

AFRICAN RURAL ECONOMY PROGRAM

WORKING PAPER

CHANGING PATTERNS OF FOOD CONSUMPTION
IN TROPICAL AFRICA: A
WORKING BIBLIOGRAPHY

by
Mark D. Newman

Working Paper No. 23

January 1978

Department of Agricultural Economics
Michigan State University
East Lansing, Michigan 48824

CHANGING PATTERNS OF FOOD CONSUMPTION
IN TROPICAL AFRICA: A
WORKING BIBLIOGRAPHY

by

Mark D. Newman

*Prepared under terms of Agency for International Development
contract AID/afr-C-1260.

**Ph.D. Candidate, Department of Agricultural Economics, Michigan
State University.

January 1978

FOREWORD

The African Rural Economy Program was established in 1976 as an activity of Michigan State University's Department of Agricultural Economics. The African Rural Economy Program is a successor to the African Rural Employment Research Network which functioned over the 1971-76 period.

The primary mission of the African Rural Economy Program is to further comparative analysis of the development process in Africa with emphasis on both micro and macro level research on the rural economy. The research program is carried out by faculty and students in the Department of Agricultural Economics in cooperation with researchers in African universities and government agencies. Specific examples of ongoing research are, "Poor Rural Households, Income Distribution and Technical Change in Sierra Leone and Nigeria," "Rural and Urban Small-Scale Industry in West Africa," "Dynamics of Female Participation in the Economic Development Process in West Africa," and "The Economics of Small Farmer Production and Marketing Systems in the Sahelian Zone of West Africa".

Carl K. Eicher
Professor of Agricultural Economics
Michigan State University

PREFACE

The sources included in this bibliography consider definitions of nutritional standards, food consumption patterns in various parts of tropical Africa, and the process of change in food consumption patterns.

Much of the literature concerned with development emphasizes assurance of "adequate" supplies of food to satisfy "basic nutritional needs". What these needs are, and the impact of changing food consumption patterns on their satisfaction, is hardly a closed subject, however.

This working bibliography is offered in the hope that it will be useful in assessing the state of current literature, and facilitating further consideration of the dynamics of change in food consumption patterns in tropical Africa.

- Abercrombie, Keith C. "Setting a Social Maximum and a Social Minimum for Food and Nutrition." Food and Nutrition, Vol. 1, 4th Issue. Rome: FAO, 1975: 28-32.
- Amann, V.F.; Belshaw, D.G.R.; and Stanfield, J. Nutrition and Food in an African Economy. Kampala, Uganda: Makerere University, 1972.
- Annegers, John F. "Ecology of Dietary Patterns and Nutritional Status in West Africa: Distribution of Starchy Staples." Ecology of Food and Nutrition, Vol. 2 (1973): 107-119.
- _____. "Geographic Patterns of Diet and Nutritional Status in West Africa." Ph.D. dissertation, Michigan State University, 1972.
- _____. "The Protein-Calorie Ratio of West African Diets and Their Relationship to Protein-Calorie Malnutrition." Ecology of Food and Nutrition, Vol. 2, 3rd Issue (1973): 225-235.
- _____. "Protein Quality of West African Foods." Ecology of Food and Nutrition, Vol. 3 (1974): 125-130.
- _____. "Seasonal Food Shortages in West Africa." Ecology of Food and Nutrition, Vol. 2 (1973): 251-257.
- Austin, James, E., study director. Urban Malnutrition: Problem Assessment and Intervention Guidelines. Submitted to the World Bank by Harvard University, 1976.
- Aylward, Francis. "Food Habits in West Tropical Africa." Chemistry and Industry 39 (September 24, 1966): 1624-27.
- _____. "The Responsibility of the Food Industry." Ceres 5 (1972): 47-49.
- Barrès, V. et al. La participation des femmes rurales au développement. Paris: IRAM, 1975.
- Bennett, M.K. The World's Food. New York: 1954.
- Bensaid, Georges. Les consommations alimentaires dans les pays du bloc ouest-africain: approche temporelle d'une élasticité-revenu. Paris: Institut d'Etude du Développement Economique et Social, 1967.
- Berg, Alan. The Nutrition Factor. Washington: Brookings Institution, 1973.
- Berg, Elliot. The Recent Economic Evolution of the Sahel. Ann Arbor: Center for Research on Economic Development, University of Michigan, 1975.

