including Camilo Jaramillo, Chief of the Foreign Trade Section.

(a) a much more aggressive program of import substitution through higher prices and technical help to farmers;

(b) an attempt to save exchange by reducing commercial purchases and operating with small reserve stocks, particularly just prior to the Colombian harvest (leading to periodic crises in one city or another, and the allocation of foreign exchange to "emergency" imports of flour and wheat, and probably also of edible oils); and

(c) a combination of higher internal prices to consumers, fewer capital goods imports, and a somewhat reduced program of economic development.

The lower rate of economic development (see Chapter IX) would have a secondary effect upon levels of consumption. In some income classes in some parts of the country, wheat consumption would be larger with lower incomes; in other classes and in other parts of the country, wheat consumption would be smaller. The net effect would be a reduction in wheat consumption, with corresponding increases in the consumption of corn bread (arepa), cassava (yuca), plantains, and possibly some other products. The income elasticity for wheat is estimated at about 0.34 (see Chapter V), but with substantial area differences.

At a lower level of economic development than existed in 1956-62, wheat consumption would then have been lowered. This must be considered in comparing actual imports with probable imports in the absence of Title I. It should also be recalled from Chapter II that per-capita levels of income were decreasing, or increasing very slowly, during most of this period. Only a small change would have been needed to produce declining per-capita incomes in most of the Title I years.

Without P.L. 480 imports, and with an earlier effort to expand domestic cotton production, local output probably would have approached textile mill consumption levels more rapidly--that is, imports would have been smaller than they actually were, the difference probably being more than the amount of P.L. 480 imports. It is difficult to believe that edible oil imports would have been reduced this much; it is more likely that commercial imports would have been larger but more erratic as periodic crises loomed on the horizon.

For wheat, the same conclusions seem appropriate, except that some part of the problem would have been transferred to barley and to raw material shortages for the breweries--that is, higher prices for wheat relative to barley would have resulted in a somewhat larger area of wheat and a somewhat smaller area of barley. Some commercial importation of barley might have occurred in place of Title I wheat imports. Also, the problem of milk and dairy products would have been made somewhat more difficult because of the competition between wheat and dairy cattle for the same land; on the other hand, this problem would have been eased somewhat by a slower increase in the economic status of the Colombian people. Finally, attempts to expand production of a wide range of farm products through higher yields would have required additional inputs such as fertilizers, fungicides, insecticides, and weed killers. Since nearly all these are imported products, they would have added to the demand for foreign exchange, offsetting part of the decrease in exchange used for wheat, cotton, and edible oils.

In summary the most fruitful hypotheses, or the more likely results of policy decisions, in the absence of Title I agreements, are as follows:

(a) Higher prices and more aggressive technical programs to expand wheat production in Colombia.

(b) An earlier attainment of self sufficiency in cotton production with smaller total imports, and probably with some reduction in commercial imports.

(c) Probably somewhat larger commercial purchases of edible oils, in a total volume somewhat less than actual combined purchases (commercial plus Title I). Perhaps a third of the actual Title I imports would have been purchased commercially, assuming the same level of increase in national income.

(d) A more erratic purchase of imported wheat, with commercial imports below actual levels in some years and above actual levels in other years. Some commercial imports of barley would have occurred, essentially in place of some Title I wheat.

(e) By expanding domestic production, by operating with critically short inventories, by expanding the consumption of wheat substitutes through higher prices and episodic shortages of bread, and by more careful handling of domestic wheat, the aggregate wheat imports would have been reduced by a major fraction of Title I imports.

(f) Wheat mills and textile mills would have operated at a lower percentage of capacity, with consequently fewer employed workers. It should also be remembered that Colombian wheat produces less flour than North American wheat. Thus, there would have been less flour both because of reduced supplies, and because of reduced flour from the average ton of wheat. Specialty manufacturers of crackers and spaghetti probably would have had even more trouble maintaining employment than bread bakeries.

Chapter VIII

THE UTILIZATION OF LOCAL CURRENCY

As noted in Chapter I, the Title I agreements designated various United States and Colombian uses for the proceeds from commodity sales. Substantial progress has been made in developing approved projects, allocating funds and making expenditures or loans; still, there are lags between the signing of the agreements the accumulation of funds, the approval of projects, and the disbursement of pesos. While the funds held by the United States Treasury are small, substantial amounts are held at other stages of disbursement. Since all of the allocations for Colombian uses are for loans to be eventually repaid in pesos or dollars, the future inflow of funds will presumably include payments on loans now outstanding, and will tend to increase if there are additional Title I agreements.

Note that the pesos paid for P.L.480 commodities flow back into the Colombian economy in much the same fashion as the pesos accumulated by INA through its markup on imported commodities. Both types of funds are generated as Title I commodities move into consumer channels, and volumes of both are in some degree determined by agreements between the two governments. Within limits, INA exercises a degree of control over its own markup, however, subject to certain limitations set by agreement between the United States and Colombia. INA also administers the use of its own funds, which it disburses both directly and through various other Colombian agencies. Title I pesos, the concern of this chapter, are paid in the first instance to the United States Government.

Major uses of Title I pesos

As of March 9, 1962, the United States Governmet had received 311.3 million pesos from Colombia for Title I commodities and had allocated 305.3 million pesos to uses specified in the various agreements (Table VIII-1). United States uses accounted for 28 percent of the total allocations, and Colombian uses 72 percent. More than half of all allocations represented loans under Section 104(g) for economic development activity by various agencies of the Colombian Government, semi-public corporations, and a few approved projects of private enterprises. Since 1957, additional Title I funds have been allocated under Section 104(e) for loans to private industry.

Implications of alternative uses

In the absence of P.L. 480 pesos a large share of the U.S. expenditures would probably have been made with dollars. Possibly the market development projects under Section 104(a) and the international educational exchange under Section 104(h) would have operated on a much smaller scale if the peso funds had not been available. Otherwise, most of the pesos allocated to U.S. uses represent a loss of dollars to the Colombian economy, or more precisely, a substitution of farm products for dollars in the pre-purchase of pesos to finance ordinary U.S. Government operations.

The remainder of the P.L. 480 pesos represent an actual or potential increase in the flow of currency and credit through the Colombian economy. Under certain conditions they can stimulate the process of economic development; under other circumstances their primary effect is to add to the forces for internal inflation. The actual results will be considered in Chapter IX. The rest of the present chapter will concentrate on the procedures and specific projects which have directed Title I pesos to the various uses.

Table VIII-1. Title I funds received through March 9, 1962 as allocated to major uses

Item and section	Amount in pesos		Percentage distribution of allocations	
	(thousands)		(percent)	
United States uses				
104(e) Market development	13,487		4	
104(f) Government obligations	43,778		14	
104(h) Educational exchange	14,856		5	
104(j) U.S. Information Service	7,690		3	
Health Education, and Welfare	20		/a	
104(k) Scientific activities	5,630		2	
Congressional travel	13		/a	
Subtotal		85,476/b		28
Common defense-104(c)		375		/a
Colombian loans				
104(e) Loans to private enterprise	52,984		17	
104(g) Loans to Colombian Government	166,462		55	
Subtotal		219,446		72
Total allocations		305,297		100
On deposit		6,004		

a/ Less than 0.5 percent.

b/ As of December 31, 1961, a total of 39,415,000 pesos had been allocated to U.S. uses but had not been disbursed. The total for March 9 would be slightly different.

