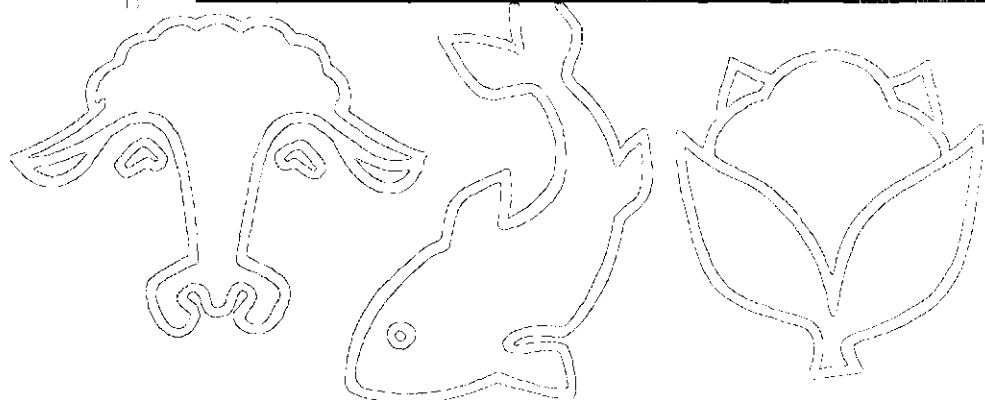


**THE SELECTIVE EXPANSION
OF AGRICULTURAL PRODUCTION
IN LATIN AMERICA**



UNITED NATIONS



FOOD AND AGRICULTURE ORGANIZATION

THE SELECTIVE EXPANSION OF AGRICULTURAL PRODUCTION IN LATIN AMERICA

**Joint report of the Economic Commission
for Latin America and the
Food and Agriculture Organization
of the United Nations**

UNITED NATIONS, 1957

E/CN.12/378/Rev.2

February 1957

UNITED NATIONS PUBLICATION

Sales No.: 1957. II.C. 4

Price: \$U.S. 0.80; 5/6 stg.; Sw. fr. 3.50
(or equivalent in other currencies)

EXPLANATION OF SYMBOLS

The following symbols have been used throughout this report in English:

Two dots (..) indicate that data are not available or are not separately reported

A dash (—) indicates that the amount is nil or negligible

A full stop (.) is used for decimals

A comma (,) is employed to distinguish thousands and millions

A slash (/) indicates a crop year, e.g. 1952/53

References to "tons" indicate metric tons, and to "dollars" United States dollars,
unless otherwise stated

Minor discrepancies in totals and percentages are due to rounding

TABLE OF CONTENTS

	<i>Page</i>
FOREWORD	xi
EXPLANATORY NOTE	xii
CHAPTER I. GENERAL REVIEW OF AGRICULTURAL DEVELOPMENT IN LATIN AMERICA..	1
1. Structural changes in Latin America's economy.....	2
2. Effects of structural changes.....	3
3. The principle of selectivity in agricultural expansion.....	5
4. Future development and programming.....	6
CHAPTER II. AGRICULTURE AND OVER-ALL ECONOMIC DEVELOPMENT.....	8
1. Gross income and investment.....	8
2. Active population	10
3. Comparison with other regions.....	11
4. The situation in some countries of the region.....	12
5. Importance of agriculture for the region's balance of payments.....	13
CHAPTER III. EVOLUTION OF AGRICULTURAL PRODUCTION.....	14
1. Mexico and Central America.....	15
2. The Caribbean zone.....	17
3. The tropical zone of South America.....	17
4. The temperate zone of South America.....	18
CHAPTER IV. THE DOMESTIC SUPPLY AND DEMAND FOR AGRICULTURAL COMMODITIES..	20
1. General situation	20
2. Situation in some countries of the region.....	23
(a) Argentina	23
(b) Brazil	24
(c) Colombia	25
(d) Chile	25
(e) Mexico	25
3. Levels of food consumption and nutrition.....	26
CHAPTER V. FOREIGN TRADE IN AGRICULTURAL PRODUCTS.....	28
1. General situation	28
2. Situation of selected countries in the region.....	29
(a) Argentina	29
(b) Brazil	30
(c) Chile	30
(d) Colombia	30
(e) Cuba	30
(f) Mexico	30
(g) Peru	30
(h) Uruguay	31
(i) Venezuela	31
3. Intra-regional trade in agricultural commodities.....	31

	<i>Page</i>
CHAPTER VI. TRENDS, PRODUCTION POLICIES AND SURPLUSES IN RELATION TO SELECTED MAIN COMMODITIES	34
1. Wheat	34
(a) Production policy in importing countries.....	34
(b) Surplus problems	38
2. Maize	39
(a) General considerations	39
(b) Surplus problems	40
3. Rice	40
(a) General considerations	40
(b) Surplus problems	41
4. Sugar	42
(a) Production in importer countries.....	42
(b) Surplus problems	44
5. Cotton	45
(a) General considerations	45
(b) Surplus problems	46
6. Coffee	47
(a) The abnormal 1954 coffee-year.....	47
(b) Estimated production in Latin America.....	48
(c) Stabilizing measures	50
7. Meat	50
(a) Production trends	50
(b) Unit yield and rate of slaughter.....	51
(c) Supplies and prices.....	53
8. Milk	54
9. Wool	55
(a) Production and supply trends.....	55
(b) Prices and exports.....	56
10. Fish products	56
11. Wood products	57
(a) Production trends	57
(b) Basic forestry problems.....	59
CHAPTER VII. PRODUCTION AND DEMAND PROSPECTS FOR AGRICULTURAL PRODUCTS	60
1. General prospects	60
2. Additional remarks on the future programming of agriculture.....	61

Annexes

I. Report of the Rapporteur of Committee IV on the Economic Problems of Agriculture adopted by the Economic Commission for Latin America at its Sixth Session, Bogotá, August-September 1955.....	63
II. Text of the resolutions relating to agriculture adopted by the Economic Commission for Latin America at its Sixth Session, Bogotá, August-September 1955..	67

Index of tables

<i>Table</i>	<i>Page</i>
Chapter I	
1. Latin America: Foreign trade in agricultural commodities.....	4
Chapter II	
2. Latin America: Gross income by activities.....	8
3. Latin America: Composition of stock of capital by activities.....	8
4. Latin America: Fixed stock of capital per gainfully employed person.....	9
5. Latin America: Net annual investment coefficients by sectors.....	9
6. Latin America: Imports of agricultural machinery as a percentage of imported capital goods in selected countries.....	10
7. Latin America: Tractor imports in selected countries.....	10
8. Latin America: Active population by sectors.....	11
9. Latin America: Gross income per gainfully employed person.....	11
10. United States: Gross income and fixed capital invested by activities, total and per active person, 1948.....	11
11. Latin America: Growth of the gross product by sectors in selected countries....	12
12. Latin America: Distribution of the gross product by activities.....	12
13. Colombia: Indices of gross product and fixed capital invested, by activities and per active person.....	13
14. Percentage of agricultural over total exports in Latin America.....	13
Chapter III	
15. Latin America: Indices of agricultural production.....	14
16. Indices of agricultural production per capita and per sub-region.....	15
17. Latin America: Percentage composition of agricultural production.....	16
18. Per capita agricultural production in Mexico and Central America.....	17
19. Mexico: Area and yields for selected crops.....	17
20. Per capita agricultural production in the Caribbean area.....	17
21. Sugar production in the Caribbean area.....	18
22. South America: Per capita agricultural production in the tropical zone.....	18
23. Brazil: Area and yields of selected crops.....	18
24. South America: Per capita agricultural production in the temperate zone.....	19
25. Argentina: Areas and yields of selected crops.....	19
Chapter IV	
26. Latin America: Indices of supply and per capita income.....	21
27. Latin America: Terms of trade index by activities.....	21
28. Latin America: Index of per capita supplies of selected agricultural commodities	22
29. Latin America: Indices of the supply of agricultural commodities in the sub- regions	22
30. Argentina: Gross per capita supplies of selected agricultural commodities.....	23
31. Argentina: Indices of gross disposable income and gross per capita supplies....	24
32. Brazil: Indices of per capita supply of some agricultural commodities and of disposable per capita income.....	24
33. Brazil: Per capita supplies of selected agricultural commodities.....	24
34. Colombia: Per capita supplies of some agricultural commodities.....	25
35. Colombia: Indices of agricultural supplies and disposable income per capita....	25

<i>Table</i>	<i>Page</i>
36. Chile: Per capita supplies of selected agricultural commodities.....	25
37. Chile: Indices of per capita supplies for some agricultural commodities and of per capita disposable income.....	25
38. Mexico: Per capita supplies of agricultural commodities.....	26
39. Mexico: Indices of per capita supply of agricultural commodities and of per capita disposable income.....	26
40. Latin America: Food supplies available for human consumption.....	26
41. Latin America: Calorie and protein content of food supplies.....	27

Chapter V

42. Latin America: Exports and imports of agricultural commodities.....	28
43. Latin America: Indices of the quantum of exports and imports of selected commodities	30
44. Latin America: Share of intra-regional trade in exports and imports of agricultural products	31
45. Latin America: Composition of intra-regional trade in agricultural products..	31
46. Latin America: Share of agricultural products in total intra-regional trade....	31

Appendix

<i>Table</i>	
I. Latin America: Agricultural exports and imports.....	32
II. Latin America: Agricultural export and import indices.....	33

Chapter VI

47. Latin America: Net supplies of wheat in countries with insufficient production..	35
48. Latin America: Supply trends and imports of wheat in five countries with insufficient production	35
49. Latin America: Trends in cultivated acreage and yields for five countries with insufficient production, as compared with Argentina.....	37
50. Latin America: Domestic and import prices per ton of wheat in four Latin American countries, 1949-53	37
51. Latin America: Comparison between the average annual expansion of production and of area under wheat in five countries with insufficient production.....	37
52. Latin America: Comparison of regional and world production and exports. Situation of stocks.....	38
53. Latin America: Net imports and exports of wheat.....	39
54. Latin America: Cultivated area, yields and production of maize and other cereals	39
55. Latin America: Comparison of regional and world maize production and exports. State of feed grain stocks.....	40
56. United States: Production, exports, apparent consumption and stocks.....	41
57. Latin America: Composition of regional and world rice production and exports. State of stocks.....	41
58. Latin America: Supply and import trends for sugar in eight countries.....	42
59. Latin America: Net sugar supplies in eight countries.....	43
60. Latin America: Annual rates of growth of sugar production and total agricultural production in given countries.....	43
61. Latin America: Domestic and import sugar prices per ton in three countries....	44
62. Latin America: Regional and world production and exports of raw sugar. State of stocks	45
63. Production, exports and stocks in Cuba and other countries.....	45
64. United States: Cotton prices.....	46
65. Latin America: Comparison with world production and exports of cotton. State of stocks	46
66. United States: Cotton production and exports.....	47
67. Latin America: Average monthly quotations for Santos 4 coffee on the New York market during the months indicated.....	47

<i>Table</i>	<i>Page</i>
68. Latin America: World and regional exports, United States imports and coffee prices on the New York market.....	48
69. Brazil: Coffee available for export.....	49
70. Latin America: Real and estimated coffee production from 1948 to 1954 and projections for 1958.....	49
71. Latin America: Animal stocks.....	51
72. Latin America: Meat production by sub-regions and per capita production indices	52
73. Latin America: Meat production by species.....	52
74. Latin America: Meat yields per head of cattle.....	52
75. Latin America: Rate of cattle slaughter in selected countries.....	53
76. Latin America: Per capita meat supplies by sub-region.....	53
77. Latin America: Foreign trade in meat.....	53
78. Latin America: Indices of prices for meat and other foodstuffs in selected countries	54
79. Latin America: Per capita production and supply of milk in selected countries..	55
80. Latin America: Milk imports and exports.....	55
81. Latin America: Production of wool.....	55
82. Latin America: Wool supplies and foreign trade.....	56
83. Wool prices in specific countries.....	56
84. Latin America: Total catch and landings of fish, crustaceans, molluscs, etc., 1938, 1947-53	57
85. Forested area and roundwood removals in the world.....	57
86. Latin America: Removals for fuelwood and industrial use.....	58
87. Latin America: Production of sawnwood.....	58
88. Latin America: Production of plywood.....	58
89. Latin America: Production of chemical and mechanical pulp.....	58
90. Latin America: Wood exports.....	58

Chapter VII

91. Latin America: Production, demand and trade prospects for agricultural products	61
92. Latin America: Production estimates for 1956/57 and progress made up to 1952-54	61
93. Latin America: Indices of food production, estimates for 1956/57 and progress made till 1952-54 in the various sub-regions.....	61

Index of figures

<i>Figure</i>	<i>Page</i>
I. Latin America: Indices of stock of fixed capital and gross income by active person and by economic sectors, 1954.....	12
II. Latin America: Gross product growth by economic sectors in several countries	13
III. Latin America: Indices of agricultural production.....	14
IV. Latin America: Indices of per capita agricultural production by sub-regions..	15
V. Latin America: Indices of per capita supplies and income.....	20
VI. Latin America: Indices of the terms of trade by activities.....	21
VII. Latin America: Indices of cost of living and foodstuffs retail prices in several countries	23
VIII. Latin America: Indices of gross exports and imports and net exports of agricultural products	29
IX. Latin America: Supplies, production and net imports of wheat in five countries with insufficient production	36
X. Latin America: Supplies, production and net imports of sugar in eight countries	43
XI. Coffee: Average monthly quotations for Santos 4 on the New York market..	47
XII. Latin America: Trends in the production of coffee.....	49
XIII. Latin America: Supplies, production and net exports of meat.....	51
XIV. Latin America: Indices of meat and foodstuffs prices in several countries....	54
XV. Latin America: Production, demand and trade prospects for agricultural products	60

FOREWORD

The present document is a result of the joint work of the Food and Agriculture Organization of the United Nations and the Economic Commission for Latin America.¹

Under the terms of resolutions approved at the seventh session of the FAO Conference, held in 1953, consultative regional meetings were to be held, to give the governments of the different regions of the world an opportunity to appraise their agricultural policies and programmes in the light of the world situation, particularly in connexion with the existence of agricultural surpluses. Since a Latin American meeting of this kind was scheduled for the present year, and, moreover, since the sixth session of ECLA was to be held in Bogotá, the two organizations thought it advisable that the FAO consultative meeting should be incorporated with the Agricultural Committee of the ECLA session. This would have the further advantage of permitting discussion not only of specific agricultural problems but also of those arising from its relationship to the over-all economy.

¹ The preparation of this report has basically been the responsibility of the Head of the Joint ECLA/FAO Programme and of a special consultant engaged by FAO for this purpose. They have at all times been able to rely on the active co-operation of other staff members of both organizations.

Although this document has been prepared with the aim of being as complete as possible in itself, it represents an integral part of all the documentation prepared for the Bogotá Conference and is in particular complementary to the *Economic Survey of Latin America, 1954*.²

It must also be emphasized that this report should be regarded merely as a working paper and does not constitute an exhaustive analysis of Latin America's agricultural situation. Such an analysis would have required much more time than was available. Further, it should be noted that some of the statistical series on which the analysis has been based do not correspond exactly to those used in the preparation of other ECLA documents, for, while the latter cover only the twenty Latin American Republics, the present study refers to the whole geographical region known as Latin America, including non-self-governing territories. In no case, however, are there significant discrepancies in trends or general conclusions between the analyses based on the different series.

² See E/CN.12/362/Rev.1, United Nations publication, Sales No.: 1955.IJ.C.1.

EXPLANATORY NOTE

For the purposes of this report and for a better understanding of the agricultural situation, Latin America has been subdivided on a geographical basis into four sub-regions. Alternative classifications (e.g., by degree of economic development) were considered, but the subdivision chosen seemed most suitable, as it has the advantage of grouping countries with similar types of climate, which in turn determine to a large extent the predominant types of agricultural production. It is not, of course, intended to imply that all the countries grouped together have exactly the same characteristics.

These sub-regions are as follows:

1. *Mexico and Central America*—Mexico, Guatemala, El Salvador, Honduras, British Honduras, Nicaragua, Costa Rica, and Panama.
2. *Caribbean Area*—All islands in the Caribbean, including Cuba, Haiti, the Dominican Republic, Puerto Rico and the British, French, and Netherlands West Indies.
3. *Tropical Area of South America*—Colombia, Venezuela, Ecuador, Peru, Bolivia, Brazil, and the three Guianas.
4. *Temperate Area of South America*—Paraguay, Uruguay, Argentina, and Chile. (Although most of Paraguay lies within the tropics, the most developed area is located south of the Tropic of Capricorn.)

Chapter I

GENERAL REVIEW OF AGRICULTURAL DEVELOPMENT IN LATIN AMERICA

There is no doubt that Latin America is reaching a crucial point in its agricultural development, owing to several factors which have been exerting increasing influence since the Second World War. It is therefore of great importance that the Latin American countries should now exchange views on the best way to approach the future agricultural development of the region, not only in relation to agriculture itself but also to the role it should be assigned in over-all economic development. It is common knowledge that because agriculture is one of the structural supports of a national economy, its situation is both a cause and an effect of present or future development in other sectors of the economy. Furthermore, owing to the close interrelationship between the various countries of the world, the agricultural evolution of any of the countries is influenced by the agricultural development or the general economic growth of the others. The more important the country within the over-all world economy, the stronger this influence will be.

The FAO Conference may be regarded as an international forum where all these problems are widely discussed from the point of view of the interdependence of nations, so that more accurate conclusions can be established to solve agricultural problems at the world level. So that its recommendations may be implemented, however, not only must the FAO Conference receive the support of its various member States, but also the countries of specific regions of the world, which may have similar development patterns and mutual relationships arising from geographical proximity, should hold regional meetings to discuss ways of implementing these recommendations and to give fresh inspiration to the Conference itself when it is next convened.

At its 1953 session, the FAO Conference faced a problem which had not existed prior to that date. After the Second World War, the primary interest of all countries, whatever their degree of development, was centred on the restoration of pre-war production levels, which had been seriously affected by hostilities in most regions of the world; Canada and the United States, where production expanded to an unusual degree, had been notable exceptions. Until 1953, therefore, the fundamental task of FAO had been to foster agricultural expansion in order that previous levels might be regained, and, for this purpose, to collaborate with governments to the utmost of its ability. Individual countries, moreover, were also intent on raising their production, either to meet the domestic demand for farm produce or to dispose of exportable surpluses which could be used to meet the unsatisfied demand of other countries. The rapidity with which production could be increased in the various countries was, naturally enough, strictly dependent not only upon the availability of unexploited agricultural resources but also upon the degree of tech-

nological development. Thus, in some regions of the world, production expanded at a much faster rate than in others, and, consequently, stocks that were difficult to sell began to accumulate. The low purchasing power of the peoples of less developed countries prevented them from acquiring these surpluses, which thus could find no outlet, and at present constitute a serious burden on the world market.

It was for this reason that the FAO Conference was forced in 1953 to adopt recommendations warning governments of this situation and urging that it be duly considered in the preparation or revision of their agricultural development plans. The new policy no longer aimed at the indiscriminate expansion of agricultural production, which might lead to a new and more dangerous accumulation of agricultural surpluses, but at "selective expansion" with a view to fostering those types of production which would not aggravate the problem and which would, at the same time, help to meet basic consumer requirements.

As a matter of fact, as stressed later in this document, the combined production-consumption approach is really the essential point of the recommendations of the FAO Conference. Failing such an approach, the expansion of production would be likely to encounter difficulties already experienced in the past. Two procedures were adopted in order to put this recommendation into effect. Firstly, it was suggested that the nations directly affected—and FAO organizations such as the Committee on Commodity Problems and a special consultative Subcommittee on Surplus Disposal, with headquarters in Washington—should keep a constant watch on the situation of several commodities in excess supply. Secondly, to promote the principles of selective agricultural expansion, regional consultative meetings were convened in the regions of the world most concerned, that is, the Far East, the Near East and Latin America. This year the Latin American meeting will be held in conjunction with the sixth session of the Economic Commission for Latin America, so that the agricultural development prospects for the region may be analysed both from the point of view of agriculture itself and in relation to general economic development.

The current state of Latin America's agriculture and the importance of this branch of production in relation to other sectors of the economy is analysed in the following sections. A brief study will also be made of the effects of national policies in relation to the main products and of the region's possible contribution to the accumulation of agricultural surpluses. Before entering a detailed analysis of these topics, however, it is advisable to present an over-all picture, in order to give as precise an idea as possible of the interrelationships between the various factors to be examined.

1. STRUCTURAL CHANGES IN LATIN AMERICA'S ECONOMY

Studies of the main aspects of the region's general economic development made by the Economic Commission for Latin America since its establishment, clearly show that remarkable changes have taken place in the structure of Latin America's economy, particularly since the Second World War.

Basic dynamic factors behind these changes are: (a) the need to create new sources of income for the rapidly increasing population; and (b) the desire to improve the existing low levels of per capita income. This is why certain sectors of the economy, where productivity is high, have expanded in the last few years. Some countries, such as Argentina, Brazil and Chile, have concentrated their efforts on the development of industry and energy. Certain types of heavy industry, such as the steel mills of Volta Redonda in Brazil, Huachipato in Chile and Paz del Rio in Colombia, have also been developed. At the same time, it has been necessary to maintain a highly accelerated pace in the building industry and in services, both public and private.

This state of affairs is, of course, natural in countries undergoing a rapid process of development and it may therefore be understood that agriculture should grow at a slower rate than other sectors of the economy. Nevertheless, a certain disequilibrium has appeared, because either the evolution of agriculture or that of other sectors of the economy has not progressed at a satisfactory rate.

Excluding this last case and confining the discussion to the weak points of agricultural production, the analysis made in this document, like other papers prepared by FAO and submitted at previous regional meetings, shows that, as a general rule, the development of Latin America's agriculture has not kept pace with demographic growth.

The indices which appear in another part of the text indicate that, on the average, aggregate agricultural production between the pre-war period and 1954/55 expanded by 35 per cent, but that the average per capita figure declined by 8 per cent during the same period. This, however, as will be seen later, is not true for all countries nor for all products, the over-all index having been particularly affected by the inadequate development of animal production.

The share of gross income accruing from agriculture in Latin America also decreased, falling from 30 to 27 per cent between 1940 and 1954.¹ The average reduction naturally varies for individual countries. According to calculations to be given later, a comparison of the pre-war figure with the average for 1950-54 reveals that the gross income derived from agriculture declined from 21.1 to 16.6 per cent, in terms of national income, in Chile; from 23.7 to 19.0 per cent in Mexico; from 27.6 to 19.5 per cent in Argentina; from 39.7 to 28.7 per cent in Brazil; and from 48.6 to 37.7 per cent in Colombia. In several Latin American countries—such as the three first-mentioned—agricultural income has lost its predominant position as the main source of wealth.

Simultaneously structural changes in the labour force of the region have occurred, and although there is still a prevalence of rural over urban active population, the former's share in the aggregate is declining. These modi-

fications in the composition of the labour force have been accompanied by increases in labour productivity.

One of the causes of the decrease in the relative importance of agricultural production—and, at the same time, an effect of the development trends in other economic sectors—is that agricultural investment has stood at very low levels and that per capita investment in this sector has also declined in absolute terms.