- Bernard, F. East of Mount Kenya: Meru Agriculture in Transition. IFO Afrika Studien, no. 75. München: Weltforum, 1972.
- Bernus, Edmond. "Cueillette et exploitation des ressources spontanées du Sahel Nigérien par les Ké1 Tamasheq." Cahiers ORSTOM Sciences Humaines 4 (1967): 31-52.
- _____. "L'évolution récente des relations entre éleveurs et agriculteurs en Afrique Tropicale: l'exemple du Sahel Nigérien." Cahiers ORSTOM, Vol. 11, no. 2 (1974): 137-143.
- Binet, Jacques. Psychologie économique Africaine; éléments d'une recherche interdisciplinaire. Paris: Payot, 1970.
- Blair, T.L.V. "Continuity and Change in African Food Habits." Food Technology 20 (6) (1966): 53-58.
- _____. "The Social, Economic and Marketing Aspects of Diffusing Low Cost Protein-enriched Foods in Urban Africa and the Third World." Proceedings Nutrition Society 29 (1). London, 1970: 164-169.
- Blanc, J. Malnutrition et sous-développement. Grenoble, 1975.
- Burgess, Anne and Dean, R.F.A., eds. Malnutrition and Food Habits. New York: Macmillan Co., 1962.
- Busia, K.A. Report on a Social Survey of Sekondi-Takoradi. London: Crown Agents for the Colonies, 1950.
- Cantrelle, P. La mortalité différentielle urbaine-rurale. Paris: ORSTOM. (Forthcoming.)
- Centre de Documentation Economique et Sociale Africaine. Alimentation des populations africaines du Sud du Sahara. Bruxelles: CEDESA, 1965.
- Claret, Y. "Tentatives de promotion d'aliments nouveaux." FAO-UNDP, 1967.
- Clark, J.D. "The Spread of Food Production in Sub-Saharan Africa." Journal of African History 3: 211.
- Colson, Elizabeth. The Social Consequences of Resettlement: The Impact of the Kariba Resettlement Upon the Gwembe Tonga. London: Manchester University Press, 1971.
- Comhaire-Sylvain, S. "Food and Leisure Among the African Youth of Leopoldville." In Social Implications of Industrialization and Urbanization in Africa South of the Sahara. Paris: UNESCO, 1964.
- Corkill, N.L. "Dietary Change in a Sudan Village Following Locust Visitation." Africa 19 (1). London, 1949: 1-12.
- Corkill, N.L.; Creditor, H.; and Stewart, G.E.S. "Millet Beer and Peanuts as Protective Foods in Africa." Journal of Tropical Medical Hygiene 51 (1948): 160-168.

- Coursey, D.G. Yams: An Account of the Nature, Origins, Cultivation and Utilization of Useful Members of the Dioscoreaceae. London: Longmans, 1967.
- Cros, J. and Baylet, R. "Etat nutritionnel de la population de trois villages de la region de Niayes (Sénégal)." Bulletin Soc. Med. Afrique Noire Lang. Fr. 12 (1967): 212-223.
- Culwick, G.M. "Nutrition in East Africa." Africa 14 (1944): 401-410.
- Cuypers, J.B. L'alimentation chez les Shi. Tervuren, Belgique: Musée Royal de l'Afrique Centrale, 1970.
- de Garine, I. "Food, Nutrition and Urbanization." FAO Nutrition Newsletter 7 (1) (January-March 1969): 1-19.
- _____. "The Social and Cultural Background of Food Habits in Developing Countries." FAO Nutrition Newsletter 8 (1) (1970): 9-22.
- _____. "The Socio-Cultural Aspects of Nutrition. Ecology of Food and Nutrition 1 (1972): 143-163.
- de Nigris, M. "The Impact of Urbanization on Food Demand." Monthly Bulletin of Agricultural Economics and Statistics 22 (9) (September 1973): 1-16.
- Dema, I.S. and den Hartog, A.P. "Urbanization and Dietary Change in Tropical Africa." Food and Nutrition in Africa 7. Rome: FAO, 1969: 31-63.
- den Hartog, A.P. A Selected Bibliography on Food Habits; Socio-Economic Aspects of Food and Nutrition. Part 1: Tropical Africa. Rome: FAO Library Occasional Bibliography No. 10. September 1974: 88.
- _____. "A Suggested Reading List on Food Habits." FAO Nutrition Newsletter 12 (1) (January-March 1974): 31-38.
- _____. "Unequal Distribution of Food Within the Household; A Somewhat Neglected Aspect of Food Behaviour." FAO Nutrition Newsletter 10 (4) (1972): 8-17.
- den Hartog, A.P. and de Vos, A. "The Use of Rodents as Food in Tropical Africa." FAO Nutrition Newsletter 11 (1973): 1-14.
- Dieterlen, Germaine and Calame-Griaule, G. "L'alimentation Dogon." Cahiers des Etudes Africaines, Vol. 1 (3) (October 1960): 46-89.
- Doggett, H. Sorghum. London: Longman, 1970.
- Dumont, René. Notes sur les implications sociales de la "Revolution Verte" en quelques pays d'Afrique. Geneve: Institut de Recherche des Nations Unis pour le Développement, 1971.
- Dupin, Henri. "L'alimentation, l'état de nutrition et les tendances actuelles de consommation en Afrique intertropicale." Dev. Civ. 35: 21-60.
- _____. "Evolution de l'alimentation dans les pays en développement: éléments favorables et défavorables." Revue Tiers Monde, Vol. 16, No. 63 (Juillet-Septembre 1975): 461-487.

