UNITED STATES AGRICULTRAL SURPLUS DISPOSAL IN COLOMBIA

Thesis for the Degree of Ph. D.
MICHIGAN STATE UNIVERSITY

Theodore James Goering

1961

This is to certify that the

thesis entitled

United States Agricultural Surplus Disposal
In Colombia

presented by

Theodore James Goering

has been accepted towards fulfillment
of the requirements for

Ph. D. degree in Agricultural
Economics

Major professor

Date 12/61

O-169

ABSTRACT

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by Theodore J. Goering

This investigation is concerned with the operation of Public Law 480 in Colombia. A basic objective is to determine the manner in which Colombian agriculture and the economy have been affected by the inflow of P. L. 480 commodities. Loans made in local currencies generated by the sale of these products are also considered.

Colombia has received surplus farm commodities through Titles I and III of P. L. 480. Five Title I agreements have been signed with a total market value of U.S. $75 million, or 400 million pesos. Approximately 74 percent of all local currencies are allocated for Colombian use through Sections 104 (e) and (g). Approximately U.S. $25.9 million of Title III foods have been distributed by voluntary agencies. Nearly 1.5 million Colombians receive food supplements through the donation program.

In the period 1955-60, 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. The inflow of P. L. 480 wheat and flour at favorable terms permitted the Colombian government to pursue a less vigorous wheat price support and development program. Consequently, there has been some shift from wheat to barley production on cool-climate lands. Because of attractive price and marketing policies for barley, the transition was made easily with little effect on gross incomes of these land owners. Effects upon domestic producers of cotton and other oil crops have been negligible.

Promotional campaigns for specific agricultural products were financed in part with revenues originating in taxes levied on P. L. 480 imports. The large buying-selling price differential for wheat, flour, and oil imports has also been a source of funds for agricultural development.

Local currencies generated by domestic sale of P. L. 480 commodities do not represent additional resources for the recipient country. Rather, these funds are claims on resources; if used unwisely, they may retard economic growth by augmenting inflationary pressures. It is argued that P. L. 480 loans in Colombia have generally been efficacious because of appropriate economic circumstances--fiscal and monetary rigidities, moderate, but controlled, inflation, and unemployed or underemployed resources. Under these conditions Colombian monetary authorities were willing to draw upon the funds.

Through the first quarter of 1961, 130 million pesos were loaned to Colombian agriculture and industry. There has been emphasis upon channeling loan funds to projects of benefit to local agriculture and which stimulate production of crops in domestic deficit.

Public Law 480 coincided with the break in world coffee prices and Colombia's resulting balance of payments crisis. During the years 1955-60, 33.4 million dollars of Title I farm products were imported without foreign exchange expenditure. As a result, per capita wheat consumption increased 19 percent at a time when domestic production was static and balance of payments considerations called for reduced commercial imports.

Dollar earnings to the country have been reduced by the payment in pesos of U.S. obligations in Colombia valued at 9.8 million dollars. Some increased import demand for machinery and equipment resulted from projects financed with local currency loans.

But, exchange savings will occur as completed projects produce products which were formerly imported.

United States export programs to Colombia also affected foreign competitors. Canada's wheat and flour shipments to Colombia were reduced during the P.L. 480 years. Some of this shift appears attributable to P.L. 480, although more aggressive dollar sales efforts and U.S. pricing policies also played a role. Peruvian cotton exports and shipments of edible oils from countries other than the U.S. were less affected.

The effectiveness of loan expenditure could be enhanced by greater U.S. guidance of local currency uses. Channeling funds into agriculture would assist in meeting agricultural problems. The use of Title II foods in partial compensation for labor-intensive work projects should be considered. The persistent imbalance between import requirements and export earnings poses a serious problem for the economy. A modest approach to this difficulty is to consider local currency "loans" as grants to the Colombian government. Dollar repayment would reduce the foreign exchange available for merchandise imports or other external debt service. Peso repayment accumulates currencies more rapidly than they can be employed.

UNITED STATES AGRICULTURAL SURPLUS DISPOSAL IN COLOMBIA

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A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Agricultural Economics

1961

ACKNOWLEDGMENTS

Heartfelt thanks are due all who gave assistance throughout the study. The author acknowledges his debt to the Department of Agricultural Economics of Michigan State University and the Ford Foundation for financial assistance prior to and during the investigation. Sincere appreciation is expressed to his wife, Shirley, for her encouragement and financial support.

Special recognition is due Professor Lawrence W. Witt who stimulated the author's interest in this area of research and whose guidance and insights were most valuable. Thanks also go to Professors Dale E. Hathaway, Harold M. Riley, Carl K. Eicher, and Garland P. Wood who read early drafts and offered helpful suggestions.

The assistance of those individuals in Colombia who gave of their time and resources is gratefully acknowledged. Particularly appreciated was the help of Dr. Henry Hopp, U.S. Agricultural Attache to Colombia, Dr. Antonio J. Posada, former member of the Colombian Planning Commission, and Dr. Enrique Latorre of the Bank of the Republic's Department of Economic Research.

The views expressed have been influenced by the associations acknowledged above, but they remain the sole responsibility of the author. Errors, omissions, and misjudgments can be attributed to him alone.

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CHAPTER I

INTRODUCTION

The productivity of United States agriculture represents both a problem and an undeniable blessing. Abundant agricultural resources and the great efficiency with which these can be converted into food and fiber permit the United States to be one of the best-fed, best-clothed nations in the world. But, domestic consumption and commercial exports of these commodities in the past decade have lagged behind agriculture's ability to produce them. The result is an accumulation of farm surpluses that burden the American taxpayer and create uneasiness among other exporting countries.

The naive solution calls for reduction of these stocks, but this is only question begging. The basic problem is how this reduction should proceed. Rapid disposal through domestic markets would produce catastrophic price declines and resulting injury to agriculture. Indiscriminate overseas disposal would provoke resentment among competitors in the international trading community. Destruction of stocks is antithetical to deeply-held values, particularly when two-thirds of the world's population suffers from malnutrition and insufficient clothing.

In recent years the term "burdensome," as used in reference to the surplus problem, has been displaced by more complimentary adjectives with the realization that abundant supplies of agricultural commodities represent powerful assets in the war against hunger, disease, and poverty. Surplus agricultural products can be considered as capital and capital is a basic requirement for economic development.

The task is to devise means whereby the objective of agricultural surplus disposal may complement the goal of economic development. Bold and imaginative social innovation is required.

This problem is not unique to the United States. Agricultural surpluses have become common in numerous countries throughout the world. The Food and Agricultural Organization of the United Nations became concerned with this and associated problems in November, 1953, when it stressed the urgency for a constructive approach to commodity disposal. The Organization's Committee on Commodity Problems was charged with the task of seeking solutions to these difficulties.

In the recommended principles for surplus disposal, special emphasis was placed upon the following uses for these commodities: (1) as supplementary aid for economic development in underdeveloped countries; (2) as a means of improving nutrition of underprivileged and vulnerable groups; and, (3) as food relief in time of crop failure or other natural disaster.[1] These possible uses were embodied in the three titles of Public Law 480, (83d Congress, 1954) the most significant United States legislation for dealing with agricultural surpluses. Although designed primarily for disposing of surpluses abroad, this legislation attempted to do this in a manner which would be generally beneficial to recipients and least harmful to competitive countries.

From the beginning of the program in 1954 through June, 1961, more than U. S. $14 billion (export value) of agricultural products have been authorized for use under this act.[2] The magnitude of this program

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[1]United Nations, Food and Agricultural Organization, Uses of Agricultural Surpluses to Finance Economic Development in Underdeveloped Countries; A Pilot Study in India, (Rome, Italy: June, 1955), p. iii.

[2]U. S., Congress, House, The 14th Semiannual Report on Activities of the Food-For-Peace Program Carried On Under Public Law 480, 83d Congress, as Amended, 87th Congress, 1st Session, 1961, House Doc. 223, p. 2.

emphasizes its great potentiality for both beneficial and harmful effects upon the economies of participating countries. Public Law 480 is presently more than seven years old, but little analysis of the program as it operates in recipient countries has been undertaken. Past discussions of surplus disposal activities have generally been limited to theoretical considerations of how these programs might be most effective in promoting economic development,[3] or the not-too-objective views of those who see the programs as necessary adjuncts to existing domestic farm policies. More recently, the United States Department of Agriculture has contracted with independent agencies, generally outside the U. S., to undertake comprehensive studies of P. L. 480 impacts in recipient countries.

Objectives

The present study is independent of U.S.D.A. financial support. It was done in Colombia in conjunction with Michigan State University's program of technical assistance to the National University of that country. The investigation is part of a more comprehensive study of agriculture's role in economic development, financed jointly by a Ford Foundation grant and Michigan State University. A basic objective of the investigation is analysis of program impacts, particularly as they relate to agricultural and general economic development in Colombia. Special emphasis will be given to:

1) Investigating the manner in which the Colombia economy has been affected by P. L. 480;
2) Assessing the manner in which P. L. 480 has influenced the development of Colombian agriculture;

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[3]Important in this regard are the FAO study cited earlier and a 1961 publication by the same group entitled Development Through Food; A Strategy for Surplus Utilization.

3) Gaining insights into acceptable and useful ways of employing accrued local currencies;
4) Formulating suggestions which may be useful in making more compatible the two U.S. objectives of disposing of agricultural surpluses and promoting economic growth in recipient countries.

Research Difficulties

Economic investigation in Colombia, as in other less-developed countries, poses special problems. One of the most troublesome perhaps is the relative scarcity of reliable data. The problem is serious as such statistics are indispensable in accurately determining changes among economic variables. It is not, however, insurmountable. Rather, it requires that investigators use discretion in data selection, use direct observation and primary data where possible, and employ the necessary caution in analysis and interpretation of results. Fallible statistical information necessarily complicates an investigation but should not be cause for declaring that useful analysis is impossible.

A more subtle problem concerns the applicability of modern economic theory in underdeveloped areas. To what extent can economic generalizations evolved in industrialized money economies be used in analysis of economic phenomena in countries where attitudes and institutions may be different? Will a higher wage rate reduce the total quantity of labor supplied? Is the profit motive less important in organizing production?

It is assumed that institutions differ much more between developed and underdeveloped areas than do attitudes. Man is everywhere acquisitive; resources are generally limited; more is preferred to less; and there exists a universal desire to maximize one's utility or level of living. These are basic postulates of economic theory; if they are accepted, the elementary principles of economics follow. While Colombia

has some characteristics of underdeveloped countries, the attitudes of the population generally are similar to those held by the populace of more developed countries. In this environment contemporary economic theory may be usefully employed. Institutional differences may limit and direct certain economic activities but do not invalidate basic economic principles.[4]

Procedure and Format

Special attention is directed in this study to the influence of Public Law 480 upon agricultural and general economic growth. Before drawing useful policy conclusions as to how the program may be more effective in promoting growth, some knowledge of the Colombian economy--its past development, present characteristics, and problems--is necessary. Chapter II is written for this purpose. Its approach will be basically descriptive and analytical with little mention of Public Law 480.

The type and extent of program impacts are related to volume of P. L. 480 imports, the value of currencies generated, and uses to which these funds are put. These factors will be considered in Chapter III. Operational aspects of the program, including agreement negotiations and loan procedures, will also be discussed here. Chapter IV focuses upon Title III donations and distribution efforts by voluntary agencies in Colombia. Special feeding programs and food distributions to underprivileged groups will be discussed in this section. Barter transactions, also consummated under Title III, will be given brief consideration here.

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[4]"There are several million followers of the Mosaic law in the United States and elsewhere in the West who do not eat pig meat. We do not say that the law of demand is invalid because they do not eat more pork when its price falls." See P. T. Bauer, Economic Analysis and Policy in Underdeveloped Countries (Durham, North Carolina: Duke University Commonwealth Studies Center, 1959), p. 13.

Chapters V and VI comprise the two most important analytical sections in the study. The first of these will focus specifically upon program impacts on Colombian agriculture. A discussion of peso uses as they relate to agriculture will be included. Chapter VI will consider general economic growth as it relates to P. L. 480. Particular attention will be given to program influence upon retail prices, consumption levels, and the country's balance of payments. A general discussion of the impact upon trade patterns for agricultural products will conclude the chapter.

Chapter VII will utilize the description and analysis of previous sections in developing specific policy recommendations. A brief summary constitutes the last chapter.

Two appendices are included in this report. Appendix A is a discussion of the Public Law 480 legislation. Appendix B is a brief consideration of P. L. 480 commodity impacts upon processing industries in Colombia and the program's influence upon employment and investment in that country. These considerations are directly relevant in a study of Public Law 480. They are relegated to an appendix because of their tentative and preliminary character, occasioned by serious data deficiencies and the impossibility of comprehensive investigation.

CHAPTER II

COLOMBIA: A PHYSICAL, SOCIAL, AND ECONOMIC PERSPECTIVE

The Physical Setting

Location and area

Colombia's location in the northwest corner of South America is notable because of its frontage on both the Atlantic and Pacific Ocean and the relative proximity to the country's most important trading partner, the United States. This geographical location places Colombia in an enviable position, relative to her South American neighbors, with regard to international commerce. One of her important ports, Buenaventura, is only 266 miles from the Panama Canal; a second port, Barranquilla, is 2,100 miles from New York and within easy shipping distance of Europe.[1] The strategic location perpetuates strong commercial ties between the Colombian economy and the United States. The effect is both advantageous and adverse. Colombia finds the U.S. a good market for the bulk of her coffee production and in turn purchases a wide variety of manufactures there. On the other hand, the economy of Colombia, with its strong foreign trade orientation, is affected by economic disturbances in its trading partners.

Colombia's land area is estimated at 440,000 square miles, a figure approximately equal to the combined areas of Arizona, New Mexico, Nevada, and California. This land area lies entirely within

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[1]Kathryn H. Wylie, The Agriculture of Colombia, Foreign Agriculture Bulletin No. 1, (Washington: U.S. Government Printing Office, 1942), pp. 2-3.

the Tropics, between lattitudes 4° 14' S. and 12° 31' N. However, it is altitude, not lattitude, which conditions and molds the country's economic and cultural life.

Topography

The rugged terrain which characterizes much of the land area of Colombia has had a profound influence upon the development of the country. From the Ecuadorian border in the south, three great mountain ranges, or cordilleras, traverse Colombia, dividing the country into regions differing greatly with respect to climate, land resources, and population. The Western Cordillera, the lowest of the three but with peaks of 16,000 feet, ends at the shores of the Caribbean Sea. It has a length of approximately 750 miles. The backbone of the Colombian mountain system is the Central Cordillera with an average height of 11,500 feet but ranging up to 18,700 feet. The eastern Cordillera is the longest and the widest. On its slopes at an altitude of 8,850 feet is the Savanna of Bogota, one of the country's most important economic areas.[2] Apart from the Andean system is the Sierra Nevada de Santa Marta, a mountain range lying near the Caribbean Sea. The range is low in the Guajira Peninsula, but in the Santa Marta region the snow-capped peaks rise to heights of almost 19,000 feet.

The great Andean ranges determine Colombia's river system. The system attains singular importance in this country where road building is extremely expensive and water power is invaluable for present and future economic growth. These rivers and streams have been of utmost significance in the economic development of the country by serving as the main transportation arteries, thereby permitting the exploitation of agriculture and industry in inland areas. The Magdalena River,

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[2]Antonia J. Posada F., "Economics of Colombian Agriculture" (unpublished Ph.D. thesis, Dep't. of Agricultural Economics, University of Wisconsin, 1950), p. 2.

flowing between the Central and Eastern Cordilleras, is the principal waterway of the country. It has been called "El Río de la Patria" in recognition of its in contribution to the growth of the country. The Cauca River and its tributaries flow between the Western and Central Cordilleras to eventually join with the Magdalena. The great Magdalena has an extension of 950 miles of which 900 are navigable.[3] Rivers of the Pacific Coast area are generally short, fall rapidly, and are of less economic significance. In the eastern areas of Colombia the rivers flow through the extensive grassland areas, the llanos, and the selvas, or tropical jungles. All of these rivers are of great length and navigable for long distances. Their true economic significance must await further development of these expansive land areas. Nearly two-thirds of Colombia's total area lies in this region east of the Eastern Cordilleras.[4]

Climate

The climate of Colombia reflects its great topographical variations. Temperatures and rainfall vary greatly, depending upon altitude and trade wind influences, but the equatorial characteristics of slight monthly temperature variations and considerable daily fluctuations are prevalent everywhere. In mountainous regions up to 3,400 feet the mean average temperature ranges from 83° F. to 75° F.; from 3,400 to 6,800 feet, 75° to 63°; from 6,800 to 10,000 feet, 63° to 50°; the high mountain slopes, or páramos, at altitudes of 10,000 to 14,000 feet, are cold and windy.[5] In the mountain highlands there are two distinct wet seasons

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[3]Ibid., p. 3.

[4]Wylie, loc. cit., p. 4.

[5]U.S., Department of Commerce, Investment in Colombia (Washington: U.S. Gov't. Printing Office, 1957), p. 3.

and two dry seasons which vary somewhat, depending upon elevation and exposure. Generally the wet seasons include the periods April through May and September through December.

The coastal areas are characterized by high temperatures but rainfall depends upon location. On the Pacific Coast precipitation is excessive, ranging up to annual averages of 331 inches. The Atlantic Coast is drier with more pronounced wet and dry seasons. The temperature there is moderated by ocean breezes during the December-April dry seasons. The Guajira Peninsula on the Atlantic Coast has extremely low rainfall and high temperatures.

Lands east of the Eastern Cordillera include jungles in the south and grasslands in the north. Variations in temperature and rainfall intensity are also found here. Temperatures of both the grasslands and jungles are quite high, averaging about 80° F. Rainfall in the grasslands is generally lighter and more seasonal than in the Colombian jungles.

Agricultural areas

Colombian agricultural production is determined in location and type by topographical environment. The country's geographical location would seemingly dictate the production of tropical products. However, the economic history of Colombia began in the highlands where European crops grew well and the health hazards of the hot climate were absent. The great variations in climate, soils, and population concentrations have also encouraged a wide variety of agricultural production in various geographical areas. The striking differences in altitude have led to the natural delineation of three production zones: the tierra caliente (hot land), tierra templada (temperate land), and tierra fría (cold land). These production zones delineate, although not exclusively, the production areas of certain agricultural products.

In the tierras calientes of the Atlantic Coast bananas, cotton, sugar cane, and cacao are produced. The lowlands also encompass the Magdalena and Cauca Valleys which are important for sugar cane, cacao, cotton, rice, corn, and livestock production. Livestock production is the dominant enterprise in the low-lying grasslands of Eastern Colombia.

In the tierras templadas, comprising the Andean slopes and mountain valleys of Colombia, coffee is grown in abundance. Other important crops of this production zone include corn, beans, yucca, cacao, and sugar cane.

The tierras frías are producing zones for the cool-climate crops of wheat, barley, potatoes, and fruits such as apples, peaches, and pears. The Savanna of Bogota, which falls in this zone, is important for its dairy enterprises, resulting chiefly from the advantageous combination of suitable climate and proximity to consumption centers.

The river valleys of Western Colombia are important agricultural areas of the country. The Cauca Valley, located between the Western and Central Cordilleras, is one of the most fertile valleys in Colombia and possibly in the world. The Tolima, Sinú, Magdalena, and Río Cesar Valleys are important agricultural regions. Additional agricultural expansion in these areas is likely. Other areas of significance are the cool highlands in the states of Boyacá, Cundinamarca, and Nariño. Heavy population concentrations furnish a ready market for the livestock products and cool-climate crops produced there.

The great land areas of Eastern Colombia are of limited usefulness at present due to lack of roads and communications. However, development efforts are underway and extensive agriculture, particularly livestock production, appears feasible. Also of future economic significance are the forested areas of Colombia. More than 50 percent of Colombia's land area is under forest, consisting of mangrove swamps

along the Pacific and Caribbean coasts, mixed tropical forests up to 5,000 feet, and temperate-zone trees at higher elevations.

The Social Setting

The Spanish heritage

The cultural, social, and economic environment in Colombia today reflects to some extent the heritage of Spain and her conquest policy. The Spanish Conquistadores came to the new continent primarily as conquerors and not as agriculturalists. Bringing with them the institutions of Spanish feudalism and the powerful Catholic Church, Spanish rulers imposed upon the sedentary agriculturalists of the land area that is now Colombia a series of policies, administrative practices, and political institutions whose vestiges are identifiable today. It is not the task here to evaluate the social worth of this heritage but rather to emphasize its significance in molding the cultural and economic evolution of the country.

Coming as a conqueror rather than a colonist, the Spanish soldier intermingled freely with other racial groups. As a result modern Colombia exhibits a remarkable assimilation of basic stocks including the native Indian, the white man of European origin, and the Negro brought in to replace the decimated natives of the low-lands. Prejudice in Colombia, to the extent that it exists, is based on social and economic status rather than color or ancestry.

Political evolution

Colombian political history is stormy. During the nineteenth century the country experienced considerable difficulty in making the transition from colonial absolutism to independence and self-government. Between 1811 and 1866 there were ten constitutions, six providing for a

centralized government and four for a federal.[6] Internal conflict plunged the country into a destructive civil war at the close of the century (1899-1902), but from the experience resulted new concepts of national unity and democracy. Free elections and political stability returned and with them a new burst of economic progress. The first three decades of the century saw substantial development of roads, railroads, ports, and other infrastructure, aided in part by the indemnity received from the United States for Panama.

The economic depression of 1929-32 brought a sudden end to the rapid growth of the previous years. Foreign loans stopped and many of the vast public works projects were suspended. Foreign exchange earnings fell drastically as a result of the decline in world coffee prices. The inability to import capital and intermediate goods added to the difficulties. Growing unemployment and reduced purchasing power contributed to the political unrest which marked this and later periods.

Colombia perhaps has enjoyed greater political stability during the past half century than some of her Latin-American neighbors. However, civil disturbances, particularly since the violence of 1948, are frequent and appear to have had some adverse effect upon the economic growth of the economy. Sporadic acts of violence in the countryside have been destructive of agricultural capital and encouraged the migration from rural areas to the safer refuge of the city.[7] One effect has been to stimulate the growth of underutilized latifundio,

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[6]Ibid., p. 10.

[7]A satisfactory explanation for the Colombian violencia is difficult. Civil disturbances in 1948 were directly attributable to the assassination of a popular political leader. In ensuing years political difference between the Liberals and Conservatives have provoked occasional outbreaks of violence in some areas. It has been stated that extreme poverty among the country people encourages some to kill and plunder. The desire of large landowners to increase their holdings is given as another reason for the violence. In this scheme wealthy landholders reputedly hire bandits to spread terror and destruction in country areas, thereby reducing land values and making acquisition easier.

a predominant characteristic of Colombian agriculture.

Population

Colombia is experiencing dynamic changes in total population, composition between urban and rural sectors, and the distribution of active population among economic activities. Census figures indicate an average annual population growth rate of 2.2 percent between 1938 and 1951. The 1951 census showed a total population figure of 11.5 million. The economic research department of the central bank estimates an annual growth rate in excess of 2.8 percent in recent years. This rate produces a mid-1960 population estimate of 14.77 million.[8]

Geographically the population is heavily concentrated in the higher altitudes. In 1954 it was estimated that 17 percent of the population was found in the Caribbean coastal areas, 2.6 percent in the Pacific coastal area, 2 percent in the national territories, and 78.4 percent in the Andean regions.

A striking feature of the Colombian demographic pattern is the rapid urbanization of the population. During the period 1918-53 the growth rate of the urban population was 4.2 percent compared with 1.2 percent for the rural sector. In recent years the difference in growth rates has been larger. During the period 1945-53 urban population increased at a rate of 5.2 percent annually while rural population growth slowed to 0.4 percent.[9] This period includes the years of civil unrest during which large numbers migrated to urban areas. This partially accounts for the accentuated growth rate in urban areas.

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[8]Banco de la República, Población, Producto Bruto Interno, e Ingresos, Departamento de Investigaciones Económicas, (Bogotá: Banco de la Repúblic, 1960), p. 21.

[9]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.

Changes in the rural-urban distribution over time are also noteworthy. Between the years 1918 and 1953 rural population declined from 79.0 to 57.3 percent of the total.[10] With the improved economic and cultural opportunities in urban centers, the migration from farms to cities has continued. It is estimated that 55.2 percent of the total population resided in the rural sector in 1959 (see Table II-1).

Table II-1. Colombia: Population growth and distribution by economic activity.

	Percentage distribution			
	1925	1945	1953	1959
Total population (in millions)	5,543	10,152	12,129	14,364
Urban population	23.2	34.0	42.7	44.8
Rural population	76.8	66.0	57.3	55.2
Active population	100.0	100.0	100.0	100.0
Agriculture	68.5	59.9	53.8	49.1
Mining	1.6	2.1	2.0	1.5
Manufacturing	3.4	5.2	6.4	5.1
Artisan industry	7.9	7.3	8.5	10.3
Construction	1.8	2.7	3.6	4.8
Transport, communications, and energy	[a]	2.5	3.2	5.1
Trade and finance	16.8	5.8	6.4	7.2
Government	[a]	2.4	3.7	4.3
Services	[a]	12.1	12.4	12.6

[a]Included in "Trade and finance."

Sources: Figures through 1953 are from the United Nations, Department of Economic and Social Affairs, Analysis and Projections of Economic Development, III, The Economic Development of Colombia (Geneva, 1957), p. 17. The 1959 figures were developed by the Departamento Administrativo Nacional de Planeación y Servicios Técnicos, Proyecciones de Población Para Colombia, (Bogotá, 1960), p. 2. All agglomerations with more than 1500 inhabitants are considered as urban.

[10]Ibid., p. 17.

A third feature is the shift in the occupational distribution of the population. Agriculture has employed smaller proportions of the active population through the years. Modest increases have been registered in most other categories, with manufacturing and the construction industries showing the greatest relative increases.

The Economic Setting

Classifying a country or area as developed or underdeveloped is somewhat arbitrary, depending upon the criteria of development which are employed. Moreover, the usefulness of such a classification can be questioned. Few would disagree that all countries, regardless of the level of development, are to some extent underdeveloped or less than optimally developed. Although precise definition of the level of development in any specific country is difficult, most of the "underdeveloped" countries of the world possess the following characteristics: (1) the economies are based largely on primary production; (2) the agricultural sectors exhibit relatively low productivity; (3) the quality of the human productive agent is low; (4) capital shortages exist; and (5) the countries are heavily-oriented toward foreign trade.[11] To varying degrees, Colombia also exhibits these characteristics.

Emphasis upon primary production

Several economic measuring sticks are available which indicate a country's dependence upon primary production. One of these, the

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[11]The above classification does not imply that a country exhibiting any one of the above attributes is thereby "underdeveloped." The economy of New Zealand is based heavily upon primary production but her level of development by nearly any standard is one of the world' highest. It is well to remember that "primary production is an associative characteristic of a poor country, but not a causative characteristic." See Gerald M. Meir and Robert E. Baldwin, Economic Development; Theory, History, and Policy (New York: John Wiley and Sons, Inc., 1957), p. 400.

percentage of the labor force in agriculture was noted earlier. In Colombia approximately 49 percent of the active population is engaged in agriculture. This figure is well below those of many countries frequently classed as underdeveloped. A related measure is agriculture's contribution to national income. In this regard, too, Colombia is evidencing rapid progress. Although agriculture is still a substantial item in the gross national product, its share has been decreasing slowly through the years to 34 percent in 1959. Table II-2 indicates the steadily expanding contributions of manufacturing, construction, trade, and finance.

A developing economy is generally characterized by heavy emphasis upon industries closely allied with primary production. According to the 1953 Industrial Census the foodstuffs industry accounted for approximately 42 percent of gross value of total industrial production. The beverage, textile, and tobacco industries contributed another 20 percent. The total contribution of the chemical, mechanical, and metallurgical industries was only 13 percent of industrial production.[12] These figures emphasize a significant aspect of Colombian industry--the predominance of enterprises producing consumer goods and the relative absence of industries manufacturing capital goods and intermediate products.

Colombian agricultural productivity

The productivity level in agriculture determines income and consumption levels in that sector. When agriculture is an industry of major proportions in terms of contribution to national income, a low productivity level prevents that sector from exerting a dynamic influence on other sectors of the economy. A brief analysis of the agricultural

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[12]United Nations, Analysis and Projections . . . , op. cit., pp. 273-274.

Table II-2. Colombia: origin, by economic activity, of gross national product at current market prices.

	Percentage distribution							
	1925	1945	1954	1955	1956	1957	1958	1959
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture and livestock	58.8	47.0	36.3	33.6	34.6	36.2	35.0	33.9
Mining	1.5	3.7	2.2	2.2	2.4	2.8	3.8	3.6
Manufacturing	8.5	14.4	15.7	17.8	17.4	17.8	17.2	17.6
Construction	3.6	6.1	8.8	9.3	9.6	8.7	8.7	9.2
Transport	2.3	5.2	6.6	6.9	6.9	6.0	5.1	4.9
Energy, communications and public utilities	0.4	0.8	1.0	1.2	1.2	1.2	1.2	1.3
Trade and finance	9.7	11.2	17.2	16.3	15.5	15.4	16.7	17.1
Government	5.7	5.5	4.8	4.9	4.8	4.6	4.8	4.9
Personal services	9.5	6.1	7.4	7.8	7.6	7.3	7.5	7.5

Source: Banco de la República, Población, Producto Bruto Interno, e Ingresos. Departamento de Investigaciones Económicos, (Bogotá: Banco de la República, 1960), p. 17.