Again it should be stressed that this is a phenomenon representing the average for Latin America and that it has thus been strongly influenced by the extreme situations prevailing in some of these countries. At times, lack of adequate incentives, or problems arising from price controls or from the absence of an appropriate programme, have clearly constituted obstacles to investment in agriculture. Either because the profits generated in agriculture have been invested in other sectors, or because they have largely been used for consumption, or have been so precarious that they have not permitted adequate re-investment, the fact remains that the rate of investment in this sector—in the light of available statistics—is incompatible with the sound development of agricultural activity. As will be seen below, during the 1950-54 period, the net investment coefficient² for agriculture only stood at 3.4 per cent, as against 13.0 per cent for industry, building and mining and 14.2 per cent for services. In this respect it should be recalled that a large proportion of Latin America's agriculture still remains at subsistence level and that it cannot therefore be expected to make any sizable contribution to the over-all investment effort.

Similarly, the inflationary process which affects many countries of the region cannot be disregarded as a factor retarding agricultural investment. The climate of inflation that has dominated the economic development of Argentina, Bolivia, Brazil, Chile and other Republics has not been very favourable to the expansion of agricultural investment. On the contrary, farmers have often preferred to invest their profits in the purchase of new land, urban property, or other goods, as a defence against the fall in the purchasing power of their respective currencies. Furthermore, foreign investors have mainly shown interest in the development of other activities, particularly mining and industry, again a circumstance which contrasts with former heavy investments made by foreign capital in Latin America's agriculture.

Further structural changes referring specifically to agriculture—which have also been pointed out on other occasions and in other papers³—are linked with the decline in the relative importance of foodstuffs or raw materials for export. This has obviously been a direct result of the growth of demand caused by an increase of population, urban development and increments in net per capita income. It is also interesting to note that agricultural production has tended to increase proportionally more rapidly in those Latin American countries where agriculture was less advanced in the period immediately preceding the Second World War, while in countries such as Argentina, not only did agriculture develop at a slower rate but, in this particular case, its importance declined in absolute terms and there was a contraction of the area cultivated. A different balance

² The net investment coefficient is the ratio between net investment and net income.

³ See *Economic Survey of Latin America, 1954, op. cit.*

¹ Excluding non-self-governing territories.

has consequently been established in Latin America's agricultural economy, with the result that the importance of Argentina's agriculture within the aggregate has declined.

The analysis made in the following pages seems to indicate that a certain diversification of agriculture has taken place in most Latin American countries, with the exception of those in the Caribbean area. This can be observed, for example, in Mexico, where maize has maintained its share of the total value of production, while the relative importance of cotton, sugar and other commodities has risen. In the tropical zone of Latin America, coffee represented 31 per cent of aggregate production in 1934-38, as against only 20 per cent in 1953/54, while the relative share of other crops, such as rice, roots and tubers, and several minor commodities, has increased. In the temperate zone of Latin America there has been a reduction in the relative contribution of certain traditional items such as maize and industrial oils, while other crops, fruit and vegetables, for example, gained in importance. In the Caribbean area, on the other hand, which is a typical monoproducer of cane, the relative contribution of sugar fluctuated from 70 per cent of 1934-38 to 79 per cent in 1951/52 and to 73 per cent in 1953/54, while that of other commodities declined.

It should be emphasized that this tendency towards diversification has become manifest in many countries where efforts are being made to produce the commodities most urgently required for domestic consumption, to avoid any further disequilibrium in the balance of payments. Sugar and wheat, for example, which are at present being produced far more abundantly in countries which traditionally import them, have been subject to special output policies. The result of these policies has not been uniform, nor have they always been successful with regard to wheat. With respect to sugar, there are now very few countries in the region which do not produce adequate supplies for domestic requirements. As far as the Caribbean area is concerned, although for diametrically opposed reasons, the current trend is towards a greater diversification owing to the present crisis in sugar production.

The technical level of agriculture has improved more in some countries than in others. Broadly speaking, significant progress has been made, particularly in the use of agricultural machinery. Thus, the number of tractors in use rose from 35,000 to 190,000 between the pre-war and the present periods, with a consequent modification of the index of agricultural mechanization.

With some exceptions, however, there has been no similar increase in the use of fertilizers nor in that of improved seeds, which could have made a radical difference to yields. Notwithstanding, in the last three or four years an appreciable improvement has taken place.⁴ According to the data given elsewhere in this document, the cultivated acreage for a number of commodities has increased at a lower rate than the volume of production of these crops. Average yields must, therefore, have increased considerably. Some years must still elapse be-

fore an accurate appraisal can be made of the influence of technical improvements on such increases.

2. EFFECTS OF STRUCTURAL CHANGES

It is impossible to judge whether the region's agricultural development has, or has not, been adequate to meet the potential demand for agricultural production in recent years, unless this development is viewed in the light of its effects on the region's agricultural supplies (both foodstuffs and non-foodstuffs), on the levels of Latin America's foreign trade and on the impact of the latter upon over-all economic development.

Before referring specifically to these aspects, however, it is advisable to comment generally on the incidence on national income of industrial development policies applied in recent years. Statistics seem to indicate that national income has increased appreciably and, according to studies made by ECLA, the levels of average real income per capita improved by about 46 per cent⁵ between the pre-war years and the 1952-53 average. Agriculture has contributed to this improvement, principally on account of the rise in world prices for such commodities. The fact that the development of other sectors of the economy has exerted a greater influence than agriculture, however, appears to be borne out, because, while the income generated in the other economic sectors rose by 105 per cent between 1950 and 1954, that of agriculture increased by only 80 per cent. This is more clearly evident in certain individual cases such as Argentina, Brazil, Chile, Colombia and Mexico.

While average per capita income in real terms increased by about 46 per cent between the pre-war period and 1952/53, per capita supplies of agricultural products expanded by less than 10 per cent during the same period. It had an unfavourable effect upon prices for these commodities, so that, on an average, they rose much more rapidly than the general price level.⁶ Statistics for several countries show that it was the price of foodstuffs that exerted the strongest influence on the over-all cost of living in those countries. (See figure VII below.)

Nevertheless, the situation in certain countries, or the position of specific commodities, should be mentioned in relation to their effect on aggregate supply indices. Thus, for instance, if Argentina and Brazil are excluded, the index for the rest of the region improves substantially, and the increment between the pre-war period and 1952-53 stands at 30 per cent. Moreover, if coffee and meat—in the supply of which there has been a marked decline—are excluded from calculations for the region as a whole, the index for the remaining products shows a 20 per cent increase during the same period.

The outstanding improvement in nutritional standards seems to have taken place in the Caribbean zone and the tropical area of South America, excluding Brazil; in contrast, the countries of the temperate zone have shown little change and in Argentina a certain deterioration took place. But this has little significance in the case

⁵ This figure is the average increase in per capita income in five representative countries, namely, Argentina, Brazil, Chile, Colombia and Mexico, comprising together some 70 per cent of Latin America's population.

⁶ This is also clear, because, while the index of the quantum of production increased by only 35 per cent between the pre-war period and 1954/55, the gross income generated in agriculture rose by 80 per cent, as already mentioned.

⁴ This is in contrast with the situation prevailing until 1949/50, as described by FAO at the Second Latin American Regional Meeting on Agricultural Programmes and Outlook, held at Montevideo in 1950. Until that date, yields for ten of the region's main crops had shown very little improvement over the average for the pre-war period.

of Argentina, because average per capita consumption is very satisfactory and is among the highest in the region.

As regards agricultural products other than foodstuffs, supplies increased sharply in countries such as Argentina, Brazil, Chile, Colombia and Mexico, where the rate of industrial development was intense. In fact, availabilities of non-foodstuffs (excluding coffee) increased at a faster rate than food supplies in all sub-regions, with the exception of the Caribbean zone, where aggregate industrial development was not outstanding.

In many countries of the region and at various periods, a shortage of agricultural commodities has resulted from inadequate domestic output and insufficient imports.⁷ The relative increase in prices of farm products has often had unfavourable effects upon nutritional standards of the less favoured groups of the population. Brazilian meat consumption is an example of this situation. Owing to the sharp upswing in meat prices, and despite the rise in the average level of per capita income, certain groups of consumers have been obliged to replace meat

by other commodities of inferior nutritional value such as sugar and farinaceous roots.

The slow progress of agricultural production has had an appreciable influence upon the volume of foreign trade. The region's growing consumption of agricultural commodities led to a considerable increment in such imports during the post-war period, so that by 1953 they stood 80 per cent above the average for 1934-38. There was a parallel decrease, in absolute terms, in the volume of agricultural exports, which recovered only in 1953, when they rose slightly above the average for the pre-war period. The over-all result was that net agricultural exports declined sharply, amounting to only 68 per cent in 1952 and 91 per cent in 1953 of the level of total net exports in 1934-38 and 49 and 63 per cent respectively of net per capita exports. There was some recovery of net exports in 1953, but they still stood far below the 1934-38 level.

A table summarizing the fluctuations of the foreign trade in agricultural commodities enables the situation to be viewed in greater detail. (See table 1.)

Table 1. Latin America: Foreign trade in agricultural commodities^a

(Dollars at 1950 prices)

	Aggregate (millions of dollars)				Per capita			
	1934-38	1949-51	1952	1953	1934-38	1949-51	1952	1953
Exports	3,926	3,656	3,271	4,066	32.2	23.0	19.1	23.2
Imports	575	933	976	991	4.7	5.8	5.7	5.7
Net exports ..	3,351	2,724	2,295	3,075	27.5	17.2	13.4	17.5

Source: Economic Commission for Latin America.

^a Representing 12 countries which comprise about 90 per cent of Latin America's total population.

Among the commodities which Latin America has been forced to import in growing quantities are wheat, fats and oils, meat, milk and dairy products, fish and even eggs, with most of this increase coming from the United States and Canada which have thus become substantial supply sources of foodstuffs for Latin America. In itself this would not be remarkable, were it not for the fact that the region utilizes many tens of millions of dollars to meet its food requirements, when this money could well be used to purchase other goods. The fact is that Latin America has been unable to produce these foodstuffs and that the great industrial countries to the north, apart from supplying capital goods, are now an important source of non-durable consumer goods for the other countries of the western hemisphere.

Nevertheless, agricultural exports have continued to be the mainstay of the economic life of the Latin American countries and, although they have not expanded, their relative contribution to total exports has become increasingly greater. Thus, in 1934-38 they accounted for only 56 per cent of aggregate Latin American exports, but in 1953 the proportion had risen to 59.4 per cent. This means that agricultural exports are still contributing a major share to Latin America's capacity to import, which plays such a predominant role in the region's economic development. Mainly through them is

it possible to obtain the foreign exchange required to purchase capital goods abroad.

It should be noted that, owing to changes in the structure of exports directly resulting from the increase in regional demand, Latin America's foreign trade has become more sensitive to world fluctuations with respect to a certain group of commodities. Thus, for example, exports of coffee, sugar, wheat and cotton—which in the pre-war period accounted for only 29 per cent of total exports from Latin America—in 1953 represented 41 per cent of the aggregate. The relative importance of these four commodities within total agricultural exports also increased from 51 to 68 per cent. It is hardly necessary to stress the importance of this fact, since a sharp drop in prices and in the world demand for these commodities would have disastrous consequences for the over-all economic development of Latin America.

It so happens that—with the exception of coffee—all these products are undergoing difficulties in world trade through the accumulation of surpluses. The prospects for coffee seem to be equally dubious, in view of the large new coffee plantations made in recent years. The effects of the decline in sugar exports have already been felt, particularly by the Cuban economy. It is easy to assess the consequences of a crisis in coffee, since in 1952 and 1953 this commodity accounted for about 45 per cent of the region's total agricultural exports and 25 per cent of its aggregate exports.

The analysis also reveals that only a small share of the value of agricultural exports is utilized for the pur-

⁷ See FAO, *Prospects for Agricultural Development in Latin America* (LA/3/1).

chase of goods destined for agriculture. A close relationship between imports of goods strictly for agricultural purposes and the region's agricultural exports is not to be expected, because it would conspire against a sound policy for over-all economic development. Nevertheless, such imports for agricultural development have not in the past been commensurate with the importance of agriculture in the region's economy. In recent years, fortunately, a certain reaction has set in and agricultural machinery represents an increasing percentage of capital goods imports, especially in Argentina, Brazil and Chile.

To conclude, the development of industry and other sectors of economic activity has undoubtedly exerted an important influence on the improvement of per capita income levels. The lack of adequate progress in agriculture, however, constitutes a problem which must be solved in time, since upon such progress closely depends the future over-all development of Latin America.

3. THE PRINCIPLE OF SELECTIVITY IN AGRICULTURAL EXPANSION

The foregoing considerations lead to others on the possibilities of agricultural development in the immediate future. It is evident that to avoid a halt in regional progress the Latin American republics must adopt energetic and co-ordinated measures. As many of these countries have already understood, such action cannot be left to chance, but calls for careful planning of agricultural development. Many countries already have broad programmes under way, but perhaps only a few have co-ordinated their agricultural development with that of other sectors of the economy. Nor does it seem that the implications for over-all economic development of a corresponding degree of progress in agriculture have been fully evaluated.

In a report to be submitted by the Economic Commission for Latin America to its sixth session,⁸ the methodology for over-all economic programming will include a discussion of the basic factors to be taken into account in agricultural programming. Nevertheless, it is not out of place to emphasize this point and in addition to explain what the seventh session of the FAO Conference understood as the selective expansion of agriculture and the consumption of agricultural commodities.

The selective expansion of production must aim at developing agriculture with due heed to the prospects for each commodity. As previously noted, when FAO advocated "selective expansion" it meant that governments should give priority to essential consumer goods not in excess supply on the market, emphasizing the need to take steps in order to improve consumption in the direction of higher nutritional standards.

In relation to export products, at no time did the FAO Conference suggest that countries should curtail the development of those crops in over-supply on the world market, but simply that extreme caution should be used in encouraging their cultivation, since any production in excess of domestic requirements or unjustified by world market prospects would be hazardous for the countries in question. This, however, is an aspect of FAO's recommendations which deserves special attention, since it is evident that agricultural development pro-

grammes aimed at expanding exports of products already in over-supply might clash with the interests of countries that have accumulated stocks. As long as the latter cannot reduce such stocks through their absorption in the domestic market, it is natural that they should try to sell them on the world market.

The analysis made in this document indicates that Latin America has had some share in the accumulation of agricultural surpluses since 1952. Its role has been of special importance in the case of sugar. As a result of the higher production in Cuba, a surplus of about 2 million tons was accumulated in this country up to 1 December 1954. Mexico likewise possesses a large stock which is difficult to sell. Various factors—apart from the increase in Cuba's production—have contributed to this situation. Among them, the expansion of sugar production in importing countries has played a decisive role. On the other hand, Latin America does not seem to have contributed to any large extent to the formation of wheat surpluses. Stocks of this commodity rose in Argentina, however, from 50,000 to 1.4 million tons between 1952 and 1 December 1954. Latin America may also have had some slight share in the accumulation of cotton surpluses, because its relative contribution to world production and exports has increased since 1952.

In Latin America, as elsewhere in the world, the problem of surpluses naturally presents opposing features. One relates to the situation of exporting countries and the other to countries importing commodities in over-supply. In the first case it is evident that countries which have accumulated surpluses are suffering not only from their inability to sell such stocks, but also from lower prices and uncertain outlook for these products. Conversely, importer countries can benefit from this situation. It must not be forgotten, however, that the indiscriminate purchase of surpluses and the fall in the price of the products concerned may, in some cases, affect the agricultural development of these latter countries. Furthermore, if such purchases go beyond reasonable limits, they may in the long run conspire against over-all economic development programmes through their influence on the balance of payments. To avoid the harmful effects of indiscriminate surplus disposal, certain principles and guiding procedure have been adopted by FAO bodies, which are described in detail in the separate report prepared by this organization for the sixth session of ECLA.

The Third Latin American Regional Meeting of FAO, held at Buenos Aires in early September 1954, made a careful examination of the surplus problem and adopted some important resolutions. One of the suggestions was that the accumulation of surpluses on the world market might, over the long term, have unfavourable cumulative effects upon the economic development of the region by hindering the progress of certain items of agricultural production in Latin America. Similarly, it was stressed that any obstacle to the expansion of Latin American exports would, by directly affecting the capacity to import, have undoubted repercussions upon the interests of the industrial countries whence Latin America purchases capital goods. Consequently, the continuation of such a situation over a long period would not be in the interests of these exporter countries. Such considerations are undoubtedly of vital importance for any international agreements which may be reached to solve the surplus problem.

⁸ See *Analyses and Projections of Economic Development. I, Introduction to the Technique of Programming* (E/CN.12/363) United Nations publication, Sales No.: 1955.II.G.2.

The United States Government has already signed a number of agreements with deficit countries of Latin America for the sale of agricultural surpluses. For example, arrangements have been made with the Chilean Government for the purchase of 30 thousand tons of wheat and 8 thousand tons of semi-refined oil from the United States. It is likely that Chile will buy other United States agricultural surpluses to a value of 8 million dollars. Colombia has just purchased 5.3 million dollars worth of agricultural surpluses from the United States; Peru has been authorized to purchase 7.5 million and Bolivia has been granted, under special terms, 15.2 million. Less significant amounts have also been authorized for other countries in the region.

The type of general agreement which is being signed for the purchase of these surpluses provides for the investment of the product of such sales in local works, including some directly benefitting agriculture, and for a part, in local currency, to cover the expenses of official United States organizations in the countries concerned. These transactions are undoubtedly of benefit to the recipient countries, who can use the product of these sales for economic development. But, in contrast, such purchases may momentarily affect exports of the same commodities from other countries of the region.

Be this as it may, it is clear that countries wishing to avert the risks arising from an inadequate expansion of their own agricultural activities should, in programming, give priority to those commodities which are most secure. It is therefore pertinent to stress here that the selective expansion of production is equivalent to sound agricultural programming, although the term "selective expansion" was used as a convenient *leit motiv* to emphasize how it differs from a policy of indiscriminate expansion.

4. FUTURE DEVELOPMENT AND PROGRAMMING

The wise programming of agricultural activities in the Latin American countries, as elsewhere in the world, must therefore be based on an accurate appraisal of the factors which influence domestic consumption and the world demand for agricultural commodities. From the first aspect, agricultural expansion should be governed by the changes which are expected to take place in population and family income, that is, in the capacity of consumers to purchase farm products. A question of vital importance here is that of the possible price levels for agricultural commodities. Consumption of the most desirable of these may be affected by high prices, which are generally caused directly by inadequate production or supply. This is the case, for example, of certain commodities such as meat and other animal products, which clearly show a deficit in Latin America. Here, then, is a very important branch of production for which expansion in Latin America is advisable. In this connexion, the recent development of fish production and consumption in many countries is most satisfactory from the point of view of protein intake.

There are other products of which the consumption and production are unsatisfactory, not always because they are beyond the reach of the consumer, but because the latter are not fully aware of their nutritional value. In this category fall fruit and vegetables, the consumption of which is definitely inadequate in Latin America. Hence agricultural programming also necessitates educa-

tional campaigns aimed at improving nutritional habits. Special surveys among the various population groups are required to determine precisely where consumption deficiencies are to be found. A suitable policy for these commodities may thus encourage other important branches of agricultural production.

Much can also be done in the field of marketing. Surveys made by ECLA and FAO⁹ show that there is a pronounced deficiency in the transport and storage of agricultural commodities, which causes serious losses of supplies through wastage. This undoubtedly affects prices, as also does the existence of unnecessary middlemen between the producer and the consumer. An improvement in the marketing of agricultural production might have the desired effect of raising both consumption and nutritional standards by lowering consumer prices.

No adequate production policy can be applied without an accurate prior knowledge of agricultural potentialities. The need to establish inventories of available natural resources aimed at a precise assessment of productive capacity has often been stressed. This concept refers not only to new areas which might be brought under cultivation, but also to the potential capacity of those already cultivated and to ways of improving their utilization. Such surveys lead to a determination of how far it is possible to correct agricultural methods, to extend the use of fertilizers, insecticides and improved seeds, and to introduce up-to-date stock-breeding techniques, in short, how it will be feasible to increase land and live-stock yields.

The financing of agricultural development merits special consideration. If it has clearly been insufficient in the past, the causes should be thoroughly investigated and the more urgent investment requirements carefully established. It is insufficient merely to draw up agricultural development plans aimed at bringing larger areas under cultivation, either by irrigation, by colonization or by ploughing up pasture land. It is essential to locate the weak points of agricultural investment. This can be done through farm management research, the farmers themselves being contacted and their exact requirements discovered. Such an analysis can and should be made jointly with an investigation of productive capacity, so that a precise outline of the required investment may emerge.

All this is the more necessary since, as mentioned earlier, the technical development of agriculture leaves much to be desired and one of the main ways of increasing agricultural production is that of substantially improving unit yields. Through research, it is possible to define where investment is required for irrigation canals, for fences enabling grasses to be utilized to the best advantage, for the improvement of animal stocks, for the mechanization of agriculture or for the building of barns and rural roads, all of which will allow production to be better utilized. This method of analysing the required investment in agriculture, although it seems so obvious, has been adopted in only few cases and on rare occasions in Latin America.

The planning of agricultural investment must be linked to investment in the other sectors of the economy. The time is perhaps past when programming could be limited to one of these sectors, since their influence is reciprocal.

⁹ See, for instance, *Agricultural Requisites in Latin America*, a report of the Joint ECLA/FAO Working Party (E/CN.12/83).

In any event it may safely be asserted that a higher rate of investment per agricultural worker can be achieved, without affecting the development of other economic sectors, if the investment coefficient concerned is raised only slightly above the very low current level. In other words, it will be essential to revise and improve this investment coefficient to bring it into line with the importance of agriculture in the economies of the Latin American countries.

Needless to say, to achieve the most appropriate development of each economic sector, a strict criterion of priorities must be established, so that the scanty capital resources available in most countries of the region may be utilized to the best advantage of the nation as a whole. In this respect, it is important to note that the seventh session of the FAO Conference, when outlining the principles of the selective expansion of agricultural production, clearly alluded to the influence on consumption of employment and development in other sectors of the economy, among them industry.

This session of the FAO Conference recommended¹⁰ that member States, the United Nations and other competent international organizations should foster programmes for over-all economic development, industrial expansion and full employment. The Conference also requested the Director-General of FAO to seek the assistance of other international agencies in appraising the prospective rate of expansion in various countries and regions and "to summarize this information with reference to its meaning for prospective changes in levels of demand for farm products", so that it would be available to the countries when preparing programmes for the selective expansion of agricultural production and consumption.

From the aspect of a better co-ordination of Latin America's economy, a balance between the extremes of absolute regional specialization and complete self-sufficiency must be sought. A suitable degree of regional specialization might clearly have a stimulating influence

upon inter-Latin-American trade, in contrast with the depressive effect of exaggerated policies for national self-sufficiency. On this point, the FAO meeting held at Buenos Aires in September 1954 recommended that studies be made to determine: (a) the geo-economic areas into which Latin America might be divided from the agricultural aspect; (b) the agricultural produce most suited to the geo-economic areas thus defined; and (c) the effect of greater agricultural specialization in Latin America on the intra-regional trade in agricultural commodities. The implementation of this recommendation depends, apart from other considerations, on the desire of the Latin American countries to avoid as far as possible the development of high-cost types of production which may adversely affect domestic consumption levels.