SOURCE-- Tabulation prepared by J.W. Anderson, AID (Bogotá: U.S. Embassy, 1962).

Section 104(g) loans

The largest single use of local currency consists of loans to the Colombian Government for economic development. Some 58 percent of the Title I pesos were earmarked for this purpose under the sales agreements. They are administered for the United States through the Agency for International Development (AID). Through the influence of Jorge Mejía Salazar, Minister of Agriculture when the first sales agreement was signed, procedures were established by which the pesos generated through Title I could be channeled into projects to stimulate production of farm commodities which were in national deficit. Thus most of the pesos from the early agreements were loaned for projects directly related to agriculture. This was modified somewhat in the later agreements as the result of the "Cooley Amendment" Section 104(e) which encouraged a wider range of loan activities.

Planning and administration

In the actual loan operations, the Caja de Crédito Agrario, Industrial y Minero (Caja) has a major part. The planning and policy coordination, however, are functions of a three-man committee composed of the AID Country Director, the Colombian Minister of Agriculture and the General Manager of the Caja. The evaluation and approval of loan applications received and recommended by the Caja is by consensus. The Caja has much administrative discretion in actual loan procedures and is also responsible for loan repayment.

Since 1958, the loan projects have been planned and reviewed somewhat more comprehensively. Prior to that time, the Caja essentially reacted to loan proposals received from various groups and individuals, who believed that their particular projects qualified for inclusion. Since then, the National Planning Commission (Consejo Nacional de Política Económica y Planeación) has been influential in directing the pesos into the more promising economic projects. To this end, it makes the initial proposals for loan agreements and uses its influence to determine the use of available funds. The result is a somewhat subtle and complex interaction in designating the type of acceptable projects, the appropriate amount of funds, and the preparation of appropriate specific loan projects. This accomplished, the funds are transferred to the Caja. An interest rate of four percent is charged to the Caja; it charges the commercial rate, which is always higher, and uses the difference to administer the program. The allocations of pesos by projects and the actual loans made by the Caja are shown in Table VIII-2.

Loan projects

Loans relating to land reclamation, water control, and electrification have been important in the total use of Section 104(g) funds, and they have accounted for a large share of Colombia's recent investments in such programs. The largest single loan was to aid in the development of the Cauca Valley by the Cauca Valley Corporation, an autonomous regional development agency established in 1954 according to the pattern provided by the Tennessee Valley Corporation. Goering 1/ appraises the implications of this loan as follows:

> The Cauca Valley contains approximately 1 million acres of flat, extremely fertile land. It is potentially one of the richest agricultural areas in the world. Because of its equable climate and productive land resources, the area has great potential as a producer of foodstuffs. Unfortunately, this potential has not been fully developed due to drainage problems and the pattern of land use which includes extensive livestock production on level valley land.
>
> The favorable climate and continuing violence in outlying areas have produced a heavy population influx, making growth rates for the area nearly twice the national average. The Valley is well located with respect to interior consuming markets and has relatively easy access to port facilities. It possesses large coal deposits and is undergoing rapid development of its hydro-electric resources, partly as a result

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1/ T.J. Goering: United States Surplus Disposal in Colombia, a doctoral thesis in the library of Michigan State University (East Lansing: 1961), pp. 97-100.

Table VIII-2. Section 104(g) funds allocated and loaned through March 9, 1962.

Item	Funds allocated	Funds loaned by the Caja Agraria
	(pesos)	(pesos)
Project Agreement I/a		
Cacao production	292,000	196,000
Access roads to agricultural areas	4,900,000	4,900,000
Cattle improvement	1,700,000	1,850,000
Water well drilling	223,500	223,500
Lime pits and kilns	430,000	430,000
Fertilizer production	12,000,000	12,000,000
Irrigation	850,000	850,000
Small industry	2,153,500	1,966,500
Total, Agreement I	22,549,000	22,416,000
Project Agreement II/b		
Cauca Valley Corporation	33,590,000	33,590,000
Coal production	6,000,000	4,120,000
Fertilizer production	24,000,000	24,000,000
Lumber production	1,000,000	1,000,000
African palm production	4,075,000	3,365,000
Fondo STACA	4,355,000	-
Total, Agreement II	73,000,000	66,075,000
Project Agreement III/c		
Irrigation and drainage	5,652,050	5,248,653
Ch mical fertilizer	10,000,000	9,951,400
Cement production	2,347,950	2,347,950
Reforestation	2,000,000	1,200,000
Total, Agreement III	20,000,000	18,748,003
Project Agreement IV/d		
Fertilizer production	20,000,000	20,000,000
Cement production	9,652,050	9,652,050
Reforestation	6,000,000	-
Irrigation and drainage	6,000,000	-
Irrigation and drainage(Atlántico)	14,347,950	14,347,950
Silo construction-INA	18,000,000	-
Livestock production-STACA	12,000,000	-
Access roads to agricultural areas	5,000,000	-
Port improvement	10,000,000	-
Total, Agreement IV	101,000,000	40,000,000
Grand total	216,549,000	147,239,003

a/ Signed June 27, 1957; covers the Sales Agreements of June 23, 1955 and December 20, 1955.

b/ Signed April 14, 1958; covers the Sales Agreement of April 16,1957

c/ Signed June 16, 1959; and covers Sales Agreement of March 14,1958

d/ Signed October 26, 1960; covers Sales Agreement of October 6,1959 See Caja de Crédito Agrario, Industrial y Minero: Carta Agraria Nº 51. 2a (Bogotá: Octubre 1960),p.l.

SOURCE--Data from U.S. Embassy, Administrative Section(Bogotá: 1962).

of CVC activities. Because of these advantages and an abundance of cheap labor (but, unfortunately, poorly-trained), the area has become an important industrial center.

In 1958 a loan of 33.5 million pesos was granted to the Corporation for use in irrigation, drainage, and electrification projects. Receipt of the funds at this time was particularly propitious for the Corporation as expected funds from the central government had not materialized and projects were being delayed. Of the total amount, nine million pesos were used in the electrification program with the reminder going to finance reclamation works. Final payment of funds was made to the CVC in March 1961. Amortization is to begin in 1964 and is to be completed 10 years thereafter (a 20-year amortization period has been requested). The interest rate of 7 percent was perhaps not the most advantageous feature of the loan; more notable was the fact that commercial banks simply did not have this quantity of long-term investment capital available.

The electrification project includes the construction of 300 miles of high voltage transmission lines in the Valley. Villages and many farms will receive dependable electrical service for the first time. The project will make feasible the use of electrical irrigation equipment, thereby aiding agriculture and reducing the impact of occasional droughts. The program is unique in that it represents the first total-area electrification scheme in Colombia and Latin America.