Classification categories have changed slightly through the years, thereby making some regrouping necessary.

sector will furnish a better understanding of the Colombian economy, in toto.

The efficiency with which resources are turned into agricultural products generally has been low relative to the non-agricultural sector of the economy. The reasons for this are many but a few can be isolated and discussed coherently. One explanation is the existing pattern of land use and the mal-use of available resources which it engenders. A pervasive aspect of land use in Colombia is the production of crops on mountain slopes and steep or broken ground while large areas of the flat, fertile valleys are used for livestock production. This incongrous pattern of land use reflects Colombia's Spanish heritage. Under Spanish rule, large tracts of the more desirable valley lands were granted to deserving Conquistadores for meritorious service to the Crown. These lands were devoted largely to cattle production, an enterprise which required a minimum of capital investment and managerial supervision. In the process the poorer agricultural workers were forced to take up land elsewhere for their subsistence agriculture. The remaining lands were frequently mountain slopes, areas not particularly attractive to livestock producers but generally favored by a climate more conducive to physical labor. This system has been perpetuated by a land tax system which permits frequent tax evasion or under-evaluation of agricultural lands. The rapid urban migration in recent years has also eased some of the pressure for fuller utilization of the latifundio.

Colombia has an estimated 113.8 million hectares of land area. Of this, only 33.2 million (or 29.1 percent) are under crops or used for pasture. Of the total area, 3 million hectares (or 2.6 percent) are under annual or perennial crops and 30.2 million (or 26.5 percent) are under natural or artificial pasture.[13] In 1959 livestock operations

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[13]Consejo Nacional de Política Económica y Planeación, El Sector Agropecuaria y sus Problemas (Bogotá: Departamento Administrativo de Planeación y Servicios Técnicos, Abril, 1960), p. 27.

utilized 91.3 percent of all agricultural land, but contributed only 31.0 percent to agricultural gross product. Unfortunately, there is no reliable information available regarding the percent of tillable land presently employed in extensive livestock operations. (Less than one percent of the country's land area has been studied in detail for agronomic characteristics.) However, there is general agreement that much of the land now in livestock production could be used more intensively.[14]

A second factor partially accounting for the production problems of Colombian agriculture is the low yield of agricultural labor. This is low relative to labor in other sectors of the economy. Estimates indicate that in 1955 the value added to gross national product by one agricultural laborer was 1,507 pesos. In contrast, in the manufacturing sector each man contributed 5,898 pesos to gross national product.[15, 16] A comparison of the man hours required to produce 100 kilograms of product in the United States and in Colombia is also illuminating. In the case of wheat, one U.S. man-hour is required to produce 100 kilograms while 35 Colombian man-hours are required to produce the same amount. For rice, the ratio is 1.3 U.S. man-hours to 34 Colombian man-hours.[17]

An aspect closely related to low labor productivity is the amount of capital investment in agriculture. In 1953 agricultural assets represented 36 percent of the country's entire stock of capital. But crop production, which accounted for 64.5 percent of all agricultural production, carried only 32.1 percent of total farm assets. The stock of

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[14]Ibid., p. 28.

[15]United Nations, Analysis and Projections . . . , op. cit., p. 199.

[16]This comparison is not true "marginal analysis." Each man employs a suitable level of accompanying resources, mainly land in agricultural and capital in industry. Thus, the "value added" indicates not just what the one worker would produce, but what the worker with a complement of accompanying factors would produce.

[17]United Nations, Analysis and Projections . . . , op. cit., p. 201.

capital per active person engaged in agriculture was only 45 percent of the country average. The productivity of labor was also adversely affected by the low rate of investment per active person in machinery and equipment.

The composition of fixed and working capital is indicative of the technological level. In 1953 investment in livestock and soil improvement accounted for 61.5 percent of total capital while investment in buildings and fences was 15.1 percent. Investment in equipment and machinery was only 1.7 percent. Of the working capital (that used to finance operating expenses) nearly 81 percent was used for labor remuneration. This reflects the labor-heavy nature of Colombian agriculture. About 2 percent of the working capital was used in acquiring fertilizers; pesticides, fuels, and lubricants used another 2.2 percent.

The small quantities of commercial fertilizers used in Colombia are additional indicators of the low technological level. In 1960, a total of 135,000 tons of commercial fertilizers were available.[18] With a total cultivated area of three million hectares, the average availability per hectare is only 45 kilograms. In contrast, Chile used more than 200 kilograms of commercial fertilizer per hectare during 1950.[19]

This low level of fertilizer use should not suggest that agricultural lands are uniformly fertile and not in need of fertilizer. On the contrary, there is agreement among technical experts that most land is very seriously lacking in soil nutrients. Calculations by the Ministry of Agriculture indicate that 25,000 tons of nitrogen, 54,000 tons of potassium, and 73,000 tons of phosphorus should be used annually to

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[18]Gustavo Pérez Angel, Estudio sobre las Características de la Importación, Consumo y Producción de Fertilizantes Químicos en Colombia y Estimaciones de la Demanda en 1965 (Bogotá: Instituto de Investigaciones Tecnológicas, 1961), Resumen.

[19]United Nations, Analysis and Projections . . . , op. cit., p. 175.

bring crop production to "satisfactory levels."[20] These figures, when compared with the 1960 figure on fertilizer availabilities, indicate nitrogen, potassium, and phosphorous deficits of 28, 65, and 59 percent, respectively.[21]

Agricultural development since 1930 in Colombia has lagged behind industrial growth. In the years 1953 to 1959 output of Colombian industry increased 66 percent while agricultural production increased only 14 percent.[22] The slow growth in agriculture has occurred in spite of generally favorable trade and price policies. The policy of vigorous protection against foreign competition began in 1931 with the doubling of import duties on all agricultural products. Later import quotas came into use where high tariffs proved ineffective in protecting domestic producers. Currency depreciation and exchange control in the pre-World War II period were usually dictated by general monetary considerations but were additional stimulants to any agricultural production which could be exported.

In the country's balance of payments difficulties following the war the peso was further devaluated and differential exchange rates were established. The official rate applicable to most exports was fixed at 1.95 pesos to the dollar but for agricultural products in exportable quantities, a preferential rate fluctuating between 2.50 and 3.90 was permitted.

The policy of stimulating domestic production through favorable exchange rates, a price support program, and import protection was

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[20]Ibid., p. 177.

[21]In 1960 Colombian agriculture used 18,000, 30,000, and 19,000 tons of nitrogen, phosphorus, and potassium, respectively.

[22]Caja de Crédito Agrario, Carta Agraria, "Perspectivas y Necesidades de Crecimiento en la Industria y en la Agricultura," (Bogotá: Sección de Investigaciones Económicas, Marzo, 1960), p. 3.

only of limited effectiveness. Production of sugar, rice, barley, cotton, tobacco, and rubber increased more than the population in the period 1947-49 to 1956-58. But in this period total agricultural production per person fell three percent and per capita production of basic foodstuffs (corn, yucca, wheat, beans, plantain, potatoes, brown sugar) fell more than 13 percent.[23]

Part of these production problems are the result of insufficient investment in agriculture, particularly in the crop sector. In 1953 the product-capital ratio in that sector was 0.89 as compared with 0.51 in the industrial sector and 0.35 for the total economy.[24] This high ratio in agriculture indicates that existing capital is being used productively and additional investment would be desirable. The ratio of 0.20 in livestock production suggests resources in this sector are not well utilized. The extensive farming methods and poor technology in livestock production result in mal-use of available social capital and low productivity per actively-engaged worker.

The Colombian government recognized the problem of lagging investment and has attempted to remedy the situation by agricultural credit legislation and preferential interest rates on agricultural loans. The Caja Agraria, the agricultural development bank, was established in 1932 to meet credit needs in agriculture. This institution supplies an estimated 60 percent of all agricultural credit. For several years the central bank has maintained preferential discount rates for agricultural

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[23]Consejo Nacional de Política Económica y Planeación, El Sector Agropecuaria . . . , op. cit., p. 1.

[24]The product-capital ratio, or the ratio between value added and capital, measures the productivity of that capital. Value added is the difference between the sales value of production in an enterprise and purchases from other enterprises which enable that production level to be reached. The product-capital ratio serves as a practical guide to directing investment into the most productive channels. A high ratio would, by the criterion of value added, call for additional investment in that sector.

development loans. On June 30, 1961, this rate was three and one-half percent as compared with five percent for most other commercial loans.

One of the most significant pieces of agricultural credit legislation in recent years is Law 26 of 1959. This law requires all commercial banks to reserve the equivalent of 15 percent of their deposits for agricultural credit. Available data suggest this measure may have increased the flow of credit to agriculture (see Table II-3). But the law does not require commercial banks to make agricultural loans up to this amount. Consequently, while commercial banks do comply by earmarking 15 percent of deposits for agriculture, they generally do not loan this full amount.

Table II-3 shows the volume of new loans by commercial banks to Colombian agriculture and industry in the period 1953-60. The rather sharp increase in agricultural loans in 1959 and 1960 is due in part to Law 26. Despite this stimulus, new loans to industry in 1960 were 314 percent of 1953 loans while agricultural loans were only 238 percent of 1953 agricultural loans.

The quality of the human factor

The low quality of the human agent is a troublesome aspect of the Colombian economy. Rural society in particular is hindered by poor health and a high rate of illiteracy. Posada has vividly portrayed this problem in the following words:

> Colombia is rich in natural resources but mountain barriers, dependence on foreign economies, and sick, illiterate people are great obstacles. If health and education were improved, the other two obstacles might soon fall. Low wages, low purchasing power, inadequate food and housing, poor productive capacity, lower wages, lower purchasing power . . . becomes a vicious cycle, until by drink, drugs, disease, or sheer exhaustion, the young laborer passes on his burden to his child, in death. It is an endless cycle.[25]

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[25]Posada, op. cit., p. 35.

Table II-3. Volume of new loans granted to Colombian agriculture and industry by the commercial banking system, 1953-1960.

Year	Crops	Livestock	Machinery	Total agriculture		Industry[a]	
	(Millions of pesos)			pesos (millions)	index	pesos (millions)	index
1953	206.8	342.0	11.0	559.8	100.0	358.9	100.0
1954	294.4	467.1	18.7	780.2	139.3	442.2	123.2
1955	304.1	528.1	15.9	848.1	151.5	512.6	142.8
1956	333.3	517.6	18.9	869.8	155.4	684.7	190.8
1957	385.0	473.4	13.8	872.2	155.8	758.5	211.3
1958	446.5	562.9	28.8	1,038.2	185.5	813.5	226.6
1959	634.5	612.0	52.2	1,298.7	232.0	1,024.9	285.5
1960	570.3	710.6	54.1	1,335.0	238.5	1,127.4	314.1

[a]Excluding loans to trade and utilities.

Source: Superintendent of Banking, (Bogota: Ministry of Finance, 1961). Computed from data supplied in the monthly bulletins.

The rate of illiteracy reflects the criterion chosen as to the level of reading and writing skill which constitutes "literacy." According to the Ministry of Education 28.5 percent of the population was illiterate in 1958.[26] The rate of illiteracy in urban areas was reported to be 23.8 percent and in rural areas, 76.2 percent. A later report has more startling figures. This source estimates that 43 percent of the population is illiterate and 720,000 children of school age are receiving no elementary instruction.[27]

The level of education in agriculture is well below that in urban areas. A disturbing fact is the small number of higher education students studying in the field of agriculture. A mere 5 percent of all college students are in agriculture and in 1959 only 53 students graduated from Colombia's colleges of agriculture.[28] The fact that agriculture is still an industry of major proportions in Colombia operating with a low level of technology increases the significance of these figures.

The tremendous health problems that beset the Colombian people are also barriers to accelerated development. Some of the population is subject to diseases characteristic of the tropical lowlands. Malaria is present at altitudes up to 3,500 feet. Respiratory and venereal diseases are common. Intestinal diseases and infections are a major scourge in most areas because of contaminated food and water supplies. Yellow fever is still endemic in some forest areas but a measure of control is resulting from efforts by the Rockefeller Foundation and the Ministry of Hygiene.

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[26]Ministerio de Educación Nacional, Educación Primaria en Colombia (Bogotá, 1958), p. vi.

[27]Banco de la República, "Proyecto de Presupuesto Para 1961," Revista del Banco de la República, (Bogotá: Augusto, 1960), p. 966.

[28]The Commission on Higher Agricultural Education, Higher Agricultural Education in Colombia: A Framework for Teaching, Extension, and Research, A Study Prepared by Michigan State University and Sponsored by the W. K. Kellogg Foundation, (East Lansing, Michigan: Michigan State University, 1960), p. 30.

In addition to contagious diseases which depress per capita productivity, Colombia is plagued by health problems resulting from nutritional deficiencies. Part of these deficiencies reflect bona fide shortages of the proper available foodstuffs; others reflect superstitions regarding the dire "consequences" from the consumption of certain types of foods. The first set of deficiencies can be ameliorated by imports, expanded production, and improved distribution of protective foodstuffs; the second type must await the educational process.[29] Basic nutritional difficulties result from a deficiency of calcium, phosphorous, Vitamin A, and riboflavin in the average Colombian diet. There is also a serious shortage of protein relative to calories, although the caloric intake may at times be under recommended levels.

These health problems, together with the high rate of population growth, produce two additional characteristics common in less-developed countries. These are low life expectancy and the high proportion of the total population in the younger age groups. These conditions place additional strain on existing social overhead capital and channel a high proportion of available resources into the maintenance and training of the population not yet in the productive age group. The short life expectancy at birth of about 40 years also means a relatively short period in which the worker is actually in the productive stage.[30]

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[29]A recent study concludes that the three principal causes of malnutrition in Colombia are: (a) economic--the prohibitive cost of basic foods; (b) educational--a lack of knowledge of the constituents of a balanced diet and a wrong idea about what good nutrition is; (c) social--the relative absence of consumer cooperatives and popular eating places offering nutritionally—adequate food at prices lower than those now existing. See J. Lebret, Estudio sobre las Condiciones de Desarrollo de Colombia, (Bogotá: Aedita Editores, 1958), p. 74.

[30]U.S., Department of Commerce, Investment in Colombia, op. cit., p. 5.

Capital accumulation and availability

A useful set of economic measures determining the causative forces in development relate to capital availability and the rate of capital accumulation.[31] The basic significance of capital formation is that society does not use the entirety of current production for immediate consumption, but instead directs portions to the making of capital goods, thereby enhancing the efficacy of future productive effort.

Historically, the investment coefficient (the ratio of gross investment to gross national product) for the Colombian economy has been high relative to other countries generally classed as "underdeveloped." The average investment coefficient was 26.1 percent during the period 1925-29, 16.1 percent in the depression period 1930-34, and about 20 percent in 1945-53.[32] However, during these periods there were important differences in the size of the coefficients for various sectors of the economy. For example, the coefficients for agriculture were only

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[31]However, it is misleading to think of investment as the only or perhaps even the principle determinant of development. Institutional and political forces, qualities and attitudes of the population, and the supply of complementary resources are often of equal importance. The great significance of these other factors is frequently underestimated when investment is regarded as the key dependent variable in development; and it is the failure to recognize the significance of these elements that has evoked the quip, "Economic development is far too serious a matter to be left entirely to economists." Bauer has suggested, "It is more meaningful to say that capital is created in the process of development, rather than that development is the function of capital. This is indicated by some of the components of gross investment which are essentially items on which income is spent rather than propellants of the growth of income. Housing is an example." See P. T. Bauer, Economic Analysis and Policy in Under Developed Countries, op. cit., pp. 119-120.

[32]In India and Pakistan the investment coefficient has been only 6 or 7 percent. See Meier and Baldwin, op. cit., p. 304.

13.4, 12.8, and 12.3 percent, respectively, while the average coefficient for industry was as high as 48 percent in the period 1925-29.[33]

Investment coefficients for more recent periods indicate some difficulty in maintaining investment at high levels. During the early 1950's the coefficients averaged 19.6 percent. During the period 1954-56, the coefficient rose to 24.7 percent but in 1957 fell to 17.4 percent, then slipped further to 16.3 percent in 1958. The year 1959 showed a slight increase to 16.6 percent.[34]

Foreign inflows of capital have assisted in Colombian capital formation. During the period 1950-53 approximately 14 percent of total capital formation represented foreign capital. During this period almost 8 percent of the entire stock of capital was the result of foreign investment.[35] This heavy inflow of capital no doubt has stimulated the development of the economy. Yet a mounting external debt has demanded increasing proportions of dollar earnings for debt servicing. During the late 1940's and early 1950's the percentage of dollar earnings needed for this purpose averaged 3.1 percent. This rose to 29.2 percent in 1958[36] (see Table VII-1). These figures have considerable significance for the Colombian economy where capital imports needed for development are paid for with scarce dollars.

A basic difficulty which the economy faces arises not so much from the magnitude of the investment coefficient but rather from the high rate of population growth. With an annual net increase in population of approximately 2.8 percent, the rate of capital accumulation must be

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[33]United Nations, Analysis and Projections . . . , op. cit., p. 19.

[34]Consejo Nacional de Política Económica y Planeación, Plan Cuatrienal de Inversiones Públicas Nacionales--1961-1964, (Bogotá: Departamento Administrative Nacional de Planeación y Servicios Técnicos, 1960), p. 32.

[35]Ibid., p. 30.

[36]Banco de la República, XXXVII Informe Anual del Gerente a la Junta Directiva; 1 de Julio de 1959--30 de Junio de 1960, (Bogotá: 1960), p. 157.

correspondingly higher in order to replace depreciated and obsolete capital and then provide a surplus to "deepen" the capital available to each worker. The high population growth rate may result in a stagnating or possibly deteriorating capital per capita figure. In contemporary terminology, the population increase means an increase in demand for "extensive" investment, as distinguished from "intensive" investment.[37]

The role of foreign trade

Colombia resembles other underdeveloped countries in the heavy foreign trade orientation of the economy. The important role of the external sector is indicated by the great reliance upon coffee as a foreign exchange earner and the high dependence upon imports for supplies of capital goods and intermediate products.

The import-export pattern. The "lop-sidedness" of the Colombian economy is particularly well-evidenced by the export-import pattern. Historically, coffee has been the overwhelmingly important item, accounting for about 80 percent of the total value of exports through the years. Petroleum and bananas virtually complete the roster of exports. Table II-4 illustrates the relative importance of each of these products.

Colombia's import pattern is equally interesting. Industry is largely geared to the production of non-durable consumer goods. Consumer durables and some intermediate products have only recently achieved importance in domestic manufacturing. Most of the country's foreign exchange earnings are used in the purchase of capital goods,

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[37] "While intensive investment means an increase in capital per head and hence in productivity, extensive investment, in the course of population growth, serves merely to maintain the supply of capital per head of the labor force." See Ragnar Nurkse, Problems of Capital Formation in Underdeveloped Countries (Oxford: Basil Blackwell, 1958), p. 48.

Table II-4. Colombia: exports (F.O.B.) of principal products as a percentage of total exports, 1951-60.[a]

Year	Coffee	Petroleum	Bananas	Others	Total
1951	77.5	16.0	1.9	4.6	100.0
1952	80.3	15.1	1.9	2.7	100.0
1953	82.6	12.8	1.9	2.7	100.0
1954	83.7	11.5	2.0	2.8	100.0
1955	83.5	10.5	2.9	3.1	100.0
1956	76.9	13.0	5.2	4.9	100.0
1957	76.7	14.9	4.5	3.9	100.0
1958	78.1	14.7	1.7	5.5	100.0
1959	77.2	15.5	2.1	5.2	100.0
1960	71.5	17.3	2.9	8.3	100.0

[a]Excluding gold.

Sources: Naciones Unidos, Comisión Económico Para America Latina, Boletín Económico de America Latina, (E/CN. 12/2) Santiago, Chile: 1959), pp. 58, 71; Banco de la República, Revista del Banco de la República (Bogotá: Julio, 1961), p. 974.

raw materials, and intermediate products. In the years since 1950 these items have accounted for approximately 83 percent of total imports.[38] Imports of durable and non-durable consumer items average about 13 percent of total imports but fluctuate in accordance with the level of exchange earnings and balance of payments conditions. In times of balance of payments stress these items are the first to come under import restrictions.

[38]These percentages are computed from basic data on imports reported in Naciones Unidos, Comisión Económico Para America Latina, Boletín Económico de America Latina (E/CN. 12/2), (Santiago, Chile: various years).

The economy is heavily dependent upon the United States as a market for exports and a source of imports. The U.S. has been the largest market for the country's exports, absorbing from 70 to 80 percent except for a few years in the late thirties when these shipments were somewhat smaller. Europe and the U.S. together take more than 90 percent of total exports and supply 88 percent of all imports.[39] In recent years about 63 percent of the imports have come from the U.S.

Import capacity. Because of the heavy reliance upon imports as a source of capital goods, the capacity to import is an important determinant of Colombia's economic growth. The capacity to import may be defined as the equivalent of the value of goods and services exports plus gross foreign capital receipts minus the outflow of capital and remittance of profits and interest. The figure represents the amount of foreign exchange available for imports of goods and services. Because imports cannot exceed the capacity to import for any great length of time, this concept reflects fairly accurately the external sector's net contribution to the national economy. The capacity to import has been converted to an index number in Table II-5.

The behavior of this index in recent years emphasizes the importance of coffee as an exchange earner. The price of Manizales coffee in New York fell from a high of nearly 80 cents per pound in 1954 to 45.2 cents in 1959. Coffee dollar earnings similarly fell from U.S. $505.8 million in 1954 to $339.8 million in 1959.[40] The fall in the index from

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[39]Computed from trade statistics reported in Departamento Administrativo Nacional de Estadística, Anuario de Comercio Exterior (Bogotá: annual editions, 1950-60), various pages.

[40]Federación Nacional de Cafeteros, as reported by Banco de la República, Revista del Banco de la República (Bogotá: Julio, 1961), p. 974.

Table II-5. An index of Colombia's capacity to import, 1952-1960.

Year	Index (1952=100)
1952	100.0
1953	132.3
1954	146.7
1955	127.0
1956	112.6
1957	103.0
1958	92.3
1959	94.2
1960	92.5

Source: Departamento Administrativo Nacional de Estadística, Boletín Mensual de Estadística (Bogotá: Junio, 1960), p. 60.

1954 to 1956 of more than 30 points is largely due to this sharp break in coffee prices. 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. 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 surpluses with pesos rather than scarce dollars.

The Colombian perspective summarized

It is desirable to briefly summarize the most salient features of the Colombian economy. This procedure will emphasize certain elements of significance in the analysis which follows.

The substantial but declining proportions of the population engaged in agriculture and its contribution to gross national product were noted. The relatively high investment coefficient for the economy places Colombia further along in development than many countries of the world. Colombian industry in 1954 represented a higher percentage of total national income than any other Latin American country except Argentina.[41] In Rostow's terminology, Colombia appears to be well into the "take-off" period.[42]

In spite of these encouraging signs, certain elements restricting economic growth are apparent. The rapid rate of population growth strains the capacity of social overhead capital and makes "intensive" investment difficult. The high population growth rate also increases the difficulty of raising per capita real income. According to this commonly-used measure of development, Colombian economic growth in recent years has been less than spectacular (see Table II-6).

The low productivity in agriculture exerts an additional drag on the economy through the mal-use of existing capital stock there. These problems are attributable to an inefficient land-use pattern and the inefficiency of agricultural labor. Agricultural labor is unproductive because of the low level of technical knowledge. Attempts to increase the flow of credit to agriculture have achieved some success but additional investment is needed to meet present and future production requirements.

The poor quality of the human agent results from health and educational deficiencies. The educational level of the rural population is particularly low and existing educational facilities in both rural and

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[41]United Nations, Analysis and Projections . . . , op. cit., p. 240.

[42]"During the take-off, the rate of effective investment and savings may rise from, say, 5 percent of national income to 10 percent or more." See W. W. Rostow, The Stages of Economic Growth (Cambridge: University Press, 1960), p. 8.

Table II-6. Colombia: Total and per capita gross product and income (Pesos at constant 1958 prices).

Year	Gross national product (millions)	Percent yearly change	Gross national income (millions)	Percent change	Per capita real income	Percent change
1950	14,580.8	--	15,110.1	--	1,356	--
1951	14,969.3	2.7	15,113.3	0	1,319	-2.7
1952	15,970.1	6.7	16,090.3	6.5	1,365	3.5
1953	16,923.3	6.0	17,515.4	8.9	1,444	5.8
1954	18,150.6	7.3	19,406.5	10.8	1,555	7.7
1955	18,882.0	4.0	19,511.1	0.5	1,520	-2.3
1956	19,391.4	2.7	20,062.0	2.8	1,519	0
1957	20,019.6	3.2	20,478.9	2.1	1,508	-0.8
1958	20,476.8	2.3	20,476.8	-0.1	1,466	-2.9
1959	21,687.7	5.9	21,250.9	3.8	1,479	0.9

Source: Banco de la República, Población, Producto Bruto Interno, e Ingresos, Departamento de Investigaciones Económicas, (Bogotá: 1960), p. 21.

urban sectors are generally inadequate. Agricultural education is failing to produce the quality and quantity of agricultural graduates needed to boost technical know-how in this sector.

The Colombian economy lacks diversification, relying upon imports for capital goods and intermediate products. Coffee is the most important foreign exchange earner and, as a consequence, the capacity to import capital items is heavily dependent upon the price and quantity of coffee exports. However, there is some evidence that diversification of exports is occurring, both with respect to destination and composition.

These are important aspects of the Colombian economy associated with past and existing growth rates. With this background the study may focus specific attention upon the agricultural export programs of the United States and their impacts in Colombia.

CHAPTER III

UNITED STATES SPECIAL AGRICULTURAL EXPORT PROGRAMS IN COLOMBIA: SALES FOR LOCAL CURRENCIES

United States agricultural exports under special terms are not new features of international trade. Along with other major exporters of agricultural commodities, the United States has relied on numerous devices aimed at stimulating the flow of agricultural products to overseas markets. These measures have ranged from rather innocuous negotiations with trading countries to lower import tariffs on agricultural products, through the Reciprocal Trade Agreements Acts, to direct subsidization of agricultural exports under Section 32 authority of the 1933 Agricultural Adjustment Act. The substantial flows of agricultural products to the war-ravaged economies of Western Europe under the various economic recovery programs must also be classed as export programs of a special nature. These postwar programs proved to be of unequivocal assistance to both the American farmer and the recipient countries. Little criticism was forthcoming from other trading nations since few countries had exportable surpluses during this period and the economic assistance features were clear-cut.

Following the Korean military action the problem of farm surpluses loomed again in many agricultural nations. In the United States mounting surpluses, increasing pressure on farm prices, and the resultant pleas for Congressional action produced an export stimulant in some ways reminiscent of the Marshall Plan. A notable feature of this new legislation was the provision for sales of surplus agricultural commodities in local currencies. This device for promoting surpluses

abroad perhaps is not so much a tribute to American ingenuity as a manifestation of the largess of the United States Treasury and the tolerance of the American taxpayer.

Authorization for local currency sales of farm products was first given through Section 550 of the 1951 Mutual Security Act. This authorization was continued in Section 402 of the present Mutual Security program, but foreign currency sales under this legislation have declined steadily through the years. Once nearly a half billion dollars, local currency agricultural exports under this act were less than $200 million in 1960-61 (see Appendix A).

Of far greater significance was the authorization for local currency sales in Title I of Public Law 480, the Agricultural Trade Development and Assistance Act (83d Congress). This legislation, passed in 1954, has been extended to the present and today represents an important element in the U.S. agricultural export program. In this 7-year period Public Law 480 exports have accounted for 26 percent of all agricultural exports, with Title I alone representing 16 percent of the total.[1] In addition to Title I local currency sales, Titles II and III provided funds for disaster relief, donations, and barter of agricultural commodities. Operations in Colombia under the latter titles will be discussed more fully in later chapters. Title IV, added in 1959, authorized long-term dollar sales. Appendix A includes more specific discussion of these titles.

Public Law 480, Title I Operations in Colombia

Colombia historically has been an important market for United States agricultural products. In 1958 Colombia was the fifth largest

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[1]U.S., Congress, House, The 14th Semiannual Report on Activities of the Food-For-Peace Program . . . , op. cit., p. 5.

Latin American importer of U.S. farm products.[2] These imports consisted mainly of cotton, barley, malt, wheat, flour, vegetable oils, and animal fats and oils. The special export programs of the United States have helped to maintain exports to Colombia at high levels.[3] There have been no imports into Colombia under Sections 550 and 402 of the Mutual Security programs. United States agricultural products valued at approximately 75 million dollars (export value) have moved to Colombia under Title I and III of P.L. 480.

In examining the effects of these export programs in Colombia it is essential to have some knowledge of their size. This section of the study will include a description of the local currency sales program in Colombia. Consideration of the food donation and barter operations will be delayed for the next chapter. Similarly, analysis of these operations and recommendations for program improvement will be postponed to later sections of the study.

Title I agreements with Colombia

The Colombian government has been an active participant in the P.L. 480 program since its inception in 1954. This participation reflects (a) the fact that commodities in surplus were those in which Colombia has had substantial domestic deficits, notably wheat, cotton, and oils; and, (b) the Colombian government recognized P.L. 480 as a means of enhancing food and raw material availabilities without further endangering a seriously over-burdened balance of payments. As of

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[2]U.S., Department of Agriculture, U.S. Agricultural Trade With Latin America (Washington: Foreign Agricultural Service, 1959), M-57, p. 8.