No matter how well an agricultural development programme is planned, its implementation is bound to be an arduous task. A well organized administrative mechanism is necessary, manned by the most competent staff available, qualified not only to carry out the programme, but also to modify it when need arises. Furthermore, and this is fundamental, from the moment it is established, a development programme should receive the active and direct co-operation of farmers, since any plan that excludes this prerequisite, however excellent on paper, may entirely lack the popular support for its accomplishment.

The foregoing remarks are only a brief description of the basic aspects of sound programming and of the policy which must be adopted to achieve the selective expansion of agricultural production and consumption in Latin America. The precise direction of this policy, and the specific production targets which each country should establish, must depend upon special studies and upon the possibility of co-ordinating each programme with that of neighbouring nations.

The description in this document of the current situation of Latin America's agriculture and its main problems is intended only as a basis on which the countries of the region may discuss the most important topics of common interest.

¹⁰ See resolution No. 7 in FAO, *Report of the 7th Session of the Conference, 23 November-11 December 1953*, Rome, 1954, p. 20.

Chapter II

AGRICULTURE AND OVER-ALL ECONOMIC DEVELOPMENT

Before beginning a detailed analysis of the relations between production and consumption of agricultural commodities, it is advisable to draw a comparison between development in agriculture and in other sectors of Latin America's economy to define the exact role of this activity within the over-all economic development of the region.¹

1. GROSS INCOME AND INVESTMENT

The gross income derived from agriculture expanded by almost 80 per cent² between 1940 and 1954. Its relative contribution to the region's gross income, however, has deteriorated from 29.5 to 26.8 per cent during the same period.

Table 2. Latin America: Gross income by activities

	Absolute figures (millions of dollars at 1950 prices)			Percentage distribution			Annual rates of change (percentage)	
	1940	1953	1954	1940	1953	1954	1940/53	1953/54
Agriculture	6,565	11,319	11,797	29.5	27.4	26.8	4.3	4.2
Mining	807	2,017	2,113	3.7	4.9	4.8	7.3	4.8
Industry and building	4,237	8,228	8,929	19.1	20.0	20.3	5.2	8.5
Government and other services...	10,614	19,656	21,158	47.7	47.7	48.1	4.9	7.6
TOTAL	22,223	41,220	43,997	100.0	100.0	100.0	4.9	6.7

Source: Economic Commission for Latin America.

Table 3. Latin America: Composition of stock of capital by activities

	Stock of capital				Net investment 1950-54 ^a	
	Absolute values (millions of 1950 dollars)		Percentage distribution		Absolute values (millions of 1950 dollars)	Percentage of stock of capital in 1950
	1950	1954	1950	1954		
Agriculture	21,551	22,952	25.7	22.9	1,401	6.5
Industry, building and mining...	12,803	17,924	15.3	17.8	5,121	40.0
Services	49,516	59,631	59.0	59.3	10,115	20.4
TOTAL	83,870	100,507	100.0	100.0	16,637	19.9

Source: Economic Commission for Latin America.

^a Calculated as the difference between the stock of capital in 1950 and 1954.

It may be seen that the economic development of Latin America has been somewhat uneven. Other branches of production and aggregate services have grown at a much faster rate than agriculture. Although the difference between the rates of growth of agriculture and other activities—such as industry and services—is a natural phenomenon in the rational economic evolution of countries in full development, extreme disequilibrium, in one direction or the other will tend to cause serious disruptions. For Latin America as a whole, the imbalance seems to have been unfavourable to agricultural development, so that, in many countries, production has proved insuf-

ficient to meet the demand, without affecting the volume of foreign trade. A similar situation is to be noted in relation to net capital investment in the various sectors of the economy. Between 1950 and 1954—a period for which complete data are available—the fixed capital invested in agriculture expanded by only 6.5 per cent, as against an increment of 40 per cent in industry, building and mining activities considered as a whole, and of 20.4 per cent in services. This again seems to reveal a one-sided tendency, unfavourable to the requirements of balanced development.

² The differences between this increase and that of production—which during the same period expanded by only 35 per cent—is due to the regular favourable effects of the terms of trade for farm products during this period.

¹ The following analysis refers only to the 20 Latin American Republics, excluding dependent territories.

The low level of net investment in agriculture during the period under review caused a decline—in absolute terms—of the stock of capital per person gainfully employed in this sector, in contrast with the substantial increments registered in the other two groups. (See table 4.) In fact, while the net investment per gainfully

employed person added during the period 1950-54 in services and the group comprising industry, building and mining activities was equivalent respectively to 1.5 and 3.5 times the level of stock of capital per active person in 1950, agricultural net investment per active person during the same period stood at a lower level.

Table 4. Latin America: Fixed stock of capital per gainfully employed person

	(1)		(2)	(3)	(4)	(5)	
	Stock of capital per active person in 1950	Index (percentage)				Aggregate net investment 1950-54 (millions of 1950 dollars)	Increase in active population 1950-54 (millions of persons)	Net investment per additional active person in 1950-54^{a} (1950 dollars)	Stock of capital per active person in 1954	Index
	1950 dollars					1950 dollars	
Total activities	1,585	100	16,637	5.2	3,200	1,730	100
Total non-agricultural activities	2,502	157	15,236	3.2	4,761	2,760	160
Agriculture	770	49	1,401	2.0	700	765	44
Industry, building and mining	1,280	81	5,121	1.2	4,260	1,600	93
Services	3,323	210	10,115	2.0	5,057	3,528	204

Source: Economic Commission for Latin America.

^a Obtained by dividing total net investment in 1950-54 by the increase in the active population over the same five-year period.

If net investment is related to net income by activities (see table 5), the investment coefficient for each of the main sectors of Latin America's economy are obtained; the previous statement that net agricultural investment has not been proportional to the importance of this activity is thus confirmed. For instance, the investment coefficient of agriculture represents only one quarter of the figures for the other sectors.

Table 5. Latin America: Net annual investment coefficients by sectors

(Millions of dollars at 1950 prices)

	Annual net income ^a	Annual net investment ^b	Investment coefficient ^c
	(Average 1950-54)		
Agriculture	10,220	350	3.4
Industry, building and mining ..	9,861	1,280	13.0
Services	17,780	2,529	14.2
TOTAL	37,861	4,159	10.9

Source: Economic Commission for Latin America.

^a Arithmetical average. At market prices.

^b Annual average of figures for total net investment (1950-54) in table 4.

^c Annual net investment as a percentage of net income.

This situation partly arose from the inflationary process affecting many countries of the region, which has discouraged investment in the land and has channelled it towards urban activities. Other factors which have undoubtedly proved detrimental to agricultural investment are exchange and price policies, want of adequate incentives, unsuitable land tenure systems, or even, simply, insufficient technical knowledge.

Although the preference shown by Latin American investors for more productive sectors such as industry and services can well be understood, the investment coefficient of agriculture could still be raised through a better utilization of the income generated in this sector and

without drawing resources away from other activities. Well-balanced national development programmes, and stable and clearly-defined agrarian and economic policies could undoubtedly promote a substantial increase in agricultural investment.

The main deficiency in agricultural investment appears to be in buildings and farm improvements such as barns, storehouses, fences, silos, etc.³ In contrast, the mechanization of agriculture has proceeded at an exceptionally rapid rate in recent years⁴ and a trend has be-

³ This type of investment may be under-estimated in the calculation of the stock of capital, since it is often made with purely local resources without using basic materials such as iron and cement. It might therefore elude statistical control and give rise to an under-estimate.

⁴ The development of mechanized farming has undoubtedly been the most striking post-war change in the region's agriculture. Perhaps more significant than the Latin American total is the change in distribution. In 1939, more than 70 per cent of the total tractor park were in Argentina, while in 1952 this country accounted for only 25 per cent. In both Argentina and Mexico, tractor numbers have grown over the seven years ending 1953 from under 20,000 to nearly 50,000, while in Brazil the park rose from 5,000 to 35,000. Rapid rates of increase have occurred in most of the other countries. The outstanding example of the development of mechanization is Uruguay, which in 1946 possessed about 3,000 tractors and by 1954 had risen to 20,000; 80 per cent of the arable land was farmed mechanically in contrast with some 20 per cent for the region as a whole.

NUMBER OF TRACTORS^a

Region	1938/39	Immediate post-war years ^b	1953	Arable area Number of tractors in 1953 ^c
Europe	274,610	464,360	1,413,598	104
North America ...	1,695,000	2,900,000	4,650,000	50
Latin America ...	35,000	64,174	188,530	470
Near East	5,000	15,526	52,317	1,200
Far East	—	15,000	20,000	8,500
Australia	46,500	71,500	158,382	110
USSR ^d	523,500	450,000	969,000	230
TOTAL ^e	2,579,610	3,980,560	7,451,827	130

^a Including only tractors of more than 8 h.p. The figures probably tend to under-estimate the degree of mechanization in Europe,

come apparent in Latin America towards a greater utilization of foreign exchange for the purchase of agricultural machinery, in relation to aggregate imports of capital goods. (See table 6.) Statistics for six of the main countries of Latin America show that in 1950-53 tractor imports were equivalent to 157 per cent of the 1949 park. (See table 7.) Although no data are available for the region's total tractor park in 1954, considerations referring to 1953 are still valid. In effect, in 1953 the total tractor park in use numbered almost 190,000 units, or, about one tractor for every 1,600 agricultural active persons. In 1940, in contrast, with a tractor park of about 35,000 units, the proportion was only about one unit per every 7,800 active persons.

Table 6. Latin America: Imports of agricultural machinery as a percentage of imported capital goods in selected countries

Country	Average 1937-39	Average 1951-53
Argentina	8.9	11.8
Bolivia	2.3	3.4
Brazil	2.7	8.3
Chile	4.8	7.8
Colombia	8.0	7.6
Ecuador	8.5	9.1
Peru	12.0	10.8
Venezuela	4.6	4.0 ^a

Source: Economic Commission for Latin America.

^a Average for 1951-52.

Table 7. Latin America: Tractor imports in selected countries (Units)

Country	Park in 1949	1950	1951	1952	1953
Argentina	25,000	3,789	6,629	7,318	10,055
Brazil	10,500	7,448 ^a	9,826 ^a	8,056	5,764 ^a
Chile	4,000	773	1,997	1,751	1,597
Colombia	4,000	1,590	1,723	1,136	1,535
Peru	2,150	1,218 ^b	1,491 ^b	1,546 ^b	2,058
Uruguay	10,000	2,528	4,180	2,323	1,313
TOTAL	55,650	17,346	25,882	22,130	22,322

Source: Economic Commission for Latin America.

^a Calculated according to the 1952 ratio of

1 tractor = 3,148 kilogrammes.

^b Calculated according to the 1953 ratio of 1 tractor = 4,768 kilogrammes.

The additional number of tractors has been mainly used to replace the agricultural labour absorbed by other activities and has raised the very low level of productivity per farm worker. Thus the interest shown by governments and farmers alike in large-scale purchases of agricultural machinery is important, since by this means, in combination with other improvements in farming practices, a more satisfactory standard of labour productivity may be attained.

where the proportion of orchard tractors is larger than in other regions.

^b 1946, except in the case of the figures for the Near and Far East, which refer to 1949.

^c A very rough estimate which gives some indication of the degree of mechanization in each of the main regions at the close of the decade under review.

^d In terms of 15-h.p. tractors.

^e Excluding the smaller countries in the Near and Far East; dependent territories in all regions; New Zealand; China; and the Union of South Africa. The number of tractors estimated for these countries is 200,000, which should be added to the total for 1953.

In many respects Latin America has come to occupy an intermediate position between the mechanically more-advanced countries and the Near and Far East. Most of the increase has been in privately-owned tractors, but the establishment of government pools has contributed substantially to bringing mechanized farming within the reach of large groups of farmers who are not in a position to purchase heavy machinery. These pools have been of considerable importance in several Latin American countries, such as Brazil, Chile, Cuba and Peru. They are a typical development of the post-war period, although in a few cases they were started earlier. A further important development in the region is the beginning of domestic tractor production. In Argentina and Brazil, tractor plants are under construction and, when completed, will make a substantial contribution to power mechanization in these two countries.

It should be noted that the main items included in farm improvements are closely linked to livestock production. As this type of investment has received insufficient attention from governments and farmers, it is thus not surprising that, although this activity is vital to over-all agricultural development, it has lagged behind demographic trends, as it will be shown in another section of this document.

Storage and marketing of food commodities have also been affected by the low investment rate prevailing in agricultural activities. The supply of cities have become more complicated through growing industrialization and the development of urban centres. Therefore, special emphasis should be laid on investment in storage and marketing facilities, since they permit optimum utilization and mobility of production.

2. ACTIVE POPULATION

Agriculture is still the main source of employment in Latin America, although its importance has declined in recent years. The development of other activities has caused a considerable shift of the active population from rural to urban areas. Table 8 shows the absolute and relative changes which have taken place between 1940 and 1954 in a group of selected activities.

The gross income per person gainfully employed in the different sectors of Latin America's economy is obtained by combining the data presented in tables 2 and 8. Table 9, which summarizes these calculations, shows that gross income per active person has remained, during the two years under consideration, at a much lower

level than that obtaining in other sectors. This, in turn, may be a reflection of the low level of capital invested per active person. From these figures it can be inferred that more than 50 per cent of Latin America's economically active population—the proportion engaged in agriculture—earns an average income equivalent to one-third of the average in other activities.

The average income per person engaged in agriculture, however, increased at a higher rate than that of other sectors, so that there was a slight relative improvement in 1954. The mechanization of farm work has undoubtedly exerted a strong influence on this improvement.

Table 8. Latin America: Active population by sectors

	Absolute figures (millions of persons)		Percentage distribution	
	1940	1954	1940	1954
Total	44.3	58.1	100.0	100.0
Agriculture	27.5	30.0	62.1	51.6
Industry, building and mining	6.4	11.2	14.5	19.3
Services	10.3	16.9	23.4	29.1

Source: Economic Commission for Latin America.

Table 9. Latin America: Gross income per gainfully employed person^a

(Dollars at 1950 prices)

	Absolute figures		Indices (total = 100)		Percentage variation 1940-54
	1940	1954	1940	1954	
Total activities	501	757	100	100	51
Total non-agricultural activities..	932	1,146	186	151	23
Agriculture	238	393	47	52	65
Industry, building and mining....	788	986	157	130	25
Services	1,030	1,252	206	165	21

Source: Economic Commission for Latin America.

^a Obtained by dividing the figures of table 2 by those of table 8.

3. COMPARISON WITH OTHER REGIONS

If Latin America is compared with the United States, for instance, the disequilibrium between agricultural development and the expansion of other activities becomes still more striking for some countries. The two situations are of course quite different, and therefore this comparison is made as an illustration only.

The following tables show that the position of agriculture within the United States economy is radically different from that prevailing in Latin America. In addition to the well-known fact that the numbers of the active population engaged in agriculture stands at less than 15 per cent of the aggregate in that country, the level of capital per active person in this sector is also

remarkable. Although the share of agriculture in the aggregate capital stock is higher in Latin America than in the United States, the great difference in the labour force makes the capital invested per person gainfully employed in agriculture in the latter country only slightly inferior to that of other activities, in contrast with Latin America, where this ratio is about 1.0 to 3.5. (See again table 4 and figure I.)

This disparity in the availability of capital per active person results in a parallel incongruity for gross income generated. Thus gross income per economically active person in agriculture is only 30 per cent below the average for other activities in the United States, against a ratio of 1 to 3 in Latin America.

Table 10. United States: Gross income and fixed capital invested by activities, total and per active person, 1948

	Active population ^a	Total gross income ^b	Total capital invested	Gross income	Total capital invested
	(Percentage of the total)					(Total activities = 100)
Total activities	100.0	100.0	100.0 ^c	100	100
Total non-agricultural activities...	86.6	90.6	90.0	104	104
Agriculture	13.4	9.4	10.0 ^c	70	74
Industry and building	34.1	34.8	15.0 ^d	102	44
Mining	1.9	2.3	2.9 ^e	124	155
Services	50.6	53.5	72.1 ^f	106	142

Source: ^a *Economic Report of the President*, transmitted to Congress, January 1955 Tables D-16 and D-22.

^b *National Income*, edition 1954, U.S. Department of Commerce; page 177.

^c Economic Commission for Latin America.

^d *Capital and Output Trends in Manufactur-*

ing Industries, 1880-1948; Daniel Creamer, Occasional Paper No. 41, Studies in Capital Formation and Financing; National Bureau of Economic Research, Inc., United States.

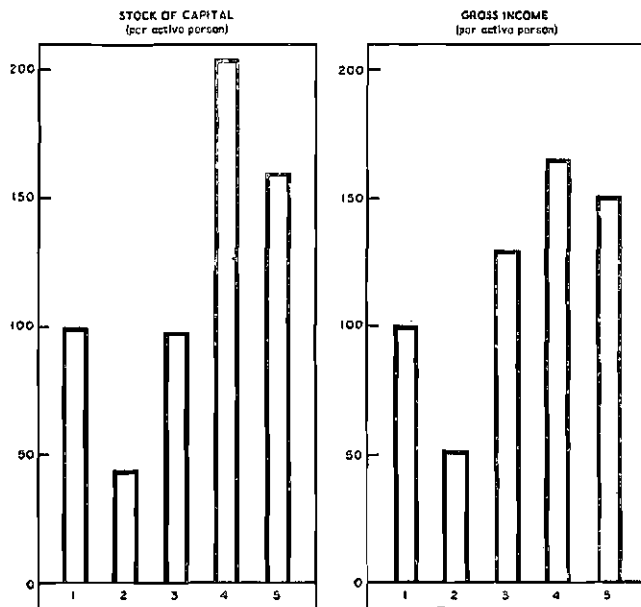
^e *Capital and Output Trends in Mining Industries*, 1870-1948; Israel Borenstein; Occasional Paper No. 43, same studies.

^f Obtained residually.

Figure I

LATIN AMERICA: INDICES OF STOCK OF FIXED CAPITAL AND GROSS INCOME BY ACTIVE PERSON AND BY ECONOMIC SECTORS, 1954

Total activities = 100
Natural scale



Source: Economic Commission for Latin America.

1. Total activities.
2. Agriculture.
3. Industry, construction and mining.
4. Services.
5. Total non-agricultural activities.

Anything more than a comparison of the absolute figures given above would fall outside the scope of this document. Nevertheless, they indicate the trend that these values may follow in the course of Latin America's economic development.

4. THE SITUATION IN SOME COUNTRIES OF THE REGION

The statistical series for five countries, covering a period of about 15 years, corroborate the general conclusions outlined above. In effect, the experience of Argentina, Brazil, Chile, Colombia and Mexico—together comprising about 70 per cent of the region's population—shows that the growth rate of agriculture has been much slower than that of other sectors. (See table 11 and figure II.)

As a result, agriculture no longer ranks as the main activity in the gross product for some of these countries. (See table 12).

In Colombia, for instance, for which complete statistics are available over a long period, a close relationship has existed between the investment and capital stock per active person, on the one hand, and between investment and the gross product generated in each activity, on the other. On the whole, agriculture has undergone a relative decline. With the exception of the period 1944-46, the percentage investment in relation to the gross product has remained very low. (See table 13.) This has resulted in a decrease in the capital invested per active person engaged in agriculture, which, finally, has caused a smaller gross product to be generated than in other activities. Thus, the share of agriculture in the formation of the gross national product has progressively declined, though this sector still constitutes the main branch of production.

Table 11. Latin America: Growth of the gross product by sectors in selected countries
(1935-39 = 100)

	Agriculture			Industry			Other activities		
	1940-44	1945-49	1950-54	1940-44	1945-49	1950-54	1940-44	1945-49	1950-54
Argentina ..	116	111	111	124	168	179	118	157	172
Brazil	102	114	137	133	192	296	121	157	204
Chile	104	113	116	115	143	169	117	140	164
Colombia..	111	131	142 ^a	137	196	275 ^a	114	145	199 ^a
Mexico	122	146	192	135	183	237	137	206	262

Source: Economic Commission for Latin America.
^a 1950-53.

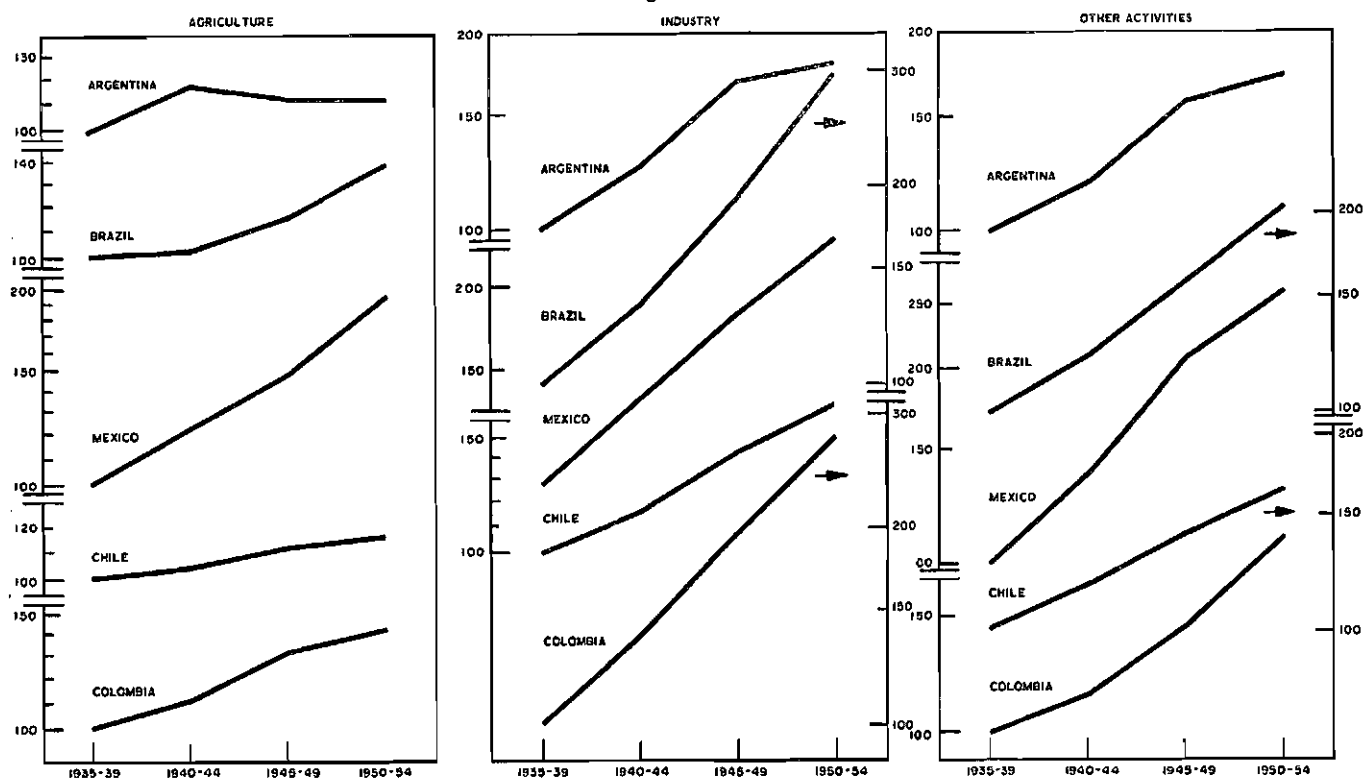
Table 12. Latin America: Distribution of the gross product by activities
(As a percentage of the gross national product)

	Agriculture		Industry		Other activities	
	1935-39	1950-54	1935-39	1950-54	1935-39	1950-54
Argentina	27.6	19.5	20.7	23.7	51.7	56.8
Brazil	39.7	28.7	13.7	21.3	46.6	50.0
Chile	21.1	16.6	16.6	19.1	62.3	64.3
Colombia	48.6	37.7 ^a	15.7	23.6 ^a	35.7	38.7 ^a
Mexico	23.7	19.0 ^a	20.7 ^b	20.4 ^{a b}	55.6	60.6 ^a

Source: Economic Commission for Latin America.
^a 1950-53.