- _____, (ed.). "Nutrition humaine et développement économique et sociale." Revue Tiers-Monde 16 No. 63 (Juillet-Septembre, 1975): 459-701.
- Dupin, Henri et Brun, Thierry. "Evolution de l'alimentation dans les pays en voie de développement; remarques sur quelques facteurs qui orientent cette évolution." Cahiers Nutritionnels et Diététiques 8, no. 4: 284-290.
- Dupin, H. et Rimbault, A.M. Epidémiologie et prévention des troubles nutritionnels chez l'enfant. CIE/OMS, 1972.
- Ejiga, Nathaniel O.O. Economic Analysis of Storage Distribution and Consumption of Cowpeas in Northern Nigeria. PhD dissertation, Cornell University, 1977.
- El-Shazali, H. "Home-made Weaning Foods for Sudanese Children." Sudan Medical Journal (Khartoum) 10 (1972): 87-93.
- FAO. Food and Nutrition Strategies in National Development: Ninth Report of the Joint FAO/WHO Expert Committee on Nutrition. Rome: FAO, 1976.
- FAO. Nutrition et alimentation tropicales. Recueil des conférences du deuxième cours de nutrition pour l'Afrique noire (Marseille, 4 oct.-15 dec., 1955). Rome: FAO, 1957.
- FAO. Perspective Study on Agricultural Development in the Sahelian Countries, 1975-1990. 3 vols. Rome: FAO, 1976.
- FAO. Population, Food Supply and Agricultural Development. Rome: FAO, 1975.
- FAO Country Perspective Team. Perspective Study of Agricultural Development for Zambia: Food Demand and Nutrition. Rome: FAO, 1976.
- Fikry, M. "Traditional Maternal and Child Health Care and Related Problems in the Sahel. A Bibliographic Study." Preliminary Report to USAID, BLK Group, Inc., 1977.
- Freedman, R.L. "Famine Foods: Little Known Food Plant Resources; a Monograph.: Berkeley, Cal.: By the author, 1972.
- Galletti, R.; Baldwin, K.D.S.; and Dina, I.O. Nigerian Cocoa Farmers. London: Oxford University Press for the Nigeria Cocoa Marketing Board, 1956.
- Gelfand, M. Diet and Tradition in African Culture. Edinburgh: Livingstone, 1971.
- _____. "The Dietary Habits of the African and European, with Special Reference to the Shona-Speaking Peoples: A Brief Comparison." South African Medical Journal 47 (1973): 1501-3.
- Golding, P.T.F. "An Enquiry into Household Expenditure and Consumption and Sale of Household Produce in Ghana." Economic Bulletin of Ghana, Vol. VI (4): (1962).
- Gorden, Wendell. "Institutional Consumption Patterns in Underdeveloped Countries." Journal of Economic Issues VII (2) (June 1973): 267-287.

- Greiner, Ted. "The Promotion of Bottle Feeding by Multinational Corporations: How Advertising and the Health Professions Have Contributed." Ithaca: Cornell International Nutrition Monograph Series No. 2 (1975).
- Hardy, Georges. L'alimentation indigène dans les colonies françaises, protectorats et territoires sans mandat. Paris: Vigot Frères, 1933.
- Helleiner, Gerald K. Peasant Agriculture, Government and Economic Growth in Nigeria. Homewood, Illinois: Richard D. Irwin, 1966.
- Hughes, Charles C. and Hunter, John M. "Disease and 'Development' in Africa." Social Science and Medicine 3 (1970): 443-493.
- Hunter, John M. "Geophagy in Africa and in the United States: A Culture: Nutrition Hypothesis. Geographical Review 63 (3). New York, 1973: 170-195.
- _____. "Seasonal Hunger in a Part of the West African Savanna: A Survey of Bodyweights in Nangodi, North East Ghana." Institute of British Geographers Transactions and Papers, Publication #41, 1967
- IBRD. Western Africa Foodgrain Study. Washington: IBRD, 1976.
- Idusogie, E.O. "Centuries of Changing Food Consumption Patterns in African Communities." Food and Nutrition in Africa 12 (1973): 5-32.
- _____. "A Critical Review of the Role of Cash Cropping on the Nutrition of Nigerian Peoples." Ph.D. dissertation, University of London, 1969.
- "Influence de la culture traditionnelle dans la promotion alimentaire et nutritionnelle." Afrique Médicale 130 (Mars 1975): 469-472.
- INSEE-SEDES. Etude démographique et économique en milieu nomade. Vol. 1: Démographie et consommation. Vol. 2: Elevage. Paris: SEDES, 1966.
- Intech, Inc. Nutrition Strategy in the Sahel. (French: La stratégie de nutrition au Sahel.) Silver Springs, Maryland: Poyner International, 1977.
- International Food Policy Research Institute. "Recent and Prospective Developments in Food Consumption: Some Policy Issues. New York: Protein Calorie Advisory Group (PAG) of the U.N., 1977.
- International Labour Office. Employment, Growth and Basic Needs: A One-World Problem. Geneva: ILO, 1976.
- International Labour Office. Meeting Basic Needs: Strategies for Eradicating Mass Poverty and Unemployment. Geneva: ILO, 1977.
- Jeffreys, M.D.W. "Pre-Columbian Maize: North of the Old World Equator." Cahier des Etudes Africaines 9 (33) (1969): 146-149.
- Jelliffe, Derrick B. "Commerciogenic Malnutrition? Time for a Dialogue." Food Technology 25 (1971): 55-59.