[3]Agricultural exports to Colombia have also been made under terms of the International Wheat Agreement and facilitated by short term credits of the U.S. Export-Import Bank. These programs have been of limited scope and will not be considered further in this study.

June 30, 1961, the estimated Commodity Credit Corporation cost of the Title I commodities shipped or programmed for Colombia was almost 95 million dollars.[4] This dollar volume of operations made Colombia the second largest Title I participant in Latin America. Brazil, with a $453 million Title I program, was the largest Latin American participant. But all Latin American country programs are overshadowed by the $3.7 billion program for India.[5]

Sales agreement negotiations

In executing P.L. 480 the President of the United States must take reasonable precautions to safeguard U.S. commercial marketings and assure that Title I sales will not "unduly disrupt" world prices or existing patterns of commercial trade.[6] With these restrictions, careful planning and study are required prior to the signing of Title I agreements.

Title I agreements in Colombia have generally originated in requests by Colombian officials for specific quantities and types of agricultural commodities currently in surplus and available for purchase under the law. These requests include a discussion of domestic supply and demand conditions for the respective commodities in order to demonstrate a bona fide need for the products. The requests are analyzed by U.S. authorities, "taking into account legislative requirements, surplus disposal objectives, fund limitations, dollar exchange position of the country, impact on dollar sales, . . . , and effect on

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[4]U.S., Congress, House, The 14th Semiannual Report on Activities of the Food-For-Peace Program . . . , op. cit., p. 55.

[5]Ibid.

[6]The words "or normal patterns of commercial trade with friendly countries" were added in the 1958 amendment after vigorous program operations in 1956-57 brought strong protests from competing exporters.

the export markets of other supplying countries."[7] Negotiations follow where commodities, quantities, and periods of purchases and deliveries are reviewed and agreed upon. Table III-1 summarizes the five Colombian Title agreements signed through June 30, 1961.

These agreements are subject to negotiated amendment in accordance with the wishes of either contracting party. The amendments may arise from changed demand conditions in the recipient country or changed commodity availability in the U.S. Because of this provision the dollar value and commodity composition of the original Title I agreements are slightly different from the quantities actually programmed through June 30, 1961. Table III-2 lists the programmed amounts.

Most of the discrepancy between market value in the agreements and programmed market value is due to the temporary 1960 restriction by the Colombian government of flour imports. Severe corn and rice shortages in early 1961 have also led to the importation of some feed grains not provided for in the original agreement. On the other hand, some of the P.L. 480 cotton in the agreements was not imported because of unexpected domestic production increases.

All agreements include stipulations requiring the maintenance of commercial marketings. Beginning with the 1957 agreement the "usual marketings" provision was spelled out in greater detail, including both the required commercial free world imports and the U.S. share for some of the commodities. This agreement read:

> Commercial imports shall be (1) for each of the three U.S. fiscal years 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 fiscal year 1957 a minimum of 7,300 tons of edible oil and 5,000 bales of cotton from the United States;

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[7]U.S., Department of Agriculture, "Title I, Public Law 480," mimeograph, (Washington: Foreign Agricultural Service, June 1, 1960), p. 3.

Table III-1. Commodities, dollar, and peso values of Colombian Title I agreements.

Date signed	Commodity	Quantity (metric tons)	Value	
			U.S. dollars (millions)	Colombian pesos (estimated 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 cotton-seed oil	11,000	3.4	
	Ocean transportation	--	3.9	
	Total value		31.6	202.24
	Grand total		75.35	401.64

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

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

Table III-2. Colombia: commodity composition of Title I agreements programmed July 1, 1954 through June 30, 1961.

Commodity	Value (millions of dollars)	Quantity
Wheat and flour	36.5	21,451,000 bushels
Feed grains	2.8	216,600 bushels
Cotton	11.9	71,500 bales
Tobacco	1.6	1,610,000 pounds
Dairy products	0.3	1,878,000 pounds
Fats and oils	9.4	67,850,000 pounds
Total market value	62.5	
Ocean transportation	6.9	
Market value and transportation	69.4	
Estimated CCC cost with transportation	94.4	

Source: U.S., Congress, House, The 14th Semiannual Report on Activities of the Food-For-Peace Program . . . , op. cit., pp. 55, 68.

and, (3) such quantities of the above commodities from other supplying countries as will not disrupt normal trade patterns.[8]

The U.S. government has not always complied with the full commodity request of the Colombian authorities. In 1957 the Colombian government requested U.S. $91 million of agricultural products through P.L. 480. The agreement which eventually materialized totaled only 20.4 million, a reduction of nearly 75 percent.[9] The reduced agreement

[8]U.S. Department of State, Agreement With Memorandum of Understanding Between the United States of America and Colombia, (Washington and Bogota: April 16, 1957), Treaties and Other International Acts, Series 3817, p. 7. Statements of a similar nature can be found in the March 14, 1958 Agreement, page 6, and in the October 6, 1959 Agreement, page 6.

[9]Earl W. Loveridge, Ley Pública 480, Título I; Excedentes de Productos Agrícolas de los Estados Unidos de America, (Bogota: U.S. Embassy, Office of the Agricultural Attache, 1957), p. 4.

reflected (1) the realization by U.S. authorities that importation of commodities in amounts originally requested would preclude maintaining commercial imports at satisfactory levels; and, (2) exhaustion of appropriations in Washington for P.L. 480 operations, thereby necessitating a reduction in the scope of the program.

Wheat and flour have been relatively important components in all agreements except that of March 14, 1958. The latest agreement, signed October 16, 1959, includes more than U.S. $23 million worth of wheat and flour but provides for deliveries over a three-year period, fiscal years 1960, 1961, and 1962. Cotton was relatively important in earlier agreements but is not included in the 1959 contract, reflecting the rapid expansion of Colombian cotton production. Edible oil is the third largest component of the agreements.

Allocations and Uses of Title I Pesos in Colombia

In agreement with the law, the local currencies generated through Title I commodity sales are deposited to the account of the United States government in the recipient country. They are then credited to the accounts of the various U.S. agencies having supervisory responsibilities for each of the permitted use categories. The mere signing of an agreement does not immediately result in a credit to the U.S. account by the amount of local currency involved in the contract. Local currencies are generated only as shipments are made and total currency accruals need not always equal amounts stipulated in sales agreements due to possible shortfalls in shipments.

Currency use designations

Title I sales agreements generally follow a standard format which includes the allocation of foreign currencies among the several authorized uses. The use classification stipulated in the original agreement is broad

and subject to considerable administrative discretion. Specific quantities of local currencies programmed for each of the various uses are not always utilized precisely as stipulated. This may be due to currency shortages reflecting shipment shortfalls or lack of suitable loan projects.

It is helpful to separate use categories on the basis of United States or Colombian use. The distinction is not absolutely clear-cut but in many instances U.S. uses represent expenditures which, in the absence of pesos, would have been paid in dollars. A clear example is the defraying of U.S. Consular and Embassy expenditures. The two categories providing funds predominately for Colombian use are Sections 104 (g) and 104 (e). In the Colombian programs there have been no grants under these two sections; only loans have been made. Table III-3 indicates the peso allocations (in dollar equivalents) for the five agreements. Some of the larger use categories will be considered briefly.

Table III-3. Allocation of Colombian pesos as provided in the sales agreements. (In thousand dollar equivalents at the deposit rate of exchange.)

	Common defense 104 (c)	Loans to private enterprise 104 (e)	Loans to Colombian government 104 (g)	U.S. uses[b]
Total[a] $70,890	80	11,270	41,180	18,360
Percent 100.0	0.1	15.9	58.1	25.9

[a]Market value including ocean transportation. This amount is subject to adjustment when actual commodity purchases have been made. The figure differs slightly from the total in Table III-2 which reflects purchase authorization transactions.

[b]Included are uses under Sections 104 (a), (b), (f), (h), (i), (j), (k), (l), (m), (n), (o), and (p); see text.

Source: U.S., Congress, House, The 14th Semiannual Report on Activities of the Food-For-Peace Program . . . , op. cit., p. 81.

Loans to foreign governments, Section 104 (g)

Section 104 (g) provides for local currency loans to promote multilateral trade and economic development. This is the largest use of Title I pesos in Colombia. Of the U.S. $70.89 million involved in the five agreements, U.S. $41.18 million (about 58 percent) have been earmarked for this category. Legislation permits these funds to be used in financing the local costs of development... This includes wages for labor and cost of locally-produced materials. The Department of State has delegated to the International Cooperation Administration the responsibility for administering the program. This agency has the responsibility of determining whether loan requests meet legislative requirements and the objectives of United States policy. Prior to negotiations on specific loans, approval of Washington authorities is required on broad categories of loan projects.

In Colombia most 104 (g) pesos have been channeled into agriculture largely as a result of the influence of Jorge Mejía Salazar, Minister of Agriculture when the first sales agreements were signed. Mejía convinced his government of the value of the P.L. 480 program to the country and that pesos generated by the purchase of commodities currently in national deficit should be channeled back into projects which would stimulate production of these products. As a result, pesos generated by early sales agreements have been loaned for projects directly related to agriculture. This was modified to some extent in later agreements as a result of the "Cooley Amendment," Section 104 (e), which permitted a wider range of loan activities.

The planning procedure prior to actual loaning of 104 (g) pesos is necessarily complex in order that policy goals of both the United States and Colombia may be met. A three-man committee composed of the ICA Country Director, the Colombian Minister of Agriculture, and the

General Manager of the Caja de Crédito Agrario, Industrial y Minero has the task of evaluating loan applications received by the Caja.[10] Only the ICA Director and the Minister of Agriculture have voting privileges in committee operations but the Caja enjoys a good deal of administrative discretion in actual loan procedures. The Caja is also responsible for loan repayment.

Prior to 1958 loan applications were received by the Caja from various groups and individuals who felt their particular projects might possibly qualify for loan assistance. With the establishment of the National Planning Commission in 1958, 104 (g) loan activities have been given greater direction. The Commission, in its concern with directing the pesos to the most profitable projects in terms of economic development, now makes the initial proposals for loan agreements and uses its influence to determine the uses of available funds.

The result of this increased administrative control is a series of loan criteria more satisfactory to both U.S. and Colombian authorities. It has been ICA policy to sanction loans for the purpose of increasing the production of food for domestic consumption. However, loan assistance is not permitted for the production of agricultural commodities exported by the U.S. and currently in surplus. Another restriction of the September 21, 1959 amendment prohibited the loaning of funds for purposes of health and education without congressional authorization. This restriction was removed in the 1960-61 extension of the law. Abiding fully by these various restrictions is sometimes difficult in actual loan operations.

Prior to loaning of 104 (g) funds, project agreements are negotiated which designate the type of acceptable projects and the quantity of funds

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[10]The Caja de Crédio Agrario, Industrial, y Minero is Colombia's largest development bank with a special function of channeling credit funds into agriculture.

allocated to each. Upon completion of project agreement negotiations, the funds are transferred to the Caja for subsequent relending to private or public borrowers. The U.S. government charges the Caja four percent interest; the Caja may then charge a rate equal to that for comparable loans in Colombia. Because commercial rates are always higher than four percent the Caja realizes some gross profit in the operation. These funds are used in administering the loan program. By June 30, 1960, three project agreements had been signed covering the pesos generated by the first four sales agreements. Another project agreement was signed in October, 1960, to cover the sales agreement of October, 1959. The pesos allocated for various projects and amounts loaned by the Caja are shown in Table III-4.

Loans to private enterprise, Section 104 (e)

The August 13, 1957 amendment to Public Law 480 included the "Cooley Amendment" which provided for foreign currency loans to private businesses. Currencies available in this use category are limited to not more than 25 percent of the total currencies received under the agreements. Loans under Section 104 (e) may be made to (1) U.S. business firms and branches for business development and trade expansion in Colombia; and (2) U.S. or Colombian private business firms for expanding markets for, and consumption of, U.S. agricultural products.

The restrictions on currency use in this category are clearly stated in the legislation: "That no such loans shall be made for the manufacture of any products to be exported to the United States in competition with products produced in the United States or for the manufacture or production of any commodity to be marketed in competition with United States agricultural commodities or the products thereof."[11] The administrative

[11]U.S., Congress, Public Law 480, 83d Congress, Amended August 13, 1957, (Washington: U.S. Government Printing Office, 1957), p. 5.

Table III-4. Allocations and loans of Section 104 (g) pesos as of March 31, 1961.

	Pesos allocated	Approved by Caja	Loaned by Caja
Project Agreement I[a]			
Cacao production	292,000	292,000	196,000
Access roads to agricultural areas	4,900,000	4,900,000	4,900,000
Livestock improvement	1,700,000	1,700,000	1,700,000
Water well drilling	223,500	223,500	223,500
Agricultural lime pits and kilns	430,000	490,000	430,000
Fertilizer production	12,000,000	12,000,000	12,000,000
Irrigation	850,000	850,000	850,000
Small industry	2,153,500	2,005,500	1,966,500
Total: Agreement I	22,549,000	22,461,000	22,266,000
Project Agreement II[b]			
Cauca Valley Corporation	33,590,000	33,590,000	32,700,000
Coal production	6,000,000	6,050,000	3,560,000
Fertilizer production	24,000,000	24,000,000	24,000,000
Lumber production	1,000,000	1,000,000	1,000,000
African palm production	4,075,000	4,090,000	2,289,000
Fondo STACA	4,335,000	-0-	-0-
Total: Agreement II	73,000,000	68,730,000	63,549,000
Project Agreement III[c]			
Irrigation and drainage	5,652,050	5,652,050	3,500,000
Chemical fertilizer	10,000,000	10,000,000	7,551,400
Cement production	2,347,950	2,347,950	2,347,950
Reforestation	2,000,000	2,000,000	1,200,000
Total: Agreement III	20,000,000	20,000,000	14,599,350
Project Agreement IV[d]			
Fertilizer production	20,000,000	-0-	-0-
Reforestation	6,000,000	-0-	-0-
Irrigation and drainage	6,000,000	-0-	-0-
Irrigation and drainage (Atlantico)	14,347,950	-0-	-0-
Storage facilities (INA)	28,000,000	-0-	-0-
Livestock production (STACA)	12,000,000	-0-	-0-
Cement production	9,652,000	9,652,050	7,152,050
Access roads to agricultural areas	5,000,000	-0-	-0-
Total: Agreement IV	101,000,000	9,652,050	7,152,050
Grand Total: Agreements I, II, III, and IV	216,549,000	120,843,000	107,566,400

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

[b]Signed April 14, 1958, and covers Sales Agreement of April 16, 1957.

[c]Signed June 16, 1959, and covers Sales Agreement of March 14, 1958.

[d]Signed October 26, 1960, and covers Sales Agreement of October 6, 1959. See Caja de Crédito Agrario, Industrial y Minero, Carta Agraria, No. 51, 2a, (Bogotá: Octubre, 1960), p. 1.

Source: U. S. Embassy, Administrative Section, Bogota, Colombia.

agency for these loans is the United States Export-Import Bank. Loan applications are made through ICA country headquarters.

Approximately 73 million pesos (equivalent to 11.27 million dollars) have been allocated to Section 104 (e). As of June 30, 1961, 23.3 million pesos had been loaned to industries in Colombia. All 104 (e) loans stipulated an interest rate of 8 percent with repayment over a five-year period beginning in February, 1960. The industries receiving 104 (e) loan assistance and the respective peso amounts are shown in Table III-5. At the beginning of the 1961 calendar year twenty loan applications involving nearly 50 million pesos were pending. Additional loans will be made as negotiations continue and loan criteria are met. Under the commodity sales agreement of October, 1959, the Export-Import Bank will receive 50 million additional pesos for lending in Colombia. As of January 31, 1961, only a small number of these pesos had been made available to the Bank.[12]

United States use

Loans through Sections 104 (e) and (g) are made to the Colombian government or to industries within Colombia. For this reason these two categories, comprising approximately 74 percent of all pesos in the five agreements, may be designated "Colombian use." However, this nomenclature is somewhat misleading since 104 (e) loans are under administrative control of the Export-Import Bank. Only 104 (g) loans are under direct control of Colombian authorities although here, too, the U.S. wields some influence over their use. The United States government has greatest control over the pesos allocated to the several categories labeled in Table III-3 as "U.S. uses." The peso equivalent of 18.36 million dollars is earmarked for these categories.

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[12]Letter from Raymond L. Jones, Chief, Loan Division, Export-Import Bank of Washington, Washington, D.C., January 31, 1961.

Table III-5. Loans in Colombia of Section 104 (e) funds, through June 30, 1961.

Firm	Purpose	Amount (millions of pesos)
Maizena, S.A.	Facilities to produce starch and related products	5.9
Aluminio de Colombia	Facilities for production of aluminum products	2.0
Carboquímica, S.A.	Facilities to produce chemicals	0.6
Cartón de Colombia	Facilities to produce paper board products	0.9
Pfizer Corporation	Facilities to produce chemicals and pharmaceuticals	1.7
Compañía Hotel del Prado	Rehabilitation and modernization of Hotel del Prado	0.9
Abbott Laboratorios de Colombia	Facilities to produce pharmaceuticals	7.7
Shellmar de Colonbia	Facilitities to produce containers	0.4
Parke-Davis Inter-American Corporation	Facilities to produce pharmaceuticals	2.4
Purina Limitada	Facilities to produce animal feeds	0.8
		23.3

Source: United States Embassy, Administrative Section, Bogota, Colombia.

Payment of U.S. obligations. The largest U.S. use, and third most important in terms of total allocations, is Section 104 (f). Peso amounts are not designated in individual sales agreements, but Department of Agriculture sources state that the peso equivalent of U.S. $9.848 million is allocated to this category.[13] Most of these funds are

[13]U.S., Congress, House, Department of Agriculture Appropriations for 1961, Hearings Before the Subcommittee on Appropriations, House of Representatives, 86th Congress, 2nd Session, (Washington: U.S. Gov't. Printing office, 1960), p. 202.

employed in meeting obligations incurred by U.S. Embassy and Consular operations in Colombia. This category is significant because of its size (about 14 percent of total operations) and the fact that most of these expenses would have been paid with dollars in the absence of the peso program.

Market development. Market development activities with P.L. 480 currencies are aimed at maintaining and expanding existing markets in Colombia or developing new markets for U.S. farm products. Where feasible the Foreign Agricultural Service enters into agreements with U.S. or Colombian trade groups to carry out market development projects. Cooperators may contribute up to 50 percent of project cost. However, if a needed project exists and trade groups are unwilling to contract with F.A.S., the entire project cost may be borne by the Service.

Through December 31, 1960, 5.4 million pesos had been allocated for market projects in Colombia but only 2.5 million were spent. In terms of funds allocated, the most important commodities in the Colombian program are wheat and wheat products. More than 1.4 million pesos are earmarked for promotion of these items. Approximately 878,000 pesos are designated for dairy cattle and dairy products promotion. The third largest use of 104 (a) funds is the U.S. agricultural attache program in Colombia. Attache uses include the salaries of Colombian nationals employed by the attache office, office lease and utility expenses, U.S. personnel allowances for quarters and education, and international travel expenses by attache personnel. Table III-6 illustrates the relative magnitude of the various commodity and activity programs, showing pesos apportioned and expended for each of the commodities as well as the percents which these represent of the total.

Dairy cattle and dairy products, wheat and wheat products, and attache activities account for 84 percent of total market development

Table III-6. Apportionment and expenditure of Colombian market development funds, as of December 31, 1960.

Activity or Commodity	Pesos apportioned	Percent of total apportionment	Pesos expended	Percent of total expenditure
Attache program costs	701,363	13.0	691,332	26.7
Trade fairs	627,835	11.6	125,805	4.8
Wheat and wheat products	1,412,000	26.1	718,914	27.7
Dairy cattle and dairy products	878,714	16.2	759,160	29.4
Livestock other than dairy	10,254	0.2	4,751	0.2
Soybean oil	354,140	6.5	14,805	0.6
Feed grains and seeds	298,140	5.5	178,747	6.9
Soap and tallow	269,355	5.0	23,293	0.9
Poultry and poultry products	171,800	3.2	8,289	0.3
Other	690,726	12.7	65,802	2.5
Total	5,414,327	100.0	2,590,898	100.0

Source: United States Embassy, Disbursing Office, Bogota, Colombia.

expenditures. For some products--soybean oil, soap, and tallow, poultry, and livestock other than dairy--projects were just getting underway at the close of 1960. Less than one-half of all pesos allocated for market development were expended as of that date. More than 690,000 pesos are allocated to market development activities other than those listed under specific commodities. The largest single project is a comprehensive economic study with the principal objective of estimating long-term supply and demand conditions for Colombian farm products.[14] This project, valued at 578,000 pesos, should permit a more accurate estimation of future import requirements for U.S. farm products. Other projects in this category are less spectacular, ranging from analysis of the Colombian rice market to the purchase of trophies for presentation at Latin American livestock shows.

Colombian market development funds have been employed in paying international travel expenditures for project personnel. These funds are used by the airlines in their Colombian operations. Included in this category are travel expenditures of personnel to a Paris trade fair (157,000 pesos), a Hamburg trade fair (264,000 pesos), and of a German seed purchase team to the United States (49,000 pesos).[15] Market development activities within Colombia have also been carried on with other currencies. An example is the regional promotional campaign for U.S. wheat and wheat products jointly financed with 104 (a) currencies from Colombia, Brazil, Chile, Ecuador, and Peru.

Other peso allocations. Peso allocations to Sections 104 (a), (e), (f), and (g) represent approximately 92 percent of the pesos in the five sales agreements. Other allocations (in dollar equivalents) include: (1) U.S. $80,000 for local currency expenses of a U.S. Air Force aerial

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[14]Project Number 11121-21, United States Embassy, Disbursing Office, Bogota.

[15]Project Numbers 10431-21, 10441-21, and 66501-21, respectively.

mapping mission in Colombia; (2) U.S. $2.1 million for cultural and educational interchange under the Fulbright and Smith-Mundt Acts; (3) U.S. $100,091 for translation, publication, and distribution in Colombia of English, political science, and economics textbooks; (4) U.S. $1.556 million for operation and construction of five U.S.-sponsored schools; (5) U.S. $271,919 for the construction of Colombia-American Institutes in four Colombian cities; and, (6) U.S. $177,000 for the establishment of chairs and workshops in American studies. These uses cannot unequivocally be classed as either U.S. use or Colombian use on the basis of resulting benefits. For most categories, peso expenditures affect both U.S. and Colombian interests.

CHAPTER IV

UNITED STATES SPECIAL AGRICULTURAL EXPORT PROGRAMS IN COLOMBIA: FOOD DONATIONS AND BARTER

The foreign assistance programs of the United States have become increasingly diverse in character in recent years. To the programs authorizing sales for local currencies can also be added the barter programs and the widespread efforts abroad of American voluntary relief agencies. All have been espoused as devices with the twofold effect of reducing troublesome farm surpluses at home and enhancing the welfare of the less fortunate abroad.[1]

In 1948 a Congressional study concluded that, "American voluntary relief is an essential counterpart to foreign relief and recovery programs conducted by the government."[2] Each year since that time Congress has appropriated funds in its foreign aid legislation to assist food shipments to voluntary agencies in countries in which the United States government has economic and supplemental aid agreements.

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[1]The welfare aspects of the barter program are perhaps least apparent. A comment by authorities in charge of the barter program is interesting in this regard: "In some instances, the strategic and other materials received in exchange for agricultural commodities would not otherwise be acquired by the U.S. government. To that extent, a market is created with the result that unemployment abroad is decreased, mining, processing and manufacturing facilities are more fully utilized, and the general economic well-being of the countries supplying the materials is stimulated." See U.S., Department of Agriculture, The United States Barter Program, Commodity Stabilization Service, (Washington: June, 1960), Mimeograph BI, No. 20, p. 1.

[2]American Council of Voluntary Agencies for Foreign Service, Inc., United States Governmental Agricultural Commodities: P.L. 480, Title III, (New York: March, 1959), p. 1.

Surplus agricultural commodities were first made available to U.S. voluntary agencies in January, 1949, in accordance with the provisions of P.L. 439, Section 416 (Agricultural Act of 1949). Under this legislation only those foods in danger of loss through storage could be declared available for foreign donation by voluntary agencies. The law provided no transportation reimbursement for commodity shipments. These conditions limited severely the variety and amount of commodities which the agencies could finance and ship abroad. Even with these limitations, voluntary agencies during the period January, 1949, through March, 1954, shipped more than 364 million pounds of powdered milk, dried eggs, butter, and cheese to 62 countries and areas of the world.[3]

In 1954 the United States Congress undertook the formulation of more comprehensive legislation that would move agricultural products abroad. Section 416 of the 1949 law was expanded and broadened to achieve this end and incorporated into Public Law 480 under Title III. Later amendments liberalized further the provisions for surplus commodity availability and distribution through voluntary agency channels. One of these was Section 308, added in the 1959 amendment, which permitted the Commodity Credit Corporation to pay ocean freight charges on donated goods from United States ports to ports of entry abroad.

During the seven fiscal years, 1955-61, yearly authorizations through Title III averaged more than 225 million dollars.[4] However, the magnitudes of the yearly programs have fluctuated considerably. This is due to the legislative requirement that commodities will be made available to voluntary agencies for foreign distribution only if and as stocks of any commodities remain after the needs of Title I, Title II,

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[3]Ibid., p. 3.

[4]U.S., Congress, House, The 14th Semiannual Report on Activities of the Food-For-Peace Program . . . , op. cit., p. 44.

and the barter provisions and domestic distribution under Title III have been met. The effect has been to introduce an element of uncertainty into the donation program and increase the complexity of program planning by voluntary agency administrators.

The Food Donation Program in Colombia

Distribution of foodstuffs under Title III must be limited to "needy persons" defined as "those who by virtue of their personal economic status are in need of food assistance." The widespread poverty in Colombia, together with the continuing violence in rural areas and the resulting numerous destitute refugees, have produced conditions calling for vigorous food donation and rehabilitation efforts. In this environment the Title III program in Colombia has quickly become one of the largest in Latin America. In fiscal 1961 the Colombian operation was the fourteenth largest among the 104 countries of the world receiving food donations from the United States.[5] Table IV-1 shows the pounds of food authorized for Colombia and the corresponding dollar value for fiscal years 1955-61. After a 1958 high in terms of dollars the program has undergone some reduction in size. This fact does not indicate lessened need in Colombia but rather reflects the smaller quantities of high value commodities available for foreign donation. The total program including all countries underwent a similar reduction during 1959 and 1960. Larger shipments in fiscal 1961 reflect the new emphasis given to the Title III program.

The commodity composition of the Colombian program has varied from year to year. This denotes the changing availability of various foodstuffs in the United States as government-held stocks of specific commodities rise and fall. In the years 1954, 1955, and 1956 powdered non-fat milk and processed cheese were the most important commodities

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[5]Ibid., pp. 106-7.

Table IV-1. Title III donations in Colombia, fiscal years 1955-61.

Year	Pounds (In thousands)	Cost (In thousands of dollars)
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
Total	179,602	25,908

Source: U.S. Congress, House, The 14th Semiannual Report On the Food-For-Peace Program . . . , op. cit., p. 106.

being shipped to Colombia. In 1956 Section 416 of Title II was amended to permit the Commodity Credit Corporation to process surplus grain into flour, making available large amounts of wheat flour and corn meal for the first time. Powdered milk has continued to be a large item since 1958, but cheese shipments were discontinued after that year. Wheat flour and corn meal are other important components of the program during the years 1958-61.

The voluntary agencies

A requisite for any voluntary agency to become eligible for the benefits accorded under U.S. laws, including P.L. 480 food donations and reimbursement for ocean freight costs, is registration with the Advisory Committee on Voluntary Foreign Aid of ICA. In Colombia three agencies have been involved in the food distribution program.

These are the United Nations' Children's Fund, Catholic Relief Service, and CARE. The United Nations program in Colombia was small in 1954 and 1955 and has since been discontinued.

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. With this legislation the program in Colombia was given a tremendous impetus and presently ranks as one of the largest feeding programs under CARE supervision.

The Colombian CARE program is designed to fit the structure of the Colombian government--a federal system with a high degree 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 departamentos, or states. The first of these was signed in 1955 with Valle del Cauca. It provided for the daily distribution of 25 grams of cheese per person to occupants of hospitals, antitubercular centers, and welfare institutions. In addition, each of 127,000 public school children received one pound of cheese and 2 pounds of milk monthly.[6]

In 1957 food programs were initiated in the Bogota 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

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[6]CARE, CARE in Colombia, A Mimeograph Describing the Work of CARE, (New York: April, 1959), p. 4.

or more members with clinical evidence of nutritional deficiencies. The order of priority is as follows: Families with pre-school age children, families with children under fifteen where economic conditions do not permit an adequate diet, families with expectant mothers, and refugee families who are victims of political violence.[7] In 1958, 60,000 of these packages were distributed. This was increased to 150,000 packages in each of the years 1959 and 1960.[8] 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 IV-2.

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

The Bogota school feeding program serves many of the 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 a very modest income will send their children to the better-equipped, better-staffed private schools.

The Catholic Relief Services program. This food distribution program was initiated in Colombia in December, 1955, when the

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[7]Ibid., p. 9.

[8]CARE Mission in Colombia, CARE Program in Colombia, 1958-1960, (Bogota: 1961), pp. 4, 7, and 10.

Table IV-2. CARE Food Crusade and departmental feeding programs, 1958-60.