^b Including building activities.

Figure II
LATIN AMERICA: GROSS PRODUCT GROWTH BY ECONOMIC SECTORS IN SEVERAL COUNTRIES
 (1935-39 = 100)
Semilogarithmic scale



Source: Economic Commission for Latin America.

Table 13. Colombia: Indices of gross product and fixed capital invested, by activities and per active person

	Active population		Gross product per active person				Stock of capital per active person		
	1925 (Percentage of total)	1953	1925	1935	1945	1953 (Total activities = 100)	1925	1945	1953
Total activities	100.0	100.0	100	100	100	100	100	100	100
Agriculture	69.2	54.3	76	76	75	65	55	55	48
Mining	1.6	1.9	146	181	184	187	128	100	99
Industry and building.....	13.1	18.5	114	101	133	132	64	68	69
Services	16.1	25.3	186	170	138	144	322	275	168

Source: Economic Commission for Latin America.

5. IMPORTANCE OF AGRICULTURE FOR THE REGION'S BALANCE OF PAYMENTS

Despite the relative decline of farming activities, agricultural exports still constitute Latin America's main source of foreign exchange. Although the volume of such exports has declined in recent years in relation to the pre-war period—except in 1953, when there was a slight recovery—their share in total exports has grown to a significant extent. (See table 14.)

Table 14. Percentage of agricultural over total exports in Latin America^a

	Foodstuffs, beverages and stimulants	Agricultural raw materials ^b	Total
1934-38	40.6	15.4	56.0
1946-51	44.0	17.1	61.1
1952	42.5	12.9	55.4
1953	46.0	13.4	59.4

Source: Economic Commission for Latin America.

^a Percentages at current values.
^b Including tobacco.

Chapter III

EVOLUTION OF AGRICULTURAL PRODUCTION

Aggregate agricultural production in Latin America has increased fairly considerably since the pre-war period. (See table 15.) It was most pronounced in the case of foodstuffs, an expansion of almost 40 per cent having been registered between 1934-38 and 1954/55. During the post-war period this group of commodities followed a uniformly upward course. In contrast, non-foodstuffs dropped sharply during the early post-war years in relation to pre-war production levels; but a substantial recovery had set in by 1951/52, so that in 1954/55 production stood at a slightly higher level than the average for 1934-38.

But, although the aggregate production index seems to be satisfactory, quite different results are obtained when the necessary adjustments are made in relation to demographic growth. Table 15 and figure III show that the index of per capita aggregate production has remained below the pre-war level, fluctuating between 88 and 93 per cent of the latter during the entire nine-year period. Partial per capita indices for foodstuffs and other agricultural products show the same fluctuations as the aggregate index, none of them at any time reaching the pre-war level.

Table 15. Latin America: Indices of agricultural production^a
(1934-38 = 100)

Year	Total	Foodstuffs ^b	Non-food-stuffs ^b	Per capita		
				Total	Foodstuffs ^b	Non-food-stuffs ^b
1946/47	111	115	89	91	94	73
1947/48	114	120	86	92	96	69
1948/49	116	121	89	91	94	70
1949/50	119	122	98	91	94	75
1950/51	125	130	98	93	97	73
1951/52	121	125	100	88	91	73
1952/53	131	135	107	93	96	76
1953/54	132	136	104	91	95	72
1954/55 ^c	135	139	109	92	94	74

Source: FAO.

^a Includes all farm products.

^b Coffee and tea are included among non-foodstuffs.

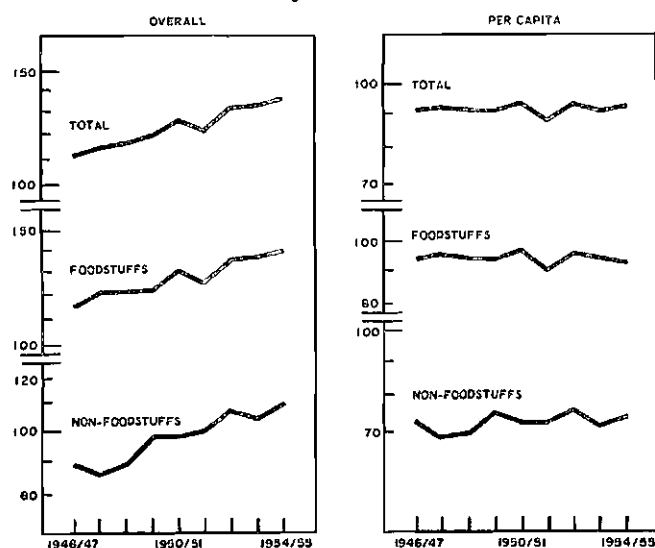
^c Preliminary estimates.

Figure III

LATIN AMERICA: INDICES OF AGRICULTURAL PRODUCTION

(1934-38 = 100)

Semilogarithmic scale



The improvement of yields has played an important role in production increments during recent years. A comparison between output indices and those for the expansion of acreage under cultivation reveals that between 1934-38 and 1952 the production index for these commodities rose from 100 to 134, while the area under cultivation increased only from 100 to 123. Although it is difficult, for technical reasons, to prepare an aggregate index of yields, a mere comparison of the two previous indices reveals that the average yield of the commodities in question¹ must have risen in by more than 34 per cent. Although improvement of agricultural technique cannot be judged by development in the course of only one year, previous figures show that considerable progress has been made in the introduction of modern techniques into Latin America's agricultural activities.

The focal points mainly responsible for this situation can be more easily appraised if the figures given in table 15 are broken down by the four sub-regions into which Latin America has been divided for the purposes of this analysis. A table has been prepared to show that agricultural production has developed at a very different rate in the various sub-regions, particularly in the main producer countries. (See table 16 and figure IV.)

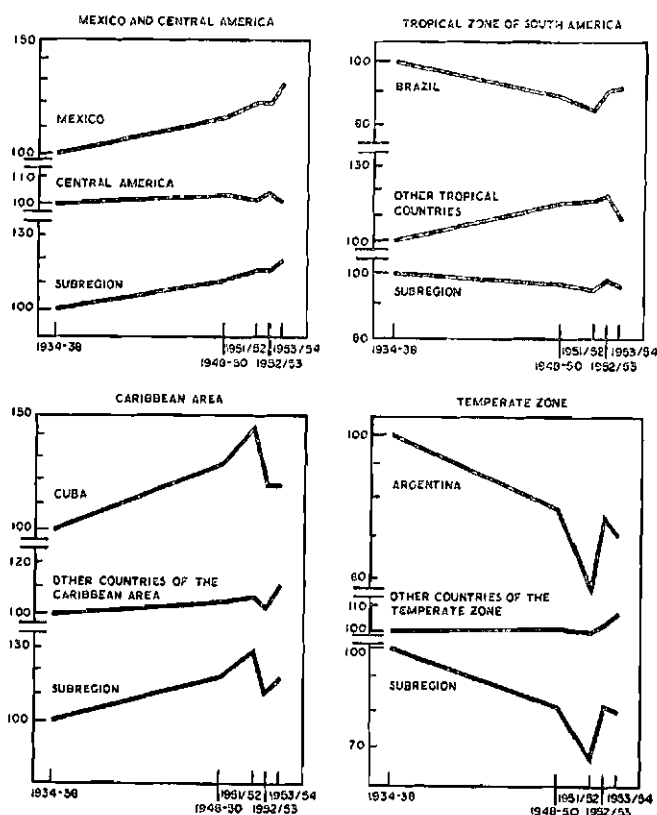
¹ Wheat, rye, barley, oats, maize, rice, potatoes, sweet potatoes and yams, pulses, oil-seeds and cotton.

Figure IV

LATIN AMERICA: INDICES OF PER CAPITA AGRICULTURAL PRODUCTION BY SUB-REGIONS

(1934-38 = 100)

Semilogarithmic scale



Source: Food and Agriculture Organization.

Table 16. Indices of agricultural production^a per capita and per sub-region (1934-38 = 100)

Region	Average 1948-50	1951/52	1952/53	1953/54
<i>Mexico and Central America</i>				
Mexico	114	120	120	127
Central America	103	102	104	102
Sub-region	111	115	115	119
<i>Caribbean Zone</i>				
Cuba	127	144	116	116
Other countries	104	106	102	110
Sub-region	116	127	110	115
<i>Tropical Zone of South America</i>				
Brazil	88	84	89	90
Other tropical countries	113	114	116	108
Sub-region	96	94	97	95
<i>Temperate Zone of South America</i>				
Argentina	77	58	75	70
Other temperate countries	101	100	102	106
Sub-region	82	67	81	80

Source: FAO.

^a Comprises a group of products which covers 90 per cent of total agricultural output in Latin America.

Thus, for instance, the sub-region of Mexico and Central America registered a sharp increase in per capita production, mainly caused by the improvement achieved in Mexico, where in 1953/54 the per capita figure was 27 per cent higher than pre-war levels. There was only a slight improvement in Central America, and a similar development in the Caribbean zone. The index for the latter sub-region indicates a substantial improvement in 1951/52, 1952/53 and 1954/55, principally owing to the influence of Cuban production, which weighs decisively in this sub-region's aggregate. The increments recorded for the remaining countries of this area were very small, but more regular than those registered in Cuba.

There was a slight decline in per capita production in the tropical zone of Latin America, but this was due to the decline in production of one country—Brazil—which carries exceptional weight within the sub-region. If Brazil is excluded, the aggregate production of the remaining countries can be seen to have increased substantially.

The decrease in per capita levels was still more marked in the countries of the temperate zone, where average per capita production is highest in Latin America. The influence of Argentina's output is so great that its fluctuations to a large extent determine the variations in the sub-regional and even in the aggregate Latin American index. The position is therefore substantially altered if this country is not taken into account. In effect, the per capita production index for the whole of the remaining countries of the temperate zone has increased, though on a modest scale, showing that efforts have been made to keep pace with demographic growth.

As a general rule, the production of foodstuffs expanded more vigorously than that of the remaining commodities. (See again table 15.) Mexico and Central America constitute exceptions in that the proportions remained fairly constant. The eminently food-producing character of Latin America's agriculture has thus become increasingly marked, since production of foodstuffs now accounts for more than 80 per cent of the aggregate. Moreover, as has been pointed out in ECLA's *Economic Survey of Latin America, 1954*, this coincides with the fact that production for domestic consumption has undergone a greater expansion than production for export. Table 17 has been drawn up to show the composition by percentages of the production of the four sub-regions under review. (See table 17.)

A more detailed analysis of the development of agricultural production in each sub-region is given below.

1. MEXICO AND CENTRAL AMERICA

The main items of agricultural production in the sub-region are: cotton, maize, meat, coffee and sugar, which, in the aggregate, account for about 75 per cent of the value of the production of the groups considered in this study.

These five commodities have followed divergent courses since the pre-war period. While per capita production of maize, sugar, and particularly of cotton, substantially increased between 1934-38 and 1952/53, that of meat and coffee registered a marked decline. (See table 18.)

The first three items, which in 1934-38 represented about 31 per cent of the total value of production, had

Table 17. Latin America: Percentage composition of agricultural production^a

	Mexico and C. America				Caribbean area				Tropical zone of S. America				Temperate zone			
	1934-38	1951/52	1952/53	1953/54	1934-38	1951/52	1952/53	1953/54	1934-38	1951/52	1952/53	1953/54	1934-38	1951/52	1952/53	1953/54
Wheat	5.1	4.5	3.9	4.9	—	—	—	—	1.1	1.8	2.2	2.4	26.0	14.6	28.3	25.7
Other cereals	0.9	1.2	1.2	1.1	—	—	—	—	0.5	0.7	0.7	0.8	4.5	3.4	9.7	6.8
Maize	16.8	18.1	17.0	18.8	2.2	1.5	1.6	1.6	11.1	9.8	9.2	10.2	14.8	5.3	6.7	8.6
Rice	2.1	3.0	3.0	3.0	0.8	1.6	2.1	2.5	5.3	9.5	9.1	9.7	0.3	1.5	1.2	1.3
Beans	4.1	3.9	4.1	4.1	2.0	0.7	0.7	0.7	4.4	5.0	5.5	5.5	0.6	0.8	0.7	0.8
Roots and tubers	1.4	1.3	1.4	1.4	4.1	2.9	3.5	3.7	5.9	10.0	9.7	10.0	4.1	6.4	5.8	6.6
Sugar	6.3	8.3	9.1	9.3	69.7	79.0	75.3	73.0	6.1	8.4	8.8	9.3	1.7	3.7	2.4	3.1
Edible oils	1.9	4.8	4.6	4.6	0.2	0.2	0.2	0.2	2.2	1.8	2.0	1.7	1.1	6.7	4.2	3.5
Meat	24.2	17.5	16.6	16.5	8.1	5.4	6.5	6.5	17.4	17.5	16.6	16.7	29.8	39.6	28.5	29.8
Foodstuffs	62.8	62.6	60.9	63.7	87.1	91.3	89.9	88.2	54.0	64.5	63.8	66.3	82.9	82.0	87.5	86.2
Non-edible oils	0.1	0.6	0.5	0.5	—	—	—	—	0.9	0.7	0.6	0.6	8.1	3.2	1.7	2.7
Coffee	19.6	11.9	13.1	11.3	6.6	4.3	4.2	5.5	30.9	21.7	20.4	20.2	—	—	—	—
Tobacco	2.7	2.7	2.8	2.9	4.6	3.4	4.5	4.8	2.7	2.8	2.5	2.9	0.8	1.8	1.4	1.2
Cotton	7.8	19.0	17.8	18.3	0.6	0.2	0.2	0.2	10.5	8.7	11.1	8.7	1.9	4.9	3.4	3.8
Hard fibres	6.7	4.0	4.1	3.6	1.0	1.2	1.1	1.1	0.2	0.8	0.9	0.9	0.1	0.3	0.2	0.3
Wool	0.2	0.2	0.2	0.1	—	—	—	—	0.6	0.6	0.5	0.5	5.2	8.0	5.8	6.2
Non-foodstuffs	37.1	38.4	38.5	36.7	12.8	9.1	10.0	11.6	45.8	35.3	36.0	33.8	16.1	18.2	12.5	14.2
TOTAL ^b	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: FAO—ECLA.

^a Includes a group of commodities representing about 90 per cent of the total value of production.

^b Differences due to rounding.

Table 18. Per capita agricultural production in Mexico and Central America
(Values in 1948 dollars)

	1934-1938	1948-50	1951/52	1952/53	1953/54
Cotton	1.86	4.06	5.72	5.32	5.50
Maize	4.01	5.14	5.47	5.08	5.64
Sugar	1.51	2.40	2.50	2.72	2.80
Coffee	4.66	3.68	3.58	3.92	3.39
Meat	5.75	5.27	5.26	4.95	4.95 ^a
Miscellaneous	6.00	7.81	7.87	7.70	7.91
TOTAL	23.79	28.36	30.40	29.69	30.19

Source: FAO/ECLA.

^a Estimate.

risen by 1953/54 to about 46 per cent of this value (at constant 1948 prices). Conversely, production of meat and coffee, which in the pre-war period had accounted for 44 per cent of the total value, subsequently fell so sharply that in 1953-54 it represented only 28 per cent. Although these are the most marked changes in the structure of the sub-region's agricultural production, the increment in the production of oils—both edible and industrial—is also significant, since it constituted a rise from 2 to 5 per cent of the total value of production between 1934-38 and 1953/54. The relative position of rice also improved, accounting for 3 per cent of the aggregate value by 1953/54. Again, a considerable fall

was recorded in the per capita production of hard fibres, so that their share of the total dropped from 6.7 to 3.6 per cent during the same period. The other products maintained more or less the same proportion within the total value of the sub-region's agricultural production. (See again table 17.)

Mexico, the most important country within this sub-region, accounts for more than 75 per cent of the total value of agricultural production. The sizable increase in the production of cotton, maize and sugar is due mainly to the remarkable expansion of the country's cultivated acreage. (See table 19.) However, yields have also risen appreciably between the two periods under review.

Table 19. Mexico: Area and yields for selected crops

	Cotton		Maize		Sugar cane	Coffee
	Area ^a	Yields ^b	Area ^a	Yields ^b	Area ^a	Area ^b
1934/38	275	2.5	2,980	5.60	81	114
1948/50	571	3.4	3,950	7.45	194	159
1951/52	884	3.3	4,428	7.75	210	175
1952/53	784	3.4	4,236	7.60	222	205
	753	3.6	4,875	7.75	247	199

Source: ECLA, from Mexican agricultural statistics.

^a Thousands of hectares.

^b Metric quintals per hectare.

2. THE CARIBBEAN ZONE

Sugar in this sub-region accounts for about 75 per cent of the total value of agricultural production. Other products of importance are coffee and tobacco, which together contribute about 10 per cent of the aggregate value. The area can therefore be considered a typical monoproducer. There has been no sign of any tendency towards diversification; on the contrary, all crops—except sugar—have been losing ground, and in some cases the per capita levels of productivity have declined sharply. (See tables 17 and 20.)

Within this area, Cuba accounts for approximately 60 per cent of the value of total production, its share of the sugar crop amounting to about 70 per cent. The other important sugar producer in the sub-region, Puerto Rico, contributes with about 14 per cent of the total. Despite large sugar surpluses, several exporter countries in this sub-region have continued to expand their production. (See table 21.)

Table 20. Per capita agricultural production in the Caribbean area
(1948 dollars)

	1934-1938	1948-50	1951/52	1952/53	1953/54
Sugar	36.93	50.19	60.28	46.72	44.70
Coffee	3.48	3.33	3.28	2.60	3.34
Tobacco ...	2.43	2.90	2.63	2.77	2.92
Miscellaneous	10.06	10.65	10.41	9.92	10.24
TOTAL^a	52.90	67.07	76.60	62.01	61.20

Source: FAO/ECLA.

^a Representing more than 90 per cent of the total production of the area.

3. THE TROPICAL ZONE OF SOUTH AMERICA

Production is highly diversified in this area. The main crop, coffee, accounts for little more than 20 per cent of

Table 21. Sugar production in the Caribbean area

(Thousands of tons)^a

	1934-38	1948-50	1951/52	1952/53	1953/54	1954/55
British West Indies	433	663	678	805	805	775
Cuba	2,838	5,515	7,225	5,159	4,890	4,536
Dominican Republic	440	495	588	600	637	705
French West Indies	105	97	134	141	171	180
Haiti	39	50	58	55	46	50
Puerto Rico	884	1,146	1,234	1,061	1,080	1,061
TOTAL	4,744	7,973	9,928	7,833	7,641	7,318

Source: FAO.

^a Crude sugar, excluding *panela* (unrefined brown sugar).

the aggregate for this group. This situation differs from that prevailing in the pre-war period, when coffee contributed more than 30 per cent of the total production. Conversely, the relative position of wheat, rice and other cereals—excluding maize—has improved substantially, rising from 7 to 13 per cent between 1934-38 and 1953/54. In the aggregate, the same applies to sugar and to roots and tubers, whose share of the total value of agricultural production has risen from 6.1 to 9.2 and from 5.9 to 10 per cent, respectively, during this period. (See table 17.)

Per capita production of rice, tubers and sugar has risen sharply. (See table 22.) Conversely, that of maize and meat, like that of coffee, has decreased to a marked extent. Other commodities, which taken as a group, do not represent a significant percentage, have maintained

Table 22. South America: Per capita agricultural production in the tropical zone

(1948 dollars)

	1934-38	1948-50	1951/52	1952/53	1953/54
Coffee	14.06	8.62	8.77	8.82	8.62
Meat	7.95	7.35	7.08	7.15	7.15 ^a
Cotton	4.79	3.66	3.52	4.79	3.72
Maize	5.09	4.00	3.95	3.96	4.36
Rice	2.41	3.94	3.83	3.93	4.15
Roots and tubers	2.90	4.37	4.05	4.16	4.28
Sugar	2.77	3.32	3.38	3.79	3.98
Miscellaneous ...	5.76	6.21	5.77	6.50	6.51
TOTAL	45.73	41.47	40.35	43.10	42.77

Source: FAO/ECLA.

^a Estimate.

about the same per capita levels as during the pre-war period.

Brazil accounts for 62 per cent of the total population and its production constitutes approximately 70 per cent of the sub-regional aggregate. Increases achieved in rice and sugar production have mainly been due to the expansion of the acreage under cultivation. (See table 23.) In contrast, the area under coffee has contracted considerably and by 1953/54 had fallen 16 per cent below the pre-war acreage. Although there was a remarkable increment in the area under maize—more than one million hectares—declining yields have resulted in a lower per capita production.

4. THE TEMPERATE ZONE OF SOUTH AMERICA

The highest value of per capita agricultural production within Latin America is found in this sub-region. It is here, too, that the sharpest decline has taken place in these values since the pre-war period, mainly as a result of the violent fluctuations of Argentina's agricultural production, which accounts for about 80 per cent of the aggregate value for the sub-region.

The structure of agricultural production in these countries has not varied to any considerable extent between the pre-war period and 1952/53 and 1953/54 (see again table 17). The percentage represented by meat and wheat production, which in 1934-38 together accounted for almost 56 per cent of the total value, has remained practically unchanged the last two years. Some modifications, however, are to be observed with respect to other commodities. Maize and linseed, which accounted for about 23 per cent of the total value of agricultural production in the pre-war period, represented only 8 per cent in 1952/53 with a slight improvement in 1953/54. The absolute and relative increment registered in the "mis-

Table 23. Brazil: Area and yields of selected crops

	Rice		Sugar cane	Maize		Coffee
	Area ^a	Yields ^b	Area ^a	Area ^a	Yields ^b	Area ^a
1934-38	902	14.4	457	4,013	14.1	3,486
1948-50	1,896	16.0	833	4,649	12.7	2,555
1951/52	1,873	15.6	920	4,864	12.1	2,738
1952/53	2,072	14.8	991	5,120	11.7	2,823
1953/54	2,383	14.4	999	5,469	12.9	2,919

Source: ECLA, from Brazilian agricultural statistics.