The P.L. 480 pesos have financed two reclamation projects in the area. One of these, the Aguablanca project in the Cali area, includes flood protection and drainage. The project was completed in early 1961 and made available 13,000 acres for agricultural purposes, urban housing, and industrial sites. Its social value is significant as it permits an easing of the serious land shortage in the area. Because of the steeply-rising mountain range on one side of the city and flood-susceptible low lands on the other, urban expansion has been severely restricted. The project makes possible the development of these new areas as residential centers and has permitted some of the land to be brought into agricultural production, particularly garden and truck crops. A reclamation project in the Roldanillo-La Unión-Toro area is aimed at intensifying the use of 28,750 acres of potentially productive farm land. Prior to project completion, 3,700 acres were largely swampland and totally unfit for agricultural use. Other large areas were not cultivated because of an excessively high water table and frequent flooding. It is estimated that the drainage project in this area has brought 23,000 acres of formerly idle land into production and increased production on the remaining 5,750 acres.

Another aspect of the Roldanillo-La Unión-Toro project is the plan to furnish former subsistence farmers with newly reclaimed plots of economical size. The new lands will have access to irrigation water. A program of village settlement is being attempted in a further effort to conserve the fertile lands for agricultural use.

The CVC program is a step toward intesifying land use in the Cauca Valley. As one of the richest agricultural areas in the country, the Valley must be called upon to produce increased quantities of foodstuffs. Under Colombian law, all reclamation works must be paid for by benefitted land-owners. This increased tax burden has the effect of forcing land into more intensive uses. In the Valley outside of these two reclamation areas, land taxes have been increased by 4 mills to a rate of more than twice the national average. Although the levy is still relatively low, the change will ecourage a land use pattern more in accord with the country's food needs.

The CVC development program can be considered a part of Colombian agrarian reform, Reclamation projects and intensified land use are providing increased employment opportunities, either as small farmers or workers in large farms, for many poorly trained workers who cannot easily be assimilated into the industrial labor force. An example concerns the 220-acre experimental farm of Frutera Colombiana, a fruit and vegetable processing company. Within one year, this farm has been transformed from grassland, furnishing empleyment to one worker, to an irrigated vegetable and truck farm employing 160 full-time laborers.

A smaller project, in the Departamento of Atlántico, borrowed some 20 million pesos with i rigation as the primary objective. Recent estimates suggest that 10,000 hectares will be irrigated when the total project is completed, and that 7,500 hectares will receive other benefits. Construction costs have increased greatly since the original engineering studies in 1951, and the need for a careful reconsideration of the entire project was suggested by a 1960 study mission./2

2/ Robert R. Nathan Associates: Programa de Desarrollo Económico del Valle del Magdalena y Norte de Colombia. A study directed by Lauchlin Currie for the Ministry of Public Works, The Colombian National Railways, and the Colombian Petroleum Company (Bogotá: 1960), p. 261 & ff.

The fertilizer industry has received a series of loans totaling about 66 million pesos for a plant which has been in construction since 1956. The purpose of this plant is to make more fertilizer available for intensified land use, while reducing or eliminating the nation's dependence on fertilizer imports. This would seem to be a high priority objective, in view of the contribution which more fertilizer could make to agricultural productivity, and in view of the fact that Colombia has been disbursing some 5 million dollars of foreign exchange annually for imported fertilizers./3 Construction of the plant, however, has been subject to a series of costly delays, and the project has been criticized for a series of engineering and administrative errors./4

Another major loan has been to INA for the development of storage facilities. This loan supplements the funds accumulated through markups on imported grains and oils, which INA has used to improve market facilities. These facilties serve two purposes. One is to provide sufficient modern storage space, so that wheat growers can sell thir crops speedily at harvest time without long delays and price discounts. The other purpose is to store imported grain as it arrives and to distribute its use over time so that national and imported grains can be blended in flour milling. Obviously both purposes can be served only through careful timing of imported supplies.

Through March 9, 1962, some 12.5 million pesos had been loaned for livestock improvement, cacao and African oil palm production, agricultural access roads, reforestation and lumber production. Nearly 37 million pesos were designated for these purposes in four project agreements signed between June 1957 and October 1960.

3/ See Gustavo Pérez Angel: Estudio Sobre las Características de la Importación, Consumo y Producción de Fertilizantes Químicos en Colombia y Estimación de la Demanda en 1965 (Bogotá: Instituto de Investigaciones Tecnológicas, 1961), pp.1-2, and Caja de Crédito Agrario, Industrial y Minero: Carta Agraria Nº 33 (Bogotá: Enero 1960), p.3.

4/ Nathan Associates: op. cit., p. 163 & ff.

Many of these pesos were intended to supplement government funds allocated for production expansion campaigns. This was true of the loans actually made for cacao and African oil palm production, as well as for a proposed allocation of 12 million pesos under the fourth agreement to support a vigorous livestock improvement campaign. Loans for building access roads in the departamento of Cauca will also support livestock expansion by opening up new areas which are well suited for livestock production and reasonably well located with respect to consuming centers.

Section 104(e) loans to private business

One sixth of the peso funds have been allocated to private business loans under Section 104(e), which became effective through amendment of P.L. 480 in 1957. Similar loans had been made earlier, under Section 104(g), to several agriculturally related firms. Since then, some ten additional loans have been made, and five more have been approved, for Colombian firms or for Colombian subsidiaries of American companies. Loan applications now flow through AID channels. An interest rate of 8 percent has been stipulated, with repayment usually to be scheduled over a five-year period.

Under the sales agreements of 1957, 1958, and 1959, nearly 73 million pesos were earmarked for Section 104(e) loans. As of May 18, 1962, however, only 23.3 million pesos had actually been loaned (Table VIII-3)./5 Chemical and pharmaceutical firms received half of these loans. Another category of special interest includes loans to firms processing agricultural products. Loans to this group under Section 104(e) plus the earlier loans under Section 104(g) total more than 8 million pesos.

The largest loan in the latter group was to Maizena, S.A., for construction of a new plant in the Cauca Valley in 1958.

5/ An important recent addition is the 5 million peso housing loan.

Table VIII-3. Loans in Colombia of Section 104(e) funds allocated through June 30, 1961 and disbursed through May 18, 1962.

Firm	Purpose	Funds allocated through June 30, 1961	Funds disbursed through May 18, 1962
		(millions of pesos)	
Maizena, S.A.	Facilities to produce starch and related products	5.9	5.9
Aluminio de Colombia	Facilities for production of aluminum products	2.0	2.0
Carboquimica, S.A.	Facilities to produce chemicals	0.6	0.6
Carton de Colombia	Facilities to produce paperboard products	0.9	0.9
Pfiser Corporation	Facilities to produce Chemicals and pharmaceuticals	1.7	1.7
Compañía Hotel del Prado	Rehabilitation and moderni zation of Hotel del Prado	0.9	0.9
Abbott Laboratories de Colombia	Facilities to produce pharmaceuticals	7.7	7.7
Shellmar de Colombia	Facilities to produce containers	0.4	0.4
Parke-Davis Inter-American Corporation	Facilities to produce pharmaceuticals	2.4	2.4
Purina Limitada	Facilities to produce animal feeds	0.8	0.8
W. R. Grace International Paper Co.	Facilities for paper manufacture	6.0	
Goodyear de Colombia	Facilities for manufacture of tires and tubes	2.0	
Hogares Colombianos (World Wide Homes, Wichita, Kansas)	Facilities for residential housing	5.0	
Gillette de Colombia	Facilities to produce safety razors and blades	4.0	
Owens-Illinois International	Facilities for glass manufacture	4.5	
	Totals	44.8	23.3

SOURCE--Data from United States Embassy, Administrative Section (Bogotá: 1962).