Year	Program	Number of recipients	Value U.S.$	Commodities included				
				Powdered milk	Wheat flour	Cheese	Corn meal	Pork
				(Millions of pounds)				
1958	Departmental feeding	453,372	$4,394,439	8.54	2.58	5.20	--	--
	Food Crusade	58,800	300,000	.27	.30	.42	.30	--
1959	Departmental feeding	772,785	2,956,020	5.20	5.06	--	1.72	--
	Food Crusade	140,400	750,000	1.35	.75	--	1.50	--
1960	Departmental feeding[a]	774,000	3,515,062	10.58	5.84	--	2.67	--
	Food Crusade[b]	140,000	862,500	--	.67	--	1.83	.50
	Totals	2,319,982	11,878,021	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, op. cit., pp. 2-9.

Catholic Relief Service contracted with Caritas Colombiana to undertake distribution responsibilities.[9] CARITAS is the official agency of the Catholic Church in Colombia 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 the three central storage warehouses located in Cali, Barranquilla, and Bogota, distributions are made quarterly to the 48 ecclesiastical jurisdictions of Colombia. Each jurisdiction has a program coordinator in charge of receiving and controlling the distribution 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 resulting from the influx of refugees from violence areas. The only large school feeding program is in the Department of Caldas. It reaches approximately 30,000 children. The Bogota distribution program is also significant. This cafeteria operation supplies 50,000 rolls of bread and 50,000 portions of milk daily to needy individuals.

From 1955 through 1959 the CARITAS food donation program reached about 500,000 beneficiaries daily. In 1960 the program was stepped up to nearly 600,000 daily recipients, but future plans call for a "deepening" of the present program through larger daily portions, rather than any significant increase in the number of people reached.

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[9]The Catholic Relief Service is the overseas operations branch of the U.S. National Catholic Relief Service.

The task of distributing the commodities is under the supervision of local church leaders with much of the physical labor done by the 6,000 lay people associated with the CARITAS program. The quantities and types of surplus foodstuffs distributed are shown in Table IV-3.

Table IV-3. CARITAS food distribution program, December, 1955-December, 1960.

Period	Powdered milk	Wheat flour	Cheese	Corn meal	Rice
			(Millions of pounds)		
December, 1955 through June, 1959	25.31	12.75	5.34	12.29	1.00
July, 1959 through December, 1959	2.80	2.24	a	3.53	--
January, 1960 through June, 1960	.73	2.77	-	2.38	3.10
July, 1960 through December, 1960	.82	3.67	-	3.25	1.50
Total	29.66	21.43	5.34	21.45	5.60

[a]Less than 10,000 pounds.
Source: Bogota office of the Catholic Relief Service, James D. Noel, Jr., Director.

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 tax levied on each ecclesiastical jurisdiction. The tax is based on the economic status of the jurisdiction rather than quantities of commodities distributed to the area. Costs of

the school feeding program in Caldas are met in part by a departmental appropriation to CARITAS. The Bogota 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.

Impacts, shortcomings, and results

A food donation operation as large as that of the combined efforts of the Colombian CARE and CARITAS missions is certain to produce impacts among its recipients. These may range from changes in the infant mortality rate to changes in agricultural price levels; the only common elements are the difficulties involved in their isolation and measurement. Although more detailed analysis of the price effects must await future treatment, other observations are warranted here.

Legislation requires food packages donated abroad to be marked, identifying the contents as a gift from the people of the United States. Food distribution centers also boast wall posters declaring the nature, source, and purpose of the various food items. But, even with these efforts it is certain that not all recipients are fully aware of the source of these commodities. Most of the beneficiaries are illiterate and frequently are not concerned with identifying the giver or knowing the purpose behind the gift. Among the better-educated classes, however, the programs are well-known and generally have received a great deal of favorable publicity. In addition to any nutritional impact, the donation program doubtlessly has had a favorable propaganda effect for the U.S. government.

The complexities and scope of the Colombian programs emphasize the difficulties in giving away food constructively.[10] In spite of generally

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[10]See Howard P. Davis, "Sharing Our Surplus--By Food Donations Under P.L. 480," Foreign Agriculture, United States Department of Agriculture, (Washington: U.S. Gov't. Printing Office, February, 1960), p. 13.

high quality program administration by the voluntary agencies involved, there have been from time to time unavoidable shortcomings and irregularities in distribution efforts. Some of these result from a failure to recognize eating habits of recipients; others result from the lack of sufficiently trained distribution personnel. An example of the former was the inclusion in early shipments of a high quality tinned cheese, a product quite unfamiliar to the poverty-stricken Colombian peasant. In certain cases the recipient, recognizing the commercial value of the item and not possessing a taste for the particular type of cheese, exchanged the tin in the market place for something more to his liking, and generally less nutritious. The resulting flow of the high-quality product into commercial channels brought protests from dairy interests. However, it is generally agreed that such incidents were rare and probably included less than 1 percent of total cheese shipments.[11]

On occasion Title III commodities have also been used or sold by the person in charge of local distribution. These abuses may reflect breach of trust but are frequently prompted by extreme economic need on the part of the distributor or his immediate family. Where distribution depends upon untrained, low-income laymen correction of these aberrations is difficult. In other instances where distribution is through the local parish, commodities have been sold for a fraction of commercial value with the funds going for other church needs.[12] The justification for this action is "that recipients are receiving high quality food at less than market prices and the money is used in areas of greater need."[13]

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[11]Interview with James D. Noel, Jr., Mission Chief of the Catholic Relief Service in Colombia, February 28, 1961.

[12]A similar plan has been proposed by CARITAS officials in Colombia. Under this scheme recipients would pay a nominal fee for all food distributed. In the Bogota area these payments could total 50,000 pesos daily. These funds could then be used in other worthy projects--such as schoolroom construction. This method of channeling food expenditures of the very poor into capital formation would promote neither health nor political stability in the country.

[13]Interview with a village priest, department of Tolima, July 28, 1961.

Other minor losses resulted from the inability of recipients to read preparation and mixing directions on food packages. This was notable particularly in the case of powdered milk and led to immediate corrective efforts through better training of disbursement personnel. The CARITAS program has recognized the lack of education of recipients as one of the outstanding causes of program abuse. Present program emphasis is on supplying the recipient with a baked product, a prepared glass of milk, and a bowl of rice rather than distributing packages of flour, powdered milk, and dry rice. This new emphasis is more demanding of personnel time and effort but is more effective in channeling donated foods to those in greatest need.

Voluntary agencies have shipped an average of more than 22 million pounds of surplus foodstuffs to Colombia during the past 6 years. An important question is the extent to which Colombian agriculture has been affected by this program. Part of the answer is already apparent. The Title III program has had little, if any, adverse impact upon agriculture because of the nature of the program and the commodities involved. The food distribution programs of the voluntary agencies have been carefully designed to serve only the most needy individuals. These groups have only nominal purchasing power and food donations generally represent "additional consumption" rather than displacement of market purchases. The nature of the distributed commodities is also significant. Milk powder and wheat flour have been important components of the donations. Wheat production in Colombia is far short of consumption and there exists a tremendous shortage of fluid milk. The influence of the powdered milk distribution on market price is negligible, or at most is to reduce the upward pressure against the government-established price ceiling.[14] With the exception of the cheese

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[14]This view has been expressed by the head of the largest dairy producers organization in Colombia. Carlos Reyes P., Director of the National Association of Milk Producers and Processors ("ANALAC"),

incident, program criticism by dairy interests has been virtually non-existent.

The CARITAS Bogota feeding program, operating in a well-defined geographical area, offered a unique opportunity to examine the impact of the operation upon neighborhood retail stores. In 1959 CARITAS conducted a survey of these establishments with the objective of determining whether sales of flour and milk had decreased as a result of the feeding program. In no cases did proprietors indicate that sales of these products had been affected.

A longer term impact of the donation program may be beneficial to agricultural interests. The voluntary agencies, through medical personnel, teachers, and volunteers, have helped to develop among recipients an appreciation of the nutritive values of the donated foods. The CARE feeding program in the Department of Antioquia was combined with a series of lectures on nutrition for the 600 school teachers who prepared and distributed surplus milk, cheese, and rolls. The impact of this venture in developing new tastes, and consequently, expanded markets, may be substantial in this country where nutrition education is greatly deficient.

The impact of the program upon the health of beneficiaries has not been examined closely, although CARITAS is currently cooperating with the National Institute of Nutrition and the Ministry of Public Health in studying program results. It is hoped that the findings will be useful in the planning and orientation of nutritional programs of a broader nature. Medical authorities in preliminary evaluation of the Antioquia CARE feeding program concluded that childrens' consultations in health

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in an interview, January 13, 1961, suggested that Title III powdered milk imports have not been harmful to the industry but that re-constitution prior to disbursement would be a further guarrantee that the powder would not enter commercial trade channels.

centers had decreased fifty percent due to CARE school and family feeding.[15] School attendance, which characteristically tended to fall off after the first months of the term, was maintained at high levels due to the attraction of CARE milk, cheese, and rolls.

It was noted earlier that the average Colombian diet is generally deficient in calories and proteins. Wheat products, when supplemented with milk, are an excellent means of alleviating this protein deficiency. Wheat shipments under Titles I and III of P.L. 480 have been primarily responsible for raising average per capita consumption levels from 14.6 kilograms annually in 1953 to 19.6 in 1960.[16]

Voluntary agency programs in Colombia encouraged the national government and other agencies to further develop their own public welfare programs. These expanded welfare programs may facilitate gradual phasing-out of the U.S. donation programs when circumstances warrant. A sensitized spirit of charity is also evidenced by the inter-agency cooperation in the Colombian programs. Initial efforts by CARE and CARITAS in many cases have evoked cooperation from other agencies and thereby permitted a more effective distribution program. The coffee growers' donations of coffee to the CARE food packages were noted. The national food procurement agency (INA), in addition to meeting baking costs of the CARITAS Bogota cafeteria operation, also contributed soybean flour and in 1960 donated more than 10 tons of potatoes per day to the Bogota program. The large petroleum complex, Shellmar de Colombia, assisted by contributing plastic containers for the Care food packages. All of these are examples of donations which were made feasible largely by the fact that an administrative and distributive organization already existed which could utilize the donated

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[15]CARE Mission en Colombia, op. cit., p. 8.

[16]See Chapter VI.

items most satisfactorily. This increased sensitivity to the needs of the less-fortunate is no doubt one of the most significant "side effects" of the voluntary agencies' efforts in Colombia.

Program recommendations

The great need for welfare feeding programs in Colombia and continued existence of utilizable U.S. surpluses suggest that donation operations should be continued and expanded. In general these operations have been handled well and produced satisfactory results. However, some program modifications could better meet the country's needs and policy objectives of the U.S. and Colombian governments.

The use of surplus foodstuffs in compensation for carrying out community work projects is not authorized under Title III. However, Title II of P.L. 480 does permit payment in kind, a distribution scheme which is presently being used on a limited scale in other countries. Studies have indicated this use to be highly compatible with both the objectives of surplus disposal and economic development.[17] The Colombian labor force is increasing at the rate of 120,000 workers annually; but only 92,000 new employment opportunities are created each year.[18] The result is a serious and worsening unemployment problem. This existence of surplus labor possessing little purchasing power together with the opportunity for many labor-intensive work projects such as road and street improvement and sewer construction, suggest that Title II foodstuffs used in partial compensation would be a

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[17]See United Nations, Food and Agricultural Organization, Uses of Agricultural Surpluses to Finance Economic Development . . . , op. cit.

[18]Ministerio de Hacienda y Crédito Público, Memoria de Hacienda Presentada al Congreso Nacional de 1960, Tomo Principal, (Bogotá: Imprenta Nacional, 1961), p. 21. The figures originate with the National Planning Commission.

desirable outlet. This program, taking the form of a government-to-government operation rather than involving voluntary agencies, is certainly worthy of consideration in Colombia.

A less-important criticism, and possibly more difficult to correct, hinges on the fact that the types of foods donated in the past have not always been readily assimilable in the diet of the recipient. The example of the high-quality tinned cheese somewhat foreign to the eating habits of the beneficiary was noted. The shipment of yellow corn meal or corn flour to Colombia where white corn is virtually the only type eaten by humans is another example. Correcting these shortcomings is difficult since the choice of commodity type and quality among existing surplus stocks is frequently limited. It would be well, however, for program planners to make the maximum effort possible to become familiar with the diets and eating habits of recipients.

In 1960 more than 1.5 million beneficiaries received food supplements through voluntary agency programs in Colombia. The size of these programs, in terms of numbers of individuals at least partially dependent upon the United States for their food supplies, forces consideration of the possible repercussions should the donation program suddenly be discontinued. The critical need of most of the recipients suggests that sudden termination or even reduced food shipments would throw a tremendous relief burden upon existing welfare services and foster great hardship upon former beneficiaries. The possibility of adverse political repercussions upon the United States is also quite real and program termination might well serve as the rallying point which agitators are looking for.

This is not to suggest that it is unwise for the U.S. to become so involved in the program. On the contrary, the program has produced benefits to both Colombia and the U.S. A basic legislative improvement would be one which gives the program more certainty than it

currently enjoys. At the present time, Title I, Title II, barter, and domestic distribution requirements must all be met before overseas voluntary agency requests can be honored. There can be little criticism of first meeting domestic donation requirements and the needs of relief programs under Title II. On a humanitarian basis there seems less justification for giving the present high priority to the barter program where bartered agricultural products enter commercial channels and are distributed by the price mechanism. Because of barter, destitute families may receive nothing. Consequently, it is recommended that the overseas donation program should be accorded greater priority in total P. L. 480 commodity availability. This would greatly reduce some of the uncertainty faced by the voluntary agencies in planning distribution operations and, to the extent that such a change would prevent sudden program termination, would help overcome the possible disadvantages of the present system.

The Barter Program in Colombia

Section 303 of Title III authorizes the Secretary of Agriculture to barter U.S. farm products for strategic materials and other equipment useful to the United States. Under the barter program the Commodity Credit Corporation exchanges the commodities it owns or controls for materials produced in other countries. In the transaction a private U.S. firm buys a material abroad and sells it to the CCC at or below the world price. Payment to the commercial firm is made in a surplus agricultural commodity which is then sold on the international market. Materials acquired by the CCC may be placed in a stockpile or used by the ICA, Atomic Energy Commission, or the Department of Defense. The term barter is strictly applicable only to the transaction between the private firm and the CCC; in disposing of the agricultural commodity or acquiring the strategic material the private U.S. firm uses commercial trade channels.

Barter transactions involving Colombia are of the "open end" type. This form of contract, in the case of agricultural exports to Colombia, permits the material to come from some country other than Colombia. Similarly, in the case of material exports from Colombia, the agricultural commodities are shipped to a third country.

Imports

In the period July, 1954, through June, 1961, U.S. farm products worth 8 million dollars were exported to Colombia through Section 303.[19] The first barter imports were made in 1954 when wheat valued at $644,000 was exchanged for platinum produced in the Netherlands and the United Kingdom. Wheat imports with a total value of $1.966 million were made in 1956 and 1957. Cotton imports of $3.6 million and barley imports of $289,000 were also made during those two years in exchange for metals produced in third countries.[20] During 1959 and 1960 approximately $1.5 million of U.S. farm products moved to Colombia through barter authorization.

These commodity imports flow through commercial trade channels. Payments by Colombian importers are made to the U.S. firm in dollars or other acceptable currencies. The transactions do not generally constitute a dollar saving for Colombia. The impact upon Colombian agricultural is similar to that produced by other agricultural imports. This will be considered further in Chapter V.

Exports

Some Colombian platinum exports to the U.S. have been made through Section 303. In 1954 a barter contract was consummated providing

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[19]U.S., Congress, House, The 14th Semiannual Report On Activities Of the Food-For-Peace Program . . . , op. cit., p. 47.

[20]Letter from T. R. Rawlings, Director, Barter and Stockpiling Division, Commodity Stabilization Service, United States Department of Agriculture, February 13, 1961.

for the export of wheat to Norway, Germany, Yugoslavia, and the United Kingdom in exchange for Colombian platinum valued at U.S. $1.347 million. Because this contract was made between private firms in Colombia and the U.S., little information regarding the transaction is available. The usual procedure is to make the payment to the Colombian firm in dollars or grant the firm the equivalent in dollar credits. From the Colombian viewpoint these platinum exports represented dollar sales. No dollar earnings were lost as would have occurred in a bona fide barter deal. The most important impact upon the economy is the stimulation of the Colombian platinum industry. Secondary impacts result as the foreign currency earnings are spent.

CHAPTER V

COLOMBIAN AGRICULTURE AND PUBLIC LAW 480

The principal concern of this study is the impact of Public Law 480 upon the Colombian economy. A possible approach in facilitating the analysis of this complex program is to separate the agricultural sector from the remainder of the economy, then consider each in turn. This section will focus primarily upon the agricultural sector. This sector looms large in the total economy in terms of resources employed and income generated.

Agriculture's role in economic growth

This approach does not deny that growth in agriculture and development of other sectors of the economy are closely linked, although contemporary theory has not established clearly the existing relationships. A detailed theoretical discussion is inappropriate here; however, a brief consideration of current thought may be helpful in pointing out possible relationships between the P. L. 480 program, agricultural growth, and general economic development in Colombia.

In general, two views exist with regard to the role which agriculture plays in economic growth. Briefly, one line of thought suggests that industrial development may be a prerequisite to increased productivity and commercialization of agriculture. In this view, the growth of the non-farm sector determines the extent of the market for foodstuffs and agricultural raw materials, thereby influencing production patterns, income levels, and investment in agriculture. The industrial sector also provides employment opportunities for the influx of rural

workers, permitting higher per capita incomes for those persons remaining in agriculture.[1]

A second view contends that an increase in agricultural productivity serves as the most important stimulus to industrial growth.[2] Higher productivity in agriculture permits the release of resources from the sector and their consequent employment in industry. These resources include not only labor but also capital which can serve as the basis for industrial investment through appropriate taxation.[3] Increased commercialization and higher incomes in agriculture widen the market for manufactured products, thereby further stimulating industrial growth. Higher agricultural productivity also facilitates capital accumulation by minimizing the rise in food prices.

The role of agriculture in Colombian economic growth may best be understood by a synthesis of the above views. It is true that agriculture is a source of low-cost labor for Colombian industry. Furthermore, the food and fiber processing industries are dependent upon domestic agriculture for raw materials. On the other hand, the agricultural sector is becoming an increasingly important consumer of manufactured products. Efficient food production is indispensable for social welfare and adequate quantities and qualities can influence labor productivity. This factor attains crucial importance in Colombia where the rapidly growing population is pressing against available food

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[1]See W. Arthur Lewis, "Economic Development with Unlimited Supplies of Labor," The Manchester School of Economic and Social Studies, Vol. XXII, (Manchester: 1954), pp. 139-191.

[2]See Ragnar Nurkse, Problems of Capital Formation in Underdeveloped Countries, op. cit., p. 52.

[3]Japan is perhaps the best example of where agriculture served as the source of investment in the capitalist sector. See Bruce F. Johnston, "Agricultural Development and Transformation: Japan, Taiwan, and Denmark," A Paper Presented to the Conference on the Relation Between Agriculture and Economic Growth, Stanford University, November, 1960.

supplies. One of the important contributions of Colombian agriculture to general economic development is the foreign exchange earnings resulting from coffee and banana exports. Agricultural exports supply more than three-fourths of Colombia's foreign exchange needed to import capital and intermediate products.

Program impacts

There are two general categories of effects resulting from the P.L. 480 program. One of these may be called the "commodity impact" and arises from the inflow of agricultural products into the recipient economy. Increased availabilities of foodstuffs and agricultural raw materials result. This impact has perhaps been most worrisome to program evaluators who are fearful that increased quantities in domestic markets and possible lower agricultural prices will have deleterious effects upon agricultural growth. A related concern is that government authorities in recipient countries may view the program as a device which permits deferring agricultural development and lowering the priorities for public investment in agriculture.[4]

A second category of effects may be called "local currency use impacts" and involves the uses of funds generated in the recipient country by the sale of P.L. 480 commodities. This aspect of the program has received less consideration by evaluators because effects of currency expenditure are difficult to isolate and become apparent only after some length of time. Nevertheless, it is reasonable to hypothesize that the currency use impact, although longer-run in nature, will produce longer lasting and possibly more beneficial results. This category of impacts includes those from the use of market

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[4]John H. Davis, "Surplus Disposal as a Tool for World Development--Objectives and Accomplishments," Journal of Farm Economics, Canadian Journal of Agricultural Economics, Proceedings of the Joint Annual Meeting, Aug. 20-22, 1958, Winnipeg, Canada, Vol. XL, (Menasha, Wis.: Dec., 1958), pp. 1484-1494.

development funds, loans to local industry, payment of U.S. obligations, and the loans for economic development under Section 104 (g).

The Commodity Impact

Relative size

A feasible approach in examining the commodity impact of P.L. 480 upon Colombian agriculture is to note the size of these imports relative to total agricultural imports and domestic production. Table V-1 makes this comparison for the years 1955 to 1960. In value terms, Public Law 480 has 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 V-2 compares imports of wheat, cotton, and edible oils with domestic production. Other commodity shipments through P.L. 480 were very small relative to domestic production.

Wheat imports through P.L. 480 ranged from 13 percent of Colombian production in 1955 to 56 percent in 1959. On the average, wheat imports equaled 30.6 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. Public Law 480 edible oil shipments loom large relative to domestic production. In the 6-year period 1955-60, these imports equaled 39 percent of domestic production but ranged up to 59 percent in 1958.

Table V-1. P.L. 480 imports in Colombia, total agricultural imports, and total agricultural production, 1955-60.

Year	P.L. 480 imports (millions) Dollars	Pesos	Total agricultural imports (millions of dollars)	Total agricultural production (millions of pesos)	P.L. 480 imports as percent of agricultural imports	P.L. 480 imports as percent of agricultural production
1955	4.3	10.9	77.8	4,433.3	5.53	0.25
1956	11.5	29.0	86.2	4,967.6	13.34	0.58
1957	5.0	25.5	82.4	6,231.4	6.07	0.41
1958	5.5	36.8	66.0	7,009.2	8.33	0.53
1959	1.2	7.9	56.9	7,577.2	2.11	0.10
1960	6.1	40.5	52.8	7,880.1[a]	11.55	0.51

[a]Partly estimated.

Source: United States Embassy, Disbursing Office, Bogota; Consejo Nacional de Política Económica Y Planeación, Plan Cuatrienal . . . , op. cit., p. 70; Banco de la República, XXXVII Informe Anual del Gerente a la Junta Directiva, Segunda Parte, (Bogotá: Junio, 1960), p. 70.

Table V-2. P.L. 480 imports and domestic production in Colombia of wheat, cotton, and edible oils, 1955-60.

Commodity	1955	1956	1957	1958	1959	1960
			(metric tons)			
Wheat						
P.L. 480 imports	22,242	56,260	55,784	19,486	72,877	43,164
Domestic production	166,500	160,000	158,000	129,000	130,680	150,000
P.L. 480 imports as percent of domestic production	13.4	35.2	35.3	15.1	55.8	28.8
Cotton						
P.L. 480 imports	1,840	7,740	3,060	4,187	0	0
Domestic production	24,672	22,529	20,573	25,873	56,408	68,732
P.L. 480 imports as percent of domestic production	7.5	34.4	14.9	16.2	--	--
Edible oils						
P.L. 480 imports[a]	3,000	3,500	4,646	8,690	6,779	13,579
Domestic production[b]	10,621	10,825	12,458	14,800	22,590	28,900
P.L. 480 imports as percent of domestic production	28.3	32.4	37.3	59.0	30.0	46.9

[a] Includes cottonseed and soybean oils.
[b] Includes cottonseed, soybean, and sesame oils.
Sources: U.S. Embassy, Office of the Agricultural Attache, Bogota, Colombia; Instituto de Fomento Algodonero, Colombia: Algodón y Oleaginosas; Economía y Estadística, 1960; Departamento de Investigaciones Económicas, (Bogotá: Septiembre, 1961).

An important consideration at this point is the extent to which P. L. 480 imports have affected domestic production patterns. In conditions of static demand and a free market the importation of considerable quantities of farm products would tend to push prices down. Falling prices or relative price changes among commodities would expectedly alter production patterns. Unfortunately, for the sake of analysis, the conditions of static demand and a free market do not hold in Colombia. For most agricultural products, and all that are included in this analysis, price support programs have been established which attempt to hold farm prices at "reasonable" levels. The effectiveness of the programs vary among commodities. A serious storage deficiency for wheat, beans, corn, and potatoes makes it difficult to hold farm prices at these levels; for this reason these prices behave to some degree in accordance with supply and demand. For most other commodities manufacturing and storage capacity is sufficient to permit farm prices to remain close to support levels.

The analysis therefore requires not only a consideration of price and production behavior but also some discussion of price support and development programs for these commodities. Declining production and farm prices for a specific commodity may be attributable to P. L. 480 or to a less vigorous, less effective price program for that product, or a combination of the two.

Prices

Table V-3 lists several products of basic importance to Colombian agriculture. Two of these, wheat and cotton, have also been significant in the P. L. 480 program. Sesame is included because it, together with cottonseed, is a major source of edible oil. As a substitute for cottonseed and soybean oil its price behavior is related to P. L. 480 imports of the commodities. Average farm prices for each of these products are

Table V-3. Farm price changes in the pre-P. L. 480 period and during the P. L. 480 program for selected agricultural commodities.

	Wheat	Cotton[a]	Barley	Corn	Potatoes	Beans	Sesame
			(pesos per metric ton)				
1950-51 average price	615.0	2,535.0	332.5	285.0	309.5	1,130.0	588.0
1954-55 average price	680.0	2,645.0	390.0	315.0	265.0	1,050.0	637.0
Percent change	10.6	4.3	17.3	10.5	-14.4	-7.1	8.5
1959-60 average price	920.0	4,800.0	703.0	485.0	357.0	1,530.0	1,412.0
percent change	35.3	81.5	80.2	54.0	34.7	45.7	121.7

[a]Fiber.

Sources: Banco de la República, "Estimación del Valor de la Producción a Precios Corrientes de Cada Año, 1950-1960," Departamento de Investigaciones Económicas, (Bogotá: January, 1961); Instituto de Fomento Algodonero, Colombia: Algodón Y Oleaginosis . . . , op. cit.

computed for a period prior to P. L. 480 (1950-51), at the beginning of the program (1954-55), and during the years 1959-60. Price trends can be determined by comparing percent price changes in these periods.

Farm prices for none of these commodities rose more than 20 percent during the pre-P. L. 480 period 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 80 percent; sesame prices increased 121 percent. Wheat, corn, potato, and bean prices increased from 35 to 54 percent.

A comparison of these price increases with the behavior of the general price level is useful. From 1954 through 1960, the wholesale price level, including both consumption and investment items, rose 58 percent.[5] Thus, farm prices for wheat, corn, potatoes, and beans rose less than the general price level. The increase in sesame prices was more than double the rise in the general level of prices.

Production

Table V-4 includes the same commodities as the previous table but considers production rather than prices. As would be expected, production expansion is related to price increases. Cotton and barley production more than doubled since 1954; sesame production increased 67 percent. Production of wheat, corn, and potatoes increased less than 6 percent while bean production declined 16 percent from 1954-55 levels.

This table demonstrates that domestic production of one P. L. 480 commodity (wheat) has expanded little since 1954. In contrast, production of a second commodity (cotton) increased 138 percent. A close substitute

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[5]Memoria de Hacienda y Crédito Público, Memoria de Hacienda Presentada al Congreso Nacional de 1960, op. cit., p. 98.

Table V-4. Production changes in the pre-P.L. 480 period and during the P.L. 480 program for selected agricultural commodities.

	Wheat	Cotton[a]	Barley	Corn	Potatoes	Beans	Sesame
				(1,000's of metric tons)			
1950-51 average production	116.0	7.5	53.3	732.6	455.0	38.0	9.2
1954-55 average production	146.5	26.3	58.5	809.9	657.5	59.5	9.3
Percent change	26.3	250.7	9.8	10.6	44.5	56.6	1.1
1959-60 average production	146.7	62.5	119.0	854.7	669.0	50.0	15.5
Percent change	0.1	137.6	103.4	5.5	1.7	-16.0	66.6

[a]Fiber.

Source: Same as Table V-3.

for P.L. 480 edible oil imports increased substantially. Explaining production trends on the basis of relative quantities of P.L. 480 imports is not satisfactory since edible oil imports equaled 39 percent of domestic production, yet sesame and cotton production have increased greatly during this time period. Some consideration of price support and development programs is required.

Commodity programs

A unique feature of Colombian agriculture is the system of semi-autonomous, semi-official commodity organizations, each with the responsibility for the development of one or a group of similar farm products. These agencies are involved in a wide variety of activities related to the production and marketing of their respective commodities. Two of the most important are technical assistance to producers and price support programs. The price support operation is generally administered by each agency, but with some supervision by the Superintendent of Economic Regulation. Under this system, cotton and sesame prices are supported by the powerful Cotton Development Institute (IFA); barley prices are administered by the Barley Development Institute (Procebada); and, wheat, corn, potato, and bean prices are supported by the National Food Procurement Agency (INA). Of these three agencies, INA is most closely controlled by the Ministry of Agriculture and the central government.

An economic power struggle affects the operations of these agencies. Price support levels among agencies are generally determined by the economic power of the agencies' constituents or the political appeal of their programs. A basic weakness of this poorly-coordinated price program is the frequent distortion of price relationships among commodities. Price levels are often established on the basis of unreliable cost data and with little regard to other economic circumstances. The commodity

organization with the greatest political strength will be authorized to establish the highest relative price. The result is an unstable production pattern in any specific geographical area as producers shift rapidly to the crop which may momentarily be most lucrative. Official support levels in Table V-5 give an indication of which agencies have had the power and the desire to raise prices in recent years. It should be emphasized that INA is the only agency representing both consumer and producer interests. This is a basic reason why this agency has pushed less vigorously for price increases.