^a Thousands of hectares.^b Metric quintals per hectare.

Table 24. South America: Per capita agricultural production in the temperate zone

(1948 dollars)

	1934-38	1948-50	1951/52	1952/53	1953/54
Wheat	29.50	20.66	10.11	25.61	22.22
Other cereals ..	5.08	4.35	2.37	8.75	5.85
Maize	16.86	4.39	3.69	6.08	7.45
Roots and tubers	4.67	5.84	4.40	5.27	5.70
Linseed	9.20	2.78	2.24	1.54	2.30 ^a
Meat	33.90	29.00	27.40	25.80	25.80
Wood	5.91	5.53	5.53	5.25	5.40
Miscellaneous ..	8.42	12.52	13.60	12.32	12.08
TOTAL	113.54	85.07	69.34	90.62	86.80

Source: FAO/ECLA.

^a Estimate.

cellaneous" group² is also significant, since their per capita production rose by 50 per cent between 1934-38 and 1953/54, while their share of the total increased from 7 to 14 per cent in the same period.

In the case of Argentina, the sharp drop in agricultural production has been due mainly to the sizable contraction in cultivated acreage, since yields (except for sunflower seed) have generally been higher than during the pre-war period (excluding 1951/52). The acreage under the seven crops which represent about 80 per cent of the value of purely agricultural production³ in this country declined by more than 30 per cent between 1934-38 and 1953/54. (See table 25.)

² Including edible oils, beans, rice, tobacco, cotton and hard fibres.

³ Excluding livestock.

Table 25. Argentina: Areas and yields of selected crops

	1934-38		1948-50		1951/52		1952/53		1953/54 ^a	
	Area ^b	Yields ^c	Area ^b	Yields ^c	Area ^b	Yields ^c	Area ^b	Yields ^c	Area ^b	Yields ^c
Wheat	6,783	9.8	4,706	11.4	2,740	7.7	5,640	13.4	4,996	12.4
Maize	4,362	18.1	1,564	14.8	1,431	14.2	2,356	15.1	2,414	18.4
Oats	794	9.4	596	11.2	418	10.5	963	13.2	729	13.6
Barley	536	9.4	504	11.7	351	9.6	840	14.0	653	13.7
Rye	434	5.8	673	6.0	152	5.3	1,305	10.3	836	7.2
Sunflower seed	175	8.8	1,243	7.6	963	6.7	627	6.8	453	7.6
Linseed	2,599	6.6	892	6.2	448	7.0	847	6.7	552	7.4
TOTAL SEVEN COMMODITIES	15,683		10,178		6,503		12,578		10,633	

Source: FAO Yearbook of Production, 1953.

^a ECLA based on Argentine agricultural statistics.^b Thousands of hectares.^c Metric quintals per hectare.

Chapter IV

THE DOMESTIC SUPPLY AND DEMAND FOR AGRICULTURAL COMMODITIES

1. GENERAL SITUATION

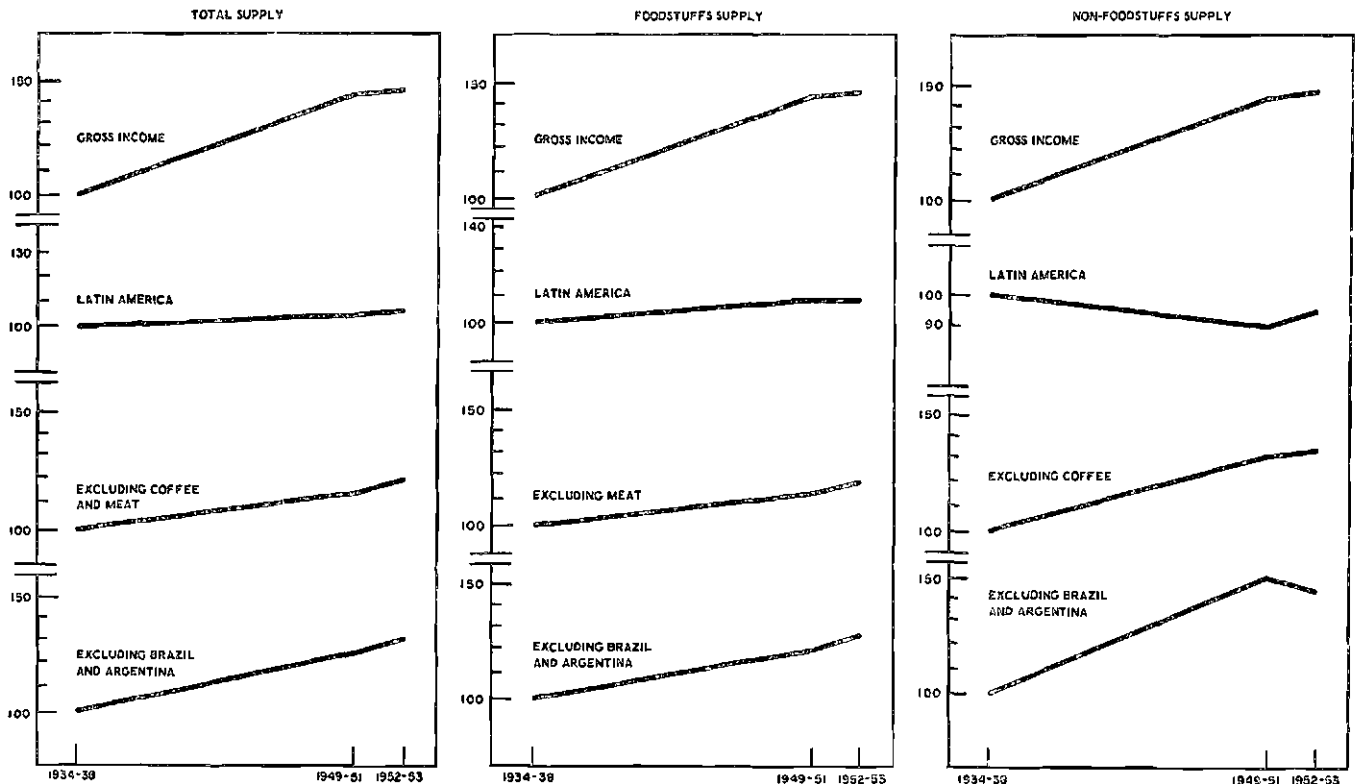
As seen in section III, Latin America's agricultural production did not expand sufficiently to reach pre-war per capita levels. Unlike the development of production, per capita supplies¹ have improved in recent years in comparison with the pre-war period. In the light of statistics prepared by FAO, the general index of per capita supplies, comprising a group of more than 30 products, improved by 5 per cent in 1949-51 and by

¹For the purpose of this analysis, supplies for domestic consumption are calculated by adding imports of a given commodity to the production of a specific year or period, and subtracting exports. When data are available on stocks the corresponding adjustments are introduced (and these adjusted supplies are called "net supplies"). Moreover, in making the estimates the harvesting season and corresponding commercial year have been taken into account, in accordance with a procedure which it is unnecessary to describe in detail here.

some 6 per cent in 1952-53 in relation to the base period 1934-38.

These average regional percentages must be viewed with great caution, since they have been influenced by extreme factors which tend to distort the general picture. This is the case with coffee, for instance, supplies of which have suffered an abnormal decline, according to official statistical series. Meat supplies have also decreased considerably in some countries, and since this commodity is an item of great importance in the diet of all Latin American nations, its impact on the general indices is great. Nor is it possible to disregard the influence exerted by certain important countries such as Brazil and Argentina, in that per capita supplies in these countries have substantially fallen off, for exceptional reasons which will be explained later. Thus, if the two products or the two countries mentioned are excluded, the picture becomes substantially different. (See table 26 and figure V.)

Figure V
LATIN AMERICA: INDICES OF PER CAPITA SUPPLIES AND INCOME
(1934-38 = 100)
Semilogarithmic scale



Source: Food and Agriculture Organization and Economic Commission for Latin America.

Table 26. Latin America: Indices of supply and per capita income
(1934-38 = 100)

	Average 1949-51	Average 1952-53
<i>Total supplies</i>		
Latin America	105	106
Excluding coffee and meat.....	114	119
Excluding Argentina and Brazil..	123	130
<i>Food supplies</i>		
Latin America	108	108
Excluding meat	112	116
Excluding Brazil and Argentina..	120	127
<i>Non-food supplies</i>		
Latin America	89	93
Excluding coffee	130	132
Excluding Argentina and Brazil..	149	143
Gross income ^a	144	146

Source: FAO-ECLA.

^aThe average income of Argentina, Brazil, Chile, Colombia and Mexico—which together comprise 70 per cent of Latin America's population—has been assumed to be representative for the region.

If the index of per capita supply is compared with that of per capita income; a very small income-elasticity of demand is obtained in the one case—a little more than 0.1—which does not seem to reflect the natural reaction of the region's consumers to an increase in income. In the alternative case upon the exclusion of the countries or products indicated above, the index of supply takes a more normal course, and elasticities close to 0.5 and 0.6 are obtained, which would be nearer to the partial results estimated by the Economic Commission for Latin America in the course of research on this topic.

The apparent inadequacy of agricultural supplies in the region as a whole has had manifest repercussions on the relative prices of agricultural products. If an analysis is made of the terms of trade by activities, it becomes evident that their favourable character has benefited agriculture since 1945, and particularly since 1950. (See table 27 for the indices of the terms of trade for 1950-54.) It is clear that prices of agricultural commodities have steadily remained at levels much higher than those for other goods and services. This seems an undoubted reflex of the pressure exerted by unsatisfied demand on domestic price levels, although the primary influence of fluctuations in world prices cannot, of course, be disregarded. (See also figure VI.)

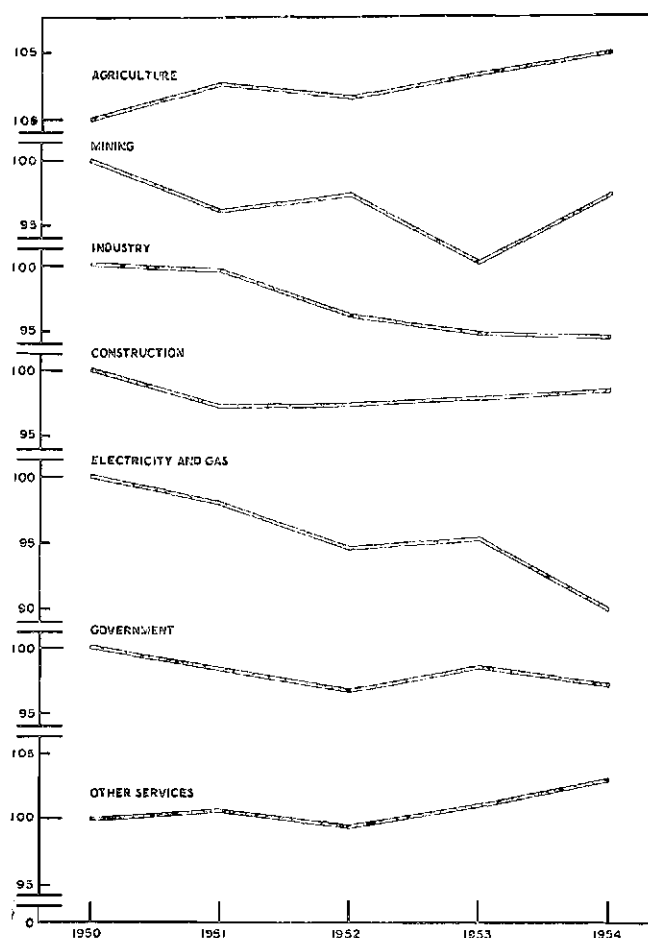
Table 27. Latin America: Terms of trade index by activities
(1950 = 100)

	1950	1951	1952	1953	1954
Agriculture	100	102.6	101.6	103.4	105.0
Mining	100	96.2	97.4	92.3	97.6
Industry	100	99.6	96.3	94.9	94.7
Building	100	97.2	97.5	97.9	98.5
Electricity and gas	100	97.9	94.6	95.4	90.1
Government	100	98.4	96.8	98.6	97.4
Other services	100	100.7	99.4	100.9	102.8

Source: Economic Commission for Latin America.

Figure VI
LATIN AMERICA: INDICES OF THE TERMS OF TRADE BY ACTIVITIES

(1950 = 100)
Natural scale



Source: Economic Commission for Latin America.

Not all commodities have participated equally in this development of food supplies. While some, like wheat (exclusively because of the sharp decline in Argentine supplies until 1952) and meat, register decreases in relation to the per capita level of the period immediately preceding the war, large increases are recorded for others such as rice, beans, sugar, oils, roots and tubers, and milk. Moreover non-foodstuffs, excluding coffee² also show significant increments.

Table 28 has been prepared to show the changes which have occurred in the per capita availabilities of the main foodstuffs and other commodities.³

² Supplies of this commodity seem to have been so abnormal that they were excluded from the calculations made in this section, since it seems very strange that apparent availability of coffee for local consumption should have dropped from 4.7 kilogrammes per capita in 1934-38 to 0.6 kilogrammes in 1949-51 and little more than 1 kilogramme per capita in 1952 and 1953.

³ For a better evaluation of the over-all index of the former, those commodities have been excluded which, important though they are, in many countries are mainly used as fodder, such as barley, rye and oats. Since complete statistics are not available on their use as animal feed, their inclusion in the foodstuffs index would distort it through duplication.

Table 28. Latin America: Index of per capita supplies of selected agricultural commodities^a

(1934-38 = 100)

	Average 1949-51	Average 1952-53
<i>Foodstuffs</i>	108	108
Wheat (total)	91	98
Wheat (excluding Argentina)....	114	122
Rice	149	145
Beans	115	112
Roots and tubers.....	147	137
Sugar	182	165
Edible oils	159	166
Meat	96	94
Milk	111	113
<i>Commodities other than foodstuffs</i> ^b	130	134
Tobacco	115	115
Cotton	141	159
Wool	166	117
Hard fibres	140	180
Non-edible oils	150	137

Source: FAO.

^a Excluding stocks of wheat and linseed in Argentina and of sugar in Cuba.^b Excluding coffee.

The evolution of per capita agricultural supplies has followed divergent courses in the various sub-regions of Latin America. Although such availabilities have increased in all of them in relation to the pre-war period, the size of the increments varies considerably from one area to another. Thus in Mexico and Central America food supplies per capita rose by 17 per cent between 1934-38 and 1952-53, while availability of non-foodstuffs increased by almost 40 per cent in the same period. Among foodstuffs, the greatest increases affected supplies of sugar, wheat and edible oils, which rose by 69, 55 and 30 per cent respectively between the pre-war period and 1952-53. In contrast, supplies of milk declined sharply, by almost 10 per cent per capita during the same period. An insignificant improvement in meat supplies affected the corresponding index during the same period by barely 1 per cent. On the other hand there was a marked increment in the supply of commodities other than foodstuffs, where the rise in supplies of non-edible oils played a decisive role, increases with respect to tobacco and hard fibres exerting a lesser influence. The expansion in supplies of cotton and wool was of minor importance.

In the Caribbean area the situation was quite different. Here there was important improvement in respect to foodstuffs, with more modest increments for other commodities. Among the former, sugar was the main item, since its per capita availability increased by almost 226 per cent between 1934-38 and the two-year period 1952-53. Milk and wheat supplies also expanded while those of edible oils and beans decreased. No great fluctuation was registered in the supply of meat, roots and tubers, and rice. Among commodities other than foodstuffs, there was a considerable increase in the supply of cotton and hard fibres, while that of non-edible oils dropped appreciably.

In the sub-region comprising the tropical countries of South America there was a slight increment in per capita food supplies, while considerable improvement

took place with respect to commodities other than foodstuffs, excluding coffee. As regards foodstuffs, large increases were recorded in the supply of rice, roots and tubers, wheat, sugar, milk and beans, but these were almost totally offset by the decline in meat supplies. If this last commodity is excluded, the index of supplies improves appreciably. (See table 29.) Brazil exerts a predominant influence on the over-all index for the sub-region, and its level of food supplies has improved to a lesser extent than the sub-regional average. The exclusion of Brazil, therefore, considerably raises the index of food supplies for the sub-region. Among non-foodstuffs, there were substantial increments in per capita availabilities of cotton and hard fibres, which rose by 58 and 120 per cent, respectively, between 1934-38 and 1952-53.

Table 29. Latin America: Indices of the supply of agricultural commodities in the sub-regions^a

(1934-38 = 100)

	Aggregate		Per capita	
	1949-51	1952-53	1949-51	1952-53
<i>Mexico and Central America</i>	158	172	117	118
Foodstuffs	154	170	115	117
Foodstuffs excluding milk	168	186	125	127
Commodities other than foodstuffs	199	200	148	137
<i>Caribbean area</i>	140	169	113	129
Foodstuffs	140	170	113	130
Commodities other than foodstuffs	139	142	112	108
<i>Tropical zone of South America</i>	147	160	110	112
Foodstuffs	146	157	109	110
Foodstuffs excluding meat	157	172	118	120
Commodities other than foodstuffs	149	185	112	130
<i>Excluding Brazil</i>	163	181	123	126
Foodstuffs	162	181	123	126
Commodities other than foodstuffs	176	185	133	128
<i>Temperate zone of South America</i>	129	137	104	103
Foodstuffs	125	134	101	101
Commodities other than foodstuffs	201	191	162	143
<i>Excluding Argentina</i>	142	153	120	118
Foodstuffs	135	145	114	112
Commodities other than foodstuffs	260	288	220	223

Source: FAO-ECLA.

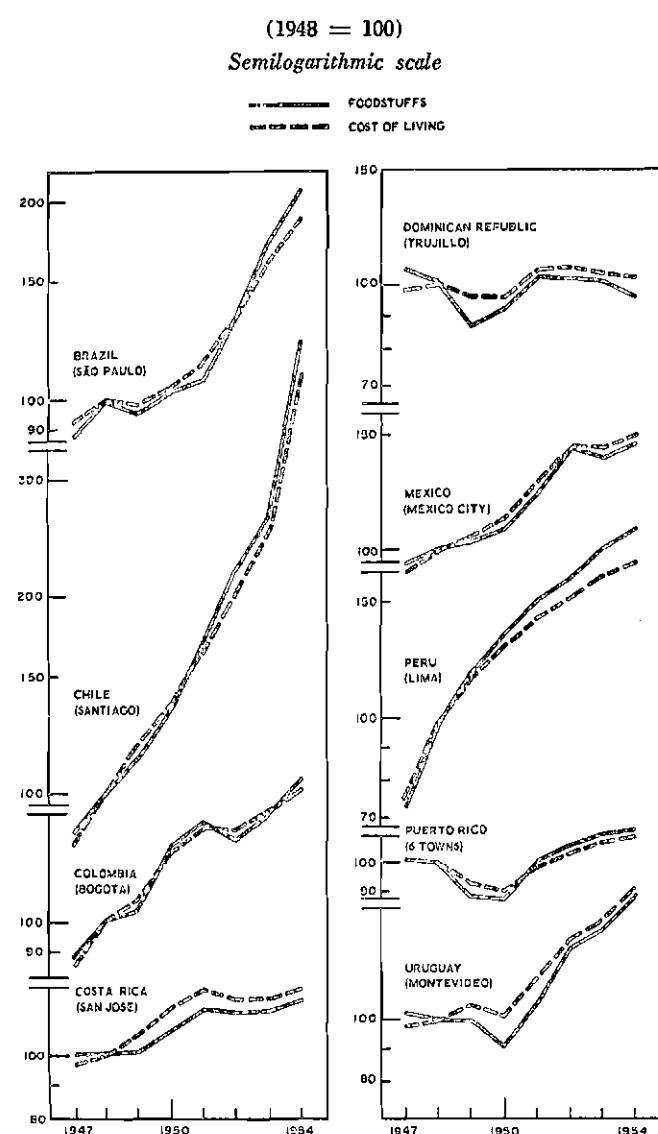
^a Includes the following commodities: Foodstuffs: wheat, rice, maize, beans, roots and tubers, sugar, oils, meat and milk. Commodities other than foodstuffs: tobacco, cotton, wool, hard fibres and non-edible oils.

A similar phenomenon occurred in the temperate zone countries. The supplies of one country—Argentina in this case—exert such a decisive influence within the area that they shape the over-all index. Supplies per capita in this country decreased considerably in the post-war years, owing to circumstances which will be explained elsewhere, so that the improvements in other countries of this sub-region were almost entirely offset. Thus the

index for the area shows an improvement for foodstuffs of barely 3 per cent between the pre-war period and 1952-53. However, if Argentina is excluded, the index for the other countries is seen to have risen by 18 per cent in relation to 1934-38. Both in Argentina and in other countries sizable increments were registered for rice, milk, edible oils and sugar. Conversely, the supply of meat, which is a stable item of diet in this sub-region, and the importance of which is considerable, has remained virtually unaltered.

Figure VII

LATIN AMERICA: INDICES OF COST OF LIVING AND FOODSTUFFS RETAIL PRICES IN SEVERAL COUNTRIES



Supplies of commodities other than foodstuffs expanded considerably in the whole sub-region. Statistics for Argentina, however, show marked fluctuations in linseed supplies in 1949-51 and in wool stocks in 1953, so that the over-all index for the area was unfavourably affected. For this reason the index for the non-foodstuffs groups has been presented both including and excluding Argentina. (See table 29.) The most significant incre-

ment within this group was that registered in cotton supplies, of which per capita availabilities in the sub-region—including Argentina—rose by almost 145 per cent. Supplies of hard fibres also increased considerably, and by 1952-53 stood at 110 per cent above the 1934-38 per capita level.

2. SITUATION IN SOME COUNTRIES OF THE REGION

(a) Argentina

(i) *Foodstuffs.* In recent years per capita food supplies in Argentina have remained below the pre-war level, in contrast with the rise in income which has occurred in the same period. This decline has undoubtedly been due to the reduction of agricultural production in this country during the intermediate years of the period under consideration. Apparently, the most important commodities in the Argentine diet—wheat and meat—registered considerable decreases until 1952. In 1953, thanks to the recovery in wheat production, there was some improvement in gross per capita availabilities of this commodity. Even if the large wheat stocks accumulated by Argentina during that year were excluded, the index of net per capita supplies would still be somewhat higher than during the pre-war period. In 1953 there was a still sharper decline in meat supplies.⁴ (See table 30.) Sizable increases were recorded, however, in the per capita supplies of other commodities such as rice, edible oils, sugar and milk.

Table 30. Argentina: Gross per capita supplies of selected agricultural commodities

(Kilogrammes annually)

	1943-38	1949-51	1952	1953	Average 1952-53
<i>Foodstuffs:</i>					
Wheat	244	175	124	276	210
Maize	101	101	77	131	104
Roots and tubers	100	115	84	110	97
Edible oils ..	6	13	14	10	12
Sugar	30	34	36	33	34
Rice	7	8	9	9	9
Meat	107	100	102	92	97
Milk	206	247	258	246	252
<i>Commodities other than foodstuffs:</i>					
Non-edible oils	4.2	^a	3.9	4.5	4.2
Tobacco	1.5	2.0	2.0	2.1	2.1
Cotton	2.3	5.3	5.7	3.8	4.7
Wool	1.1	2.0	1.6	1.3	1.5

Source: Food and Agriculture Organization.