- _____. "Infant Nutrition in the Tropics and Subtropics." (French: "L'alimentation du nourrisson dans les regions tropicales et sub-tropicales.") Geneva: WHO, 1955. (2nd ed. 1968).
- Jelliffe, D.B. and Jelliffe, E.F.P. "The Effects of Famine on the Family and on Society." In Nutrition and National Disaster. Symposium, Uppsala, 1971. Ed. by Swedish Nutrition Foundation. Stockholm: Almqvist and Wiksell.
- Johnston, B.F. The Staple Food Economies of Western Tropical Africa. Stanford: Food Research Institute, 1958.
- Jolly, Richard. "The World Employment Conference: The Enthronement of Basic Needs." Overseas Development Institute Review, 1976.
- Jones, William O. Manioc in Africa. Stanford: Stanford University Press, 1959.
- Jones, William O. and Merat, Christian. "Consumption of Exotic Consumer Goods as an Indicator of Economic Achievement in Ten Countries of Tropical Africa," Food Research Institute Studies 3 (1) (1962).
- Joy, Leonard and Philip Payne. Food and Nutrition Planning. Nutrition Consultants Report No. 35. Rome: FAO, 1975.
- Kaneda, Hiromitsu and Johnston, Bruce F. "Urban Food Expenditure Patterns in Tropical Africa." Food Research Institute Studies 2 (3) (1961): 229-275.
- Kenya, Ministry of Agriculture and Department of Economics, Egerton College. Demonstrations of an Interdisciplinary Farming Systems Approach to Planning Adaptive Agricultural Research Programs. Nairobi: CIMMYT Eastern African Economics Programme, April 1977.
- Kilby, Peter. "Patterns of Bread Consumption in Nigeria." Food Research Institute Studies 5 (1) (1965): 3-18.
- King, M.H.; King, F.M.A.; Moreley, D.C.; Burgess, H.J.L.; and Burgess, A.P. Nutrition in Developing Countries With Special Reference to the Maize, Cassava and Millet Areas of Africa. Nairobi: Oxford University Press, 1972.
- King, Robert P. "An Analysis of Rural Consumption Patterns in Sierra Leone and Their Employment and Growth Effects." M.S. thesis, Michigan State University, 1977.
- King, Robert P. and Byerlee, Derek. "Income Distribution, Consumption Patterns and Consumption Linkages in Rural Sierra Leone." African Rural Economy Paper No. 16. East Lansing: Department of Agricultural Economics, Michigan State University, 1977.
- Kohler, J.M. Activités agricoles et changements sociaux dans l'ouest-Mossi. Coll. Mem. ORSTOM No. 46. Paris: ORSTOM, 1971.
- Labouret, H. Paysans d'Afrique noire occidentale. Paris: Gallimard, 1941.
- Lagoin, Y. and Salmon, G. Etude technique et économique comparée de la distribution du poisson de mer dans les pays de l'Afrique centrale atlantique. 10 vols. Paris: Ministère de la Coopération/Société Centrale pour l'Équipement du Territoire, 1969-1970.

- Lawson, Rowena M. "Changes in Food Consumption in a Rural Community on the Lower Volta, 1954-64." Nigerian Journal of Economic and Social Science 9 (1) (1967), 99-115.
- _____. The Changing Economy of Lower Volta 1954-67; A Study in the Dynamics of Rural Economic Growth. London: Oxford University Press, 1972.
- Lewicki, Tadeusz and Johnson, Marion. West African Food in the Middle Ages: According to Arabic Sources. London: Cambridge University Press, 1974.
- Lipton, Michael. "Urban Bias and Food Policy in Poor Countries." Food Policy, November 1975.
- Lunven, P. and Périssé, J. "Energy and Protein Requirements: Their Use in Food Planning." In Report on the FAO/UNFPA Seminar on Agricultural Planning and Population. Rome: FAO, 1974.
- Mars, P.A. "Some Aspects of Soft Drinks Industry in the Tropics." Tropical Science 13 (1971): 27-48.
- Mason, J.B. "Nutritional Surveillance." Food and Nutrition, Vol. 1, 4th Issue. Rome: FAO, 1975: 28-32.
- Mauny, R. "Notes historiques autour des principales plantes cultivées d'Afrique Occidentale." Bull. Inst. Fr. Afr. Noire 15 (1953): 684-730.
- May, Jaques Meyer and McLellan, D.L. The Ecology of Malnutrition in the French Speaking Countries of West Africa and Madagascar. New York: Hafner Publishing Company, 1968.
- McLoughlin, Peter F.M. African Food Production Systems. Baltimore: Johns Hopkins Press, 1970.
- Mellor, John W. The Economics of Agricultural Development. Ithaca: Cornell University Press, 1966.
- Milliken, M. and Limfat, F.C. "Population Growth, Income Change and the Demand for Food in Mauritius." Revue Agric. Suc. 74 (4) (1968): 323-377.
- Miracle, Marvin P. Maize in Tropical Africa. Chapter 7: "Introduction and Spread of Maize in Africa." Madison: University of Wisconsin Press, 1966.
- _____. "Seasonal Hunger: A Vague Concept and an Unexplored Problem." Bull. Instit. Fr. Afr. Noire 22 (1961): 373-83.
- Mission Socio-économique de la Vallée du fleuve Sénégal. l'alimentation de la population sédentaire. Dakar, 1959.
- Mondot Bernard, Jaqueline. Prévoir l'alimentation d'une population croissante (Draft). Paris: OECD Development Center, June 1976.
- _____. "Problems Connected with Satisfying Minimum Food Requirements in Developing Countries: Case Study--Mali." Research proposal, 1976.