Table V-5. A comparison of official price support levels for selected agricultural commodities with the general price level.

Commodity[a]	1954	1955	1956	1957	1958	1959	1960
			(1954=100)				
General price level	100.0	100.2	103.1	118.9	134.7	147.1	157.9
Wheat	100.0	100.2	100.2	113.0	139.1	149.6	149.6
Cotton	100.0	100.0	123.1	163.0	163.0	192.0	192.0
Barley	100.0	108.3	121.9	129.2	161.4	178.1	178.1
Corn	100.0	100.0	114.3	114.4	157.1	157.1	157.1
Potatoes[b]	100.0	97.5	97.8	97.5	112.8	112.8	112.8
Beans[b]	100.0	93.9	103.5	108.8	112.3	112.3	112.3
Sesame[b]	100.0	116.7	141.7	225.0	229.6	229.6	229.6

[a] Prices are for the No. 1 Grade of each commodity.

[b] Prices for these commodities were not supported prior to 1958. Prices received by farmers are used as base prices in computing the index.

Sources: U.S. Agricultural Attache, Colombia: Annual Agricultural Policy Report, Report No. 215, (Bogota: U.S. Embassy, June 23, 1960), p. 13; Instituto Nacional de Abastecimientos, "Historia de los Precios de Trigo, Maíz, Ajonjolí, Frijoles, y Papa," (Bogotá: Departamento Técnico, INA, 1961); Instituto de Fomento Algodonero, Colombia: Algodón Y Oleaginosas . . . , op. cit.

As was the case for farm prices, support prices for wheat, corn, potatoes, and beans increased less than the general price level. Official price levels for these four commodities supported by INA have increased the least since 1954. Cotton, barley, and sesame, the commodities exhibiting greatest increases in support levels, have also benefitted from vigorous, well-organized development programs. These programs include technical assistance, guaranteed markets for all of production, and stable prices. Under these favorable conditions, production expanded rapidly.

Public Law 480 imports of cotton and edible oil appear to have had a negligible effect upon domestic production of these products. But, how has the Colombian wheat producer fared under this program? Because INA represents consumers' interests as well as producers', it is concerned with keeping domestic prices of foodstuffs at reasonable levels. There is evidence to suggest that INA officials viewed P.L. 480 as a device to meet domestic wheat and flour consumption requirements without the costly price support and development programs of other agencies. With the opportunity to import high quality wheat and flour at favorable terms (i.e., without foreign exchange expenditure) there was no urgent need to increase wheat price supports to elicit expanded domestic production. Because INA had monopoly control of wheat and flour imports, the organization also saw P.L. 480 as a unique device to finance its other operations. In the importation and domestic resale of wheat and flour INA realized a profit of more than thirteen million pesos per year (see Table V-8). This revenue was a powerful incentive for the Colombian government to pursue a less-vigorous price policy in wheat. The larger increase in barley support prices may also have been encouraged because this commodity could not be imported for local currency.[6]

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[6]Assuming that bread is a more beneficial component in the diet than beer, this action also has welfare aspects: increasing the barley support price raises the price of beer; increasing wheat prices raises bread prices. Nearly 100 percent of Colombian barley is consumed by the breweries.

One of the agricultural impacts of P. L. 480 is thus a shift in cool climate lands from wheat to barley.[7] Barley production increased from 65,000 metric tons to 123,000 tons in the period 1954-60.[8] In spite of a decline of 25,000 hectares, wheat production stayed relatively constant at 150,000 tons becuase of higher yielding varieties. Both wheat and barley are produced on the limited areas of cool-climate lands in Colombia. Even though P. L. 480 has shifted production patterns over what they would have been in the absence of the program, there is no indication that owners of cool-climate lands have suffered economic loss. These owners may shift from wheat to barley production without great difficulty. Table V-6 indicates that gross revenue from barley production increased steadily since 1955. Wheat revenues show a less rapid, more erratic increase. 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 absorbed more easily.

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[7]Related to the discussion of price disturbances from agricultural imports is the situation arising from the preferences by Colombian millers for imported wheats. As a result of the high domestic support price for wheat, a wide price differential exists between the Colombian and world market. Consequently, millers using imported wheat enjoyed a significant price advantage over millers using locally-grown wheats. In addition, imported wheats generally have more desirable milling qualities. Because of these advantages, millers have been reluctant to use domestic wheats when imported wheats were available. To prevent the accumulation of domestic wheats, legislation was passed requiring all millers to mill specified quantities of domestic wheat prior to receiving an allotment of imported wheat. The situation has necessitated considerable administrative expense by regulatory agencies and some uneconomical transhipment of Colombian wheat to mills in the non-productive zone. This is an example of a price disturbance resulting from agricultural imports. It is included here because it has been offered by some as an argument against the P. L. 480 program in Colombia. However, the ensuing difficulties for authorities cannot be attributed to P. L. 480. Any commercial imports moving at world market prices would produce similar effects.

[8]Banco de la República, "Estimación del Valor de la Producción a Precios Corrientes . . . ," op. cit.

Table V-6. Gross receipts from wheat and barley products, 1955-60.

	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: Banco de la República, "Estimación del Valor de la Producción a Precios Corrientes . . . ," op. cit.

Promotional taxes

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 some processing operations within the country. Also of importance are the profits realized by INA in its purchase and resale operations for 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 several commodities including 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.[9]

[9]In most cases this tax is in addition to relatively high import duties.

Public Law 480 imports have assisted these campaigns inasmuch as these commodities produced nearly 36 million pesos of promotional revenues. Table V-7 lists the P.L. 480 commodities on which promotional taxes were levied, the taxes per unit, and the total resulting revenues. Over the 6-year period, nearly 6 million pesos, on the average, have been produced annually. During this time the Ministry of Agriculture budget averaged 7.96 million pesos per year.[10] In other words, promotional taxes levied on P.L. 480 imports provided funds sufficient for nearly 75 percent of the central government's agricultural budget.

Table V-7. Promotional tax revenues from P.L. 480 imports, 1955-60.

Commodity	P.L. 480 imports to which taxes were applicable[a] (kilograms)	Promotional tax per unit (pesos per kilograms)	Revenue (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	0.40(per pkg.)[b]	5,944,288
		Total	35,989,298

[a]Fomento taxes were applied to cotton and oil imports since 1956. Figures for these commodities include P.L. 480 imports only since that date.

[b]Equivalent to about 19 pesos per kilogram.

Sources: Office of the U.S. Agricultural Attache, Colombian Agriculture, (Bogota: U. S. Embassy, June, 1960), pp. 26-30; Instituto Nacional de Abstecimientos; Arancel de Aduanas, (Bogotá: Librería Voluntad, Ltda., 1959), pp. 326-328.

[10]Banco de la República, "Proyecto de Presupuesto Para 1961," Revista del Banco de la República, Agosto, 1960, op. cit., p. 951.

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 the semi-public 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 total resources of this organization were 8.3 million pesos.[11] Of this total, 5.9 million pesos (71 percent) represented promotional taxes on P.L. 480 cigarettes. These funds are used in promoting the Colombian tobacco industry through development of improved varieties, establishing experiment 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.[12] This money is collected by the central bank, then administered by the Caja Agraria. A large proportion of the funds is employed in the wheat 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. As noted previously, INA is the agency responsible for the wheat, corn, beans, and potato price support program; this agency also manages all imports of these commodities.

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[11]Consejo Nacional de Política Económica y Planeación, Plan Cuatrienal . . . , op. cit., p. 107.

[12]Ibid.

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 has been a direct result of the P. L. 480 program.

For wheat imports under P. L. 480 sales agreements, INA paid an average price per metric ton of $702.44 (pesos). Selling price in the Colombian market averaged $914.53 per ton, producing a profit of $212.09. The flour import operation, although conducted on a much smaller scale, yielded higher per unit profits. Cost to INA averaged $823.72 (pesos) per ton; average selling price was $1,305.75. Profit per ton is $482.03. Edible oil imports in 1959 were also a source of revenue for INA. Buying price was approximately 2,100 pesos; selling price in the domestic market was 3,200 pesos. Table V-8 compares these profits with INA's total income and expenditure.

Distribution of profits

Profits from P. L. 480 imports make up a considerable portion of INA expenditures. The biggest share of these expenditures is used in the organization's price support activities. This involves 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.[13] Heaviest losses

[13]United Nations, Analysis and Projections of Economic Development, op. cit., p. 180. Losses in some areas ranged much higher. In the Cauca Valley in 1948 losses for corn were estimated at 37 percent of total production, 26.5 percent for beans, and 18 percent for rice.

Table V-8. Yearly income of INA, income produced from P.L. 480 purchase-sale operations, and uses of funds. (Millions of pesos)

Year	Total INA income	Income from P.L. 480 wheat, oil, and flour[a]	Total INA expenditure	Operating expenditure	Transfer to Caja	INA investment	P.L. 480 income as percent of total expenditure
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 for any given year may deviate from this average, the yearly income data are approximations. A total profit figure for the entire period would, however, be exact.

This column records only profits resulting from wheat, flour, and oil sales. Smaller revenues were produced by other P.L. 480 imports.

Source: Total INA income and expenditure breakdown are reported in Plan Cuatrienal . . . , op. cit., p. 112.

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.[14] 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. There they are invested in three programs carried on by the Caja: (1) colonization and parcellization; (2) drainage and water control; and, (3) general agricultural improvement. 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 earmarked for this campaign.[15] That year 102,000 hectares, or 60 percent of total wheat land, were seeded with improved seeds made available by the Caja.

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 III). With this supplement to its own funds, the organization can complete a storage system which is considered adequate to meet the future needs of its support program.

The Local Currency Use Impact

A helpful approach in studying P. L. 480 is to consider commodity impact apart from currency use impact. The previous section was devoted to a discussion of commodity effects upon Colombian agriculture,

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

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

with this category broadened to include promotional taxes and revenues produced by purchase-sale price differentials. This section will develop the agricultural implications of P. L. 480 peso expenditure. Because of the close relationship between agricultural development and general economic growth in Colombia, some arbitrariness exists in selecting topics to be treated at this time in preference to their consideration in a later section. An attempt is made to consider here peso uses most directly related to agriculture. Two general categories of expenditure are included: (1) loans under sections 104 (g) and (e); and, (2) market development activities.

Section 104 (g) uses

Public Law 480 loans in Colombia have been granted to numerous individuals and firms for a great many purposes. To consider each in detail is neither possible nor useful. Rather, for analytical purposes it is advisable to note broad categories of peso expenditure, then examine possible impacts for each type of expenditure. Specific projects will be considered where they appear particularly significant. Table V-9 classifies peso loans on the basis of use.

A striking feature of loan operations to date is the moderate number of pesos loaned relative to those allocated. Approximately 54 percent of total allocations have been loaned. This reflects desirable administrative caution in loan procedure but, in an analytical context, forces consideration of future impacts when allocated pesos are loaned and come to fruition.

Irrigation and drainage works. Public Law 480 pesos have played a prominent part in financing Colombia's land reclamation and irrigation program. During the 4 years, 1957-60, the two principal agencies responsible for water control projects, the Cauca Valley Corporation and

Table V-9. P.L. 480 peso loans in Colombia by use, as of March 31, 1961.

Purpose	Pesos allocated (1,000's)	Pesos loaned (1,000's)
Fertilizer production	66,430.0	43,981.4
Irrigation and drainage	60,663.5	37,273.5
Small industry[a]	25,453,5	25,266.5
Coal and cement production	18,000.0	13,060.0
Access roads to agricultural areas	9,900.0	4,900.0
Cacao and African Palm production	8,702.0	2,485.0
Reforestation and lumber production	9,000.0	2,200.0
Livestock improvement	13,700.0	1,700.0
Storage facilities (INA)	28,000.0	--
	$239,849.0	$130,866.4

[a]This category includes loans of $23.3 million (pesos) through Section 104 (e).

Source: Chapter III.

the Caja Agraria, invested 36.1 million pesos in drainage and irrigation works.[16] In this period P.L. 480 loans for this purpose totaled approximately 26 million pesos. The largest single P.L. 480 loan in Colombia has gone to the Cauca Valley Corporation for financing irrigation and reclamation projects. These projects have implications for Colombian agricultural growth and general economic development. Their relationship to general development is most conveniently postponed to the following chapter.

[16]Plan Cuatrienal . . . , op. cit., pp. 100, 110.

The Cauca Valley Corporation (CVC) is an autonomous regional development agency established by the Colombian government in 1954. Organizationally-patterned after the Tennessee Valley Authority, this agency has the task of planning and implementing the development program for the Cauca Valley. This includes flood control, land reclamation, and region electrification.

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 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 remainder going to finance reclamation works. Final payment of funds was made to the CVC in March, 1961. Amortization is to begin in 1964 and completed

10 years thereafter.[17] 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.[18]

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.[19]

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 Union-Toro area is aimed at intensifying the use of 28,750 acres of potentially productive

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[17]CVC authorities have requested a 20-year amortization period with the argument that 10 years is not sufficiently long for projects to reach full fruition.

[18]Reported by Bernardo Garcés Córdoba, Executive Director of the CVC, in an interview, May 2, 1961.

[19]Cauca Valley Corporation, Hechos en la CVC, Information Bulletin of the CVC (Cali, Colombia: February, 1960), p. 3.

farm land. Prior to project completion, 3,700 acres were largely swampland and totally unfit for agricultural use.[20] 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 Union-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 intensifying 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.[21] Under Colombian law, all reclamation works must be paid for by benefitted landowners. 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.[22] Although the levy is still relatively low, the change will encourage a land use pattern more in accord with the country's food needs.

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[20]Information Office of CVC, "Realidad y Trascendencia de la CVC," (Cali, Colombia: March, 1959), p. 7.

[21]According to a recent World Bank study, "an overall increase of about 40 percent over present production of food and raw materials will be required by 1965 to meet domestic needs." See the International Bank for Reconstruction and Development, The Agricultural Development of Colombia, (Washington, D.C.: May, 1956), p. 89.

[22]Ministerio de Agricultura, Un Programa de Colonización y Parcelación en Colombia, Servicio Técnico Agrícola Colombiano Americano, (Bogotá: October, 1960), p. 15.

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 on larger 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 employment to 1 worker, to an irrigated vegetable and truck farm employing 160 full-time laborers.[23]

The work of the CVC is not without opponents. Many have voiced the opinion that a similar investment in the llanos of Eastern Colombia would have provided lands for many more of the landless population. The argument may be correct in this limited form. It fails to consider, however, the pressing need for expansion of Colombian agricultural production, a task which can be achieved much more easily in the fertile Cauca Valley than in the undeveloped eastern grasslands. Not only are consuming markets relatively inaccessible in the llanos, but, more importantly, social overhead capital is almost non-existent. There is little doubt that a given amount of investment in the valley is more conducive to sound country-wide economic growth than a similar amount spent in the eastern plains.

A more modest project financed in part with 104 (g) pesos is the Ponedera-Candelaria irrigation project on the Atlantic littoral (Department of Atlantico). Twenty million pesos have been allocated to the project but as of March, 1961, only 3.5 million have been loaned. Planning and engineering studies are completed and indicate that approximately 38,000 acres will be benefitted by the project. Of these, 22,500

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[23]Ibid.

will be irrigated.[24] Soil studies show that 24 percent can be used for general crop production with 73 percent (about 16,400 acres) suitable only for rice and pasture.

The project, if successfully completed, would increase agricultural production in the area. However, because of the high proportion of benefitted lands not suitable for general crop production, there is some question as to the advisability of large-scale expenditures in the area. Greatly increased construction costs since the original 1951 engineering studies suggest the need for a careful reconsideration of the entire project.[25]

Fertilizer production. As of March, 1961, 44 million P.L. 480 pesos have been invested in expanding chemical fertilizer production in Colombia. Present and past effects of these investments upon agriculture are negligible since fertilizer plant construction has not been completed. Fertilizer consumption in the country has increased rapidly and the new production facilities will enhance future availabilities.[26] Nearly all chemical fertilizers are imported and past use has been restricted to some extent by limited exchange availability and a steadily

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[24]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, (Bogota: 1960), p. 261.

[25]Ibid., 267-268. One study mission member stated that this project rated a very low priority in his opinion.

[26]Total consumption of chemical fertilizers increased from an estimated 12,500 metric tons in 1947 to 150,000 in 1960. Sales by the Caja Agraria in these two years were, respectively, 10,000 and 120,000 tons, and represent an estimated 80 percent of total consumption. See Caja de Crédito Agrario, Industrial y Minero, Carta Agraria, No. 33, (Bogotá: Enero de 1960), p. 3.

depreciating peso.[27] The production facilities currently under construction will aid in overcoming these problems and permit foreign exchange savings.

In 1954, after two years of study and planning, the Industrial Development Institute contracted with a European firm to design and construct a fertilizer plant capable of producing daily 50 tons of ammonia, 80 tons of nitric acid, 75 tons of ammonium nitrate, and 30 tons of urea.[28] In 1955 plant design was modified to permit greater daily production. Construction began in 1956 but lack of funds led to costly delays and some deterioration of machinery and equipment.

In 1958, 36 million 104 (g) pesos were made available to supplement building funds and in October of that year a loan request of U.S. $7.5 million was submitted to the Development Loan Fund. Because of fictitiously high production values used in the request and the resulting doubts as to the economic feasibility of the project, the request was rejected by the Fund in July, 1959. By this time, construction was at least two and one-half years behind schedule and the problem occasioned by the shortage of funds remained unsolved.

An analysis of the project at that time by the Magdalena Survey Mission produced these comments:

> From the beginning, the project has been characterized by deficient economic planning which resulted in costly delays.[29] The (calculated) 5.66 percent annual return on investment demonstrates clearly that in the present circumstances, construction of the plant is not an economical project. This low

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[27]Following peso devaluation in 1957, fertilizer imports fell from 132,000 tons to 79,000 in 1959. See Gustavo Pérez Angel, Estudio Sobre Las Características de la Importación, Consumo y Producción de Fertilizantes Químicos . . . , op. cit., p. 2.

[28]Robert R. Nathan Associates, Programa de Desarrollo . . . , op. cit., p. 163.

[29]Ibid.

> return indicates that ICF (Industria Colombiana de Fertilizantes, S. A.) could not pay 6 percent interest on the debt; and, no financial institution for economic development would grant a loan only on the economic basis of the project. Also, no Colombian investor would be inclined to invest in ICF when the prospective return is much lower then the commercial interest rate.[30]

The project has been plagued by engineering and administrative errors. Plant design has been criticized as too small to permit economical per unit production.[31] Increased capacity was suggested as one step in making the project a sound investment. This recommendation was accepted but with the consequence that plant completion will be delayed until 1962 and additional funds will be required. When completed, the plant will have a maximum annual production capacity of 6,600 tons of ammonia, 33,000 tons of ammonium nitrate, 19,800 tons of 46 percent urea, and 86,000 tons of mixed fertilizers.[32]

The problem of financing the remaining 112.8 million pesos required for completion is still not solved but an additional 20 million P.L. 480 pesos have been allocated to the project. Of total estimated investment of $170 million, 66 million represent P.L. 480 loans. Other funds are expected from an Italian lending institution, the Colombian Coffee Bank, and private investors.

This P.L. 480 lending action may be evaluated at two levels. First, did this general type of project represent a high priority investment in terms of agricultural and economic development? Second, did this particular investment constitute the best possible use of funds in fertilizer production? The first question can be answered positively. The production problems of Colombian agriculture have been noted previously

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[30]Ibid., p. 165.

[31]Ibid.

[32]Consejo Nacional de Política Económica y Planeación, Plan Cuatrienal . . . , op. cit., p. 187.

along with the rapidly increasing population and the limited availabilities of foodstuffs per capita. Increased use of commercial fertilizers would alleviate some of these difficulties.

Answering the second question is more difficult. The shortcomings of the project's economic and engineering studies were noted. On the basis of economic feasibility of the operation, the advisability of the early loans appears questionable. But, to withdraw support at the present stage of construction would only further delay completion and permit additional deterioration of equipment. On this view the forthcoming 20 million pesos for the project may be considered an attempt to change an inefficient, ill-conceived operation into an enterprise of considerable value to the economy.

Small industry loans

Approximately 25.3 million P.L. 480 pesos have been loaned to small industry in Colombia. Of this total, nearly 2 million were loaned through Section 104 (g) prior to the legislation providing for 104 (e) loans and grants. Some industry loans are directly related to agriculture and should be given brief consideration here. Table V-10 lists the recipients of the loans, the purpose for which the money was granted, and the amounts involved.

With the exception of Pfizer, these industries are consumers of agricultural raw materials. Pfizer, as a producer of medicines and vaccines for the Colombian livestock industry contributes to animal health and sanitation and influences the yield and quality of livestock products. The Purina Company is one of the few firms in the country producing mixed feeds for livestock. Its operations also aid agriculture by furnishing a market for farm grains.

One of the largest industrial consumers of farm products in the country is Maizena, S. A., the Colombian subsidiary of Corn Products

Table V-10. P.L. 480 loans to industries directly related to Colombian agriculture, as of March 31, 1961.

Industry	Loan use	Size of loan (thousands of pesos)
Maizena, S. A.	Facilities to produce corn starch and related products	5,900
Compañía Nacional de Chocolates	Facilities to produce chocolate products	1,000
Purina, Ltda.	Facilities to produce animal feeds	800
Frutera Colombiana	Modernization of food processing plant	800
La Constancia	Enlarging of food processing facilities	500
Pfizer, S. A.	Facilities to produce chemicals and drugs	1,700
	Total	10,700

Source: Chapter III; U. S. Embassy, Administrative Section, Bogota.

International. The company began a modest packaging operation in 1933, then established a corn processing plant in the Department of Caldas in 1945. Rapidly increasing national demand for its corn starch, dextrin, glucose, and vegetable adhesive led to construction of a new plant in the Cauca Valley in 1958. Total construction cost was estimated at 14 million pesos.[33] The P.L. 480 loan supplied 5.9 million pesos of total investment.

The Maizena operation has benefitted corn producers by supplying a ready market for their product, thereby reducing severe price

[33]Information pamphlet of the Maizena Corporation, Cali, Colombia, p. 4.

fluctuations occasioned by temporary gluts and shortages. The plant has an annual consumption capacity of 32,000 tons of corn, equal to nearly 60 percent of 1959 production in the Cauca Valley. Because of the large plant capacity and occasional corn shortages, cutbacks in plant operations have at times been necessary. In an effort to stimulate corn production Maizena is offering producers the advantage of a fixed price known prior to market time.

Another enterprize furnishing a market to producers is Frutera Colombiana (FRUCO). This company began operations in 1948 as a small processor of fruits and vegetables. Capital investment grew from 50,000 pesos to five and one-half million in 1960. In 1959 FRUCO obtained a P. L. 480 loan of 800,000 pesos which was used to enlarge and modernize plant facilities for preparing fruit juices, vegetables, soups, and other canned products. A portion of the loan funds was used in constructing refrigerated warehouse facilities which permit the plant to purchase unusually large daily arrivals of produce and delay processing until a later time when facilities are available. The company purchased nearly eight million pesos of agricultural products in 1960.[34]

It would be presumptuous to assume that the benefits to agriculture from these various industries could all be attributed to the P. L. 480 loans. However, in many cases the loans paid most of plant modernization costs and, in the words of FRUCO's assistant manager, "made feasible the use of our own funds." In other cases, the attractive interest rates and repayment terms encouraged firms to undertake an investment program which would have been impossible without the availability of P. L. 480 money.[35]

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[34]As reported by Wolfgang F. Klein, Assistant Manager of FRUCO, in an interview, May 3, 1961.

[35]Both Maizena and FRUCO authorities considered P. L. 480 interest rates approximately 2 percent below commercial rates.

Other loan categories related to agriculture

Through March, 1961, approximately 11.3 million pesos have been loaned for livestock improvement, cacao and African oil palm production, agricultural access roads, reforestation, and lumber production. Larger amounts have been allocated to these categories and will be loaned in the future. (see Table V-9). These loans have generally been small in size and have gone to numerous private individuals. Their agricultural impacts are difficult to isolate and, in some cases, negligible since projects have not begun producing returns. Examples in this regard are funds used in financing plantings of cacao and African oil palm.

These funds should be considered as additional resources made available to the agricultural sector, usually at below-market cost. In the cases of cacao, African oil palm, and livestock, they will supplement government funds earmarked for the production campaigns of these particular products. Government campaigns in cacao and African palm production are aimed at reducing the large quantities of cacao and vegetable oil imported each year. Public Law 480 investments in these two crops will assist in this endeavor.

The government has undertaken a vigorous livestock improvement campaign which includes animal health, increased use of blooded breeding stock, and pasture and forage improvement.[36] In this effort the Ministry of Agriculture is receiving technical and financial assistance from the International Cooperation Administration. Twelve million P.L. 480 pesos have been allocated to meet local currency expenses of the campaign. The funds loaned for building access roads will support this endeavor by opening up new areas in the department of Cauca which

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[36]It is estimated that 1958 livestock industry losses from diseases amounted to 880 million pesos, or about 39 percent of the total value of meat and milk produced. See Plan Cuatrienal . . . , op. cit., p. 83.

are well-suited for livestock production and reasonably well-located with respect to consuming markets. A successful livestock program will increase domestic availabilities of meat and milk and may permit some meat exports.

Market development activities. Another category of P.L. 480 peso use with relevance to Colombian agriculture is market development. Through 1960 approximately 2.6 million 104 (a) pesos have been spent on various market development projects. A detailed analysis of these activities is outside the concern and scope of this study but some comments regarding their relationship to agriculture in Colombia are in order.

The basic objective of these projects is "to maintain and expand existing foreign markets or develop entirely new foreign markets for U.S. agricultural commodities."[37] But the fact remains that commercial markets for U.S. farm products in underdeveloped countries depend upon their import policies and abilities to earn dollars. When these factors are unfavorable, market development programs can have only a limited effectiveness, as through bona fide barter or local currency sales.[38]

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

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[37]U.S., Congress, House, Agricultural Appropriations for 1961, Part II, op. cit., p. 2.

[38]"The House Appropriations Committee could protest the use of foreign currencies generated by P.L. 480 exports to Argentina allegedly to develop a market for U.S. farm products. 'What American farm products are we building a permanent market for in Argentina?' asked Congressman Marshall. 'Is there a prospect by the use of P.L. 480 funds that we will get an increase in exports to Argentina?' 'No, sir,' answered the Administration. After all, it was only money, 14 million to be exact, that was involved in the question." See Simon G. Hanson, "The End of the Good-Partner Policy," Inter-American Economic Affairs, Volume 14, Summer, (Washington: 1960), pp. 84-85.

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 V-11). 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.[39] 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.[40] Similarly, some poultry imports from the U.S. have resulted from market development efforts.

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 for the agriculture of the participating countries. 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.[41]

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[39]Office of the U.S. Agricultural Attache, Livestock Report No. 129, (Bogota: U.S. Embassy, February 24, 1961), p. 2.

[40]Ibid., p. 2.

[41]From the official project statements of projects 4-7-57, 00302-21, and 2-7-57, respectively.

Table V-11. Total breeding livestock imports and imports from the United States, 1955-1960.

Year	Breeding cattle		Breeding hogs		Sheep		Poultry
	Total	United States	Total	United States	Total	United States	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 de 1960), p. 2.

[c]Not available.

Source: Office of the U.S. Agricultural Attache, Livestock Report No. 129 (Bogota: U.S. Embassy, February 24, 1961), Tables 15, 16, 17, 19, 20, and 28.

> This project is designed . . . to promote . . . new and expanded markets for wheat products through market research, nutrition education, promotional activities, and general publicity. . . .[42]
>
> 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.[43]

These projects are designed to primarily 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 Medellin which was aimed at promoting milk consumption in the city. Table V-12 indicates that 1959 milk consumption in that city was nearly 16 percent over 1958 levels, thereby permitting a substantial increase in per capita intake.[44] 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.[45]

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[42]Ibid.

[43]Ibid.

[44]This figure can be contrasted with the following statement: "In the first six months of 1959, the promotional work carried out under a dairy project in Medellin, Colombia, resulted in an increase of 35% in milk consumption in the area." See Agricultural Appropriations for 1961, op. cit., p. 229. The comparison emphasizes the need for a detailed, objective analysis of market development work.

[45]The Asociación Nacional de Productores e Industriales Lácteos indicated that Bogota consumption was increasing at approximately 8.7 percent during this period.

Table V-12. Population and milk consumption in Medellin, Colombia, 1956-60.

Year	Milk consumption (1000's)[a]	Percent change	Population (1000's)	Percent change
1956	40,258		485	
		7.0		6.1
1957	43,092		515	
		7.6		6.1
1958	46,358		546	
		15.9		6.1
1959	53,708		579	
		10.0		6.1
1960	59,086		614	

[a]Bottles of 750 cubic centimeters.

Sources: Milk consumption figures are from the Asociación Nacional de Productores e Industriales Lácteos, as reported in a letter from Dr. Carlos Reyes Patria, General Manager, May 10, 1961, p. 2. Population figures are estimates by the National Statistics Office.

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. . . ."[46] As is known, the project was less than completely successful in enlarging the market for U.S. feed grains in Colombia. However, the educational benefits 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

[46]Official project statement of project number 9-7-57.

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.