^a Exports were greater than production.

(ii) *Commodities other than foodstuffs.* The improvement in supplies of this group of commodities was basically due to the increase in cotton which more than doubled between the pre-war period and recent years. (See table 30.) Similarly there were increments, although on a more modest scale, in the supply of wool and tobacco, whereas the availabilities of non-edible oils—mainly linseed—remained practically stationary.

⁴ However, non-official sources would indicate that meat consumption per capita in Argentina has remained more or less constant during the period under review.

These indices show that supplies of non-foodstuffs have been closely linked to income fluctuations, while the index of foodstuffs, affected by the decline recorded for meat, would seem to demonstrate a negative elasticity. (See table 31.) The latter cannot in fact be true for foodstuffs as a whole and the figures should be considered more as a reflection of supply difficulties than as representing a natural reaction of demand in face of income increments. If meat is excluded from the foregoing estimate, a considerable change takes place in the food index and, consequently, in the total index.

Table 31. Argentina: Indices of gross disposable income and gross per capita supplies
(1934-38 = 100)

	Average 1949-51	Average 1952-53
Supply of agricultural commodities	100	98
Supply of agricultural commodities excluding meat	105	104
Foodstuffs ^a	97	93
Foodstuffs excluding meat	100	101
Commodities other than foodstuffs ^b	144	119
Gross disposable income ^c	135	121

Source: ECLA/FAO.

^a Includes the following commodities: wheat, maize, rice, beans, roots and tubers, sugar, edible oils, meat and milk.

^b Includes the following commodities: Tobacco, cotton, wool, hard fibres and non-edible oils.

^c Corresponds to the index of per capita consumption of available goods and services, which reflects more exactly the fluctuations of per capita disposable income.

(b) Brazil

(i) *Foodstuffs.* The decline in per capita supplies of meat has played a decisive role in the evolution of the indices of food supply, this commodity being in short-supply in the Brazilian diet. The relevant table shows that gross per capita meat supplies dropped by 16 per cent between 1934-38 and the average for 1952 and 1953. (See table 32.) Milk supplies also decreased by about 7 per cent, while apparent availability of maize—whether used for fodder or for direct consumption by the population—dropped even more sharply. For the rest of the foodstuffs under consideration substantial increments were recorded, particularly for rice, gross per capita supplies of which rose by about 60 per cent between the pre-war period and the average for 1952-53, and for sugar, as well as for roots and tubers, which in the same period showed increases of approximately 50 per cent.

When food supplies are compared with per capita disposable income (see table 33), it becomes evident that the demand originating in income increments has not been fully satisfied. It is necessary, however, to exclude certain items which have had a very unfavourable effect on the food index—meat and milk—in order to obtain a clearer view of developments for the rest of the commodities which make up the Brazilian diet. An examination of both series shows that, while the over-all index, including milk and meat, rose by only 7 per cent in 1952-53 in relation to 1934-38, an improvement of 28 per cent is apparent when both the above commodities are excluded from the index. This increment seems to

be reasonably normal because average per capita income increased by about 60 per cent in the same period. The comments made in the case of Argentina are also valid for the phenomenon observed in Brazil with respect to meat and milk. It does not seem logical to assume that these commodities have a negative income-elasticity of demand; the decline should be ascribed to difficulties of supply arising from Brazil's livestock problem, which in future should merit special attention. As to maize, the lower availability seems to be due to its replacement by wheat and rice; this would be a normal process in view of the rise in income.

(ii) *Commodities other than foodstuffs.* As has already been pointed out, statistical gross coffee supplies in Brazil have fluctuated so violently that it has been thought advisable to exclude this commodity from the analysis. The index of supply for the other non-foodstuffs is more normal, particularly in recent years. Apparent consumption of vegetable fibres has increased by about 60 per cent owing to the great expansion of the textile industry. Conversely, per capita supplies of tobacco, non-edible oils and wool have not fluctuated.

Table 32. Brazil: Indices of per capita supply of some agricultural commodities and of disposable per capita income
(1934-38 = 100)

	Average 1949-51	Average 1952-53
Supply of agricultural commodities	105	107
Supply excluding meat and milk	123	128
Foodstuffs ^a	105	105
Foodstuffs excluding meat and milk	128	128
Commodities other than foodstuffs ^a	107	130
Disposable income ^a	150	162

Source: Food and Agriculture Organization—Economic Commission for Latin America.

^a See notes to table 31.

Table 33. Brazil: Per capita supplies of selected agricultural commodities
(Kilogrammes annually)

	Average 1934-38	Average 1949-51	Average 1952-53
<i>Foodstuffs:</i>			
Wheat	29.3	32.0	36.6
Maize ^a	87.3	66.9	64.6
Rice	33.1	55.9	52.2
Beans	20.6	23.7	23.0
Sugar	25.1	33.1	35.4
Roots and tubers	163.2	271.9	252.5
Edible oils	2.5	2.8	3.0
Meat	33.2	28.3	28.2
Milk	105.0	97.2	98.2
<i>Commodities other than foodstuffs:</i>			
Non-edible oils	0.6	0.7	0.6
Tobacco	1.6	1.6	1.6
Cotton	4.2	4.5	6.3
Hard fibres	0.2	0.2	0.8
Wool	0.2	0.2	0.2

Source: FAO.

^a Discounting the proportion used as fodder.

(c) Colombia

(i) *Foodstuffs*. In 1952-53 the evolution of food supplies in Colombia was satisfactory in comparison with that recorded for the period 1934-38. The supply of almost all the main items of the Colombian diet—particularly rice, sugar, roots and tubers, edible oils and milk—increased moderately. (See table 34.)

Table 34. Colombia: Per capita supplies of some agricultural commodities
(Kilogrammes annually)

	Average 1934-38	Average 1949-51	Average 1952-53
<i>Foodstuffs:</i>			
Wheat	14.5	14.5	15.1
Maize ^a	46.5	47.2	59.2
Rice	13.5	25.1	25.3
Beans	4.2	4.5	4.4
Roots and tubers	75.3	111.5	115.7
Sugar	6.6	12.7	15.6
Edible oils	0.2	0.7	0.7
Meat	24.4	29.7	29.7
Milk	112.8	165.4	154.0
<i>Commodities other than foodstuffs:</i>			
Non-edible oils	-	0.2	0.2
Cotton	1.0	2.3	2.4
Wool	-	0.2	0.1
Tobacco	1.1	1.5	1.5
Hard fibres	1.2	1.0	1.0

Source: FAO.

^a Discounting the proportion used as fodder.

(ii) *Commodities other than foodstuffs*. The remarkable expansion of cotton supplies is a dominant element in the index for this group. (See table 35.) Increases are recorded for the other items—with the exception of hard fibres—but they are not so significant. If the index of agricultural supplies is compared with that of disposable income, they are seen to correspond fairly closely in Colombia, in contrast with the situation in other countries.

Table 35. Colombia: Indices of agricultural supplies and disposable income per capita
(1934-38 = 100)

	1949-51	1952-53
Agricultural supplies	137	136
Foodstuffs ^a	134	134
Commodities other than foodstuffs ^a	180	179
Disposable income ^a	135	149

Source: FAO/ECLA.

^a See notes to table 31.

(d) Chile

(i) *Foodstuffs*. Unlike developments in Colombia, the rise in supplies in this country has not been homogeneous, since considerable increases are registered for some commodities—rice, edible oils and milk—and sharp decreases for others, such as meat and tubers. (See table 36.)

Per capita food availabilities in Chile have risen by 13 per cent in recent years in comparison with pre-war levels, whereas average per capita income increased by more than 30 per cent during the same period. (See table 37.)

(ii) *Commodities other than foodstuffs*. Supplies of this group of commodities have improved appreciably since the pre-war period, a fact which reflects the considerable industrial expansion of Chile during the last 15 years. The largest increment affected textile fibres, particularly cotton, per capita the supply of which was 5 to 6 times higher than in the pre-war period. (See again table 36.)

Table 36. Chile: Per capita supplies of selected agricultural commodities
(Kilogrammes annually)

	Average 1934-38	Average 1949-51	Average 1952-53
<i>Foodstuffs:</i>			
Wheat	176.7	178.0	186.2
Rice	7.2	10.1	14.7
Beans	8.8	5.8	8.3
Roots and tubers	90.5	82.8	75.2
Edible oils	1.2	3.8	3.3
Sugar	25.9	31.2	23.9
Meat	28.0	27.7	26.7
Milk	80.1	129.6	128.7
<i>Commodities other than foodstuffs:</i>			
Tobacco	1.5	2.0	2.1
Cotton	0.5	3.0	2.6
Wool	0.5	1.4	1.4
Hard fibres	-	0.1	0.1
Non-edible oils	0.2	0.3	0.4

Source: FAO.

Table 37. Chile: Indices of per capita supplies for some agricultural commodities and of per capita disposable income
(1934-38 = 100)

	Average 1949-51	Average 1952-53
Agricultural supplies	120	119
Foodstuffs ^a	113	113
Commodities other than foodstuffs ^a	238	227
Disposable income ^a	122	133

Source: FAO/ECLA.

^a See notes to table 31.

(e) Mexico

(i) *Foodstuffs*. Food supplies on a per capita basis rose by about 15 per cent between the pre-war period and 1952-53. The increments in the supplies of maize, wheat, rice, beans and edible oils had a substantial influence on this improvement and amply offset the decline in milk. There was no great variation in per capita meat supplies.

Table 38 shows the evolution of agricultural supplies in this country.

(ii) *Commodities other than foodstuffs*. Per capita supplies within this group increased more sharply than foodstuffs availabilities. The largest increments were recorded in hard fibres, tobacco and non-edible oils. In contrast, per capita supplies of cotton declined slightly in 1952-53, after an average rise of 20 per cent over the period 1949-51.

Agricultural supplies in general, particularly foodstuffs, have not kept pace with income increments, which

Table 38. Mexico: Per capita supplies of agricultural commodities
(Kilogrammes annually)

	Average 1934-38	Average 1949-51	Average 1952-53
<i>Foodstuffs:</i>			
Wheat	21.9	33.1	34.2
Maize ^a	82.2	108.0	115.6
Rice	3.0	5.5	6.0
Beans	5.8	9.1	10.0
Roots and tubers	5.6	7.7	7.9
Edible oils	1.2	3.8	4.8
Sugar	16.9	24.1	28.2
Meat	17.0	17.1	16.8
Milk	84.6	67.9	70.5
<i>Commodities other than foodstuffs:</i>			
Tobacco	0.8	1.4	1.4
Non-edible oils	0.1	0.3	0.6
Cotton	2.5	3.0	2.3
Wool	0.1	0.2	0.1
Hard fibres	1.6	2.7	3.0

Source: FAO.

^a Discounting the proportion used for fodder.

in Mexico have reached high levels. Thus, while per capita income rose by 80 per cent between 1934-38 and 1952-53, food supplies expanded by only 14 per cent and total supplies by only 15 per cent. This situation is largely due to the unsatisfactory progress of dairy production, resulting in deficient supplies of milk. If this commodity is excluded, the index improves substantially.

Table 39. Mexico: Indices of per capita supply of agricultural commodities and of per capita disposable income

(1934-38 = 100)

	1949-51	1952-53
Agricultural supplies	115	115
Supplies excluding milk	128	128
Foodstuffs ^a	113	114
Foodstuffs excluding milk	125	127
Commodities other than foodstuffs ^a	142	123
Disposable income ^a	177	180

Source: ECLA/FAO.

^a See notes to table 31.

3. LEVELS OF FOOD CONSUMPTION AND NUTRITION

Having analysed the trends in the domestic supplies of foodstuffs, it is now appropriate to consider how developments since the war in food production, utilization and trade have affected the average levels and patterns of consumption and nutrition in different countries of the region.

National average or per capita food supplies available for human consumption⁵ in some countries—estimated by the Food Balance Sheet method—for the pre-war period as well as the immediate post-war period and the most recent year for which complete data are available are shown in table 40.

⁵ It should be noted that supplies available for human consumption differ from the net supplies dealt with in the preceding paragraphs in that adjustments are now made for waste and for supplies quantities used for non-food purposes.

Table 40. Latin America: Food supplies available for human consumption

(Kilogrammes per capita annually at the retail level)

	Cereals	Roots & tubers	Pulses & nuts	Sugar	Fats & oils	Meat	Eggs	Fish	Milk & cheese	Vegetables	Fruits
<i>Argentina</i>											
Pre-war	106.1	65.8	2.5	27.2	9.8	106.9	7.1	4.5	162.0	25	47
1946-49	124.5	87.3	2.1	34.7	16.6	114.4	7.3	4.0	164.0	39	58
Recent (1952)	100.5	55.2	3.1	31.0	19.9	99.4	9.7	4.4	124.6	51	55
<i>Brazil</i>											
Pre-war	78.3	91.1	23.0	24.7	5.5	49.8	2.6	3.2	..	20	68
1946-49	79.3	122.7	26.1	30.4	6.4	39.4	2.7	2.9	..	24	81
Recent (1952)	89.4	116.8	24.9	33.4	6.9	26.6	3.3	4.4	..	26	92
<i>Chile</i>											
Pre-war	123.8	73.3	10.3	25.4	5.0	38.4	1.7	7.2	54.0	50	42
1946-49	133.7	79.5	6.0	26.0	6.0	37.6	2.0	11.3	68.5	54	41
Recent (1952)	134.7	64.4	9.0	23.9	9.0	31.5	4.6	19.4	82.8	57	43
<i>Colombia</i>											
Pre-war	57.4	86.8	7.0	40.0	3.2	26.2	3.5	0.6	94.3	10	132
1946-49	71.5	98.0	8.0	61.7	2.9	29.0	4.2	0.6	144.8	12	105
Recent (1950-51)	59.4	90.4	10.0	71.0	2.9	32.6	2.8	1.5	164.8	13	120
<i>Mexico</i>											
1946-49	123.0	7.0	10.0	26.0	6.0	23.0	2.0	2.0	71.0	24	58
Recent (1952)	143.6	6.5	14.9	32.5	8.8	19.2	2.0	2.7	66.9	23	56
<i>Peru</i>											
Pre-war	98.2	108.9	15.6	13.6	4.0	24.0	3.2	3.3	38.7	14	42
1946-49	102.6	122.2	6.9	22.4	3.9	22.6	3.3	3.4	36.3	14	43
Recent (1952)	102.7	169.2	8.8	22.2	6.2	19.9	2.7	4.3	29.0	50	34
<i>Uruguay</i>											
Pre-war	85.2	39.5	2.5	24.0	12.6	106.6	7.4	1.9	165.8	10	29
1946-49	100.4	34.0	2.0	28.1	11.7	106.5	8.2	2.2	183.2	14	40
Recent (1952)	93.5	57.9	1.3	32.3	15.4	125.6	6.5	2.5	163.6	24	51

Source: FAO.

The calorie and protein contents of these food supplies are shown in table 41. Calorie levels have generally risen in most of the countries, exceeding even pre-war standards, as a reflection of the improvement in net supplies of foodstuffs which was described in detail earlier in this section. Moreover, a comparison of the recent calorie levels with the estimated nutritional requirements of the population shows that the former are approaching the latter in many countries and in a few cases have even surpassed the dietary requirement level. (See table 41.)

Although average food consumption standards thus appear to be fairly satisfactory in most countries of the region, from the quantitative aspect, the situation of the nutritional quality of foodstuffs is not equally satisfactory. Considering animal protein levels as perhaps the best available indication of the nutritional quality of a diet, it will be seen from table 41 that in some countries the levels are much below those of others and need to be raised substantially before they can be considered as even fairly satisfactory.

However, data on food consumption derived from Food Balance Sheets indicate only the average supplies available per capita in the country and do not reveal the variation in consumption between different parts of the country or between different sections of the population. It is important, therefore, to study the results of surveys on the diet and nutrition of specific groups of the population also. The third FAO Regional Meeting, held in September 1954, noted in this connexion that "the food surveys carried out in eleven countries of the region, showed that calorie needs were adequately fulfilled, but that there are serious deficiencies in the quality of the diet . . ." Thus the results of the surveys confirm the general picture revealed by a study of the available Food Balance Sheets.

It is clear from the above analysis of the prevailing levels of food consumption and nutrition that there is an urgent need to raise the consumption of protective foods, especially those of animal origin. Among them, milk should receive a high priority in view of the insufficiency of proteins of high biological value, which seriously affects the health of mothers and children, as demonstrated by a recent survey carried out in the region.

Table 41. Latin America: Calorie and protein content of food supplies

(Per capita daily averages)

	Calories	Proteins (grammas)	
		Animal	Total
<i>Argentina</i>			
Pre-war	2,730	61.7	98.4
1946-49	3,190	65.6	101.8
Recent (1952)	2,800	57.0	95.5
Estimated calorie requirement..	2,600	—	—
<i>Brazil</i>			
Pre-war	2,150	..	68.0
1946-49	2,340	..	63.4
Recent (1952)	2,350	..	57.0
Estimated calorie requirement..	2,450	—	—
<i>Chile</i>			
Pre-war	2,240	21.1	68.9
1946-49	2,360	22.7	71.3
Recent (1952)	2,490	27.0	77.0
Estimated calorie requirement..	2,640	—	—
<i>Colombia</i>			
Pre-war	1,860	19.8	46.7
1946-49	2,280	25.6	56.3
Recent (1950/51)	2,400	30.0	56.0
Estimated calorie requirement..	2,550	—	—
<i>Mexico</i>			
1946-49	2,050	16.0	56.0
Recent (1952)	2,270	15.2	64.9
Estimated calorie requirement..	2,490	—	—
<i>Peru</i>			
Pre-war	1,870	14.0	56.2
1946-49	1,920	13.3	51.9
Recent (1952)	2,080	12.2	54.4
Estimated calorie requirement..	2,540	—	—
<i>Uruguay</i>			
Pre-war	2,380	60.9	89.5
1946-49	2,580	62.1	94.1
Recent (1952)	2,940	67.0	98.8
Estimated calorie requirement..	2,570	—	—

Source: FAO.

Chapter V

FOREIGN TRADE IN AGRICULTURAL PRODUCTS

I. GENERAL SITUATION

The disparity between the growth of demand and that of per capita agricultural production has had an unfavourable effect upon Latin America's foreign trade in farm products. Many countries of the region have been compelled to restrict exports and raise imports of these commodities to meet domestic requirements. Thus, while aggregate agricultural exports barely exceeded the pre-war level in 1953, imports of farm products rose by more than 70 per cent during the same period. (See table 42 and figure VIII.)

Table 42. Latin America: Exports and imports of agricultural commodities^a

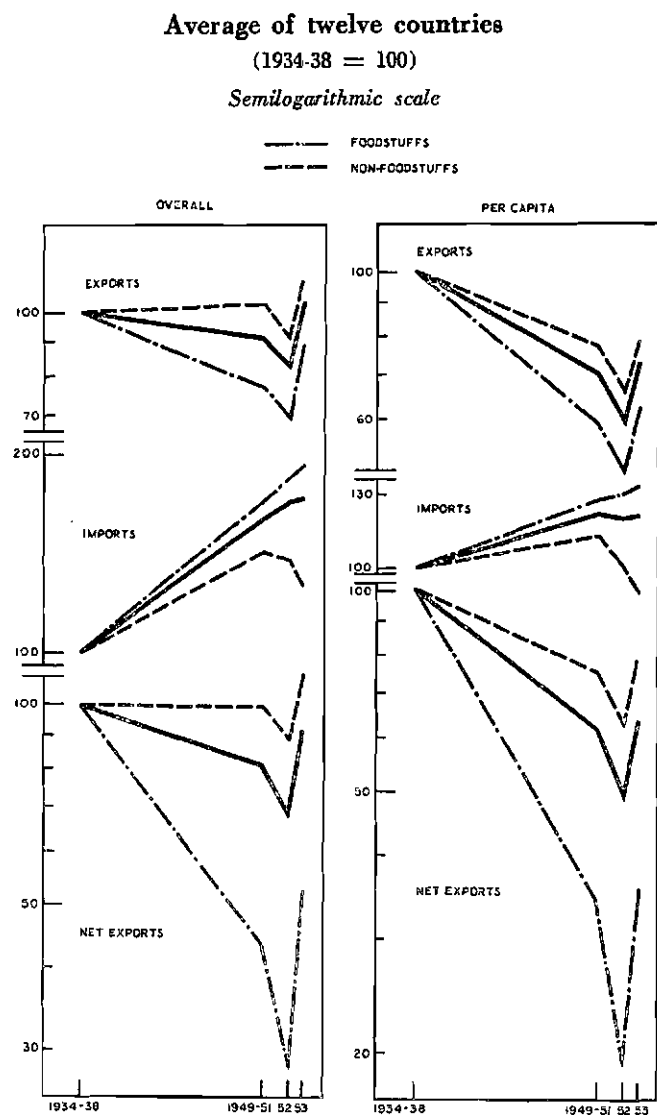
	<i>Aggregate</i>				<i>Per capita</i>			
	1934-38	1949-51	1952	1953	1934-38	1949-51	1952	1953
A. VALUES								
(Dollars at constant 1950 prices)								
<i>Gross exports</i>	3,926	3,656	3,271	4,066	32.2	23.0	19.1	23.3
Foodstuffs	1,492	1,151	1,032	1,337	12.2	7.3	6.0	7.6
Commodities other than foodstuffs	2,434	2,505	2,239	2,729	20.0	15.7	13.1	15.6
<i>Gross imports</i>	575	933	976	991	4.7	5.8	5.7	5.7
Foodstuffs	398	677	732	768	3.3	4.2	4.3	4.4
Commodities other than foodstuffs	177	256	244	223	1.4	1.6	1.4	1.3
<i>Net exports</i>	3,351	2,724	2,295	3,075	27.5	17.2	13.4	17.5
Foodstuffs	1,094	475	300	569	8.9	3.1	1.7	3.2
Commodities other than foodstuffs	2,257	2,249	1,995	2,506	18.6	14.1	11.7	14.3
B. INDICES (1934-38 = 100)								
<i>Gross exports</i>	—	93	83	104	—	71	60	72
Foodstuffs	—	77	69	90	—	59	50	62
Commodities other than foodstuffs	—	103	92	112	—	78	65	78
<i>Gross imports</i>	—	162	170	172	—	123	121	121
Foodstuffs	—	170	184	193	—	127	130	133
Commodities other than foodstuffs	—	144	138	126	—	114	100	93
<i>Net exports</i>	—	81	68	91	—	62	49	63
Foodstuffs	—	43	28	52	—	34	19	36
Commodities other than foodstuffs	—	99	89	111	—	76	63	79

Source: ECLA.

^a Data for twelve countries which together

comprise about 90 per cent of Latin America's aggregate population.

Figure VIII
LATIN AMERICA: INDICES OF GROSS EXPORTS
AND IMPORTS AND NET EXPORTS OF AGRICULTURAL
PRODUCTS



The sharpest fall in exports as well as the largest increase in imports has affected foodstuffs. Thus, net exports of these commodities in 1953 amounted to only 52 per cent of the aggregate and 37 per cent of the per capita pre-war level. Net exports of agricultural raw materials and other non-foodstuffs, in contrast, have remained much more stable, although at lower levels than during the pre-war period.