- _____. Relationships Between Fertility, Child Mortality and Nutrition in Africa. Paris: OECD, 1975.
- Morgan, W.B. "Food Imports and Nutrition Problems in West Africa." In Moss, R.P. and Morgan W.B. (eds.), Population Factor in African Studies. London, 1975: pp. 208-225.
- Murdock, George Peter. Africa: Its Peoples and Their Culture History. New York: McGraw-Hill, 1959.
- _____. "Staple Subsistence Crops of Africa." Geographical Review 50 (1960): 523-540.
- Newman, James L. "Dietary and Nutritional Conditions." Chapter 6 in Contemporary Africa: Geography and Change, by C. Gregory Knight and James L. Newman, eds. Englewood Cliffs: Prentice Hall, 1976.
- Nicholas, Guy. "Développement rural et comportement économique traditionnel au sein d'une société africaine." Genève-Afrique Acta Africana 8 (2) (1969):18-35.
- Niger, Ministère du Développement et de la Coopération. Perspectives alimentaires des pays du Sahel pour 1985. Niamey, 1974.
- Niger. Mission Economique et Pastorale. Etude démographique et économique en milieu nomade: démographie, budgets et consommation. Paris, 1966.
- Nordberg, Olle; Phillips, Peter; and Sterky, Göran, eds. Action for Children: Towards an Optimum Child Care Package in Africa. Uppsala: The Dag Hammarskjöld Foundation, 1975.
- Norman, D.W. "Rationalizing Mixed Cropping Under Indigenous Conditions: The Example of Northern Nigeria." Journal of Development Studies 11 (October 1974): 3-21.
- Ogubu, J.O. "Seasonal Hunger in Tropical Africa as a Cultural Phenomenon: The Onicha Ibo of Nigeria and Chakaka Poka of Malawi Examples." Africa 43 (4) (1973): 317-332.
- Olatunbosun, D.; Idusogie, E.O.; and Olayide, S.O. "Role of Fish and Animal Products in Nigerian Agricultural Development." Ecology of Food and Nutrition 1 (3) (1972): 235-243.
- Omololu, A. "Changing Food Habits in Africa." Ecology of Food and Nutrition 1 (2) (1971): 165-168.
- _____. "Importance de l'allaitement maternel." Afrique Médicale 120 (May 1974): 485-487.
- Ord, H.W.; Andic, F.M.; Bostock, R.M.; and Yannoulis, Y. Ghana: Projected Level of Demand, Supply and Imports of Agricultural Products in 1965, 1970 and 1975. Washington: U.S. Department of Agriculture, 1964.
- Pales, Léon and Tassin de Ste Pereuse, Marie. L'alimentation en AOF: milieux, enquête, techniques, rations. Dakar: ORANA, 1955.

- Payne, Philip R. "Improving Patterns of Consumption." In Nutrition and Agricultural Development, by Nevin S. Scrimshaw and Moisés Béhar. New York: Plenum Press, 1976.
- Périssé, J. L'alimentation en Afrique intertropicale: Etude critique à partir des données des enquêtes de consommation 1950-1965. Thesis, University of Paris, 1966.
- _____. "Rôle des aliments importés et influence du revenu monétaire sur la consommation alimentaire en Afrique intertropicale." Maroc Med 47 (1967): 787-795.
- Perissé, J.; Sizaret, F.; and François, P. "The Effect of Income on the Structure of the Diet." FAO Nutrition Newsletter, Vol. 7, No. 3, 1969.
- Pinstrup-Anderson, Per, de Londono, Norha Ruiz; Hoover, Edward. "The Impact of Increasing Food Supply on Human Nutrition: Implications for Commodity Priorities in Agricultural Research and Policy." American Journal of Agricultural Economics 58 (2) (May 1976): 131-142.
- Poix, J. "Causes de la malnutrition au Niger." L'enfant en milieu tropical 90 (1973): 4-5.
- Poleman, Thomas T. "The Food Economies of Urban Middle Africa: The Case of Ghana." Food Research Institute Studies 2 (2) (1961): 121-174.
- _____. Survey of Nutritional Concomitants of Urbanization in Selected Countries of Sub-Saharan Africa. Agricultural Economics Staff Paper No. 73-15. Life Sciences Department, Cornell University, Ithaca, New York, July 1973.
- _____. "World Food: Myth and Reality." Draft of article to be published in World Development, 5 (5-7) (1977): 383-394.
- Portères, R. "Les céréales mineures de genre *Digitaria* en Afrique et en Europe." Journal Agric. Trop. Bot. Appl. (October-November 1954): 620-675.
- _____. "L'introduction du maïs en Afrique." Journal Agric. Trop. Bot. Appl. 2 (May-June 1955): 221-231.
- Ransome-Kuti, O; Gbajumo, W.O.; and Olanyan, M.O. "Some Socio-economic Conditions Predisposing to Malnutrition in Lagos." Nigerian Medical 2 (1972).
- Reis, C.S. A nutrição no Ultramar Portugues: subsidio para uma bibliografia. Lisboa: Instituto Nacional de Estatística, 1973.
- Reutlinger, Shlomo; and Selowsky, Marcelo. Malnutrition and Poverty: Magnitude and Policy Options. Washington: IBRD, 1976.
- Richards, Audrey I. Land, Labour and Diet in Northern Rhodesia: An Economic Study of the Bemba Tribe. London: Oxford University Press, 1939.
- Robson, J.R.K. "Changing Food Habits in Developing Countries." Ecology of Food and Nutrition 4 (1976): 251-256.