A concluding statement

In concluding this chapter, a few summary comments should be made. The objective has been to examine the influence of P.L. 480 upon Colombian agriculture. Commodity impacts were separated from peso use impacts in the discussion. One commodity impact has been a less vigorous wheat price policy with a consequent shift of some land owners from wheat to barley production. The income effect upon agriculture has been slight largely because of the ease with which producers were able to shift between these two crops.[47]

The analysis suggests that the feared harmful effects to agriculture may be overshadowed by the possible salutary results from the use of promotional revenues and P.L. 480 loans. Promotional taxes levied on P.L. 480 imports have been additions to funds earmarked for agricultural development. The P.L. 480 loans helped to finance projects of some benefit to agriculture. An important consideration is that these funds have supplemented public investment in a sector where volatile private capital in search of high yields is reluctant to settle. The contribution of these funds to economic growth is dependent upon fiscal and monetary policies as well as to the extent to which unemployed (or underemployed) resources exist. These factors will be given some consideration in the following chapter.

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[47]Pedro Bernal A., president of one of the farm organizations in Colombia, stated that the P.L. 480 program "has been handled well and there have been no adverse effects upon Colombian agriculture." Reported by Bernal, President, Sociedad de Agricultores de Colombia, in an interview, December 15, 1960.

CHAPTER VI

PUBLIC LAW 480 AND THE NON-AGRICULTURAL SECTOR

The previous chapter focused upon the relationships between Colombian agriculture and Public Law 480. It was noted that agriculture plays a role in general economic growth by supplying industrial raw materials, labor, and vitally-needed foreign exchange. This sector is also a market for manufactured products which serve as production inputs or consumption items for the agricultural labor force. Public Law 480 may influence general economic growth directly by supplying cheap foodstuffs to the working force, raw materials to the processing industries, and stimulating investment and employment through development projects financed with P.L. 480 local currencies. An important consideration in Colombia is the economizing of foreign exchange through imports paid for in local currency.

The Commodity Use Impact Upon Consumers

Consumer prices

Abundant quantities of high-quality, nutritious foodstuffs contribute to general economic growth in two ways. First, sufficient food enhances the health of the working force and increases labor productivity. A second consideration is of equal or greater importance; only when food prices and expenditure are moderate relative to income is there a remaining "surplus" which can be devoted to investment. One of the concerns in underdeveloped countries is maintaining this "investable margin" by preventing inflationary price spirals.

A disquieting fact faced by Colombian planners is that basic foodstuff production is growing at a rate smaller than the population increase. Between 1947-48 and 1956-58, domestic production of this group of products increased only 13 percent resulting in a decreased per capita availability of more than 10 percent. This emphasizes the pressing need for agricultural expansion in the country if sound economic growth is to continue. It also points up the role which supplementary food imports play by increasing per capita availability and restraining price rises.

Since 1954 the general price level in Colombia has risen 58 percent. Retail food prices rose 64 percent but price changes among various food groups have varied considerably. Table VI-1 compares the general price level with price changes for several consumption items. The availability of three of these--bread, vegetable shortening, and cotton cloth--has been influenced by P.L. 480 imports. Cotton cloth and bread prices have risen less than the general price level. Beef and milk prices kept pace with other food prices but the price for vegetable shortening increased substantially more.

Retail food prices, of course, are affected by many factors other than P.L. 480. One of these is the retail price control program established by the government in 1957. This program is designed to include nearly all food commodities. But enforcement has proven extremely difficult and evasion is widespread. Only for milk and, to a lesser extent, beef, have these price ceilings substantially restricted retail price rises.

The influence which P.L. 480 imports have upon retail price is somewhat dependent upon their size relative to domestic consumption. These comparisons are made in Table VI-2. Cotton shipments through P.L. 480 averaged about 11 percent of domestic consumption in the four years 1955-58. But domestic production has increased rapidly in

Table VI-1. General price level changes compared with price changes for selected consumer items, 1953-60.

Year	General price level	Food[a]	Bread (1954 = 100)	Vegetable shortening	Beef	Milk	Cotton cloth
1953	90.6	90.1	94.8	106.4	84.6	93.5	98.9
1954	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1955	100.2	95.8	102.3	103.7	105.0	109.7	99.6
1956	103.1	105.2	107.0	110.2	101.9	112.9	103.4
1957	118.9	131.8	117.1	166.9	110.0	132.2	118.9
1958	134.1	145.0	130.6	200.5	127.3	154.9	136.7
1959	147.1	151.9	142.4	212.5	143.0	162.9	134.0
1960	157.9	164.0	139.5	216.7	165.3	162.9	135.9

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

Sources: Banco de la República, Revista del Banco de la República, XXIX, XXXIV, (Bogotá: Feb., 1956 and Julio, 1961), pp. 210 and 939, respectively; Ministerio de Hacienda y Crédito Público, Memoria de Hacienda . . . , op. cit.; Office of the U.S. Agricultural Attache, (Bogotá: U.S. Embassy).

recent years, obviating the need for P. L. 480 imports after 1958. The relatively small price increase for cotton cloth is mainly attributable to domestic production expansion rather than to P. L. 480 influence.

Table VI-2. Public Law 480 imports of wheat, cotton, and edible oils as a percent of national consumption.

Commodity	1955	1956	1957	1958	1959	1960	Average
Wheat[a]	9.1	22.8	26.3	10.5	34.4	16.8	20.0
Cotton	5.3	21.7	8.2	10.4	--	--	11.4
Edible Oils	3.6	4.4	6.1	12.2	8.8	19.1	9.0

[a]Includes the wheat equivalent of P. L. 480 flour imports.

Sources: Table V-2; Office of the U.S. Agricultural Attache, U.S. Embassy, Botota.

The case for vegetable shortening involves other factors. Public Law 480 oil imports have been large relative to domestic production but small in comparison with consumption. Colombian production of edible fats and oils increased little until 1959 and 1960. Commercial oil imports since 1954 were substantial and a high import tariff has been vigorously applied. The large retail price rise is also due to high farm support prices for the principal domestic sources of edible oils--cottonseed, soybeans, and sesame. Cotton and sesame support prices rose more than 90 percent during the period 1954-60. Price supports for soybeans increased nearly 50 percent since 1958. Public Law 480 oil imports have had only a small influence upon retail price, although this price might have been higher in the absence of the program.

The greatest retail price effect from P. L. 480 has been upon bread prices. Wheat imports through the program averaged 20 percent

of domestic consumption at a time when domestic production was increasing little. These imports assisted in holding down bread prices. Part of this influence results from the "blend price provision" of the 1957 P.L. 480 agreement. This stipulation requires that all wheat and flour imports from the U.S. be sold at a price at least as low as the average of (1) the C.I.F. cost of commercial imports, plus taxes, fees, and other charges; and, (2) the C.I.F. cost of Title I wheat and flour without these charges. This permits Colombian purchasers to buy U.S. wheat and flour at a price lower than commercial prices. Some of these savings may then be passed on to consumers in the form of lower bread prices. This provision was effective on shipments made in fiscal years 1958, 1959, and 1960.

Per capita consumption

Colombia's rapid population growth has made it difficult to maintain per capita consumption levels of food and fiber. The break in coffee prices necessitated additional reduction of imports and further aggravated the problem of adequately meeting food requirements. It appears fortunate that the P.L. 480 program coincided with the sharp reduction of foreign exchange earnings resulting from the coffee price drop. Public Law 480 met a vital need for the economy at this time by permitting the import of edible oils, wheat, flour, and cotton without the expenditure of exchange.

Table VI-3 lists estimated per capita consumption of wheat, oils, and cotton in the period 1951-60. Wheat consumption has held generally steady during the P.L. 480 period, with a slight increase in 1959 and 1960. Edible oil consumption exhibits a steady downward trend since 1955, in spite of relatively large P.L. 480 imports in 1960. Only for cotton has there been a substantial per capita increase during the period 1954-60. This is due largely to rapid expansion of domestic production rather than to P.L. 480 imports.

Public Law 480 imports did not provide for greatly increased per capita consumption but have arrested to some extent the downward per capita trend due to population increases and, in some cases, smaller imports. The table also indicates consumption excluding P. L. 480 shipments. The additional per capita quantity of wheat made available by the program is approximately 3.7 kilos per year. An average of 0.59 kilos of edible oil per person has been supplied by P. L. 480 annually. The figure for cotton is less significant. This discussion suggests that the Colombian people are to some extent better fed and, to a smaller degree, better clothed than they would have been without the P. L. 480 program.

This does not signify that in the absence of P. L. 480, per capita consumption would have been as indicated in the table. Without P. L. 480 it is highly probable that larger commercial imports would have been made, particularly for wheat and oils.[1] But, in view of the foreign exchange problem, it is likely that in the absence of the program these additional imports would have been somewhat less than the quantities imported through P. L. 480. Without the program domestic price policy in Colombia would also have been different, producing a different commodity mix (i. e., possibly more wheat, less barley), and requiring smaller commercial wheat imports. The essential point remains that the provision permitting payment in pesos has been extremely propitious for Colombia by averting the need for additional exchange expenditure or credit purchases.

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[1]A contrasting view is that P. L. 480 helped maintain commercial imports through the commercial purchase requirements in the agreements. In the absence of P. L. 480 the government, with its vigorous policy of protection for domestic producers, might have reduced commercial imports through higher tariffs and quantitative restrictions.

Table VI-3. Apparent[a] per capita consumption of wheat, edible oils, and cotton; consumption excluding P.L. 480 imports, 1951-60.

Year	Wheat[b]	Without P.L. 480	Edible Oils	Without P.L. 480	Cotton	Without P.L. 480
	(Kilograms)		(Kilograms)		(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	4.47	2.88	2.59
1959	19.4	12.8	5.39	4.23	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 equivalent of flour imports.

Sources: Computations are made from basic consumption data supplied by the Office of the U.S. Agricultural Attache, U.S. Embassy, Bogota. Population estimates were developed by the National Planning Commission.

Health and labor productivity

Labor productivity in Colombia is depressed by physical weakness and illness. While some of these difficulties can be attributable to tropical diseases and infections, nutritional deficiencies are also causative factors. There is general agreement among medical authorities and nutritionists that the average Colombian is undernourished. There is less agreement, however, as to the dietary components which are most seriously lacking. Calories and proteins are frequently stressed but calcium, riboflavin, and Vitamin A are also considered insufficient. The availability of some of these nutrients is directly related to P.L. 480 imports.

The average 1951-53 Colombian diet provided 77 percent of the calories recommended by the National Nutrition Institute.[2] A more recent study (1956-57) of 322 rural and urban families indicated that the average caloric consumption (1,947) represented 94 percent of an "adequate" intake, but the calcium, thiamine, and riboflavin were more seriously deficient.[3] Another estimate suggests that 1958 calorie intake was slightly more than 2,400 calories per day with "indications that 1959 consumption was probably at a slightly higher level. . . ."[4]

In the absence of comprehensive food intake data these several estimates should be taken with caution and are perhaps not even indicative of trends. There is certainly no good basis for suggesting that the increase from 1,947 calories in 1956 to 2,400 calories in 1958 can

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[2]United Nations, Analysis and Projections. . . , op. cit., p. 147.

[3]Ministerio de Salud Pública, Informe sobre las Actividades del Instituto Nacional de Nutrición al Consejo Técnico del Ministerio de Salud Pública, (Bogotá: 1961), p. 42.

[4]United States Agricultural Attache, Colombian Agriculture, op. cit., p. 14.

be attributed to P.L. 480. Yet it is apparent that supplementary imports of wheat, flour, and oils have performed some positive function in raising caloric intake as well as supplying additional amounts of protein, calcium, thiamine, niacin, and riboflavin.

Additional calories obtained through Title I oil and wheat shipments and Title III distribution of wheat flour, powdered milk, and corn meal are computed in Table VI-4. Public Law 480 imports contributed approximately 52 calories daily to the Colombian diet in recent years, although it should not be assumed that calorie intake would have been reduced by that amount in the absence of the program. The quantity is modest but as a marginal contribution probably produced beneficial effects. Another important nutritional impact of the program results from consumption of the protein in wheat, flour, and milk.

The question remains of what effect these imports have had upon health and labor productivity. It is well established that a direct relationship exists between calorie levels in the diet and productivity. In one study involving heavy physical work, a 20 percent increase in total calorie intake increased output nearly 50 percent.[5] In another study of construction workers in Central America the "efficiency" of workers increased three-fold when they were provided with an "adequate" calorie intake.[6] It is apparent, however, that study results are greatly influenced by initial calorie consumption. Public Law 480 shipments to Colombia increased per capita calorie intake approximately 2.4 percent if a daily consumption of 2,200 calories is assumed. But, additional per capita consumption of these imports is not uniform throughout the population; rural families living at the subsistence level

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[5]Harvey Liebenstein, Economic Backwardness and Economic Growth (New York: John Wiley and Sons, 1957), p. 65.

[6]C. E. A. Winslow, The Cost of Sickness and the Price of Health, (Geneva: World Health Organization, United Nations, 1951), pp. 354.

Table VI-4. Additional per capita calories supplied by P. L. 480 food imports, 1955-60.

	1955	1956	1957	1958	1959	1960
Title I						
Wheat (kilos)[a]	1.74	4.26	4.60	2.00	6.60	3.30
Calories[b]	5,742	14,058	15,180	6,600	21,780	10,890
Oil (kilos)	.234	.265	.342	.621	.471	.918
Calories[c]	2,069	2,343	3,023	5,490	5,164	8,155
Total annual calories	7,811	16,401	18,203	12,990	25,944	19,005
Daily calories	21	45	50	33	71	52
Title III[d] (daily calories)	n.a.	4[e]	4[e]	9	9	9
Total daily calories Titles I and III	21	49	54	42	80	61

[a] Includes the wheat equivalent of P. L. 480 flour imports.
[b] Using an estimated calorie content of 3,300 calories per kilogram.
[c] Using an estimated calorie content of 8,840 calories per kilogram.
[d] The Title III computations include only distributions of wheat flour, cornmeal, and powdered milk.
[e] These figures do not include the CARE program, which was small during these years.

Sources: Tables IV-2, IV-3, V-2; U.S., United States Department of Agriculture, Composition of Foods, Handbook Number 8, (Washington: June, 1950), Table I.

are little affected by P.L. 480 imports. At the other extreme, high income groups probably do not consume greater quantities of food because of P.L. 480. Therefore, for some middle-income sectors of the population per capita calorie increase is greater than 2.4 percent. This increase may have increased labor productivity to some extent. Consumption of other nutrients may also contribute in this regard by promoting the health of consumers, thereby reducing absenteeism, lethargy, and susceptibility to disease.

Population growth and infant mortality

To this point the discussion has centered largely upon the relationship between labor productivity and P.L. 480 imports of foodstuffs. Also of concern are the Title III food distributions and their effects upon health and infant mortality. These imports probably have had little effect upon productivity or health of the working force since they go largely to children and destitute families whose head is frequently unemployed. But this topic, particularly as it bears upon population growth, is related to general economic development.

The rapid population growth rate in Colombia is a point that has been reiterated in previous sections. Rapid population growth has increased the difficulty of maintaining per capita food consumption and income levels. The problem of an expanding population pressing against limited food supplies and social capital appears to be one of the most serious that Colombia faces.[7] If this assumption is accepted, the

[7]Regarding the problem of population pressure, Hunter and Knowles write: "Every advance in productivity is cancelled by an increase in population, especially through lower infant mortality . . . and increases in life span. This grim fact is the number one problem in the development of economically backward areas. Unless this problem is solved, there is little point in attempting to solve the other problems." See John M. Hunter and William H. Knowles, "Ten Problems of Point Four," Inter-American Economic Affairs, Volume VII, No. 1, Summer, 1953, p. 69.

difficult question of how P. L. 480 food imports have (or will) influence infant mortality rates and population growth must be considered.

The Colombian birthrate is high, possibly twice as high as in the United States, and appears to be increasing. A high rate of infant mortality has somewhat offset this and prevented a faster population growth. It is noteworthy that in 1958 nearly 53 percent of all deaths occurred among children less than 5 years of age.[8] Improving the health of pregnant mothers and small children could reduce these mortality rates significantly and it is this segment of the population which receives some of the benefits of voluntary feeding programs and food donations.[9]

Unfortunately, a comprehensive analysis of these programs has not been undertaken and consequently, the effects upon infant mortality, height and weight of children, welfare of mothers, etc. is not known. However, there is general agreement that children receiving milk, rolls, and cheese are more alert in the classroom, less susceptible to disease, and more regular in school attendance. These effects are beneficial in promoting general child health and encouraging the most effective use of those educational facilities which are available. Mortality rates for this group of recipients are probably little affected because these children have passed the most vulnerable age.

Food distribution efforts that reduce mortality rates rest largely upon a humanitarian basis which, however commendable from that point

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[8]In 1958 the infant mortality rate (deaths between birth and 1 year of age per thousand live births) was 100 and represented one-third of all deaths. See Plan Cuatrienal . . . , op. cit., p. 322.

[9]It is estimated that infant malnutrition is the cause of 70-80 percent of child mortality in Colombia. This type of malnutrition is due largely to lack of proteins and is cured by consuming milk in any form. The death rate after milk declines to 10 percent of its previous figure. See Dr. José Góngora y López, "El Problema de la Disponibilidad de Leche en Colombia," Revista Colombiana de Pediatría y Puericultura, Volume XII, No. 3, (Bogotá: Febrero, 1953), pp. 215-222.

of view, may not always be compatible with longer-term goals of increased per capita income and rising levels of living. Resolving this dilemma is extremely difficult and certainly outside the scope of this study. Nor is this discussion to be construed as advocating abolishment of these programs; rather it is argued in Chapter IV that shipments under Titles II and III should be increased and made more secure. The point is that food programs reaching young children, pregnant, and nursing mothers will undoubtedly have some effect upon child mortality rates (which is their purpose); this will influence population growth and, ultimately, economic development.

Local Currency Loans and Economic Stability

A fundamental purpose of Public Law 480 is to rid U.S. agriculture of troublesome surplus stocks. The Title I provision of sales for local currency attempts to achieve this objective in combination with a foreign policy goal of promoting economic development in recipient countries. These countries may be benefitted by local currency loans but, unfortunately, this is not necessarily the case. The limitations on local currency use and conditions under which these loans may be of value are not always clearly understood.

As Mason, et al., have suggested, local currency itself is not a resource; rather it is a claim on resources.[10] Misuse of these funds may augment inflationary problems and lead to serious mal-allocation of resources. Many of the countries receiving P.L. 480 commodities are engaged in economic development programs. Budget expenditures

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[10]Edward S. Mason, Allan B. Kline, Robert W. Purcell, and Harvey S. Firestone, Jr., The Problem of Excess Accumulation of U.S.-Owned Local Currencies, Findings and Recommendations Submitted to the Under-Secretary of State by the Consultants on International Finance and Economic Problems, (Washington: Department of State, April 4, 1960), p. 6.

are frequently greater than borrowings and tax revenues can finance. Under these inflationary circumstances the release of P.L. 480 currencies in the form of loans may only aggravate these conditions. If the loan project is something outside the country's development program, and therefore presumably of a lower priority, there is misallocation of resources. If these loan projects demand expenditure of scarce foreign exchange there is also distortion of the planned program and additional harm to the economy.

The inflow of agricultural commodities is in itself deflationary as these goods are sold and purchasing power is absorbed. The flow of goods in the economy is increased without any change in the money supply. The inflationary impact results as local currencies are loaned. Effective coordination between the lending agency and monetary authorities is necessary if these funds are to make a maximum contribution to development. In some circumstances local currency sterilization would contribute most to internal stability and sound growth. A liberal lending policy by the lending agency would be harmful if inflation is already a problem. This policy would also partially nullify effects of a restrictionist monetary policy by authorities attempting to cope with the inflation problem.

But circumstances exist where local currency loans may be of assistance to economic growth. If loan expenditures are moderate relative to total investment, inflation is no over-riding concern, and resources are available but unemployed because of monetary and fiscal rigidities, a real contribution to capital formation can result. These conditions exist to varying degrees in Colombia.

The price level in the country has increased less than 10 percent per year since 1954 (see Table VI-5). This rise has provoked concern among some Colombian authorities and led to remedial measures; but

Table VI-5. Changes in fiscal and monetary measures of the Colombian economy, 1954-60.

	General price level (1954 = 100)	Money[a] supply	Rediscount rate (Percent)	P.L. 480[b] debt	Total internal debt (Millions of pesos)	Gross investment (Billions of pesos)	National budget (+) surplus (-) deficit (Millions)
1954	100.0	100.0	4.0	0	490.14	2.17	+177
1955	100.2	103.4	4.0	0	391.98	2.37	+ 44
1956	103.1	128.6	4.0	0	501.09	2.56	- 37
1957	118.9	146.2	4.0	7.30	590.67	3.44	- 80
1958	134.1	177.3	5.0	23.75	658.43	3.82	+108
1959	147.1	196.6	5.0	88.72	716.26	4.35	+237
1960	157.9	216.0	5.0	108.30	786.42[c]	4.80[c]	+161[c]

[a] Comprises monetary liabilities of the central bank to the private sector and related institutions, and monetary deposits of commercial banks.
[b] End of year figures. Includes loans under Sections 104 (e) and (g).
[c] Partly estimated.

Sources: Ministerio de Hacienda y Crédito Público, Memoria de Hacienda, op. cit., pp. 98, 178; International Monetary Fund, International Monetary Statistics, XIV, op. cit., p. 90; Caja de Crédito Agrario, Industrial y Minero, Informe de Gerencia, 30 de Junio de 1960, (Bogotá: 1960), p. 54; United States Embassy, Administrative Section, Bogotá.

it is difficult to assess the extent to which it has harmed development efforts.[11] There is little basis for suggesting that P. L. 480 loans have contributed to this rise. No P. L. 480 loans were made prior to 1957 and since that time have equaled less than 8 percent of total internal debt and approximately 1.3 percent of gross investment.

Price increases are partly due to the great increase in the money supply--216 percent since 1954. Central bank authorities have attempted to slow the inflationary trend by a higher rediscount rate. From 1952 through 1957 the rate on commercial paper was 4 percent; in 1958 it was increased to its present level of 5 percent. Colombian fiscal policy produced budget surpluses in 8 of the 11 years since 1950. Two of the deficits occurred during the free-spending era of Dictator Rojas Pinilla.

The desirability of local currency expenditure also depends upon the availability of unemployed or underemployed resources. The extent to which these exist in Colombia is not known with certainty. However, as noted in Chapter IV, labor is abundant in the country. Public Law 480 appears to have encouraged fuller use of this factor (see Appendix B). Foreign exchange is a limiting factor and some local currency loans have increased the demand for existing supplies. But because most of the loan projects were of a high priority, they did not promote mis-use of foreign exchange.

A significant factor in the Colombian P. L. 480 program is that monetary and fiscal authorities have been willing to draw upon these local currencies. (This has not been the case in all other countries.)

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[11]The rise is modest in comparison with other Latin American countries in similar stages of development. Brazil's general price level increased nearly 400 percent during this time. Argentina and Chile price levels have increased 439 and 1,110 percent, respectively. Mexico's prices have risen 50 percent since 1953. See International Monetary Fund, International Monetary Statistics, XIV, (Washington: November, 1961), pp. 46, 66, 82 and 192.

Had these currencies been sterilized, program impacts would be quite different. Because of appropriate economic circumstances--a relatively small volume of loans, available resources, and fiscal rigidities--there is good cause for suggesting that P.L. 480 loans have generally been efficacious in Colombia. In most cases they have augmented investment funds in useful projects without significantly contributing to inflationary dangers. In view of the conservative government fiscal policy, some of these projects might have been postponed or reduced in size in the absence of this program.

The Balance of Payments and Public Law 480

A frequently-cited benefit of P.L. 480 is the provision permitting agricultural imports with payment in local currency. The alleged effect is the "release" of foreign exchange which can be used in importing capital goods or intermediate products, thereby further assisting the economic growth of the recipient country. This aspect of the program is held to be particularly advantageous to countries facing continual foreign exchange scarcities. A closer examination of program operations reveals that the "balance of payments impact" operates in a slightly different manner than that described above and is not limited to savings in exchange occasioned by agricultural imports paid for with local currencies.

Supplementary agricultural imports

A feature of the 1958 amendment to P.L. 480 is the avowed intent of the U.S. to "not unduly disrupt world prices of agricultural commodities or normal patterns of commercial trade." Commercial markets of the U.S. are to be maintained to the maximum extent possible. To achieve these objectives, recipient countries are asked to absorb these

surplus commodities in addition to normal commercial imports. When this request is complied with completely, there is no "release" of foreign exchange in the sense that some portion of the dollars formerly used in importing food and fiber could, with P.L. 480, be used in importing other articles. The real value of the program for the underdeveloped country is not that it permits diverting exchange expenditure from food to capital goods imports, but rather that it makes available to the economy additional quantities of agricultural products without additional exchange expenditure. This aspect becomes particularly valuable when real income and population increase faster than foreign exchange earnings and domestic food production. If exchange earnings increase, these earnings can be earmarked for non-food imports while P.L. 480 shipments meet the increased food needs.

Public Law 480 has been helpful to the Colombian economy because it coincided with the break in world coffee prices and the resultant sharp decrease in the country's foreign exchange earnings.[12] It also alleviated the problems caused by rapid population growth and lagging production of basic foodstuffs. With this weakening of the balance of payments position, import restrictions were increased in an effort to prevent further deterioration. In hopes of doing a minimum of damage to the country's development program, commercial imports of consumption items were restricted most severely. However, in the period 1955-60, P.L. 480 imports averaged U.S. $5.6 million annually, thereby offsetting some of the reduction in commercial imports necessitated by the coffee crisis. The program made possible increased

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[12]Gold and dollar holdings of the central bank fell from 270 million dollars in 1954 to 153 million in 1955. Reserves held roughly steady at the 1955 level through 1958, increased to 224 million in 1959, and then dropped again to 169 million in 1960. See Departamento Administrativo Nacional de Estadística (DANE), Boletín Mensual de Estadística, (Bogotá: Junio, 1961), p. 143.

food and fiber imports at a time when balance of payments considerations dictated no increases or possibly even decreases in these imports.

Through P.L. 480 33.4 million dollars of farm products were imported in the years 1955-60 without foreign currency expenditure. In the absence of this program the additional expenditure required merely to maintain wheat consumption at 1953-54 levels would total approximately U.S. $12.3 million, or about 2 million dollars annually.[13] Through P.L. 480 this level of consumption has been considerably exceeded.[14] Per capita wheat consumption in 1960 is nearly 19 percent above the 1953-54 level. Exchange savings also result from other P.L. 480 imports but are less substantial since these shipments were smaller relative to total domestic consumption.

Import substitution

One import substitution effect results from the transfer of land from wheat to barley production. Due to the emphasis upon barley, Colombia has become self-sufficient in this commodity. A second effect results from import substitution by products locally-produced in projects financed with loaned local currencies. The extent of this impact is difficult to determine precisely. In most projects using Section 104 funds, P.L. 480 pesos covered merely a part of project cost; hence any substitution of import which occurs can only partially be attributable to

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[13]This is estimated by computing hypothetical consumption at 1953-1954 levels for each of the years 1955-60, then subtracting domestic production and commercial imports. The resulting figure represents additional imports required to maintain 1953-54 consumption levels.

[14]The saving in exchange is substantial; but it must also be noted that in the absence of P.L. 480, the country's dollar earnings would be somewhat larger. These earnings represent U.S. Embassy and Consulate expenditure in Colombia, generally paid in dollars, but now paid with P.L. 480 pesos because of their availability. See the later section in this chapter.

these loans. In other cases, projects have not been completed; import substitution will occur only in future years.

The Cauca Valley Corporation loan may have import substitution effects as agricultural production in the area is stimulated. Increased production of oil seeds, notably cottonseed and soybeans, will reduce the country's dependence upon imports for supplies of edible oils. As a cotton-producing area of growing importance, the valley will also contribute to exchange earnings through increased cotton exports.

A second project using substantial quantities of 104 (g) funds is the fertilizer plant near Barrancabermeja. This plant is designed to produce approximately 145,000 tons of nitrogenous and mixed fertilizer annually, or more than enough to meet present yearly consumption.[15] During recent years (1955-59) fertilizer imports have cost the country approximately U.S. $9 million annually, of which more than one-third ($3.3 million) represented outlay on nitrogenous fertilizers.[16] The new plant may save as much as U.S. $5 million in exchange each year.

The pharmaceutical industry is one of the newest and most rapidly developing in Colombia. Part of this rapid growth may reflect the P.L. 480 pesos (11.8 million) which have been loaned to three large firms in the industry--Pfizer, Abbot, and Parke-Davis. As a result of this development, pharmaceutical imports decreased from U.S. $21 million in 1955 to $5 million in 1959.[17] Value of production within the country has grown from 141 million pesos in 1957 to 203 million in 1958.

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[15]Consejo Nacional de Política Económica y Planeación, Plan Cuatrienal . . . , op. cit., p. 187.

[16]Gustavo Pérez A., Estudio sobre las Caracteristicas de Importación, Consumo, y Producción de Fertilizantes . . . , op. cit., p. 52.

[17]DANE, Boletín Mensual de Estadística, No. 123, (Bogotá: Junio, 1961), p. 11.