The plant has an annual processing capacity for 32,000 tons of corn, equal to nearly 60 percent of 1959 production in the Cauca Valley. Total construction cost was estimated at 14 million pesos, of which the P.L.480 loan supplied 5.9 million.

A subsidiary of Corn Products International, Maizena has become one of the largest Colombian industrial consumers of farm products. The company began a modest packaging operation in 1933, and established a corn processing plant in the Departamento of Caldas in 1945. National demand for its corn starch, dextrin, glucose, and vegetable adhesive rose rapidly thereafter, and led to the construction of the Cauca Valley plant. The Maizena operation benefits corn producers by supplying a ready market for their product, thus reducing severe price fluctuations caused by temporary gluts and shortages. Corn supplies have not always been adquate to keep the large plant in full production, however, and the company has tried to stimulate corn production by announcing a fixed price prior to market time.

United States uses

Among the United States uses listed in Table VIII-1, the Section 104(f) allocations for such items as Embassy and Consular expenses in Colombia are of major size. The U.S. Treasury may use these funds whenever it requires pesos, and the 44 million peso allocation clearly reflects a roughly equivalent reduction in dollar expenditures in Colombia.

On the other hand, the availability of P.L.480 pesos has probably led to an expansion of the educational exchanges under the Fulbright and Smith-Mundt Acts, as well as of the U.S. Information Service activities, such as construction and operation of five U.S. sponsored schools and the support of Colombo-Americano Centers in several Colombian cities. At the same time, total dollar expenditures for educational exchange and U.S. Information Service have been curtailed because of the P.L. 480 pesos.

The market development funds have been expended through the Agricultural Attaché in Colombia, representing the Foreign Agricultural Service and recently, also, the Economic Research Service. Some of the funds are spent through trade groups that perform market development activities and sometimes provide dollars to cover a share of the cost.

In general the market development activities are aimed at maintaining or expanding existing markets, and at developing new markets for U.S. agricultural products in Colombia. This kind of work presents special problems in any country with highly variable foreign exchange earnings and a predilection for self-sufficiency. Just when a project is beginning to bear fruit, after substantial expenditures of money and effort, severe restrictions may be placed on specific or total imports for a variety of national reasons. In such cases, local producers instead of overseas suppliers may reap the major benefits of market development activities. At other times, barriers may fall, permitting overseas suppliers to benefit without any direct efforts toward market development.

The uncertainties of market development work in Colombia are clearly pictured in the following quotation: /6

> These points are well-illustrated by livestock and poultry imports into Colombia during the period 1955-60. Since 1957, the U.S. has supported projects within the country aimed at stimulating imports of U.S. livestock and livestock products. As of December 31, 1960, more than 760,000 pesos have been spent in these projects. But with the break in coffee prices and the imposition of vigorous import restrictions, livestock imports slowed to only 20 head in 1959 (see Table VIII-4). In 1960 the ban was removed, partly as a result of efforts by marketing specialists financed with market development pesos, but the Colombian government encouraged livestock imports from countries where coffee could be bartered. Even so, the U.S. has realized some livestock sales in Colombia primarily as a result of market development work. In July 1960, a Ministry of Agriculture mission to the U.S., financed with 104(a) pesos, purchased 760 head of purebred sheep for use in the Ministry's wool campaign. Similarly, some poultry imports from the U.S. have resulted from market development efforts.

6/ Goering: op. cit., pp. 108-113.

Table VIII-4. Total breeding livestock imports, and imports from the United States, 1955-60.

Year	Breeding cattle		Breeding hogs		Sheep		Poultry
	Total	U. S.	Total	U. S.	Total	U.S.	Total
1955	7,000	4,905	371	371	2	---	870,659
1956	934	814	225	225	0	0	648,374
1957	24	21	98	98	0	0	53,900
1958	44	39	0	0	0	0	11,020
1959	20	6	0	0	0	0	88,770
1960	422/a	110/a	192/a	170/a	1,624/b	760/b	/c

a/ January through October.

b/ Reported by Caja de Crédito Agrario, Industrial y Minero, Carta Agraria, Nº. 44, (Bogotá: Julio, 1960), p.2.

c/ Not available.

SOURCE--USDA, Foreign Agricultural Service, Office of the Agricultural Attaché: Livestock Report Nº. 129 (Bogotá: U.S. Embassy, February 24, 1961), Tables 15,16,17,19,20,and 28.

Although market development work may only have a limited effectiveness in developing permanent markets for U.S. products, these activities do have beneficial, longer-run effects in developing markets <u>for the agriculture of the participating countries</u>. This program could therefore be considered as a form of aid to the country concerned. A brief discussion of the nature of these activities will clarify this point. Most projects include substantial efforts to demonstrate the nutritional values of particular products--wheat, eggs, milk, etc. Consider the following statements from specific projects in Colombia:

> This project is designed to increase overall consumption of milk ...through an educational campaign on the benefits of milk to health and welfare.
>
> This project is designed...to promote... new and expanded markets for wheat products through market research, nutrition education, promotional activities, and general publicity...
>
> This project is designed... to demonstrate the important food values of bread and other wheat products and thereby increase the use and sale of these products.

These projects are primarily designed to promote U.S. products but the effect is also to develop among consumers an appreciation for these particular foodstuffs, regardless of whether they are produced in the U.S. or Colombia. In the presence of import quotas or embargoes, market development may be viewed as a stimulant to a market which can be supplied by domestic producers--an obvious benefit to Colombian agriculture.

A case in point is the 1959 dairy project in Medellín which was aimed at promoting milk consumption in the city. ...(total) 1959 milk consumption in that city was nearly 16 percent over 1958 levels, thereby permitting a substantial increase in per capita intake. Some part of this increase may be attributed to the promotional program, but the severe import restriction on both whole and powdered milk permitted little of the increase to be supplied with U.S. products. The 10 percent increase of 1960 consumption over 1959 also suggests that the campaign may have had some permanent effects, again a benefit to local milk producers.

Another example may be useful in emphasizing the positive effects for Colombian agriculture. In 1957 a project was designed "to increase the demand and market for U.S. feed grains and pasture seeds in Colombia by demonstrating to agricultural students, farmers, and extension workers, the advantages of improved animal feeding and pasture products that result from the use of U.S. protein concentrates, feed grains, and pasture seeds...". As is known, the project was less than completely successful in enlarging the market for U.S. feed grains in Colombia. However, the educational benefit to farmers and extension workers, while difficult to measure, is certainly significant. Similarly the various projects designed to promote purebred U.S. breeding stock in Colombia may sell few U.S. cattle when equally qualified cattle can be obtained through European barter deals for coffee; but the projects have the valuable effect of developing an awareness among Colombian cattlemen of what high-quality livestock are, how they should be managed, and what their advantages may be.