Wheat, maize and meat played a major role in the decline in food exports. There was a marked recovery in wheat exports in 1953 after the exceptional drop in exports from Argentina registered in 1952. No symptoms of recovery, however, can be noted in the other two commodities, exports of which have decreased by almost 90 and 50 per cent, respectively, in relation to the pre-war level. Milk exports, which in 1952 had fallen to less than one-third of the volume registered in 1934-38, improved suddenly in 1953, where pre-war figures were exceeded by more than 80 per cent. Exports of edible oil-seeds, on the other hand, after an encouraging im-

provement in 1949-51, fell once more in 1952 and 1953 to levels lower than those of the pre-war period. Two important foodstuffs, exports of which have remained steadily higher than in 1934-38, are sugar and rice, although for the latter a decline set in in the course of 1953.

In relation to exports other than foodstuffs, oil-seeds—particularly linseed—have stood at a much lower level during the whole post-war period. Wool exports, which had dropped slightly in 1949-51 and in 1952, recovered substantially in 1953, to decline afterwards as will be seen below. Some fluctuations have affected exports of the other commodities—coffee, tobacco, cotton and hard fibres—but they have at no time failed to exceed the pre-war level.

Emphasis should be laid on the remarkable increase in imports of wheat, sugar, milk and meat. In contrast, rice imports have gradually decreased and those of edible oil-seeds have undergone considerable fluctuations, although they have been at all times somewhat higher than in 1934-38. The most significant changes in imports of non-foodstuffs have been those registered for cotton, which have risen to nearly five times their pre-war size.

The course followed by the region's agricultural exports indicates a growing dependence on only four products: coffee, sugar, wheat and cotton. In 1934-38 these commodities accounted for about 50 per cent of the value of the region's agricultural and forestry exports, while in 1952 and 1953 this rate rose to 68 per cent. This trend towards concentration in place of a healthy diversification of exports may become very dangerous in view of the fact that—as has been pointed out elsewhere in this document—many of these commodities are in over-supply in several regions of the world.

Table 43 has been established to give indices of trade movements for some of Latin America's main agricultural imports and exports.

2. SITUATION OF SELECTED COUNTRIES IN THE REGION

Foreign trade in agricultural commodities has not followed a homogeneous pattern of development in all countries of the region. While some, like Colombia, Cuba, Mexico and Paraguay have strengthened their position as net exporters, others, Argentina for instance, where production declined sharply, have gradually been obliged to curtail their export margin to meet growing domestic requirements. At the same time, countries where production is inadequate, as in the case of Bolivia and Chile, have had to increase their net imports, so that by 1952 and 1953 they registered very large deficits in their foreign trade in farm products. Venezuela has also become an importer country, while in 1934-38 it was a net exporter of farm products.

A brief analysis of events in the main Latin American countries is given below.

(a) *Argentina.* The total net exports of this country declined by about 40 per cent between 1934-38 and 1953. The group comprising foodstuffs suffered the sharpest fall, amounting to almost 50 per cent, mainly on account of the reduction in wheat and maize exports. Moreover, exports of commodities other than foodstuffs declined by about 30 per cent during the same period, principally owing to the decrease in linseed exports.

Table 43. Latin America: Indices of the quantum of exports and imports of selected commodities

	Quantum (Thousands of tons)			Indices (1934-38 = 100)			
	1934-38	1949-51	1952	1953	1949-51	1952	1953
<i>Exports:</i>							
Wheat ^a	3,445.2	2,488.0	271.9	2,624.1	72	8	76
Maize	6,618.6	732.0	719.3	1,125.3	11	11	17
Rice ^b	156.1	313.6	454.9	258.9	201	291	166
Sugar	4,930.7	8,040.6	7,757.6	8,574.9	163	157	174
Milk ^c	232.7	207.8	67.4	424.0	89	29	182
Meat ^c	921.0	662.9	457.5	468.2	72	50	51
Edible oil-seeds ^d	253.1	451.5	135.6	199.0	178	54	79
Coffee	1,397.5	1,597.2	1,593.2	1,698.8	114	114	122
Tobacco	57.4	73.0	73.2	62.7	127	127	109
Cotton	338.0	287.0	296.4	562.5	114	117	166
Hard fibres	99.8	166.8	103.5	113.0	167	104	113
Wool ^e	117.5	109.4	104.4	161.2	93	89	137
Non-edible oil-seeds ^d ...	1,712.7	891.6	311.1	598.1	52	18	35
<i>Imports:</i>							
Wheat ^a	1,682.8	2,806.4	3,646.0	3,263.2	170	217	194
Rice ^b	713.9	799.8	665.0	704.4	112	93	99
Sugar	248.2	384.5	309.2	401.2	155	125	162
Milk ^c	291.0	807.5	978.4	949.5	277	336	326
Meat ^c	81.0	130.6	139.5	140.2	161	172	173
Edible oil-seeds ^d	86.3	98.0	116.6	88.1	114	135	102
Cotton	9.3	52.7	53.5	48.5	567	575	522

Source: FAO.

^a Includes flour in terms of wheat.

^b Unpolished rice.

^c In all forms.

^d In terms of seed.

^e Washed wool.

(b) *Brazil*. Food imports in this country have had to be substantially increased in order to supply the needs of a growing population. Thus Brazil, which was a net exporter during 1934-38, became a net importer of foodstuffs in the post-war period. The main items which have had a bearing on this situation are wheat and dairy products. On the former, more detailed comment will be made in a later section of the present document, imports of which rose by about 70 per cent between the pre-war period and 1953. Imports of dairy products which increased from little more than 2,000 tons to 83,000 tons between 1934-38 and 1952, declined to 25,000 in 1953. In contrast, net exports of non-foodstuffs increased, mainly owing to the increment in exports of coffee. Thus Brazil has been able to maintain its net aggregate exports at more or less the same level as in the pre-war period.

(c) *Chile*. The slow development of agricultural production, parallel to a considerable expansion of domestic demand, has caused an increasing disequilibrium, reflected in a substantial rise in net imports of both foodstuffs and other commodities. Before the war, Chile was a net exporter of foodstuffs, a situation which has been totally reversed, for the reasons already outlined, in the post-war period. The main products which Chile has had to import in order to supplement domestic stocks are wheat, meat, edible oils and sugar, among foodstuffs, and cotton, in the non-foodstuffs group. The last two items are not produced in Chile, except for the small-scale production of beet sugar initiated in 1954.

(d) *Colombia*. Colombia's position as a net exporter of agricultural products seems to have decidedly improved, on account of both the decline in net imports of foodstuffs and the considerable rise in net exports of other commodities. Coffee has played a very prominent

role in this situation, since exports increased by 75 per cent between 1934-38 and 1953.

(e) *Cuba*. This country is a substantial importer and exporter of foodstuffs. The considerable expansion of sugar exports enabled it to double its net imports of foodstuffs between 1934-38 and 1953. The group of commodities other than foodstuffs is of minor importance in Cuba's foreign trade, although here, too, the net balances recorded are favourable to this country, since they rose by almost 50 per cent during the period under consideration.

(f) *Mexico*. In 1953, this country's net agricultural exports stood at almost double their pre-war level. But, during the intervening period, a change took place in the pattern of its foreign trade in these commodities. While in 1934-38 Mexico was a net exporter of foodstuffs and other commodities, in the post-war period it has become a substantial net importer of the former, while its exports of non-foodstuffs have expanded considerably. Wheat imports rose from 19,000 to more than 240,000 tons between 1934-38 and 1953, while maize imports increased from 5,000 to 370,000 tons during the same period, although a vigorous expansion of production caused imports of these cereals to decline appreciably in 1954 and 1955. Heavy imports in recent years of pulses, as well as of dairy products and edible oil-seeds, are also significant. In the group of non-alimentary products, the increase in cotton and coffee exports is outstanding, while those of hard fibres have considerably decreased.

(g) *Peru*. Peru's foreign trade in agricultural commodities has undergone considerable fluctuations. Thus, in 1934-38 it was a net exporter of foodstuffs, a position which was lost in 1949-51 and 1952, when Peru became

a net importer, but was recovered, though at a lower level, in 1953. The group of commodities other than foodstuffs has enjoyed a more stable development; a decline was registered in 1949-51, but an ample recovery took place in 1952 and 1953. In the aggregate, Peru exported 7 per cent more agricultural products in 1953 than during the pre-war period.

(h) *Uruguay*. The divergence noted in most other countries of the region is also apparent in the case of Uruguay. While net exports of foodstuffs declined considerably, the reverse trend prevailed for non-foodstuffs, which, in the aggregate, had the effect of raising the total net exports of this country by about 20 per cent in 1953. This was mainly owing to the expansion of wool exports, which rose by 80 per cent above their pre-war level.

(i) *Venezuela*. This country, which was an important net exporter of agricultural commodities in the pre-war period, thanks to its exports of several non-alimentary products, became a large net importer throughout the post-war period, owing to the increase in its imports of foodstuffs and the decline in its exports of other commodities.

Data are appended on exports and imports, both gross and net, at constant values, for 12 of the main countries of the region, some of which have been mentioned in the preceding analysis. (See tables I and II at the end of the chapter.)

3. INTRA-REGIONAL TRADE IN AGRICULTURAL COMMODITIES

Although this point has been discussed in detail in another ECLA document,¹ some general remarks may be added here to complete the review of Latin America's foreign trade in agricultural commodities.

If the values of intra-regional agricultural trade are compared with those for Latin America's total trade in agricultural products from all origins and to all destinations, the importance of the intra-regional trade seems to have increased since the period immediately preceding the war.

The volume of exports retained within the region is small in comparison with total exports, and it rose to little more than 10 per cent in 1953 as against 7.1 per cent in the pre-war period. The substantial increase in the share of raw materials has played a major part in this improvement. In the pre-war period only 3.6 of the latter remained within the region, but this proportion rose to 9.3 per cent in 1953. (See tables 44 and 45.)

The significance of intra-regional purchases of agricultural commodities in relation to total imports was greater than the corresponding ratio in the case of exports. Thus more than 40 per cent of the agricultural commodities purchased by Latin America came from within the region itself. Here too the increase in imports of raw materials was relatively much greater.

This phenomenon, which is intimately linked with the exports trend, is also closely related to the intensive industrial development which has been characteristic of Latin America's economic evolution during the post-war period. Moreover, national policies aiming at self-sufficiency in the production of foodstuffs—to be dis-

cussed in detail in another section of this document—have played a decisive role in the relative contraction of intra-regional trade in these products.

Tables 44 and 45 have been prepared to show the percentage of intra-regional trade within Latin America's aggregate foreign trade in agricultural commodities, and the percentage composition of such trade.

Table 44. Latin America: Share of intra-regional trade in exports and imports of agricultural products

(Percentages)				
	1934-38	1946-51	1952	1953
<i>Exports</i>	7.1	9.7	7.7	10.1
Foodstuffs, beverages and stimulants	8.4	9.9	6.9	10.3
Raw materials ^a	3.6	9.1	10.5	9.3
<i>Imports</i>	38.7	41.0	30.1	44.8
Foodstuffs, beverages and stimulants	44.7	41.1	27.2	43.4
Raw materials ^a	21.7	40.5	39.2	49.7

Source: ECLA.

^a Including tobacco.

Table 45. Latin America: Composition of intra-regional trade in agricultural products

(Percentages)				
	1934-38	1946-51	1952	1953
<i>Exports</i>	100.0	100.0	100.0	100.0
Foodstuffs, beverages and stimulants	86.0	75.0	54.0	80.0
Raw materials ^a	14.0	25.0	46.0	20.0
<i>Imports</i>	100.0	100.0	100.0	100.0
Foodstuffs, beverages and stimulants	85.0	73.0	68.0	76.0
Raw materials ^a	15.0	27.0	32.0	24.0

Source: ECLA.

^a Including tobacco.

Finally, it should be noted that agricultural products represent a high percentage within total inter-Latin-American trade, and although their share has declined slightly with respect to the pre-war period, it still accounts for about 60 per cent of intra-regional trade.

Table 46. Latin America: Share of agricultural products in total intra-regional trade

(Percentages)				
	1934-38	1946-51	1952	1953
<i>Exports</i>	67.5	61.8	49.4	62.4
Foodstuffs, beverages and stimulants	58.2	46.4	34.5	50.2
Raw materials ^a	9.3	15.4	14.9	12.2
<i>Imports</i>	63.1	60.9	46.6	61.4
Foodstuffs, beverages and stimulants	53.6	44.1	32.0	46.7
Raw materials ^a	9.5	16.8	14.6	14.7

Source: ECLA.

^a Including tobacco.

¹ See *A Study of Inter-Latin-American Trade* (E/CN.12/369/Rev.1), United Nations publication, Sales No.: 1956 II.G.3.

APPENDIX

Table I. Latin America: Agricultural exports and imports

(Thousands of dollars at constant 1950 prices)

		Exports				Imports				Net balances ^a			
		1934-38	1949-51	1952	1953	1934-38	1949-51	1952	1953	1934-38	1949-51	1952	1953
Argentina	Foodstuffs ...	825,885	273,418	213,420	479,967	55,710	31,377	27,039	30,934	770,175	242,041	186,381	449,033
	Others	643,728	445,373	315,576	479,687	77,536	109,733	78,430	70,080	566,192	335,640	237,146	409,607
	TOTAL	1,469,613	718,791	528,996	959,654	133,246	141,110	105,469	101,014	1,336,367	577,681	423,527	858,640
Bolivia	Foodstuffs ...	942	231	341	142	30,920	60,389	69,099	73,712	-29,978	-60,158	-68,758	-73,570
	Others	1,352	1,598	1,115	562	4,911	11,266	8,765	6,609	-3,559	-9,668	-7,650	-6,047
	TOTAL	2,294	1,829	1,457	705	35,831	71,655	77,864	80,321	-33,537	-69,826	-76,408	-79,617
Brazil	Foodstuffs ...	187,172	137,337	93,896	128,670	130,957	192,872	223,240	234,173	56,215	-55,535	-129,344	-105,503
	Others	1,131,948	1,271,309	1,075,084	1,186,882	13,575	10,979	15,758	4,174	1,118,373	1,260,330	1,059,326	1,182,708
	TOTAL	1,319,120	1,408,646	1,168,980	1,315,552	144,532	203,851	238,998	238,347	1,174,588	1,204,795	929,982	1,077,205
Chile	Foodstuffs ...	27,450	16,867	18,396	13,787	22,718	36,277	46,970	41,220	4,732	-19,410	-28,574	-27,433
	Others	15,207	12,547	13,028	14,236	22,612	36,193	44,604	35,139	-7,405	-23,646	-31,576	-20,903
	TOTAL	42,657	29,414	31,424	28,023	45,330	72,470	91,574	76,359	-2,673	-43,056	-60,150	-48,336
Colombia	Foodstuffs ...	11,757	10,695	11,269	13,399	25,355	17,974	18,301	23,035	-13,598	-7,279	-7,032	-9,636
	Others	294,477	340,441	348,757	459,416	7,876	22,630	23,980	20,965	286,601	317,811	324,777	438,451
	TOTAL	306,235	351,136	360,026	472,815	33,231	40,604	42,281	44,000	273,003	310,532	317,745	428,815
Cuba	Foodstuffs ...	284,316	561,608	544,999	548,475	68,934	125,240	109,339 ^a	117,665 ^a	215,382	436,368	435,600	430,810
	Others	38,069	42,140	47,035	52,418	14,448	15,671	19,021 ^a	17,223 ^a	23,621	26,469	28,014	35,195
	TOTAL	322,385	603,748	592,034	600,893	83,382	140,911	128,420 ^a	134,888 ^a	239,003	462,837	463,614	466,005
Ecuador	Foodstuffs ...	17,759	29,130	43,287	35,326	2,319	9,073	16,961	25,027	15,440	20,057	26,326	10,299
	Others	12,828	14,659	18,389	16,407	183	221	1,224	2,315	12,645	14,438	17,165	14,092
	TOTAL	30,587	43,789	61,677	51,732	2,502	9,294	18,185	27,342	28,085	34,495	43,491	24,391
Mexico	Foodstuffs ...	22,671	23,782	11,879	18,364	9,100	43,619	58,694	71,791	13,571	-19,837	-46,815	-53,427
	Others	67,074	150,031	181,752	203,808	10,794	7,755	10,959	14,901	56,280	142,276	170,793	188,907
	TOTAL	89,745	173,813	193,631	222,172	19,894	51,374	69,653	86,692	69,851	122,439	123,978	135,480
Paraguay	Foodstuffs ...	2,120	3,447	781	1,169	6,669	6,214	4,652	5,576 ^a	-4,549	-2,767	-3,871	-4,407
	Others	10,715	18,523	16,952	16,595	1,886	656	349	368 ^a	8,829	17,867	16,603	16,227
	TOTAL	12,835	21,970	17,733	17,764	8,555	6,870	5,001	5,944 ^a	4,280	15,100	12,732	11,820
Peru	Foodstuffs ...	31,257	30,996	31,960	44,431	17,879	36,867	50,128	37,104	13,378	-5,871	-18,168	7,327
	Others	83,384	69,338	87,125	97,378	6,368	4,698	5,939	8,247	77,016	64,640	81,186	89,131
	TOTAL	114,641	100,335	119,085	141,809	24,247	41,565	56,067	45,351	90,394	58,769	63,018	96,458
Uruguay	Foodstuffs ...	68,630	52,978	50,435	40,453	11,363	18,912	13,084	16,324	57,267	34,066	37,351	24,129
	Others	91,667	120,901	105,938	160,701	12,323	23,112	21,303	25,481	79,344	97,789	84,635	135,220
	TOTAL	160,297	173,879	156,373	201,154	23,686	42,024	34,387	41,805	136,611	131,855	121,986	159,349
Venezuela	Foodstuffs ...	12,493	11,010	11,469	12,992	16,339 ^b	98,181	94,168	91,492	-3,846	-87,171	-82,699	-78,500
	Others	43,826	18,338	27,991	41,070	4,767 ^b	12,944	13,838	17,375	39,059	5,394	14,153	23,695
	TOTAL	56,319	29,348	39,460	54,062	21,106 ^b	111,125	108,006	108,867	35,213	-81,777	-68,546	-54,805
GRAND TOTAL	Foodstuffs ...	1,492,452	1,151,499	1,032,132	1,337,175	398,263	676,995	731,735	768,053	1,094,189	474,504	300,397	569,122
	Others	2,434,275	2,505,198	2,238,742	2,729,160	177,279	255,858	244,170	222,877	2,256,996	2,249,340	1,994,572	2,506,283
	TOTAL	3,926,728	3,656,698	3,270,874	4,066,335	575,542	932,853	975,905	990,930	3,351,185	2,723,844	2,294,969	3,075,405

Source: ECLA.

(-) = net imports.

^a Provisional.^b 1938.

Table II. Latin America: Agricultural export and import indices
(1934-38 = 100)

	Exports			Imports		
	1949-51	1952	1953	1949-51	1952	1953
<i>Argentina</i>						
Foodstuffs	33.1	25.8	58.1	56.3	48.5	55.5
Raw materials	69.2	49.0	74.5	141.5	101.2	90.4
TOTAL	48.9	36.0	65.3	105.9	79.2	75.8
<i>Bolivia</i>						
Foodstuffs	24.5	36.2	15.1	195.3	223.5	238.4
Raw materials	118.2	82.5	41.6	229.4	178.5	134.6
TOTAL	79.7	63.5	30.7	200.0	217.3	224.2
<i>Brazil</i>						
Foodstuffs	73.4	50.2	68.7	147.3	170.5	178.8
Raw materials	112.3	95.0	104.9	80.9	116.1	30.7
TOTAL	106.8	88.6	99.7	141.0	165.4	164.9
<i>Chile</i>						
Foodstuffs	61.4	67.0	50.2	181.7	158.7	170.7
Raw materials	82.5	85.7	93.6	108.5	131.7	119.2
TOTAL	69.0	73.7	65.7	169.0	154.0	161.8
<i>Colombia</i>						
Foodstuffs	91.0	95.8	114.0	70.9	72.2	90.8
Raw materials	115.6	118.4	156.0	287.3	304.5	266.2
TOTAL	114.7	117.6	154.4	122.2	127.2	132.4
<i>Cuba</i>						
Foodstuffs	197.5	191.7	192.9	159.7	206.8	181.4
Raw materials	110.7	123.6	137.7	160.1	197.3	155.4
TOTAL	187.3	183.6	186.4	159.9	202.0	168.5
<i>Ecuador</i>						
Foodstuffs	164.0	243.7	198.9	391.2	731.4	1,079.2
Raw materials	114.3	143.3	127.9	120.8	668.9	1,265.0
TOTAL	143.2	201.6	169.1	371.5	726.8	1,092.8
<i>Mexico</i>						
Foodstuffs	104.9	52.4	81.0	479.3	645.0	788.9
Raw materials	223.7	271.0	303.9	71.8	101.5	138.0
TOTAL	193.7	215.8	247.6	258.2	350.1	435.8
<i>Paraguay</i>						
Foodstuffs	163.0	37.0	55.0	93.2	69.8	83.6
Raw materials	173.0	158.0	155.0	34.8	18.5	19.5
TOTAL	171.0	138.0	138.0	80.3	58.5	69.5
<i>Peru</i>						
Foodstuffs	99.2	102.2	142.1	206.2	280.4	207.5
Raw materials	83.2	104.5	116.8	73.8	93.3	129.5
TOTAL	87.5	103.9	123.7	171.4	231.2	187.0
<i>Uruguay</i>						
Foodstuffs	77.2	73.5	59.0	166.4	115.1	143.7
Raw materials	131.9	115.6	175.3	187.6	172.9	206.8
TOTAL	108.5	97.6	125.5	177.4	145.2	176.5
<i>Venezuela</i>						
Foodstuffs	88.0	92.0	104.0	600.9	576.3	560.0
Raw materials	42.0	64.0	94.0	271.5	290.3	364.5
TOTAL	52.0	70.0	96.0	526.5	511.7	515.8
TOTAL						
Foodstuffs	77.2	69.2	89.6	170.0	183.7	192.9
Raw materials	102.9	92.0	112.1	144.3	137.7	125.7
TOTAL	93.1	83.3	103.6	162.1	169.6	172.2

Source: FAO.

Chapter VI

TRENDS, PRODUCTION POLICIES AND SURPLUSES IN RELATION TO SELECTED MAIN COMMODITIES

Several of Latin America's main agricultural products are affected by specific problems, an analysis of which will help to clarify the over-all situation of agriculture in the region. Among these commodities, which in the aggregate represent a large share of total production, are wheat, maize, rice, sugar, cotton, coffee and animal products such as meat, milk and wool.

Each of these commodities—to a lesser or greater extent and according to the country—has been subject to special government policies which have in large measure cast the situation of Latin America's agriculture in its current mould. For reasons which have been discussed elsewhere in this document, many countries have been impelled to expand their production, with varying success and in the face of different kinds of difficulties.