- Sai, F.T. "The Problems of Food and Nutrition of West Africa." World Review of Nutrition and Dietetics 10 (1969): 77-99.
- Sankalé, M. et al. Alimentation et pathologie nutritionnelle en Afrique noire. Paris: Maloine, 1974.
- Schnell, R. Plantes alimentaires et vie agricole de l'Afrique Noire; essai de phytogéographie alimentaire. Paris: Editions Larose, 1957.
- Secretariat d'Etat aux Affaires Etrangères (France). L'approvisionnement des villes dans les Etats Africains et Malgaches--Horizon 1985, Présentation et Synthèse pour deux études et enquêtes (IEDES et SEDES). Paris: Direction de l'AIDE au Développement, Bureau des Programmes, S.O.E.C., October 1973.
- SEDES, DGRST. Le développement rural dans les pays d'Afrique noire d'expression française. 2ième partie: "Les perspectives alimentaires de l'Afrique Occidentale et Centrale en 1985." Paris: SEDES, 1967.
- "La sein des Blancs donne la mort." Famille et Développement 8 (October 1976).
- Simmons, E.B. Calorie and Protein Intakes in Three Villages of Zaria Province May 1970-July 1971. Samaru Miscellaneous Paper 55. Zaria, Nigeria: Ahmadu Bello University, 1976.
- Simmons, E.B. and Poleman, Thomas T. The Food Balance Sheet as a Parameter of Tropical Food Economies: The Case of Mauritius. Cornell International Agriculture Bulletin 29, June 1974.
- Simoons, Frederick J. "Rejection of Fish as Human Food in Africa: A Problem of History and Ecology." Ecology of Food and Nutrition 3 (1974): 89-105.
- Smith, Victor E. Efficient Resource Use for Tropical Nutrition: Nigeria. East Lansing, Michigan: Michigan State University Graduate School of Business Administration, 1975.
- Steckle, J. Effects of Industrialization on Food Consumption Patterns. A Study in a Traditional and Industrial Ewe Village. Institute of Statistical, Economic and Social Research, Technical Publications Series, No. 20. University of Ghana, 1972.
- Steedman, Charles. Mali Agricultural Sector Assessment. Ann Arbor: Center for Research on Economic Development, University of Michigan, 1976.
- Streeten, Paul and Burki, S.J. Basic Needs: An Issues Paper. Washington: IBRD Policy Planning and Program Review Department, March 21, 1977.
- Stephenson, L.S.; Latham, M.C. "Lactose Intolerance and Milk Consumption; The Relation of Tolerance to Symptoms." American Journal of Clinical Nutrition 27 (1974): 296-303.
- Stevens, Robert D. "The Influence of Urbanization on the Income Elasticity of Demand for Retail Food in Low-Income Countries." Journal of Farm Economics (December 1963): 1,495-1,499.

- Stewart, Ian G.; Ogley, R.C. Nigeria: Determinants of Projected Level of Demand, Supply and Imports of Farm Products in 1965 and 1975. ERS and Foreign Agricultural Service. USDA. ERS-Foreign 32. August 1962.
- Tarnow-Mordi, W. "Infant Malnutrition in Africa: The Role of Artificial Milk Feeds." Journal of Tropical Pediatrics Envir. Child Health 20 (1974): 239-242.
- Thomson, Anne M. "A Cross-Country Analysis of Changing Nutrition Patterns." Food Research Institute Studies 12 (3) (1974): 275-284.
- Timmer, C. Peter. "Access to Food: The Ultimate Determinant of Hunger." (Unpublished paper.)
- Tubiana, M.J. "La pratique actuelle de la cueillette chez les Zaghawa du Tchad." Journal Agric. Trop Bot. Appl. 16 (1969): 55-83.
- Uchendu, Victor C. Socioeconomic and Cultural Determinants of Rural Change in East and West Africa. Food Research Institute Studies 8 (3) (1968-1969): 225-242.
- UN Economic and Social Council. Economic Commission for Africa. The Food Situation in Africa and a Program of Action. January 31, 1975.
- Upton, Martin. "Recent Changes from Subsistence to Commercial Agriculture in Southern Nigeria." In The Transformation of Rural Communities: Some Implications of promoting Change from Subsistence to Marketing Agriculture in Contrasted Geographical Regions by L.E. Virone et al. The World Land Use Survey Occasional Paper No. 2, Bude, 1966.
- Veil, Simone. "Food and Health." Frank McDougall Memorial Lecture. Food and Nutrition 1 (4) (1975). Rome: FAO: 18-23.
- Verlet, Martin and Hauchecorne, Jean. "Wheat Cultivation on Lake Chad." Notes and Papers on Development, no. 11 (1974): 31-49.
- Vermeer, Donald E. "Food, Farming and the Future: Imperative for Stabilization of Traditional Agricultural Systems." Ed. by Patricia Paylore and Richard A. Haney Jr. Proceedings of the West Africa Conference. Tuscan: University of Arizona, 1976.
- Vis, H.L. and Hennart, P. "L'allaitment maternel en Afrique Centrale." Assignment Children 25 (1974): 87-107.
- Wadsworth, G.R. "Underlying Causes of Ill-Health in an African Country." Ecology of Food and Nutrition 1 (1972): 81-85.
- Walker, A.R.P. "Health Hazards in the Urbanization of the African." American Journal of Clinical Nutrition 11 (1962): 551-553.
- Ware, Helen. "The Sahelian Drought: Some Thoughts on the Future." United Nations, March 1975.
- Wennens-Van der Mey C.A.M. "Developing World: The Decline of Breast-feeding in Nigeria." Tropical and Geographical Medicine 21 (1) (March 1969): 93-96.