Chapter IX

PESO USE IN RELATION TO DEVELOPMENT, CREDIT, FISCAL POLICY, AND INFLATION/1

The use of local currency as a stimulus to the process of development has been discussed by many analysts. Some suggest that Title I programs have a double impact upon development--first, when the commodities move into market channels; second, when loans are consummated and the accumulated currency moves again into the flow of money and credit. Others argue that the development contribution is made at the time the commodities are introduced into the economy; thereafter there is no development effect./2 The spending of the local currency does not represent new resources; it only adds to the fuel of inflation.

In such controversies as the above, contradictory conclusions often result from alternative premises or assumptions. In this controversy, various possible assumptions might be made about the possible policies that would have prevailed in the absence of an accumulation and disbursement of P.L. 480 currencies. Here, it will be argued that the generally conservative banking and credit policies characterizing the Colombian situation have helped to provide a favorable environment for using Title I pesos as a spur to development. In specific cases, the pesos have been or can be used in ways which supplement the regular credit and fiscal system and bring additional resources into use, thus producing a net, positive effect.

1/ Considerable emphasis will be placed on this area in the year ahead; therefore this chapter is more a problem statement than a report of research done, although it includes some of the latter.

2/ A forceful presentation of this argument will be found in Edward S. Mason et al.: The Problem of Excess Accumulation of U.S. Owned Local Currencies; Findings and Recommendations to the Under Secretary of State by the Consultants on International Finance and Economic Problems (Washington: U.S. Govt. Printing Office, 1960), p. 6.

A second way in which development may be advanced gains credence if a particular theory of development is accepted. Briefly, this argument is that the developed countries succeeded in developing only after an agricultural revolution which greatly increased the productivity of agriculture, both in total and per worker. This historical generalization is still relevant. The result of the process is the release of manpower to urban industrialization, the availability of ample food at decreasing cost, and the creation of an expanding market for industrial goods based on the saving in food expenditures./3 Moreover, Boserup argues that in both Mexico and India about the turn of the century an incipient industrial development ground to a halt because agriculture was unable to provide the necessary supplies of food to support the urban population and to provide a growing purchasing power for industrial products. According to this view, an increase in agricultural productivity is a necessary condition for economic development. The argument is sometimes extended to infer that agricultural development insures total development. A more acceptable view is that agricultural development is a necessary but not sufficient condition for economic growth.

Accepting this formulation of the development process, two points can be made. The first is that imported food paid for by an increasingly productive industrial sector, or by trade resulting

3/This view is expressed strongly in the followng papers:

Simon Kuznets: Economic Growth and the Contribution of Agriculture - Notes on Measurement, in the International Journal of Agrarian Affairs, Vol. III(April?,1961), pp. 56-75.

William H. Nicholls: The Place of Agriculture in Economic Development, an unpublished paper presented at Gamagori, Japan, 1960.

Mogens Boserup: Agrarian Structure and the Take-off, an unpublished paper of the 1960 Constance Conference.

Bruce F. Johnston and John Mellor: The Role of Agriculture in Economic Development, in the American Economic Review, Volume LI (September 1961), pp.566-593.

from an increased output of one or two farm exports, may serve temporarily the same purpose as an increase in internal productivity. Thus Japan's increasingly productive and expanding silk industry served to bring in both food and industrial capital between 1890 and 1930. Yet no major nation, including Japan, has been able to maintain a strong development program without internal adjustments to increase agricultural productivity. Even so, Title I imports may be effective in providing a temporary substitute for substantial changes in domestic agriculture.

The second point, and more directly related to the analysis of this chapter, is that the Title I pesos have largely been directed to uses which are stimulating agricultural productivity. The budget of the Ministerio de Agricultura has been one of the smallest in the national government. Despite the fact that nearly half the people are engaged in agriculture, and a third of the national income is so derived, this Ministerio has only about three percent of the national budget./4 One should not argue that the agricultural budget should be increased to 30 or even 35 percent of the national budget, but the lag in agricultural production certainly indicates that more should be done in the agricultural area. True, there are a number of semi-official agencies which add resources and manpower to the efforts to increase the technical level of agriculture; yet most of their resources, until recently, came out of profits or margins in commercial channels. As pointed out in the previous chapter, a major share of the Title I pesos have been devoted to projects closely related to agriculture. In this way the budget available for advancing the productivity of agriculture has been significantly advanced.

4/ Even this amount for the 1960 fiscal year, is much higher, proportionally, than five years earlier, due to the use of P.L. 480 pesos. An analysis of the budget of the Ministerio de Agricultura may be found in Educación Agricola Superior en Colombia, the report of the Comisión de Educación Agrícola Superior (Bogotá: Universidad Nacional de Colombia, Abril 1961), pp. 57 and 127)

Acc~~ording to these views,~~ the local currency, while not constituting an additional national resource, can be expended so as to stimulate the development process. First it can by-pass a conservative monetary and fiscal policy and bring certain national resources into more effective use in development. Second, the local currency can add substantially to the budget for agriculture and thus hasten the time at which agriculture is able to make its necessary contribution to economic growth.

It should be noted, however, that simply loaning the pesos and putting them into use, does not automatically bring about this desirable process. The uses must be carefully programmed into high priority, productive activities which can make long range contributions. Poorly planned projects of low productivity can pull resources away from valuable programs, and can add to inflationary pressures without adding a sufficient volume of new products to counter inflation. In general, also, projects using local currency, or any investment project, will tend to be inflationary during construction and deflationary when products begin to flow into the market.

The deflation-inflation matrix

The introduction of additional commodities into Colombia, at a time when the general price level was advancing five to ten percent per year, had the effect of holding down the price increase for these commodities and their close substitutes. Thus the first impact was counter inflationary, both because of additional supplies and because of the withdrawal of pesos as they were turned over to the U. S. Government. Some of these pesos were paid out very soon for U.S. expenditures; however, since these substituted for pesos which would have been bought in dollars, they probably had no net inflationary or deflationary effect--although they did affect foreign exchange earnings as discussed earlier. As loans were allocated and disbursed to various specific projects, this pesos had inflationary effects upon the economy. Historically, 1955 and 1956 were periods in which P.L. 480 commodities were sold into normal channels of trade, whereas most of the pesos generated were held on deposit; hence this was a period of net deflationary impact. In 1957, the Colombian loan pesos began to move into the stream of money and to have an inflationary effect offsetting the continued deflationary effect of additional Title I commoditites. In 1958, the deflation impact was substantial. Since then, these two tendencies have been roughly balanced, but with a slight deflationary effect, since the rate of peso expenditure was less than the rate of accumulation. Table IX-1 shows the annual accumulation and annual disbursements of pesos, based on detailed figures which appear in Tables IX 2 and IX-3.