This is expected to increase by approximately 20 million pesos when the new large Abbott plant reaches full production in late 1961.[18]

Loans to other industries have had (and will have) less substantial balance of payments effects. The 104 (e) loan to Cartón de Colombia, a subsidiary of Container Corporation of America, met part of the construction costs (about 18 percent) for a new pulping plant which will utilize Colombian-produced hard woods as the basic raw material in producing paper. The project will eliminate the need for pulp imports, thereby saving an estimated U.S. $1.2 million annually in foreign exchange.[19]

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 imported previously. 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 in 1960 had a C.I.F. value of only U.S. $84.[20]

Another possibility of import substitution may come from the agricultural fomento program discussed in Chapter V. Significant portions of the cost of this program have been met with fomento cuotas levied against P.L. 480 imports and through buying-selling price differentials on these commodities. This production campaign, to the

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[18]Interview with Antonio Lattanzio M., General Manager, Abbott Laboratories de Colombia, July 11, 1961.

[19]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 U.S. $100 in exchange. Total saving: $1.2 million.

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

extent that it is effective, will also save foreign exchange. It is hoped that by 1965 average yearly imports of wheat, cacao, wool, and oils, worth U.S. $22 million, can be eliminated by increased domestic production.[21] These idealistic objectives must be tempered by reality, but any import substitution which does occur is due in part to the P.L. 480 funds used in the campaign.[22]

Reduced foreign exchange availability through P.L. 480

The discussion to this point has examined the favorable balance of payments aspects of P.L. 480, i.e., program effects which assisted the balance of payments by reducing exchange expenditure. Public Law 480 may also adversely affect exchange availability in the recipient country through payment of local U.S. government obligations with accrued currencies. In Colombia the peso equivalent of U.S. $9.8 million, equal to about 14 percent of total accrued pesos, has been used in meeting U.S. obligations. In the absence of P.L. 480, these obligations would have been met in U.S. dollars.[23] Therefore, P.L. 480 reduced dollar availability to Colombia by approximately this amount during the period 1955-60. Consumer sovereignty in Colombia was also reduced; had these obligations been paid in dollars rather than in funds tied to food imports, the dollars could have been spent on either food or non-food items.

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[21]Frente Nacional, Un Propósito Nacional: Desarrollo Económico y Bienestar Social, La Política Económica del Frente Nacional, (Bogotá: 1960), pp. 27-28.

[22]One delay in the program of import substitution is already apparent--plantings of cacao are behind schedule and 6-7 years is required to bring trees to maturity.

[23]Without the availability of local currency incurred obligations might have been slightly smaller as Embassy officials might have stressed greater economy in Embassy and Consular operations.

This aspect of the program has at times provoked concern, but any criticism on this basis appears unjustified. First, the United States is no longer in a position to view dollar outflow with unconcern. The persistent gold flows demand some economy in the use of dollars; payment of overseas obligations with local currencies appears to be one reasonably satisfactory method of economizing. Second, these obligations have a yearly value of less than U.S. $2 million. In view of the foreign exchange savings from projects financed with P.L. 480 pesos as well as the benefits from food imports paid for with pesos, there seems little justification for criticizing the program as reducing exchange availability. On balance P.L. 480 has increased exchange availability to the economy and will release larger amounts in the future as loan projects come to fruition.

A related point is the concern that U.S. or international agencies involved with economic growth in the recipient country will view P.L. 480 as a convenient substitute for hard currency aid programs. The U.S. Congress may consider P.L. 480 sufficiently valuable in stimulating development abroad that other forms of economic assistance can be reduced.[24] On the contrary, a good case can be made for the argument that P.L. 480 actually increases the demand for foreign exchange through increased import demand for machinery and equipment needed in development projects financed with local currency loans. On this view, to be effective in promoting development, a substantial P.L. 480 country program should be accompanied by increased hard currency loans or grants.[25]

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[24]Available data do not show this to be the case. Table VI-6 indicates that although the volume of economic assistance varied considerably from year to year, there was no marked decline from the U.S. during P.L. 480 years.

[25]Mikesell has suggested that "man does not live by raw agricultural commodities alone." Similarly, economic development does not occur through the use of local currencies alone. See Raymond F. Mikesell, Agricultural Surpluses and Export Policies, (Washington: American Enterprise Association, February, 1958), p. 33.

Table VI-6. Economic assistance to Colombia by the U.S. government, international lending agencies, and private individuals, 1951-60.[a]

	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
	millions of dollars									
U.S. Government										
ICA (Technical assistance)	0.0	0.7	1.0	1.2	1.4	1.3	1.2	1.3	1.7	1.9
Export-Import Bank (Long-term loans)	2.1	2.6	4.5	0.0	0.6	0.2	0.0	83.7	0.0	25.0
World Bank (Long-term loans)	18.9	25.0	14.35	5.0	20.4	16.5	0.0	2.8	34.2	25.0
Net U.S. Private investment	11.0	20.0	1.0	33.0	16.0	24.0	12.0	-8.0	10.0	n.a.[b]
Total	32.0	48.3	20.85	39.2	38.4	42.0	13.2	79.8	45.9	51.9[c]

[a] Excluding military assistance and P.L. 480 loans.
[b] Not available.
[c] Excluding net private investment.

Source: International Cooperation Administration, Washington, letter from Margo Kranz, Colombia 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 for Reconstruction and Development, The World Bank in Latin America, (Washington: March, 1960), pp. 19-27; IBRD, Press Release No. 633, May 10, 1960, pp. 1 and 3.

A few examples from Colombia will clarify the point. Peso loans are generally employed in acquiring locally-available materials or paying local labor. But most projects also require capital goods which are not available locally and must be imported for dollars. The fertilizer plant required machinery imports valued at U.S. $12 million; equipment imports for the Cartón de Colombia project cost U.S. $4.8 million; the Maizena plant required more than U.S. $1 million of imported machinery. Other lesser examples could be cited but the point is clear--projects financed in part with P.L. 480 funds frequently increase the demand for foreign exchange and only after the project is producing is there a reversing of the situation through import substitution.

The Trading Pattern Impact

Evaluators of Public Law 480 have expressed a justified concern that the program may displace commercial markets of the United States and other countries. Commercial markets of the U.S. frequently have been maintained by explicitly including a required volume of dollar sales in the P.L. 480 agreements. But individual competing countries do not share in such a guarantee and have consequently become more vocal in their protests. This aspect of P.L. 480 bears upon international relations and, perhaps more importantly, the growth and stability of these competing countries.

Although this study is limited largely to examination of program effects within Colombia, some consideration of trading pattern impacts can conveniently be included at this point. The most significant question from the viewpoint of competing countries is how the relative share of their commercial imports has been affected by P.L. 480 shipments.[26]

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[26]Of lesser interest are questions regarding: (1) the share of agricultural imports from the U.S. relative to total agricultural imports; and, (2) agricultural imports as a percent of total imports.

Table VI-7 indicates that the relative share of agricultural imports from the U.S. increased slightly during the P.L. 480 years. But the size of agricultural imports relative to total imports has not changed, on the average, between the periods 1951-54 and 1955-60.

Table VI-7. Colombia: United States agricultural imports as a percent of total agricultural imports; total agricultural imports as a percent of total imports, 1951-60.

	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
Total agricultural imports (millions of dollars)	61.4	58.4	67.8	94.0	77.8	86.2	82.4	66.0	56.9	52.8
Agricultural imports from U.S. (millions of dollars)	27.9	27.9	15.9	30.6	27.3	29.3	33.6	25.6	30.0	27.9
U.S. agricultural imports as a percent of total agricultural imports	45.4	47.8	23.4	32.5	35.1	34.0	40.8	38.7	52.7	52.8
Total imports (millions of dollars)	407.2	414.2	571.3	654.1	665.3	402.9	467.2	399.9	414.3	518.6
Agricultural imports as a percent of total imports	15.1	14.1	11.9	14.4	11.7	14.3	17.6	16.5	13.7	10.2

Source: Consejo Nacional de Política Económica y Planeación, Plan Cuatrienal . . . , op. cit., p. 70; Office of the U.S. Agricultural Attache, Colombian Agriculture, op. cit., p. 22; Departamento Administrativo Nacional de Estadística, Punto Central de Información, Bogotá.

Competing exporters of wheat, flour, cotton, and edible oils are most directly concerned (see Table VI-8).

The Colombian import market for wheat and flour is shared by the United States and Canada. Table VI-8 lists the percentage of total wheat and wheat flour supplied by these two countries during the period 1950-60. A striking feature of the data, particularly for wheat, is Canada's decreasing relative share in total imports and the increasing proportion supplied by the U.S. In 1956, 1957, and 1960, the U.S. was the only exporter of wheat to Colombia. During the pre-P.L. 480 years (1951-54) Canada supplied an average of 56 percent of total wheat imports; the U.S. share was 39 percent. During the P.L. 480 period (1955-60) the U.S. share increased to 89 percent while the Canadian share fell to less than 10 percent.

Similar tendencies are evident for wheat flour but the changes in relative shares are more modest. During the 1951-54 period, Canada's share of total flour imports was 30 percent as compared to the U.S. share of nearly 70 percent. In contrast to the case for wheat, the U.S. was the largest supplier of flour during this period. In the P.L. 480 years, the U.S. share of total flour imports increased to 84 percent while the average yearly proportion supplied by Canada declined to 16 percent.[27]

The cotton import market in Colombia is shared by Peru and the United States, which together supply from 80 to 100 percent of total imports. But, Peruvian and U.S. cotton are not good substitutes for each other--Peruvian cotton is a long-staple fiber; the U.S. product has a shorter staple length. Both Peruvian and U.S. exports to Colombia

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[27]Another comparison lumps together imports of wheat, wheat flour, and semolina--all supplied to Colombia largely by the U.S. and Canada. (There have been no semolina imports through P.L. 480.) Using the same time periods as above, Canada's relative share declined from 52 percent of total wheat and wheat products imports to 14 percent; the U.S. share increased from 46 percent to 83 percent.

declined during recent years as domestic production in Colombia increased. The changes in relative shares for the two countries are smaller than for either wheat or wheat flour. But, as for the above commodities, the U.S. share of total cotton imports has increased--from an average of 53 to 64 percent. The Peruvian share of total imports declined slightly from 34 to 30 percent.

Analysis of the case for edible oils is complicated by the fact that oil imports include a number of different products and come from several countries, each shipping relatively small quantities. However, imports of cottonseed and soybean oil have come almost exclusively from the United States during the period 1951-60. Quantities shipped varied considerably from year to year, apparently because of their substitutability with other oils, but U.S. edible oil imports to Colombia increased substantially since 1955.

A comparison can be made between these edible oil imports from the U.S. and imports of palm oil (including the oil equivalent of copra imports) which originate largely in countries other than the United States. Although the cottonseed and soybean oils are probably preferred in cooking, the other oils do serve as substitutes and thereby make the comparison reasonably useful. Because of the numerous countries supplying oil imports to Colombia it is not particularly useful to determine relative shares for each country. The figures indicate that the U.S. in recent years supplied an increasing proportion of oil imports--from 2 percent in the earlier period to approximately 14 percent in 1955-60. Most of the increase can be attributed to the P.L. 480 edible oil shipments during this latter period. Oils originating outside the U.S. diminished from 98 percent of the total to 86 percent.

Relative versus absolute

The analysis to this point indicates that the United States' relative share of total imports for wheat, wheat flour, cotton, and edible oils

Table VI-8. Relative import market shares of the United States and competing countries for wheat, wheat flour, cotton, and edible oils, 1951-60.

Year	Wheat		Wheat flour		Cotton		Edible oils	
	U.S.	Canada	U.S.	Canada	U.S.	Peru	U.S.	Non-U.S.
	(percent)[a]		(percent)[a]		(percent)[a]		(percent)[b]	
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	261.1	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
Average: 1951-54	38.8	56.1	69.6	30.0	52.8	34.2	2.2	97.8
Average: 1955-60	88.8	9.6	84.2	15.7	63.8	29.5	13.8	86.2
Imports in 1955-60 as percent of 1951-54 imports	745.1	31.6	93.3	37.2	84.3	29.7	857.9	113.5

[a] Expressed as a percent of total imports.

[b] Expressed as a percent of imports of cotton seed, soybean, palm oil, and the oil equivalent of copra imports. (Assuming a 60% oil yield from copra.)

Sources: Office of the U.S. Agricultural Attache, Colombian Agriculture, op. cit., pp. 26-27; DANE, Anuario de Comercio Exterior, 1951-1959, various pages; Instituto de Fomento Algodonero, Información Estadística: Algodón, Oleaginosas, 1959, op. cit., p. 53; Luis Hernando Correa, Manager, Department of Economic Investigations, IFA, Bogota.

has increased, sometimes substantially, during the period 1955-60. But, before indicting P.L. 480 on this basis it is well to note that this relative increase is to be expected if the legislation is fully complied with; i.e., the objective of the law is to supply quantities of farm products in addition to those normally supplied by commercial imports. On this view an increase in relative market shares does not necessarily indicate an encroachment upon the volume of imports supplied in the past by competing countries. The point of the argument hinges upon the distinction between maintaining relative shares of the total import market or merely an absolute yearly volume of shipments. Thus, while Canada may not insist upon a certain percent of total Colombian wheat imports as a "fair share," that country may more justifiably criticize P.L. 480 if the absolute quantities of yearly shipments are reduced.

To determine the extent to which the absolute size of imports has been reduced, average wheat and flour imports for the period 1955-60 are computed as a percent of average imports during the pre-P.L. 480 period, 1951-54 (see Table VI-8). The figures indicate that the absolute size of Canada's markets in Colombia has been reduced. In the case of wheat, imports from Canada during 1955-60 averaged less than 32 percent of average annual shipments during the earlier period. Canadian flour imports were reduced to 37 percent of 1951-54 levels.

This analysis has a weakness if total imports change greatly during the time periods under consideration. If imports decrease greatly over time, a supplying country's exports would also be expected to decrease, but this could not be attributed to P.L. 480. Cotton is a case in point. Peru's share of total cotton imports has not decreased greatly, yet 1955-60 imports are only 30 percent of 1951-54 shipments from that country. These represent the small quantities of long staple cotton

required by the Colombian textile industry. On the other hand, oil imports (including cottonseed and soybean oil, the oil equivalent of copra imports, and palm oil) have increased in recent years. Consequently, 1955-60 oil imports from countries other than the United States are nearly 114 percent of 1951-54 levels. At the same time imports from the United States increased more than eight-fold on the average.

In summary, it would appear that Canadian wheat and flour markets in Colombia have been reduced in both relative and absolute terms. Peruvian cotton shipments to Colombia decreased, as have imports from the U.S., but Peru's relative market share has been affected only slightly. Oil imports increased absolutely from both U.S. and non-U.S. sources while the relative U.S. share of the total market has been increased.

United States Embassy officials in Bogota express the view that although the data coincide, there is no concrete "proof" that the Canadian wheat market in Colombia has been affected by P.L. 480.[28] With regard to dollar purchases, where Canadian sales have also decreased, it is argued that the shift away from Canadian wheat is simply the result of underbidding by U.S. exporters. On the latest INA sales tender (Solicitation M-11-61) the price differential between U.S. and Canadian wheat was approximately U.S. $5 per ton. This raises the question of how much price cutting is consistent with fair market practices; the CCC's capacity to absorb losses undoubtedly give U.S. wheat exports an advantage which Canadian exports do not have.

This price advantage is also a factor in explaining the increase in P.L. 480 shipments since these transactions are consummated as if they were dollar sales. It is also argued that U.S. wheat "salesmanship"

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[28]"Proof" is impossible in the scientific method; only varying degrees of certainty can be achieved.

is becoming more effective in Colombia. As a result, Colombian buyers now realize that lower-priced U.S. hard red winter wheat may be used in place of Canadian spring wheat. The argument that market development work is cause for the shift to U.S. wheat is only partly defensible. Most of the funds used in this work are P.L. 480 pesos. Without P.L. 480 these funds would not be available, market development work on this scale could not have been undertaken, and Canadian market shares would have been less severely affected.

The evidence in Colombia suggests that Canada may be justified in criticizing P.L. 480 as damaging to that country's commercial markets, although an aggressive U.S. price policy on dollar sales has also been a factor. As a result of the program, income to Canadian agriculture is lower to some extent and the government has possibly been forced to divert additional resources into a purchase and storage operation. However, (1) recognizing that P.L. 480 may be beneficial in promoting economic growth in recipient countries, and (2) assuming that other developed countries (e.g. Canada) have an interest in stimulating this development, it is not unreasonable to suggest that competing countries who may have been injured by the program should consider P.L. 480 as a development scheme in which they, indirectly, play a part.

On this view the criticism of P.L. 480 by competing countries is perhaps unjustifiably sharp, particularly if these are well-developed economies which can withstand program effects without serious damage. The strength of this argument is of course considerably weakened in the case of underdeveloped competing countries (such as the rice producers of southeast Asia) whose monoculture economies absorb program effects much less easily.

CHAPTER VII

IMPLICATIONS FOR POLICY

Early sections of this study included general descriptions of the Colombian economy and the Public Law 480 program in that country. Later chapters dealt at some length with the program's influence upon agriculture and the general economy. Remaining is a consideration of how Public Law 480 can be most effective in promoting agricultural and economic growth. This section will deal with this topic--the policy implications of P. L. 480.

The inclusion of a discussion concerning policy implications is based upon the premise that economics (and economists) should be pragmatic as well as theoretical, that description and analysis are merely prerequisites to prescribing action.[1] In contrast to the view that would restrict economics to delineating and discussing policy alternatives, then leaving the task of choosing to an "enlightened" public, it is here suggested that economics abdicates part of its rightful role if it remains aloof from recommending specific policies. If value judgments are explicitly stated, economics can prescribe policies without a sense of overstepping its proper domain.

A basic judgment is that the United States ought to support and promote sound economic development in Colombia even though this might

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[1]Galbraith may have had this point in mind when he suggested that, "The ability to discover deficiencies in a proposal involving social innovation is not--in the absence of suggested alternatives--the most challenging test to which the social scientist or public official can address himself." See John K. Galbraith, "A Positive Approach to Economic Aid," Foreign Affairs Quarterly, (Washington: April, 1961), p. 457.

mean an eventual clash of economic interests. This support should be vigorous and far-reaching with the long-run interests of Colombia a dominant concern and guide. This type of assistance militates against the view which would extend aid only to those industries which are complementary and not competitive with U.S. trade. Similarly, this form of assistance is not compatible with those aspects of Public Law 480 which restrict development of crops possibly competitive with U.S. exports or prohibit local currency use if that use might ultimately be detrimental to U.S. agriculture.

The vigorous and complete support for Colombian development is predicated on the following: (1) A strong assistance program aimed at promoting balanced economic growth will overcome criticism of vacillation and self-interest in U.S. policy; and, (2) A developed economy is also a good trading partner, both in manufactured and agricultural products. If these arguments are accepted as valid, evaluation in P.L. 480 can be made in terms of how it may most effectively stimulate economic growth.

Integration with ongoing development efforts

The resources available to promote economic development in Colombia are severely limited. It is therefore important that every effort be made to employ available resources as effectively as possible. Careful study is required to determine "bottlenecks" to development; then resources must judiciously be applied to overcome these limiting elements. Public law 480 is viewed as a stimulant to economic growth in the recipient country, but it is necessary that commodity imports and resulting local currencies be used most advantageously.

A fundamental point in this regard is that loan activities be carried on under the guidance and direction of a centralized agency responsible for country-wide economic planning. Early Section 104

loans in Colombia can be criticized as not being prefaced by sound economic analysis and not fitting into a more comprehensive development program. The many small loans going to private individuals for varied purposes did not generally contribute to solving bottleneck problems. With the establishment of the National Planning Office in 1958 these shortcomings were largely overcome. Loans became larger in value, smaller in number, and were frequently made to government agencies responsible for specific development projects. Special emphasis was given to directing them into areas where results would be greatest for long-run national welfare rather than shorter-term personal interest. This increased guidance of loan funds should be continued and strengthened, possibly by increased U.S. control and decision-making power with regard to acceptable loan uses.[2]

Previous discussion of the Colombian economy suggested three prevailing characteristics: (1) relatively low agricultural growth and productivity; (2) an abundance of labor relative to capital (i.e., a shortage of capital); and, (3) the perennial imbalance between exchange earnings and import requirements. From these factors stem many problems of the economy including food shortages, ill health and undernourishment, low labor productivity and wages, and substantial unemployment. To be most effective in stimulating growth, policy

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[2]The argument for increased U.S. control of loan uses has been voiced by Bernardo Garcés Córdoba, Executive Director of the Cauca Valley Corporation. Garcés believes United States aid through P.L. 480 is less effective than it might be simply because loan criteria are too lenient, thereby frequently permitting peso use in projects not essential or contributing to sound development. Lauchlin Currie, director of several studies dealing with Colombian development, has expressed similar views.

A counter argument involves two points. Increased U.S. control of loan activities would bring forth some criticism of intervention in Colombia's domestic affairs. More importantly, if the U.S. used its influence vigorously Colombian authorities might well be reluctant to negotiate additional sales agreements or refuse to draw down available P.L. 480 loan funds.

recommendations must take these characteristics into account. If these detrimental factors can be overcome, related problems will be solved.

Raising agricultural productivity

The low productivity of Colombian agriculture is directly responsible for relatively high food prices and expenditure of foreign exchange on agricultural imports. Problems of health and labor productivity are also associated. A high income elasticity for food and rapid population growth suggest that agricultural productive capacity will be heavily burdened in future years to meet consumption requirements. In the absence of substantial growth in the near future, the agricultural sector will exert an increasingly heavy drag upon the economy. Higher technological levels and increased intensity of land use are two suggested proposals for overcoming the productivity problem in Colombian agriculture.

The judicious use of Public Law 480 pesos is required. The low technical skill in agriculture can be overcome by increased emphasis upon agricultural education. Raising technological levels in agriculture is a sound and profitable approach because of the high returns which can be achieved within a relatively short time and the low capital expenditure required. Increased funds for agricultural education appears to be one of the most profitable investments possible in Colombia. Part of this capital could be supplied by P. L. 480 pesos, preferably in the form of grants to the central government. This use of funds assumes that resources are available for this purpose and that monetary authorities are willing to employ the money in this manner. The funds would be earmarked for exclusive use by secondary schools specializing in the training of agricultural technicians. This use of funds is presently a possibility as a result of the 1961 amendment and extension of P. L. 480.

Intensifying the use of the limited quantities of arable land is a second approach to meeting Colombia's agricultural production problems. To the extent that additional labor is utilized in the process (as it generally is), the social problems resulting from unemployment could also be mitigated. Land use patterns can be influenced by P. L. 480 loans, as exemplified by the loan to the Cauca Valley Corporation. Additional encouragement should be given to loans which promote intensive land use. The most important examples are regional irrigation and drainage programs accompanied by appropriate land taxes which force the reclaimed land into agricultural production. Loans use in constructing access roads to new agricultural areas suitable only for grazing may be of value in stimulating meat production but their advisability in terms of immediate effects upon foodstuff production is questionable. The construction of access roads without appropriate tax structure changes poses problems by producing windfall capital gains to adjoining landowners. Geographical destination of loans is also important. The extreme transportation difficulties in Colombia dictate against loans which may promote some intensification of land use but in areas far from consuming markets.

Unemployment and capital shortages

To make effective use of underemployed human resources poses a major problem in agricultural and economic planning.[3] In Colombia

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[3]The existence of a stock of unemployed labor may also be considered a potential blessing. Lewis states: "In one sense the countries which have surplus labor therefore have an advantage over those countries which have not. For the latter countries cannot increase their capital formation without withdrawing labor from producing consumer goods whereas the countries which have surplus labor can increase capital formation at zero cost in other goods. See W. Arthur Lewis, The Theory of Economic Growth, (London: Allen and Unwin, 1955), p. 376.

underemployment is considered substantial in rural areas and unemployment in urban areas has been accentuated by rural-urban population shifts. The solution of these and related social problems requires wise investment planning. Public Law 480 can play a useful role. It is assumed that: (1) P.L. 480 loan funds will continue to be available in Colombia; (2) monetary authorities will be willing to draw upon these funds in lieu of complete reliance upon other sources; and, (3) economic circumstances, as considered in the previous chapter, are suitable for their profitable use. Each of these assumptions appears realistic.

A possibility with regard to industrial loans under Section 104 (e) is restricting peso uses to projects which are relatively labor intensive. This would have the additional advantage of not demanding the large imports of machinery and equipment required in some capital-intensive projects, but would thereby not be conducive to developing the capital goods industry in the country.

Alternatively, the unemployed could be used in labor-intensive community work projects involving payment in kind, as permitted under Title II of P.L. 480. Local material expenses could be met in part by P.L. 480 pesos. Theoretical considerations for this type of program have been developed in other studies.[4] Projects of this nature are not difficult to find in Colombia and can play a valuable part in the country's development. In Nurske's words, "Things like buildings, roads, dams, water works, and land improvements are in the aggregate far more important than the imported machinery and equipment which bulks so large in the imagination of the public."[5]

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[4]See Food and Agricultural Organization of the United Nations, Uses of Agricultural Surpluses to Finance Economic Development . . . , op. cit.; or, Food and Agricultural Organization of the United Nations, Development Through Food; A Strategy for Surplus Utilization, op. cit.

[5]Ragnar Nurkse, Problems of Capital Formation . . . , op. cit., p. 46.

The possible projects in Colombia must be selected on the basis of objectives to be achieved. Community health can be promoted by sewer and water line construction. Reforestation and soil conservation are needed to maintain soil productivity. A great need at present and in the future is additional classroom space. The present classroom deficit totals 30,000 units and is expected to increase by another 57,000 in 1975.[6] Required annual investment is 57 million pesos to cover labor and materials, a figure far in excess of what the Colombian government can provide.

The construction of low-cost housing is another alternative. Despite considerable efforts to provide adequate housing, the need is great and increasing. It is estimated that by 1963 the housing deficit including only cities of more than 10,000 inhabitants will be approximately 275,000 units.[7] The effect upon employment would be similar to that resulting from school construction. However, on the view that the general low level of education constitutes a serious limiting factor to development in Colombia, the school construction projects should be favored.

These projects employing P.L. 480 commodities and pesos are desirable from several points of view. Better health and education are elements of welfare which create a sense of progress even though this may not be adequately reflected in figures showing per capita incomes. The labor intensiveness of these projects aids in mitigating unemployment. Community development projects supply a needed product in an area where private capital is not prone to wonder. Most of these

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[6]Ministerio de Agricultura, Un Programa de Colonización y Parcelación en Colombia, op. cit., p. 24. Colombia ranks 16th among the 20 Latin American republics in number of primary school children enrolled per 1,000 inhabitants. See Plan Cuatrienal . . . , op. cit., p. 39.

[7]Plan Cuatrienal . . . , op. cit., p. 341.

activities use locally available raw materials and therefore do not produce additional drains on foreign exchange reserves. The longer-term impacts of increased educational facilities are of significance to the economy. Finally, these activities complement the programs of community action which have become increasingly well-known and received in Colombia.

Flour imports

Other approaches are possible in utilizing abundant labor resources. A well-used device is requiring imports of agricultural products and other raw materials to be unprocessed to the maximum extent possible, thereby creating employment opportunities in the local processing industries. This principle can also be applied to P. L. 480 imports. Wheat flour imports through P. L. 480 have been modest and certainly no great upsurge in employment would be expected if these imports were replaced by their wheat equivalent.[8] However, in addition to the modest employment effect resulting from smaller flour imports and larger wheat shipments, other benefits would result. The wheat milling industry in Colombia suffers from excess capacity and high fixed costs per unit of output. These costs could be lowered if larger quantities of flour were milled.[9] The increased quantities of milling by-products produced

[8]Those opposed to reducing flour imports might argue the apparent fact that Colombian bakers are reluctant to use domestically-milled flour. This reluctance stems from the poor milling techniques and low quality domestic wheat. A useful project, using P. L. 480 market development funds, is the establishment of milling schools for local millers. This might be expanded to provide scholarships to study modern milling techniques abroad.

[9]Wheat milling capacity in 1960 was more than 3 times flour production for that year. Durham and Seeborg indicate that a flour mill with a daily capacity of 65 tons operates at a fixed cost of 24.5 cents per hundred-weight of flour produced if the mill operated only 2 days each week. If the operating period is extended to five days, fixed costs per unit fall to 9.8 cents. See Roy K. Durham and Edward F. Seeborg, "Requerimientos de Trigo y Harina de Colombia," Informe No. II, Oficina del Agregado Agrícola, (Bogotá: Embajada de los Estados Unidos, 1960), p. 2.

would also supplement supplies of mixed feeds needed by the dairy and poultry industries.

Buying and selling policies of INA

This discussion raises, somewhat parenthetically, questions regarding INA's buying and selling policy for wheat and flour imports. The wide price differential existing between domestic and imported wheat and flour provides INA with a profitable source of income. Most of this money is invested in storage construction, price support programs, and stimulation of agricultural production--all commendable projects and beneficial to Colombian agriculture and the economy.

The source of these funds raises more questions than their use. The practice of obtaining agricultural commodities at low prices abroad, then realizing substantial profits by reselling them at higher domestic prices has been severely criticized.[10] This method of financing permits INA to be completely independent of governmental appropriations but also raises the price of foodstuffs, particularly bread, vegetable oils, and flour. Financing INA's operation in this manner is regressive relative to a system of governmental appropriations where funds originate in income and property taxes. This is true in spite of the fact that bread is too costly to be consumed by the lowest income groups. If U.S. negotiators insisted that INA reduce this markup in future P.L. 480 agreements, the program could have an additional restraining influence upon food prices. Consumption of wheat and wheat products would increase and the health of recipients would be benefitted.

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[10]Representatives of the bakery industry have been particularly insistent in this criticism. Francisco Montoya Isaza, president of a large bakery trade group, commented, "Is it not sad, gentlemen, that our government must bolster its national treasury with large taxes on wheat and flour . . . coming from foreign sources as help to our people?" See Informe del Presidente de la Junta Directiva de ADEPAN al VII Congreso de la Asociación, (Cali: 6 de Abril de 1961), p. 3.