- West African Conference on Nutrition and Child Feeding. Dakar, March 25-29, 1968. Proceedings. Washington D.C.: USGPO, 1968.
- Whitby, P. Food Consumption, Nutrition and Demand Projection. Rome: FAO, 1969.
- Wickström, B. "Purchasing Power of African and Asian Consumers in Relation to Meeting the Nutritional Needs of the Child Through Commercial Channels." PAG Bulletin 2 (1972): 16-23.
- _____. "Expenses in Marketing a Supplementary Food Mixture for Children in Ethiopia." Food Industry Journal 3 (May, 1969): 5-9.
- Wilson, Christine S. "Food Habits; A Selected Annotated Bibliography." Journal of Nutrition Education 5 (1) (January-March, 1973, supplement): 39-72.
- Worthington, E.B. "On the Food and Nutrition of the African Native." Africa 9 (1936): 150-165.
- Youngs, A.J. "Wheat Flour and Bread Consumption in West Africa; A Review with Special Reference to Ghana." Tropical Science 14 (3) (1973): 235-244.
- Yudkin, J. and McKenzie, J.C. Changing Food Habits. London: McGibbon and Kee, 1964.

AFRICAN RURAL EMPLOYMENT/ECONOMY PAPERS

- AREP No. 1 Derek Byerlee and Carl K. Eicher. "Rural Employment, Migration and Economic Development: Theoretical Issues and Empirical Evidence from Africa." 1972.
- AREP No. 2 Derek Byerlee. "Research on Migration in Africa: Past, Present and Future." 1972.
- *AREP No. 3 Dunstan S.C. Spencer. "Micro-Level Farm Management and Production Economics Research Among Traditional African Farmers: Lessons from Sierra Leone." 1972.
- AREP No. 4 D.W. Norman. "Economic Analysis of Agricultural Production and Labour Utilization Among the Hausa in the North of Nigeria." 1973.
- AREP No. 5 Carl Liedholm. "Research on Employment in the Rural Non-farm Sector in Africa." 1973.
- AREP No. 6 Gordon Gemmill and Carl K. Eicher. "A Framework for Research on the Economics of Farm Mechanization in Developing Countries." 1973.
- AREP No. 7 Francis Sulemanu Idachaba. "The Effects of Taxes and Subsidies on Land and Labour Utilization in Nigerian Agriculture." 1973.
- AREP No. 8 D.W. Norman. "Methodology and Problems of Farm Management Investigations: Experiences from Northern Nigeria." 1973.
- AREP No. 9 Derek Byerlee. "Indirect Employment and Income Distribution Effects of Agricultural Development Strategies: A Simulation Approach Applied to Nigeria." 1973.
- AREP No. 10 Sunday M. Essang and Adewale F. Mabawonku. "Determinants and Impact of Rural-Urban Migration: A Case Study of Selected Communities in Western Nigeria." 1974.
- *AREP No. 11 Enyinna Chuta and Carl Liedholm. "The Role of Small-Scale Industry in Employment Generation and Rural Development: Initial Research Results from Sierra Leone." 1975.
- AREP No. 12 Tesfai Teclé. "The Evolution of Alternative Rural Development Strategies in Ethiopia: Implications for Employment and Income Distribution." 1975.

*Out of print.

Single copies of the papers may be obtained free from the African Rural Economy Program, Department of Agricultural Economics, Michigan State University, East Lansing, Michigan 48824, U.S.A.

AFRICAN RURAL EMPLOYMENT/ECONOMY PAPERS - CONTINUED

- AREP No. 13 Derek Byerlee, Joseph L. Tommy and Habib Fadoo. "Rural-Urban Migration in Sierra Leone: Determinants and Policy Implications." 1976.
- AREP No. 14 Carl Liedholm and Enyinna Chuta. "The Economics of Rural and Urban Small-Scale Industries in Sierra Leone." 1976.
- AREP No. 15 Dunstan S.C. Spencer, Ibi I. May-Parker and Frank S. Rose. "Employment, Efficiency and Income in the Rice Processing Industry of Sierra Leone." 1976.
- AREP No. 16 Robert P. King and Derek Byerlee. "Income Distribution, Consumption Patterns and Consumption Linkages in Rural Sierra Leone." 1977.