These forces, however, can not be viewed in isolation from general monetary policy. During 1955 and 1956, when the deflationary influence from P.L. 480 commodity imports was dominant, the money, credit, and fiscal policies accepted by the monetary and budget authorities were inflationary. Had the same policies been folowed after 1958, their impact on the Colombian economy would have been greater, because the net deflationary influences of P.L. 480 programs were smaller. In fact, national money, credit, and budget policies were more inflationary during 1955 to 1957 than in 1958 to 1961. The change followed two events that were completely unrelated to P.L.480---namely the change from the Rojas Pinilla to the Lleras Camargo administration and a strong recomendation by the International Bank for more caution in monetary and fiscal matters.

From 1954 through 1961, the general price level increased sharply (68 to 94 percent, depending on the index chosen), and it appears likely to continue upward for some time. The rate of increase has been of considerable concern to some Colombian authorities, and a number of measures have been taken to .old back price increases. That the rate of price increase is less than in many other countries of Latin america is small consolation to those whose incomes lag behind in the process. Table IX-4 presents a number of measures of the fiscal and monetary situation. The price increases are due partly to the great increase in the money supply, which more than doubled in the seven-year period.

Table IX-1. Peso receipts and disbursements, and the inflation-deflation balance of Title I peso funds, 1955-61

Year	Receipts	Disbursements	Inflation-deflation balance/a
		(thousands of pesos)	
1955	10,900	--	-10,900
1956	28,967	4,827	-24,140
1957	23,304	23,744	440
1958	40,302	13,598	-26,704
1959	63,987	66,352	2,365
1960	57,240	54,903	- 2,337
1961	74,879	65,302	- 9,577

a/ A negative number indicates a deflationary balance, a positive number an inflationary balance.

SOURCE--Compiled from United States Embassy and Treasury records, using detailed data which appear in Tables IX-2 and IX-3.

Table IX-2. Cumulative and indicated annual receipts from sale of Title I Commodities, 1955-61

Year	Cumulative receipts	Receipts indicated for current years
	(thousands of pesos)	
1955	10,900	10,900
1956	39,867	28,967
1957	63,171	23,304
1958	103,489	40,302
1959	167,476	63,987
1960	224,716	57,240
1961	299,595	74,879

SOURCES-- Data for 1956 approximated from United States Embassy records; later years from United Treasury tabulations made available through the Economic Research Service of USDA.

Table IX-3. Estimated annual disbursements of Title I pesos, 1955-61

Year	United States uses/a	Section 104(g) loans To Caja	Section 104(g) loans Loaned by Caja/a	Sec.104(e) loans	Total actual disbursements
		(thousands of pesos)			
1955	--		--	--	--
1956	4,827	--	--	--	4,827
1957	5,490	22,548	18,254	--	23,744
1958	9,367	34,950	4,231	--	13,598
1959	8,330	23,550	43,105	14,917	66,352
1960	11,686	35,860	37,690	5,527	54,903
1961	22,820	38,155	39,626	2,856	65,302

a/ Approximately one fourth of the pesos are designated for United States use; of these, about one third are reserved for specified purposes and have been spent quite slowly. Expenditures under the unrestricted United States uses have been more rapid.

b/ From Caja and United States Embassy records as of date nearest end of year. Data for 1961 are adjusted for loan repayments of 4,183,000 pesos, whereas United States Treasury records show a total repayment of 9,184,000 pesos.

SOURCE-- Compiled from United States Treasury tabulations made available through Haven Umstott, of Economic Research Service of U.S.D.A.

Table IX-4. Changes in fiscal and monetary measures of the Colombian economy, 1954-60

Year	Index of general price level	Index of money supply	Rediscount rate	National budget surplus	Net disbursements of Title I funds
	(1954 = 100)		(percent)	(millions of pesos)	
1954	100	100	4.0	+ 177	0
1955	101	104	4.0	+ 44	- 11
1956	110	131	4.0	- 37	- 24
1957	136	148	4.0	- 80	0
1958	159	180	5.0	+ 108	- 27
1959	175	201	5.0	+ 237	+ 2
1960	182	222	5.0	+ 161/a	- 12
1961	194	277	5.0		- 10

a/ Partly estimated.

SOURCES-- Banco de la República: XXXVIII Informe Anual del Gerente a la Junta Directiva, 1960-61 (Bogotá: no date) p. 96

Ministerio de Hacienda y Crédito Público, Memoria de Hacienda, Presentada al Congreso Nacional de 1960; Tomo Principal (Bogotá: Imprenta Nacional, 1961), p. 178.

International Monetary Fund: International Monetary Statistics, XIV (Washington, 1961), p. 90, and XV (Washington 1962)

Records of the U.S. Embassy and Treasury, as summarized in Table IX-1, supra

One of the deflationary measures taken was to increase the rediscount rate from 4 to 5 percent in 1958. Fiscal policy by itself has been deflationary with budget surpluses in 8 of the 12 years since 1950, if external credit is included in the balance. In 1961, however the federal budget operated at a deficit, thus contributing, along with monetary policy, to higher prices.

In all there is litle basis for suggesting that P.L.480 loans contributed to the rise in the general price level. No loans were expended until late in 1957, whereas the money supply increased substantially in 1956. In no year has the net disbursement of Title I pesos been large.

Title I loans and underemplyed resources

Earlier reference was made to the possibility that Title I loans might supplement the regular credit system and bring resources into production which would make a net contribution to development. As seen in Chapter VIII, a mayor share of the Title I loans have been made through the Caja. The result has been a substantial increase in the amount of funds available to this entity for the purposes to which it is dedicated. In general, it has meant a relatively greater channelling of credit into the rural as opposed to the urban part of the economy. While unemployment and underemployment exist both in the city and the countryside, it appears reasonable to assume that the proportion is larger in the rural areas. This hypothesis is strengthened by the relatively low productivity of persons who are enumerated as living in rural areas and hence presumably engaged in agriculture (see chapter II)./5

For this reason, the expenditure of loan proceeds on capital creation projects in and near rural areas is likely to permit more

5/ A recent study of underemployment in Bogotá, however, indicates that there is a great deal of under-emplyyment and unemployment in the cities. This may be partly caused by the flight from rural violence. If generally true, the above statement may need to be modified.

effective employment of individuals whose current incomes and productivities are low. Furthermore, most of the projects are intended to add to agricultural productivity by porviding improved means of transport, water control systems, additional supplies of lime and fertilizer, improved livestock, and expanded storage and processing facilities. How well this projects will accomplish their objectives remains to be seen. Moreover, this loan programs have social goals which go beyond the objectives of development.

Even if the above kinds of capital creation projects can produce substantial gains in the productivity of workers in rural areas, there remains the question of whether this productivity would rise even faster with migration to an urban environment. Certainly, such a rise would not take place unless business, personal and social capital in the cities could be expanded in rough proportion to the inflow of workers--a difficult task in Colombia or elsewhere.

Title I loans and aggregate industrial expansion

A number of individual loan projects have been reviewed in an effort to specify the investment and employment resulting from the Title I loan program. The material available is highly fragmentary and appraisal is difficult because of uncertainty as to what investment decisions would have been made in the absence of Title I pesos. Some impacts on aggregate investment, on employment, and on processors of agricultural products will be noted below.