A second question concerns the advisability of promoting wheat production in Colombia with the use of funds originating in the P. L. 480 program. It is generally agreed that the country has few natural advantages in wheat production and that in the absence of strong government assistance, the industry would undergo a painful, perhaps fatal, adjustment. If there is no economical basis for production in Colombia, the continued expenditure of P. L. 480 funds in promotional programs appears questionable. A dynamic view of comparative advantage which emphasizes the rapidly rising costs as output is expanded strengthens the point that additional promotion of wheat production may constitute a wasteful and impractical use of resources. Market development funds could be usefully employed in a study which determines the country's ability to produce wheat at reasonably competitive prices.

The foreign exchange shortage

A recurrent point in this study has been Colombia's balance of payments situation. This problem is directly related to the country's economic development. As industrialization and diversification increased, the pattern of imports has changed slightly but the total volume continues to grow.[11] A great problem of the economy is how to meet the increasing foreign exchange requirements for imports and service of foreign loans and investments.[12] A program of import substitution is

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[11]This change in the pattern and size of imports is evidenced in a comparison of 1959 and 1960 capital goods imports. In 1960 imports of capital goods were valued at 149 million dollars and constituted 31 percent of total imports. The 1959 imports were valued at 115 million dollars and made up 28 percent of all imports. See DANE, "Boletín de Prensa," No. 1, (Bogotá: 8 de Mayo de 1961).

[12]The ratio between foreign debt service and exchange earnings has risen sharply in recent years, thereby reducing still further the relative availability of exchange for imports. This problem is indicated in Table VII-1.

Table VII-1. Colombia: Foreign debt service and exchange earnings in recent years.

Year	Foreign debt service (millions of U.S. dollars)	Foreign exchange earnings	Debt service as a percent of earnings
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 de Gerente a la Junta Directiva, op. cit., p. 157.

being vigorously pursued and a favorable environment for capital imports is encouraged. Both of these approaches have limitations, however. The process of import substitution becomes increasingly difficult since the easiest substitutions in terms of cost and technical know-how have already been achieved. With regard to capital imports it is apparent that private investors and international lending agencies are unlikely to continue to pour capital into a country with a rapidly rising debt service-exchange earnings ratio unless a good possibility of increased exports exists.

Unfortunately, this increase in exchange earnings does not appear to be forthcoming in the immediate future. The low income elasticity (0.55) and price elasticity (-0.25) of U.S. demand for Colombian coffee indicate that exchange earnings for coffee exports can not be expected to increase greatly.[13] Increased coffee exports would drive prices still

[13]These estimates are developed in United Nations, Analysis and Projections . . . , op. cit., p. 3.

lower, further aggravating Colombia's ability to import. Petroleum and banana exports may be expected to increase slightly as well as other less important exchange earners--sugar, cotton, precious metals, etc.

The National Planning Commission is well aware of the significance of this problem and has devoted considerable effort toward suggesting a solution. According to Commission studies, a target growth rate in gross product of 5 percent annually will require an increase in imports from U.S. $460 million in 1961 to U.S. $540 million in 1965.[14] Future exchange earnings will be inadequate to permit this level of imports. The Commission estimates that a yearly average of U.S. $400 million will be available, leaving an annual deficit of nearly U.S. $100 million. In the absence of large capital imports or unexpected increases in exchange earnings the country's economic growth will be restricted.

A recommendation in this regard is that the United States government write off as grants the "loans" made through Sections 104 (e) and (g). As of January 1, 1961, the Colombian government owed the U.S. an estimated 36.7 million dollars as a result of P.L. 480 operations in the period 1955-60.[15] Payment of debt principal and interest is to be made in dollars or, at the option of the Colombian government, in pesos.

The planned repayment schedule through 1970 is shown in Table VII-2. Amortization and interest payments in dollars would absorb nearly U.S. $2.5 million annually. In view of the existing exchange problem, peso repayment would appear most feasible. But this would create a utilization problem for the accumulated currencies. The peso

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[14]Jorge Franco Holguín, Informe al Congreso Nacional, 1960, (Bogotá: Departamento Administrativo de Planeación y Servicios Técnicos, 1960), p. 30.

[15]Banco de la República, XXXVII Informe Anual . . . , op. cit., p. 158.

equivalent of U.S. $18 million is already allocated for U.S. uses (see Table III-4), and it is not at all certain that the United States could productively employ additional local currencies.

Table VII-2. Planned repayment schedule of Public Law 480 loans in Colombia, 1961-70.

Year	Debt on January 1 (1,000's of dollars)	Payment during the year (1,000's of dollars)		
		Amortization	Interest	Total
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, op. cit., p. 158.

Dismissing these obligations to the U.S. would not mean that individual loan recipients would become exempt from repayment. Rather, it is suggested that repayment by recipients be made as stipulated in individual loan agreements, but that proceeds be paid to the Colombian government. Depending upon economic circumstances, these funds could be sterilized or restricted to projects sanctioned by the central planning office and approved by the U.S. government. Thorough economic analysis should precede specific project approval and a vigorous effort should be made to see that projects selected are most conducive to sound economic growth.

CHAPTER VIII

SUMMARY

This investigation is concerned with the operation of Public Law 480 within Colombia. A basic objective is to determine the manner in which Colombian agriculture and the economy have been affected by the inflow of P. L. 480 agricultural commodities. A fundamental consideration is the impact of loans made in local currencies generated through the sale of these products.

The Colombian economy

Colombia is undergoing rapid change as it evolves into a country with considerable industry and a commercialized agriculture. A relatively high investment coefficient in the industrial sector has promoted a faster growth rate there than in agriculture. General economic growth has been restricted by health and educational deficiencies and periodic foreign exchange shortages occasioned by price fluctuations in the principal export commodity, coffee. The foreign exchange problem is particularly troublesome since the Colombian economy is not well-oriented to produce capital and intermediate goods. Agricultural production is restricted by the existing land-use pattern and inadequate capital. Rapid population growth accentuates the production problem in agriculture and makes intensive investment difficult.

Program size and peso use

Colombia has been an active participant in the P. L. 480 program. Five commodity agreements have been signed involving 21 million

bushels of wheat, 71,000 bales of cotton, nearly 2 million pounds of dairy products, 1.6 million pounds of tobacco, and approximately 68 million pounds of fats and oils. Total market value, including transportation, is approximately 75 million dollars. Value of the agreements in Colombian currency is 400 million pesos.

A convenient distinction can be made between pesos allocated primarily for Colombian use and those allocated for U.S. use. Colombian use categories comprise Sections 104 (g) and (e) of P.L. 480. About 74 percent of all pesos in the five sales agreements have been allocated to these two categories. Loans through Section 104 (e) total 23.3 million pesos and have gone largely to pharmaceutical companies and processors of agricultural raw materials. As of March 31, 1961, approximately 107 million pesos have been loaned through Section 104 (g). Emphasis has been placed upon directing these funds into projects which assist agriculture. Water control projects and the chemical fertilizer industry have been the largest beneficiaries.

United States peso uses include the payment of U.S. obligations (the peso equivalent of U.S. $9.8 million) and funds for educational exchange (the equivalent of U.S. $2.1 million). Approximately U.S. $1.5 million have been granted to U.S.-sponsored schools in Colombia. About 5.6 million pesos are allocated to market development activities.

Food donations and barter

The voluntary agency food distribution program in Colombia is one of the largest in Latin America. Since 1955 approximately U.S. $3.5 million of Title III food have been distributed in the country annually. The two agencies currently involved are CARE and Catholic Relief Services. Wheat, rice, wheat flour, cheese, and powdered milk are the most important components in these programs. The CARE operation in Colombia began with a public school feeding program but has expanded

to include hospitals, anti-tubercular centers, and welfare institutions. The current "Food Crusade" program provides food packages to needy families. Since 1958 the CARE program using Title III foods has reached 2.3 million Colombians. The Catholic Relief Service program is organized through ecclesiastical jurisdictions and reached 600,000 beneficiaries daily in 1960. Internal transportation and distribution costs are defrayed by Colombian funds. Beneficiaries are Catholic charitable institutions, needy families, and institutions supported by state or national governments.

Impacts of these programs are diverse. Recipients, because of their unconcern or illiteracy, do not always identify distributed food with the United States. There is general agreement that the health of beneficiaries has been enhanced, although no comprehensive analysis of nutritional impacts has been undertaken. School feeding programs have reduced medical consultations and maintained attendance through the attraction of milk, cheese, and rolls. Nutrition education and expanded charity efforts by other groups are important side effects of these programs.

Program abuse has been limited to instances where recipients sold donated commodities or where these commodities were consumed or sold by local distribution personnel. Minor losses resulted when recipients did not, or could not, read preparation and mixing directions on food packages. Present emphasis is upon preparation prior to distribution when this is possible. Commercial markets have not been harmed since beneficiaries have little or no buying power. Recommendations for program improvement include raising the priority given to Title III food availabilities.

Approximately U.S. $8 million of surplus commodities were shipped to Colombia and U.S. $1.3 million of Colombian platinum moved to the U.S. through the barter program. These operations are not true barter

inasmuch as hard currency transactions are involved. Colombia did not lose dollar platinum sales through this program nor has there been a saving of foreign exchange on these agricultural imports. Some stimulus may have been given to the country's platinum industry.

Agriculture and P.L. 480

Agricultural development in Colombia is closely related to general economic growth. Imports through P.L. 480 averaged less than 10 percent of total agricultural imports and less than 1 percent of the value of domestic agricultural production in the years 1955-60. Public Law 480 wheat and oil imports are large relative to domestic production; cotton imports through P.L. 480 are less significant in this regard. Prices received by farmers have risen substantially for most agricultural products during the P.L. 480 years. The P.L. 480 imports of wheat and flour at favorable terms permitted Colombian government authorities to employ a less-vigorous domestic price policy for wheat. Consequently, there has been some shift from wheat to barley production in the country. Because barley growers had an attractive market for total production and because the wheat-barley shift could be made easily, gross incomes to cool-climate land owners have not been affected.

Domestic agriculture benefitted from promotional taxes levied on P.L. 480 imports and from revenues arising out of buying-selling price differentials. These funds are invested in agricultural production campaigns, construction of storage facilities, colonization, and water control programs. Drainage and irrigation projects have been assisted by P.L. 480 loans of some 37 million pesos. An additional 44 million pesos have gone into chemical fertilizer production. Water control projects are stimulating production by intensifying land use and domestic fertilizer production will reduce the country's dependence upon imports. Some loans have gone to industries closely allied with

agriculture. As consumers of agricultural raw materials, these industries are furnishing producers a stable market for some commodities. Corn, fruit, and vegetable producers have been benefitted.

More than 50 percent of total market development expenditure has been used in stimulating livestock and livestock product imports from the U.S. and demonstrating nutritional values of U.S. farm products. Generally the effectiveness of these programs in increasing commercial U.S. markets in Colombia has been limited by the country's dollar shortage. Resulting benefits to Colombian agriculture include enlarged domestic markets for some agricultural products and an awareness among livestock producers of the advantages of high-quality stock and good management.

Economic development and P.L. 480

Public Law 480 may influence economic growth by restraining price increases of foodstuffs, enhancing health and labor productivity, and conserving foreign exchange. Retail prices for wheat bread and cotton cloth have risen less than other consumer items, but vegetable oil prices increased more rapidly than prices of most foods. The small price increases for bread can be attributed largely to P.L. 480 wheat and flour imports and a 1957 blend price provision restricting the resale markup on these commodities. Public Law 480 oil imports have been small relative to domestic consumption; domestic price behavior has not been greatly influenced by the program. The increase in cloth prices is due to higher farm support prices for cotton; P.L. 480 imports had little impact upon the retail price of this article.

Public Law 480 permitted increased per capita availabilities of wheat at a time when the drop in foreign exchange earnings reduced the country's ability to import this commodity at commercial terms. Edible oil shipments arrested to some extent the downward trend of

per capita consumption due to rapid population increases and lagging domestic production. Calorie intake was increased by an average of 52 calories daily and P.L. 480 foodstuffs have also supplied other nutrients vital to health and high labor productivity. Title III food shipments go to an extremely vulnerable group--destitute families, small children, nursing and pregnant mothers--and thereby influence infant mortality and population growth. This aspect of P.L. 480 has implications for future economic growth, particularly when growth is measured by changes in per capita income.

Public Law 480 has been of value to the Colombian economy because it coincided with the sharp reduction in exchange earnings resulting from the fall in coffee prices. Additional quantities of agricultural products were made available with limited foreign exchange expenditure. To maintain wheat and flour consumption at 1953-54 levels without P.L. 480 would have required an average of 2 million dollars annually in additional exchange expenditure. Smaller exchange savings were permitted by other P.L. 480 imports.

The country's balance of payments is affected by domestic production of items formerly imported but now produced in factories financed in part with P.L. 480 loans. This saving may total 15 million dollars annually when all projects are in full production. Dollar earnings to the country have been reduced by somewhat less than U.S. $2 million annually as a result of paying local U.S. obligations with P.L. 480 pesos. The balance of payments is also affected adversely (temporarily) by increased imports of equipment and machinery needed for the completion of loan projects.

The impact upon competing exporters is a much-discussed aspect of Public Law 480. Exporters of wheat, wheat flour, cotton, and edible oils are most directly concerned in the Colombian case. Although certain conceptual difficulties exist in determining the cause and extent

to which competitors have been harmed, Canada's wheat and flour markets in Colombia were reduced, both relatively and absolutely, during the P.L. 480 years. Some of this shift is attributable to the P.L. 480 program, although more aggressive dollar sales efforts and U.S. pricing policies have also played a role. Peruvian cotton shipments have decreased, as have cotton imports from the U.S., but relative market shares have changed only slightly. Edible oil imports increased absolutely from both U.S. and non-U.S. sources while the relative U.S. share of the total market has been increased.

Policy implications

A basic premise is that the U.S. should lend vigorous support to Colombian economic development efforts. This calls for increased guidance by U.S. authorities of peso uses, more stringent loan criteria, and continued efforts to fit P.L. 480 into a more comprehensive program of general economic planning. Problems of the economy include low agricultural production, unemployment, and capital shortages. The P.L. 480 program is viewed as a device which can aid in meeting these difficulties.

Low agricultural production and the resulting food supply problem require increased technological levels in agriculture and intensified land use. Within a framework of sound monetary and fiscal policies, part of the resources needed for expanded agricultural education programs can be supplied by P.L. 480 peso grants. Public Law 480 pesos should be employed in projects which encourage intensified land use. Well-conceived regional irrigation and drainage programs are examples.

The unemployment problem can be mitigated by embarking upon labor-intensive community work projects with partial compensation through P.L. 480 commodities or pesos derived from their sale. Some local material expenses may also be defrayed by P.L. 480 pesos.

The construction of schoolrooms meets the requirements of being labor intensive and using locally-available materials. In addition, it supplies a product which benefits the long-term growth of the economy.

The imbalance between exchange earnings and import needs poses a difficult problem with no immediate solution. The dependence upon imports for capital goods implies that Colombia's economic growth is directly related to the country's capacity to import. Because dollar repayment of the U.S. $36 million principal would further aggravate the exchange problem, it is recommended that loans made through Sections 104 (e) and (g) be written off as grants from the United States government. Loans would be repaid to the Colombian government with use of funds reserved for fiscal purposes or to projects most conducive to economic growth.

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APPENDICES

APPENDIX A

THE AGRICULTURAL TRADE DEVELOPMENT AND ASSISTANCE ACT OF 1954, PUBLIC LAW 480, 83d CONGRESS

Following the postwar recovery of agricultural production in many countries of the world and the subsidence of hostilities in Korea, United States farm exports were sharply reduced. With the threat of rapidly increasing surplus stocks, legislative action was called for. One of the measures passed during this period of adjustment in U.S. agriculture was the Agricultural Trade Development and Assistance Act, better known as P.L. 480. . . .

As stated in the original act, the purposes of this legislation were, "To increase the consumption of United States agricultural commodities" and "to improve the foreign relations of the United States." It was further declared to be the policy of Congress, "to expand international trade among the United States and friendly nations, to facilitate the convertibility of currency, to promote the economic stability of American agriculture and the national welfare, to make maximum efficient use of surplus agricultural commodities in furtherance of the foreign policy of the United States, . . . , to encourage economic development abroad, . . . , and, to promote collective strength."

To implement these lofty policy objectives three titles were included in the original act: Title I--Sales for Foreign Currency; Title II--Famine Relief and Other Assistance; and, Title III--General Provisions. In an effort to improve the usefulness of the disposal program to developing recipient countries and to overcome criticisms of its temporary and uncertain character, Title IV--Long-Term Supply Contracts--was added in the 1959 extension.

Table A-1. Public Law 480, Title I; uses and administrative agencies of foreign currencies accruing under Title I authorization.

Authority	Currency Use	Responsible Agency
Sec. 104:		
(a)	Agricultural market development	Department of Agriculture.
(b)	Supplemental stockpile	Office of Civil and Defense Mobilization.
(c)	Common defense	Department of State and Defense.
(d)	Purchase of goods for other countries	Department of State (I.C.A.).
(e)	Grants for economic development; Loans to private enterprise	Export-Import Bank of Washington.
(f)	Payment of U.S. obligations	Any authorized U.S. government agency.
(g)	Loans to foreign governments	Department of State (I.C.A.) and Development Loan Fund.
(h)	International educational exchange	Department of State.
(i)	Translation of books and periodicals	U.S. Information Agency.
(j)	American-sponsored schools and centers	Department of State and U.S. Information Agency.
(k)	Scientific, medical, cultural, and education activities	National Science Foundation, Department of State, and other appropriate agencies.
(l)	Buildings for U.S. Government use	Department of State.
(m)	Trade fairs	U.S. Information Agency.
(n)	Acquisition, indexing, and dissemination of foreign publications	Librarian of Congress.
(o)	American educational institutions	Department of State.
(p)	Workshops and chairs in American studies	Department of State.
(q)	Purchase nonfood items for emergency use	Department of State (I.C.A.).
(r)	Audiovisual materials	Department of State and U.S. Information Agency.

Title I--Sales For Local Currencies

A feature of P.L. 480 is the Title I provision for the sale of surpluses for foreign currencies. Possible uses for these currencies are designated in Table A-1. Title I operations are financed through periodic Congressional appropriations to the Commodity Credit Corporation. These funds reimburse the C.C.C. for transactions under this title. Public Law 480 establishes a dollar limit to reimburse C.C.C. for Title I transactions and a termination date through which Title I agreements may be signed. Title I authorizations are shown in Table A-2.

Title I agreements usually are initiated by foreign government requests for available surplus commodities. After analysis of the request by the appropriate programming officers in the U.S.D.A., and taking into account U.S. Embassy and I.C.A. recommendations, the proposed program is reviewed by the Interagency Staff Committee. Negotiations between the foreign government and an Embassy team then begin. After the agreements is signed, the importing country applies to the Foreign Agricultural Service for purchase authorizations which provide for dollar financing of commodity sales. The importing government designates certain banks in the United States and in its own country to participate in the transactions. The C.C.C. issues letters of commitment to the specified U.S. bank to reimburse the bank for payments made to the exporter. Rather than calling on the designated foreign bank for payment of such dollar amounts, the U.S. bank is reimbursed by the C.C.C. The foreign bank pays the value of the sale by depositing local currency to the account of the U.S. government rather than crediting the account of the U.S. bank. The exchange rate is that which the foreign importer would pay for dollars from his bank on the date when the dollars are disbursed by the U.S. bank.

Table A-2. Public Law 480, Title I; congressional dollar appropriations for C.C.C. reimbursement.

Authority	Approved	Amount Added	Terminal Date
Public Law 480, 83d Congress	July 10, 1954	$700 million	June 30, 1957
Public Law 387, 84th Congress	Aug. 12, 1955	$800 million	June 30, 1957
Public Law 962, 84th Congress	Aug. 3, 1956	$1.5 billion	June 30, 1957
Public Law 128, 85th Congress	Aug. 13, 1957	$1.0 billion	June 30, 1958
Public Law 931, 85th Congress	Sept. 6, 1958	$2.25 billion	Dec. 31, 1959
Public Law 341, 86th Congress	Sept. 21, 1959	$3.00 billion	Dec. 31, 1961
Public Law 28, 87th Congress	May 4, 1961	$2.00 billion	Dec. 31, 1961
	Total appropriations	$11.25 billion	

Title II--Famine Relief and Other Assistance

This title, until recently, placed major emphasis upon the use of surplus commodities to furnish emergency assistance in time of famine or in meeting other extraordinary relief requirements. In May, 1960, Title II was broadened to facilitate the use of surplus agricultural commodities to promote the economic development of underdeveloped areas. This is accomplished by authorizing surplus foods to be used as partial compensation for community work projects, a program currently underway in a small number of countries. Under Section 202 of this title, as amended, the President may authorize the granting of surplus agricultural commodities to friendly governments or voluntary relief agencies, taking the precautionary measures necessary to insure that these grants will not displace or interfere with sales made under other provisions of P.L. 480. Title II appropriations through 1961 total $1.4 billion. These appropriations may also be used in payment of ocean freight costs and foreign donations under Title III.

Title III--General Provisions

This title provides for domestic and foreign donation of surplus agricultural commodities to eligible recipients including school children, needy persons, and charitable institutions. Section 303 of Title III provides for the barter of surplus agricultural commodities for materials not produced domestically, not as prone to storage deterioration, and which can be stored at less cost. It also permits barter for materials, goods, or equipment needed in foreign economic and military assistance programs or required in off-shore construction programs.

Although barter was authorized under the C.C.C. Charter Act of 1948, barter agreements were modest in scope during the years prior to enactment of P.L. 480. Under P.L. 480 barter operations expanded rapidly, reaching $400 million in 1956-57. Protests by U.S. and foreign

exporters, who insisted the program was having deleterious effects upon their commercial sales, led in 1957 to significant program modification and reduced volume. Total value of agricultural commodities bartered under P.L. 480 authorization through 1961 is $1.34 billion.[1]

Title IV--Long-Term Supply Contracts

This amendment to P.L. 480 was passed in 1959. The purpose of Title IV is:

> To utilize surplus agricultural commodities . . . to assist the economic development of friendly nations by providing long-term credit for purchases of surplus agricultural commodities for domestic consumption during periods of economic development so that the resources . . . of such nations may be utilized . . . for . . . domestic economic development without jeopardizing meanwhile adequate supplies of agricultural commodities for domestic use.[2]

Under this title the U.S. Government may enter into agreements with other friendly nations for delivery of U.S. surplus farm products for periods up to 10 years. Credit periods of up to 20 years are permitted with payment and interest to be made in dollars. The interest rate is limited to the cost of funds to the U.S. Treasury.

The Title IV amendment is aimed at quieting criticism by recipient countries who insisted that P.L. 480 had not previously permitted maximum utilization of surplus commodities in development programs because of short-term extensions and uncertainty of commodity supply. An advantage of this amendment is the guarantee that surplus commodities will be supplied for periods of up to 10 years. Underdeveloped countries may now make specific provision in their development programs for the

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[1]U.S., Congress, House, The 14th Semiannual Report On Activities of the Food-For-Peace Program . . . , op. cit., p. 47.

[2]U.S., Congress, Public Law 480, Title IV, Section 401. Title IV was added by Public Law 86-341, approved September 21, 1959.

continued inflow of U.S. farm products. This title permits the credit sale of agricultural products to hard currency countries who are not eligible under Title I. Through mid-1961, no Title IV agreements had been negotiated although several "pilot project" countries were chosen for gaining experience in this new phase of P.L. 480 operations.

Public Law 480 exports, 1954-60

Public Law 480 has been influential in maintaining U.S. agricultural exports at relatively high levels. Farm exports under this law accounted for 26 percent of total agricultural exports since 1954. Table A-3 indicates the proportion which P.L. 480 exports were of total agricultural exports during past years.

Table A-3. Exports of U.S. farm products under P.L. 480 compared with total exports of U.S. farm products, by fiscal years.

	1954-55 and 1955-56	1956-57	1957-58	1958-59	1959-60	1960-61[a]
	(millions of dollars)					
Public Law 480						
Title I	512	909	659	725	825	932
Title II	174	88	92	56	65	146
Title III						
Barter	423	401	100	132	153	132
Donations	319	165	173	131	104	145
Total	1,428	1,563	1,024	1,044	1,147	1,355
Mutual Security exports[b]	805	394	227	210	167	186
Other exports[c]	4,407	2,771	2,752	2,465	3,213	3,359
Total exports	6,640	4,728	4,003	3,719	4,527	4,900
Public Law 480 exports as percent of total exports	22	33	26	28	25	28

[a] In fiscal 1961 P.L. 480 exports represented two-thirds of all wheat and rice exports, more than fifty percent of all cottonseed and soybean oil exports.

[b] Foreign currency sales under Secs. 402 and 550, and economic aid.

[c] Unassisted commercial transactions, exports with assistance in the form of export payments, short and medium term credit, and sales of Government-owned commodities at less than domestic market prices.

Source: U.S., Congress, House, The 14th Semiannual Report on Activities of the Food-For-Peace Program . . . , op. cit., pp. 5-6.

APPENDIX B

PUBLIC LAW 480 IMPACT ON INVESTMENT, EMPLOYMENT, AND PROCESSORS

Some topics of interest and relevance to the study cannot be fully treated because of procedural difficulties, inadequate data, and time limitations. As a consequence, conclusions are tentative and fragmentary. Some of these considerations may best be treated in a brief appendix--out of the main body of the study but yet available for examination.

Investment

An important topic involves investment and employment resulting from the P.L. 480 program. Direct and induced investment may be a significant program contribution since this factor also affects employment and income. During the P.L. 480 years direct peso investment through 104 (e) and (g) loans totaled 131 million pesos. This loan activity was heavily concentrated in the years 1958-60.

Two types of secondary investment can be considered. One represents additional funds needed to complete a project partially financed with P.L. 480 pesos. In Colombia P.L. 480 loans supplied only a part of the funds required in individual projects. This fraction for 104 (e) loans usually ranged from one-third to one-half. Induced investment funds frequently were commercial bank loans or private capital of loan recipients. Assuming P.L. 480 funds met one-half of project costs for both 104 (e) and (g) loans, induced investment would equal an additional 130 million pesos.

A second type of investment induced in part by P. L. 480 loans takes place in industries related to or complementary with the loan project. Investment in the fertilizer plant stimulates demand and investment in industries supplying chemicals and electric power. Investment in access roads and irrigation projects encourages benefited landowners to undertake additional investment and intensify land use. Part of the CVC loan financed the distribution system for the electrification program. As a result of increased demand for concrete utility poles, two new factories sprang up in the Cali area to produce these articles.

Employment

The employment effect is largely limited to projects from local currency loans and induced investment, although some employment was also 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 Colombian and U.S. personnel.

Employment opportunities created by loan activities are of two general types. One is temporary employment created in project planning and construction. The Abbott pharmaceutical project employed 800 persons in plant construction. The Cauca Valley Corporation employed 600 persons, 200 of these on construction of power transmission lines. 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 position in the finished project. An estimate of the number of positions created can be

made from 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 could be determined. It was estimated that for these loans each $50, 300 (pesos) invested provided permanent employment for one full-time employee. Assuming the same employment-investment ratio for 104 (g) loans, total P. L. 480 loans created permanent employment for approximately 2, 600 people.[1]

A third type of employment is created in industries servicing the particular P. L. 480 loan project. It is the additional employment in industries supplying project construction materials and raw materials for utilization by the completed project. This type of employment may be important in terms of jobs created but most difficult to estimate.

Processing industries

The inflow of agricultural raw materials produces effects upon industries which process and distribute them. These effects may include creation of additional employment and plant expansion. Two difficulties arise in attempting to determine this influence--lack of adequate statistics and the inability to positively attribute any occurring change to P. L. 480.[2] 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, the cotton textile industry. Some additional stimulus

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[1]This analysis assumes that the 104 (g) 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.

[2]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 operation. No detailed statistical information regarding industry is available for the years beyond 1958.

is also given to distributors, wholesale and retail merchants of these products, but these effects are likely to be modest.

Wheat flour mills. Flour milled from P.L. 480 imports represented 19 percent of total flour produced in Colombia during the period 1955-60.[3] Flour production is carried on 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 (through 1958) except in 1957 when investment totaled 5.1 million pesos.[4] 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.

Bread bakeries. Public Law 480 wheat and flour imports have been of a type suitable for bread production. These shipments supplied 20 percent of all bread flour consumed in the years 1955-60. 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

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[3]Ministerio de Fomento, "Trigo, Harina, y Pastas Alimenticias," Rama Técnica, Informe No. 4, (Bogotá: Junio de 1961), Cuadros IV, VI; Gráfica No. 4.

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

family enterprises employing less than 10 persons each. Because of the numerous small producing units, reliable statistics are difficult to obtain. Available data suggest bakery employment in 1958 was lower than in 1953.[5] 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.

Cotton textile industry. The Colombian textile industry is modern and efficient. Cotton 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. Public Law 480 cotton imports averaged 11 percent of total mill consumption in 1955-58. These imports were discontinued after 1958. New industry investment averaged 42 million pesos annually in the period 1956-58. Estimates indicate 1958 mill employment is less than 3 percent above 1952 levels.[6] Public Law 480 probably has had very little effect upon the growth of this industry.

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[5]Ibid.

[6]DANE, Industrial Census of 1952 and the 1958 Sample Surveys. See footnote two of this appendix.

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