*Out of print.

Single copies of the papers may be obtained free from the African Rural Economy Program, Department of Agricultural Economics, Michigan State University, East Lansing, Michigan 48824, U.S.A.

AFRICAN RURAL EMPLOYMENT/ECONOMY WORKING PAPERS

- *WP No. 1 "African Rural Employment Study: Progress Report and Plan of Work, 1972-1976." May 1974.
- *WP No. 2 Dean Linsenmeyer. "An Economic Analysis of Maize Production in the Kasai Oriental Region of Zaire: A Research Proposal." May 1974.
- *WP No. 3 Hartwig de Haen, Derek Byerlee and Dunstan S.C. Spencer. "Preliminary Formulations of Policy Models of the Sierra Leone Economy Emphasizing the Rural Sector." November 1974.
- *WP No. 4 Enyinna Chuta and Carl Liedholm. "A Progress Report on Research on Rural Small-Scale Industry in Sierra Leone." November 1974.
- *WP No. 5 "Plan of Work for the IDR/MSU Research Program in the Ada District of Ethiopia." November 1974.
- *WP No. 6 William A. Ward. "Incorporating Employment into Agricultural Project Appraisal: A Preliminary Report." February 1975.
- +*WP No. 7 Eric F. Tollens. "Problems of Micro-Economic Data Collection on Farms in Northern Zaire." June 1975.
- *WP No. 8 "Annual Report for Period July 1, 1974 - June 30, 1975-- Rural Employment in Tropical Africa: A Network Approach." 1975.
- *+WP No. 9 Carl K. Eicher, Merritt W. Sargent, Edouard K. Tapsoba and David C. Wilcock. "An Analysis of the Eastern ORD Rural Development Project in Upper Volta: Report of the M.S.U. Mission." January 1976.
- +WP No. 10 Tom Zalla. "A Proposed Structure for the Medium-Term Credit Program in the Eastern ORD of Upper Volta." February 1976.
- *WP No. 11 Dunstan S.C. Spencer. "African Women in Agricultural Development: A Case Study in Sierra Leone." April 1976.

† Also available in French

* English version out of print.

French version out of print.

A limited number of the papers may be obtained free from the African Rural Economy Program, Department of Agricultural Economics, Michigan State University, East Lansing, Michigan 48824, U.S.A.

AFRICAN RURAL EMPLOYMENT/ECONOMY WORKING PAPERS - CONTINUED

- *WP No. 12 Derek Byerlee, Joseph L. Tommy and Habib Fattoo. "Rural-Urban Migration in Sierra Leone: Determinants and Policy Implications." June 1976
- *WP No. 13 Dunstan S.C. Spencer, Ibi May-Parker and Frank S. Rose. "Employment Efficiency and Incomes in the Rice Processing Industry of Sierra Leone." June 1976.
- *WP No. 14 Carl Liedholm and Enyinna Chuta. "An Economic Analysis of Small-Scale Industry in Sierra Leone." June 1976.
- *WP No. 15 Dunstan S.C. Spencer and Derek Byerlee. "Technical Change, Labor Use and Small Farmer Development: Evidence from Sierra Leone." August 1976.
- WP No. 16 Mark D. Newman and David C. Wilcock. "Food Self-Sufficiency, Marketing and Reserves in the Sahel: A Working Bibliography." September 1976.
- +WP No. 17 Gretchen Walsh. "Access to Sources of Information on Agricultural Development in the Sahel." December 1976.
- WP No. 18 Dean A. Linsenmeyer. "Economic Analysis of Alternative Strategies for the Development of Sierra Leone Marine Fisheries." December 1976.
- WP No. 19 Dunstan S.C. Spencer and Derek Byerlee. "Small Farms in West Africa: A Descriptive Analysis of Employment, Incomes and Productivity in Sierra Leone." February 1977.
- +WP No. 20 Derek Byerlee, Carl K. Eicher, Carl Liedholm and Dunstan S.C. Spencer. "Rural Employment in Tropical Africa: Summary of Findings." February 1977.
- *WP No. 21 Robert P. King. "An Analysis of Rural Consumption Patterns in Sierra Leone and Their Employment and Growth Effects." March 1977.
- +WP No. 22 Tom Zalla, Ray B. Diamond and Mohinder S. Mudahar, "Economic and Technical Aspects of Fertilizer Production and Use in West Africa." July 1977.

†Also available in French.

*English version out of print.

#French version out of print.

A limited number of the papers may be obtained free from the African Rural Economy Program, Department of Agricultural Economics, Michigan State University, East Lansing, Michigan 48824, U.S.A.

AFRICAN RURAL EMPLOYMENT/ECONOMY WORKING PAPERS - CONTINUED

WP No. 23 Mark D. Newman. "Changing Patterns of Food Consumption in Tropical Africa: A Working Bibliography." January 1978.

+Also available in French.
*English version out of print.
#French version out of print.

A limited number of the papers may be obtained free from the African Rural Economy Program, Department of Agricultural Economics, Michigan State University, East Lansing, Michigan 48824, U.S.A.