Investment

Direct and induced investments may result from the availability of Title I loans. Direct peso investment under Sections 104 104(e) and 104(g) totaled 219 million pesos between late 1957 and early 1962. Induced investments came from private sources, both internal and external to Colombia, resulting from the allocation of a Title I loan.

There are two types of induced investment to consider.

The first type results when a project is only partially financed by a Title I peso loan. No project in Colombia received more than a part of its total investment from Title I, the share generaly ranging from a third to a half. The remainder of the funds usually came from commercial bank loans or from the private capital of the loan recipient--capital that often had been generated within the operations of the enterprise. Assuming that two thirds of the investment will have to come in this way, with allowance for unanticipated cost increases and minor additions, the first type of induced investment would total 438 million pesos.

The second type of induced investment occurs in industries and firms related to the company or industry with the loan project. The investment in the fertilizer plant stimulated demand for the construction industry while the plant was being built. Once in operation, the plant will stimulate demand and investment in the chemical and electricity industries. The investment in access roads and water control projects stimulates landowners in the affected area, inducing them to make additional investments to intensify land use. Access roads also stimulate investment in the transportation industry to move both people and goods, often with less depreciation to equipment. The loan to the CVC was used in part to finance a distribution system for electricity. The increased demand for concrete utility poles induced the establishment of two new factories to produce these products in the Cali area.

Even more important, the Title I loan to the CVC transformed it from a planning and study group into an operating entity. The 33 million peso loan enabled the Corporación to make a positive contribution to the Cali area and to agricultural production. Officials of the organization are emphatic in arguing that this loan was a break-through, enabling them to borrow internationally with a record of accomplishment. /6

6/ Interviews with several officials, July 30, 1962.

Employment

The employment effect is largely limited to projects resulting from local currency loans and induced investment, although some employment has also been created by the processing, distribution, and retail sale of P.L. 480 commodities. Market development activities provided additional employment for Colombian nationals, and, in the case of market survey and research projects, permitted useful educational interchange between Colombians and U.S. personnel.

Employment opportunities created by loan activities are of three general types. One is the temporary employment created in project planning and construction. The Abbott pharmaceutical project employed 800 persons in plant construction. The Cauca Vally Corporation employed 600 persons, 200 of these on power line construction. These examples represent relatively labor-intensive projects and may not be typical of construction employment in most projects. The number of jobs in project construction is probably smaller than the permanent employment from direct and induced investment.

A second type of employment is the permanent job in the finished project. An estimate of the number of positions created can be made from the information available on 104(e) loans. The percent of total project cost financed with P.L. 480 funds and the number of permanent positions created was computed for each loan project. In this way the number of jobs directly attributable to 104(e) loans cauld be determined. Permanent employment for one full-time worker appeared to result from each 50,000 pesos invested in these projects. This ratio of employment to investment appears extremely low for Colombia and should be checked against other data. Assuming the same employment-investment ratio for 104(g) loans, however, suggests that the combined result was to create permanent employment for approximately 2,600 people./7

7/ This analysis assumes that the 104(e) projects were representative, in terms of labor intensity, of all projects financed with P.L. 480 loans. The realism of the assumption can be questioned. The labor-intensiveness of the food processing operations receiving P.L. 480 loans is probably higher than in the fertilizer production project.

A third type of employment is that created in industries servicing the particular P.L. 480 loan project. This is the additional employment to supply project construction materials and also to supply any raw materials used in the completed plant. This type of employment may be important in terms of jobs created but it is most difficult to estimate.

Processing industries

A changing inflow of agricultural raw materials produces effects upon the industries which process and distribute them. These effects may include creation of additional employment and plant expansion. Two difficulties arise in attempting to determine these effects--lack of adequate statistics and the impossibility of attributing changes directly and positively to P.L. 480./8 By nature of the P.L. 480 imports in Colombia, processing effects would be expected to fall most heavily upon wheat flour mills, bakeries, and, to a lesser extent, on the cotton textile industry. Some additional stimulus is also given to distributors, and to wholesale and retail merchants of these products, but these effects are likely to be modest.

Flour milled from P.L. 480 imports represented 19 percent of total flour produced in Colombia during the 1955-60 period./9 Flour is produced in approximately 75 mills throughout the country. Milling capacity is more than three times flour production, and only a few mills are equipped to produce high quality flour. Net new investment in the industry has been approximately 1.2 million pesos annually

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8/ The last industrial census in Colombia was completed in 1953. In the years 1955-58, sample surveys were taken which included 10 percent of all manufacturing operations. No detailed statistical information regarding industry is available for the years beyond 1958.

9/ Ministerio de Fomento: Trigo, Harina, y Pastas Alimenticias, Rama Técnica, Informe Nº 4 (Bogotá: Junio 1961), Cuadros IV, VI, and Gráfica Nº 4.

(through 1958), except in 1957 when investment totaled 5.1 million pesos./10 Importation of new equipment has been prohibited since 1958.

In view of the large excess capacity in the industry, there is little basis for suggesting that P.L. 480 wheat imports have encouraged expanded mill capacity. Large industry investment in 1957 did follow heavy wheat imports in 1956. Some mill modernization occurred in years prior to 1958, perhaps partly as a result of P.L. 480 shipments. This modernization assisted in overcoming bakers' complaints against poor milling techniques and the resulting low-quality flour. Industry employment has not expanded greatly, because larger processing loads have led to greater mechanization.

Most P.L. 480 wheat and flour imports have been of a type suitable for bread production. These shipments supplied 20 percent of all bread flour consumed from 1955 through 1960. Total flour consumption increased from 160,000 tons to nearly 200,000 tons during this period. Eighty-five percent of all bread bakeries in Colombia are family enterprises employing less than 10 persons each. Because of the numerous small producing units, reliable statistica are difficult to obtain..Available data suggest bakery employment in 1958 was lower than in 1953./11 The number of establishments also declined. Total installed horsepower increased nearly 50 percent during these years, suggesting that, as with the wheat mills, considerable mechanization was occurring in the industry. The industry impact of P.L. 480, to the extent that it exists, is felt in greater mechanization rather than employment.

While no specific information is presented here, it appears that the pastas alimenticias industry making spaghetti and similar products may also have been substantially influenced by the supplies of wheat and flour having qualities not present in Colombian wheat.

The Colombian textile industry is modern and efficient.Cotton

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10/ Interview with Carlos A. Urrego A., Chief of the Statistical Section on Industrial Production and Consumption, National Statistical Agency, July 4, 1961.

11/ Ibid.

textiles are produced in a small number of large plants which, until very recently, were heavily dependent upon imports for raw cotton. Total mill consumption has increased rapidly under the stimuli of favorable government policies and expanded domestic production of cotton. P.L. 480 cotton imports averaged 42 million pesos annually in the period 1956-58. Estimates indicate 1958 mill employment was less than 3 percent above 1952 levels./12 That employment did not actually decrease is surprising, in view of the new and more fully automated textile machinery which requires less manpower (see Chapter V). Clearly, P.L. 480 has had very little effect upon the growth of this industry.

12/ Departamento Administrativo Nacional de Estadística: Industrial Census of 1952 and the 1958 Sample Surveys.

Chapter X

SUMMARY

Colombian imports under the P.L. 480 program have totaled more than 75 million dollars through 1961. The value authorized through 1962 under Titles I and III is about 100 million, three fourths being under Title I. Wheat and flour represent over half of the value of commodities shipped or programmed for later shipment. Under the Title I program, cotton and edible oils have been the major additional items, but cotton imports ceased in 1958. Under Title III dairy products have been important.

The Title I agreements provide that about 26 percent of the pesos be earmarked for U.S. use, with an additional 16 percent designated for "Cooley" loans to private enterprise. No peso grants have been made in Colombia. Loans for economic development under Section 104(g) have become an important element of the credit operations of the Caja Agraria, and are using 55 to 58 percent of the total pesos accumulated.

Colombia was able to maintain a positive rate of economic development throughout the 1950's on a per-capita basis, however, there were small declines in some years between 1956 and 1959. Since 1957, adverse coffee prices and reduced foreign exchange earnings have been continuing problems, but a per-capita development rate of about two percent annually was achieved in the 1959-61 period.

In 1955 and 1956, there were relatively few controls over the use of exchange earnings and over the internal monetary, credit, and fiscal system. This led to a substantial internal pressure for inflation, and over-commitment in purchases from abroad. Strong counter-measures came into force in 1957, together with short-term stabilization loans, and the economy gradually worked itself into a more stable position. Title I agreements in 1957, 1958, and 1959, therefore, appear to have been more appropriate than the first two agreements made in 1955 when only the most oprtimistic expectations for future coffee prices could have justified the existing liberal policies relating the use of foreign exchange.

Colombia's agricultural policy is typified by efforts at self-sufficiency, implemented largely through a series of commodity organizations. In consequence, there often is little inter-relation between research and extension, and usually poor integration among policies for the various commodities. Colombian agricultural policy is not integrated and comprehensive, but moves in jumps to emphasize one commodity or another, depending upon the political strength of the commodity organizations and their associated producers and industrial users. These problems, of course, are not unique to Colombia.

A number of P.L. 480 commodities--notably wheat and feed grains --have been associated with INA, an entity which has not strongly developed its market power or used that which it has to advance the economic interests of the producers of specific crops. Rather, it has chosen to increase importations, thereby assisting, in part, the interests of consumers. Cotton, however, has been associated with IFA. This industrial commodity has gained strong political support from the association of textile factories, interested in an adequate supply of raw material, and from the farmers who produce cotton. As a result, domestic cotton production has expanded almost without relation to Title I imports, and is no longer imported.

There have been no detectable effects of Title I imports upon cotton production, with the possible exception that in their absence the aggressive program of self-sufficiency might have began a year or so sooner, so that domestic Colombian production might have been adequate a little earlier than actually occurred. Perhaps Title I imports slightly delayed the degree of cotton self-sufficiency as the management of the textile industry took more time to realize the scope of the problem.

Title I programs in wheat and flour have been associated with a small net shift of acreage from wheat to barley, lower rates of technical advance for wheat than for barley, and price rises lagging behind the general price level. Technical developments in wheat combined with some price increases have been enough so that the aggregate gross incomes of wheat and barley farmers have increased more rapidly than the general price level. Farmers may have lost opportunities for even greater incomes, but their gross incomes have not decreased in response to Title I wheat imports.

Shortages of fats and oils in Colombia have been met in part through Title I imports. It apperas, however, that the imports were not large enough to prevent farm price increases--in fact, prices for oil crops have increased more rapidly than most other farm prices.

Feed grain imports have been small and have been used to meet what are presumed to be temporary shortages. Thus their effect has been to assist the livestock industry to weather more adequately a difficult period. However, a number of programs in livestock development and the modest changes in patterns of consumption are likely to make poultry, swine, and dairy production more important in the future, and make further feed grain imports likely, unless Colombian corn production expands materially.

Further research is needed and in process on opportunities for agricultural producers to adjust enterprise combinations, adopt more intensive practices, and incorporate cost-saving technology in various type-of-farming areas.

Consumers have benefitted from delays in price increases for bread and cotton textiles, which lagged behind the general price level. Wheat and flour imports under Title I contributed heavily to the first; substantial increases in textile mill efficiency contributed significantly to the second. For edible oils the price increase was large, but probably would have been larger or accompanied by market shortages, in the absence of Title I.

Title III programs have provided food for many low income consumers. In the past, the program has had little effect upon market supplies. The increase in quantities in 1961-62 has been associated with reports that the commodities are sometimes appearing in commercial channels. Unless administrative controls are tightened, the projected increase for 1963 can lead to further aberrations. Food donations are now scheduled for more than 20 percent of the population.

The patterns of trade appear to have been modified by Title I imports. Canada has lost wheat sales to Colombia, both in volume and in porportion. However, many factors besides Title I have affected Canada's ability to compete in exporting wheat to Colombia. Peru lost volume in cotton sales, but maintained roughly the same proportion of a declinig volume as did the United States. The United States was able to expand its market share of edible oil sales, but is still a minor factor in the total.

The two Title I agreements in 1955 came during a period when Colombia was over-buying abroad. Whether the Title I commodities were additional to normal purchases or not, Colombia's exchange policy would have permitted the purchase of these products for dollars. The later agreements were made during a period of exchange shortage, foreign trade readjustments, and more careful planning of Colombia's resources. Thus the last three agreements have contributed to Colombia's ability to meet internal food needs and still import capital equipment for development. It would be difficult to make such a case for the two agreements in 1955.

The peso use by the U.S. Government has reduced Colombia's foreign exchange earnings by an estimated 10 percent of the volume of Title I agreements. The loans of pesos through Sections 104(e) and 104(g) have increased the demand for foreign exchange in new factories and projects. These serve to offset partially the benefits to Colombia of purchasing farm products without an additional allocation of foreign exchange. Without the Title I program, a number of changes in agricultural policy would have been likely. These include (a) the implementation of a more aggressive program to extend technical knowledge to wheat producers, (b) higher wheat prices, and (c) some expansion in commercial imports over the actual 1955-61 level, forced by population pressures and the resulting increase in demand for food.

The rate of economic development and per-capita levels of income after 1958 would have been smaller than the actual levels attained. These changes would have tended to reduce consumption of wheat, oils, and fiber in favor of domestic foods, largely carbohydrates. This would have tended to decrease the need for imports.

The use of Title I pesos has shifted somewhat the balance of national development programs. Some 140 million such pesos have been loaned by the Caja Agraria to agriculturally related projects.

In addition, some of the markup on imported products has been designated for _fomento_ programs--_i.e._, for production expansion. While no conclusion can be drawn as to the comparative merit of industrial or agricultural investments, there is little doubt that agricultural loans and agriculturally related investment projects are much larger than they would have been in the absence of the Title I program.

The statements made above on the foreign exchange and economic development implications of Title I agreements are indicated by historical evidence presently available. Research planned for the next year will involve additional checking of these hypotheses and their apparent implications.