Outstanding examples are provided by sugar and wheat, which many of the importer countries of Latin America have made efforts to produce in maximum quantities in order to prevent an increase in imports, due to the rapid growth of domestic consumption, from constituting a severe drain on their exchange availabilities. As will be seen in the following analysis, many of these countries have reached their target—particularly for sugar production—but in others, the expansion of domestic production has not availed to offset the effect of demand on imports.

Although production of other commodities, such as meat and milk, has increased considerably, it has not yet sufficed to meet demand. Special consideration should be given to meat, per capita production and supply of which have steadily decreased.

This is a matter for grave concern, not only because meat consumption is of incalculable importance for adequate nutrition, but also because the Latin American countries do not seem to have devoted due attention to this commodity, although the region undoubtedly possesses substantial resources for livestock development. And it is precisely in this branch of Latin American agricultural production that the lack of adequate investment discussed elsewhere is most evident.

Coffee also merits special attention, owing to its predominant position among Latin American exports. Any appreciable drop in world prices or demand for this commodity would—as has been stressed before—have incalculable repercussions on the future development of many Latin American countries.

Finally, many of these commodities are in over-supply on the world market. In 1953—as a result of a series of factors—surpluses of certain agricultural commodities began to accumulate that could find no outlet on the world market. To date, their existence has not caused any serious disturbance to international trade, mainly

owing to the cautious sales policy followed by the countries in possession of such stocks. Accumulation, however, has continued and constitutes a disturbing factor with a depressive effect both on prices and on agricultural development, particularly in countries where exports of agricultural products are vital for over-all economic development.

The secretariat of FAO, in a separate paper, reviews the surplus situation in some detail and expounds its attitude to this problem and how it should be tackled.¹ Further detail is therefore unnecessary here. There is, however, one important point which requires elucidation, and that is the degree to which the agricultural development of Latin America may have contributed to the accumulation of surpluses in recent years.

It is no easy matter to give an answer to this question. To define a surplus is difficult enough in itself; much harder is it to determine how far a country or region may or may not have contributed to its formation. The following analysis is therefore only an attempt to explain the course of events, rather than a specific examination of the contribution of Latin America to this phenomenon. Five main Latin American commodities have been chosen for this purpose, all connected with the problem of surpluses. They are the following: wheat, maize, rice, sugar and cotton.

1. WHEAT

(a) *Production policy in importing countries*

Wheat is one of the commodities for which a special development policy has been adopted by almost every country of the region where suitable conditions for its cultivation exist.² As a result of this policy, Latin America's production rose from 8.62 million tons during the pre-war period to 10.95 million tons in the 1954/55 harvest.

Although the aggregate increase in wheat production has not been very remarkable, it is interesting to note that almost the whole of the increment has been due to the development of this crop in those countries of the region which are normally obliged to import wheat in order to meet domestic consumption. In fact, this group of countries³ was responsible for 1.55 million tons, or 67 per cent of the increase.

Wheat consumption in countries with insufficient production has grown at such a rate that, despite this ex-

¹ See *Review of the Agricultural Commodities Situation with Special Reference to the Surplus Problem and FAO Activities in this Field* (FAO/55/8/4912).

² See FAO document LA/3/1, *op. cit.*

³ Bolivia, Brazil, Chile, Colombia, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Peru and Venezuela.

pansion of production, between the pre-war period and 1953 their imports rose from 1.32 to 2.82 million tons. Clearly, therefore, in the race between domestic production and consumption, the latter is gaining ground.

This phenomenon is due to various causes. The most important is that consumption has increased not only as a consequence of demographic growth, but also because of the generally higher level of per capita income. Urban development and an improvement in means of communication have also contributed to this increment, since they have led to the substitution of wheat for other commodities. Table 47 shows the fluctuations of wheat consumption in deficit countries.

Wheat development policies have not, of course, met with equal success in all the countries where domestic production falls short of requirements. In some—Mexico for example—the wheat campaign is nearing the stage of self-sufficiency; in others—for instance in Brazil—efforts to increase production are still inadequate to make any substantial difference to the growth of imports. How far each of five selected countries has been successful in expanding wheat production to meet the ever greater exigencies of domestic demand, can be assessed in terms of the percentage of total supplies represented by imports. (See table 48 and figure IX.)

Table 47. Latin America: Net supplies of wheat^a in countries with insufficient production

(Kilogrammes per capita annually)

Country	1934-38	1949-51	1952	1953	1954
<i>Mexico and Central America</i>					
Costa Rica	20.0	36.1	35.3	38.7	37.4
El Salvador	6.1	8.5	11.7	11.7	11.7
Guatemala	11.1	16.2	19.9	16.1	21.1
Honduras	7.2	9.6	12.1	10.2	10.6
Mexico	21.9	33.1	38.2	30.3	28.9
Nicaragua	7.6	10.9	16.7	20.1	12.0
<i>South America</i>					
Bolivia	26.4	27.3	38.1	40.5	43.3
Brazil	29.3	32.0	31.0	42.1	33.8
Colombia	14.5	14.5	15.2	15.0	16.8
Chile	176.7	178.0	194.0	178.5	196.9
Ecuador	13.9	15.7	23.2	24.7	28.0
Peru	30.5	40.3	43.0	45.0	46.0
Venezuela	9.3	29.6	43.9	31.5	35.4

Source: FAO.

^a Including flour in terms of wheat.

Table 48. Latin America: Supply trends and imports of wheat^a in five countries with insufficient production

(Thousands of tons)

Country	1934/35-38/39	1948/49-50/51	1951/52	1952/53	1953/54	1954/55
<i>Mexico</i>						
Production	374	522	590	512	671	840
Imports	36	329	440	339	164	..
Imports/total supplies ^b	9	38	39	40	20	..
<i>Colombia</i>						
Production	106	116	127	140	170	175
Imports	17	48	53	41	68	..
Imports/total supplies ^b	14	29	29	23	29	..
<i>Peru</i>						
Production	76	137	157	162	164	162
Imports	128	206	225	244	263	..
Imports/total supplies ^b	63	60	59	60	62	..
<i>Brazil</i>						
Production	144	458	424	690	772	824
Imports	990	1,204	1,265	1,615	1,409	..
Imports/total supplies ^b	87	72	75	70	65	..
<i>Chile</i>						
Production	851	970	916	989	928	1,078
Imports .....	..	52	235	95	213	..
Imports/total supplies ^b .....	..	5	20	9	19	..

Source: FAO/ECLA.

For Brazil and Chile, the second of the two calendar years given.

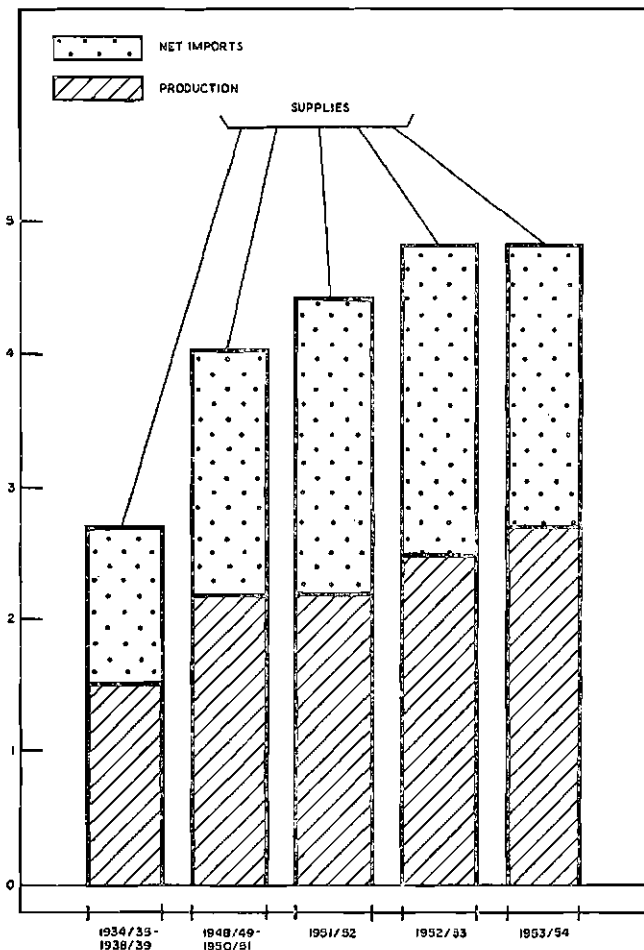
Note: For Mexico, Colombia and Peru, imports represent the commercial year, July/June.

^a Including flour in terms of wheat.

^b Percentage.

Figure IX
LATIN AMERICA: SUPPLIES, PRODUCTION AND NET IMPORTS OF WHEAT IN FIVE COUNTRIES WITH INSUFFICIENT PRODUCTION^a

(Millions of tons)
Natural scale



Source: Food and Agriculture Organization and Economic Commission for Latin America.

^a Mexico, Colombia, Peru, Brazil, Chile.

In the course of a general policy to encourage the cultivation of wheat by both technical means and economic measures, such as guarantee prices, the expansion of production has been achieved by extending the acreage under cultivation, and also, in some cases, through an appreciable improvement in yields per hectare.

As to the first point, it may be observed (see table 49) that in the five countries listed—with the exception of Chile—the acreage under cultivation increased considerably between the pre-war period and the last farm year. Outstanding in this respect is Brazil, where in 1954/55 the area under wheat was almost seven times greater than in the pre-war period.

Achievements have not been as uniform or as satisfactory in relation to yields per hectare. Sizable increases were recorded in all countries, with the exception of Brazil where some deterioration took place.

Efforts to expand the acreage under wheat or improve yields have had to take the form of properly organized

national campaigns, designed not only to awaken the interest of farmers but also to provide them with technical and economic assistance. Technical aid has consisted in research on improved seeds and their propagation, advice on better methods of cultivation and demonstrations of the use of fertilizers, machinery, etc. Economic assistance has been given through credits and remunerative prices.

It is impossible to assess precisely what success these wheat campaigns have had. One of the targets, namely, the prevention of greater expenditure of foreign exchange on imports, may be said to have been attained. It would be necessary, however, to analyse how far both public and private investment is justified by the results obtained; whether such investment, as well as the efforts made, might not have been more profitably expended on other types of agricultural production or other branches of activity; or whether both producers and consumers have reaped any real benefit.

Such an exhaustive study falls outside the scope of the present document. Nevertheless an analysis of the effect of wheat campaigns on the prices paid to farmers and on consumer prices may shed some light on the last of these points. (See table 50.)

An analysis of the figures in table 50 would seem to indicate that:

In *Mexico*, real prices paid for domestic wheat have tended to rise, to the advantage of producers. Contrarily, import prices have remained practically unchanged throughout the period under review.

In *Colombia*, real wholesale prices for wheat declined at the end of the period under review, but later recovered some of the ground lost. Import prices c.i.f. have remained at much lower levels than quotations on the domestic market. Wheat imports are subject in Colombia to heavy duties, which include a tax of 150 pesos per ton to subsidize the wheat campaign. Consequently, a considerable share in the burden of financing this campaign falls on the consumer.

In *Peru* both the real price of wheat on the domestic market and import prices declined steadily during the period considered. While the fall in real prices has undoubtedly been detrimental to the producer, it has benefited consumers as much as the drop in the price of imported wheat. The latter reduction—which contrasts with the relative stability of import prices in the other countries studied—seems to be attributable to agreements favouring trade between Peru and Argentina.

In *Brazil*, the official prices paid to farmers for wheat have also shown, in real terms, a declining trend. Moreover, import prices declined sharply in comparison with domestic quotations in terms of dollars. On the whole, the consumer subsidizes wheat production, as in Colombia, although to a lesser extent.

The expansion of wheat cultivation does not seem to have had any important negative effect on the development of other crops. During 1950-54 the total acreage under cultivation increased at a relatively higher annual rate than the area under wheat, except in Brazil. The contraction of the total cultivated area in Chile was accompanied by a still greater decrease in the area under wheat. Again, only in Brazil and Colombia has wheat production expanded faster than total agricultural production. (See table 51.)

Table 49. Latin America: Trends in cultivated acreage and yields for five countries with insufficient production, as compared with Argentina

(Areas in thousands of hectares; yields in kilogrammes per hectare)

Country	1934/35-38/39	1948/49-50/51	1951/52	1952/53	1953/54	1954/55
<i>Mexico</i>						
Area	489	586	673	593	657	777
Yields	760	890	880	860	1,020	1,050
<i>Colombia</i>						
Area	134	168	181	188	170	162
Yields	800	690	700	745	1,000	1,080
<i>Peru</i>						
Area	109	152	162	170	172	170 ^a
Yields	700	900	970	950	950	950
<i>Brazil</i>						
Area	160	606	725	810	910	1,081
Yields	900	760	580	850	850	806
<i>Chile</i>						
Area	800	839	762	779	761	805
Yields	1,060	1,160	1,200	1,270	1,280	1,338
<i>Argentina</i>						
Yields	980	1,140	770	1,340	1,240	1,240

Source: FAO/ECLA.

^a Preliminary figure.Table 50. Latin America: Domestic and import prices per ton of wheat in four Latin American countries,^a 1949-53

Year	Mexico			Colombia			Peru			Brazil		
	(A)	(B)	(C)	(A)	(B)	(C)	(A)	(B)	(C)	(A)	(B)	(C)
1949	513	54.6	79.4	599	214.0	111.3	1,348	178.3	113.7	2,805	124.1	123.0
1950	649	63.5	72.2	610	299.0	101.5	1,410	117.1	105.4	2,450	124.6	84.0
1951	610	86.7	79.4	512	215.4	118.9	1,017	78.5	82.5	2,025	124.6	94.3
1952	573	85.2	85.1	542	231.1	124.4	976	76.9	88.3	1,985	132.5	105.8
1953	599	87.8	81.9	565	259.0 ^b	116.0	960	60.3	72.9	..	..	..

Source: ECLA.

NOTE: (A) Prices in local currencies deflated by the over-all cost-of-living index.

(B) Domestic prices converted into dollars at the appropriate exchange rate.

(C) Import prices c.i.f., dollars.

^a The corresponding calculations could not be made for Chile owing to problems inherent in the exchange system. The same applies to Brazil after 1952.^b On the basis of data for only 10 months.

Table 51. Latin America: Comparison between the average annual expansion of production and of area under wheat in five countries with insufficient production

(Average 1950-54)

Country	Total cultivated area	Area under wheat	Total production	Wheat production
	(Percentages)			
Brazil	3.8	8.2	3.9	16.5
Chile	-1.8	-2.5	2.3	-1.8
Colombia	2.7 ^a	0.8 ^a	2.6	7.8
Mexico	6.1 ^a	6.0 ^a	7.2	6.9
Peru	5.2 ^a	4.3 ^a	7.0 ^a	5.0 ^a

Source: ECLA.

^a Average 1950-53.

The *Economic Survey of Latin America, 1954*, prepared by ECLA, analyses the consumption and production prospects for wheat in Latin America; according

to these estimates,⁴ wheat consumption in the twenty Latin American Republics might reach from 10 to 11.6 million tons by 1959, under the various hypotheses therein assumed for the growth of demand. The most likely level is 10.7 million tons, calculated on the basis of the current rate of demographic growth, an annual increment in per capita income of 1.5 per cent and an income-elasticity of demand of 0.5. If Argentina is excluded, consumption should probably rise to 7.6 millions by 1959, as against 6.6 in 1954.

While consumption should thus expand by one million tons—with the exclusion of Argentina—the production of the remaining Latin American countries is likely to increase by only 400 thousand tons; in other words, the gap between consumption and production in these countries will probably become still wider. It is true that this estimate of future production levels might be regarded as conservative. In this connexion, Brazil constitutes one

⁴ See chapter IV, section I (Agriculture), B.1 (Wheat), pp. 79 et seq.

of the main unknown factors, since its production has been increasing at an average annual rate of approximately 70 thousand tons during the last five years. The above calculations, however, seem to offer conclusive evidence that these countries as a whole are most unlikely to be able to meet all their wheat requirements from domestic production in the predictable future.

Such a conclusion would raise the question—at least for some of the countries where production is inadequate—of how far the continued expansion of their wheat production will be feasible, since the problem of satisfying additional consumption from greater domestic production seems difficult to solve. This subject must be approached from several aspects, identical with the current difficulties affecting wheat development campaigns. To obtain a better idea of the situation, they may be summarized as follows:

(a) Scarcity of areas with a suitable climate for wheat cultivation;

(b) Technical deficiencies in cultivation, including: (i) use of varieties giving poor yields, of low baking quality and with little resistance to outbreaks of rust; (ii) neglect of fertilizers, insecticides, fungicides and efficacious farming practices; (iii) rudimentary methods of tillage; (iv) primitive threshing methods;

(c) Competition of other crops offering better prospects for farmers.

This outline of the main obstacles to wheat expansion in many countries would seem to indicate that in future efforts should principally be channelled towards an improvement of surface yields, through the gradual solution of the problems indicated in (b) above.

From the over-all viewpoint, the problem undoubtedly calls for co-ordinated analysis by all the countries concerned, with the aim of achieving greater integration of the region's wheat economy and of intra-regional trade in this commodity.

At all events, if present production and consumption trends continue, Latin America may within an apparently short term disappear from the world market as a net exporter of this cereal.

(b) Surplus problems

It is in the case of wheat that the problem of accumulation of stocks assumes its gravest form, particularly in North America (the United States and Canada) where they increased by almost 28 million tons, or more than 164 per cent, between 1951 and 1954. Wheat surpluses appeared after the 1952 crop, when world production rose to 164.2 million tons as against an average of 142.2 millions over the three-year period 1948-50. Since almost all the wheat-growing countries, including those which normally have to recourse to imports to cover domestic shortages, shared in this expansion, the increase in production in the main exporter countries was accompanied by a sharp decline in imports.

Broadly speaking, Latin America has contributed but little to the accumulation of surpluses, since its relative share in world production has remained virtually unchanged since 1934-38 (see table 52). While Latin America's production expanded at a higher rate (30.9 per cent) than world production (14.7 per cent) between 1948-50 and 1952, the latter increment amounted to 21.1 million tons as against an increase of only 2.5 millions (11.8 per cent of the total) in Latin America's production.

Table 52. Latin America: Comparison of regional and world production and exports. Situation of stocks

(Thousands of tons)

Period	Production			Exports ^a			Stocks		
	World ^b	Latin America	Latin America Percentage	World ^c	Latin America	Latin America Percentage	World ^d	North America ^e	North America Percentage
1934-38 ..	129,000	8,619	6.7	17,400	3,400	19.5	..	..	..
1948-50 ..	143,100	8,129	5.7	25,200	2,380	9.4	..	..	..
1951-52 ..	142,800	4,882	3.4	28,500	1,000	3.5	16,900	15,900	94.1
1952/53 ..	164,200	10,639	6.5	26,500	970	3.7	13,500	12,900	95.6
1953/54 ..	163,905	9,843	6.0	23,200	3,180	13.7	28,300	25,300	89.4
1954/55 ..	150,400	10,950	7.3	24,000	4,050	16.9	44,900	40,800	90.9

Source: FAO.

^a Wheat and flour in terms of wheat during the commercial year July-June, beginning with the first year indicated.

^b Excluding the USSR.

^c Excluding post-war trade between the USSR, the People's Republic of China and the

countries of Eastern Europe, as well as their reciprocal trade.

^d Four main exporters: United States (1 July); Canada (1 August); Argentina (1 December); Australia (1 December).

^e Canada and the United States.

Latin America's relative contribution to world exports has not substantially increased, and still remains below pre-war levels. The share of Latin America's exports in the world aggregate did grow considerably, however, between 1948/50 and 1954/55, after a sharp drop in the intermediate years. This would seem to indicate that hitherto North America's exportable wheat surpluses—apart from their influence on the fall in world

prices—have not yet become very serious obstacles to Latin America's export trade. Judging by statistics, however, the region's wheat reserves have increased to an exceptional degree. In Argentina, for instance, wheat reserves on 1 December of each year stood at 566,000 tons in 1951, 50,000 tons in 1952, 1.8 millions in 1953 and 1.4 millions in 1954. The reduced stocks in December 1952 are well-known to have been due to the usually

low levels of the previous wheat harvest. These reserves represent 11, 5, 24 and 23 per cent, respectively, of the preceding crops. It is interesting to observe that Argentina's wheat reserves on 1 December 1938 stood at only 0.3 million tons, or 5.3 per cent of the preceding crop.

Another development worthy of note is that during 1951/52 and 1952/53, when wheat exports from Latin America declined, the region became a substantial net importer of this cereal, since it continued to absorb sizable tonnages on the world market. When Argentina's export trade recovered in 1953/54, however, net Latin American imports practically disappeared. Statistics which have been prepared clearly show the course of events.

Table 53. Latin America: Net imports and exports of wheat
(Thousands of tons)

Period	Imports ^a	Net trade ^b
1934/35-38/39	1,720	-1,680
1947/48-48/49	2,280	- 100
1950/51	3,230	+ 320
1951/52	3,290	+ 2,290
1952/53	3,660	+ 2,690
1953/54	3,440	+ 260

Source: FAO.

^a Commercial year June-July.

^b - Net exports; + net imports.

In conclusion, while Latin America has contributed in some measure to the formation of wheat surpluses, it has played no very considerable part. Moreover, wheat surpluses have not yet had any vital effect upon the production or exports of the region. The solution to the wheat problem as it presents itself today, is one which basically concerns North America. Nevertheless, in view of the current situation, the Latin American countries should consider the advisability of following a cautious policy with respect to wheat.

2. MAIZE

(a) General considerations

Maize is one of the most important items of agricultural production in Latin America; it covers a larger area than any other single crop, and is at the same time the basic human food in many countries of the region. Although its proportion to the total value of agricultural production has declined slightly during recent years in relation to 1934-38 when it accounted for 11 per cent, it still represents a high percentage of this value (about 9 per cent in 1953/54).

The causes of this relative setback in maize production are to be found mainly in the deterioration of average yields and in a small expansion of cultivated area than for other crops.

If the expansion of maize cultivation is compared with that of other cereals (see table 54), it can be seen that the area occupied by the latter increased somewhat more. At the same time, there was an improvement in average yields for other cereals⁵ in the aggregate, whereas maize yields declined during the same period. As a result, aggregate maize production

dropped by almost 10 per cent between 1934/38 and 1952/53, while a 65 per cent improvement was registered for the other cereals. But in 1953/54 and 1954/55 there was a remarkable recovery in maize production, which rose 17 and 20 per cent, in these two years respectively, above the 1952/53 level, and 7 and 11 per cent, respectively, above pre-war figures. Maize thus partly regained its previous position. In 1954/55 maize production accounted for 50.5 per cent of the total volume of grain harvested in Latin America.

Table 54. Latin America: Cultivated area, yields and production of maize and other cereals

	1934-38	1952/53	1953/54	1954-55
<i>Cultivated area</i> (millions of hectares)				
Maize	27.0	30.8	31.9	34.1
Other cereals ^a	14.0	14.8	16.6	17.3
Other cereals ^a	13.0	16.0	15.3	16.8
<i>Average yields</i> (metric quintals per hectare)				
Maize	12.8	11.1	11.5	11.5
Other cereals ^a	9.8	12.8	12.3	11.6
<i>Production</i> (millions of tons)				
Maize	30.8	37.0	38.0	39.6
Other cereals ^a	18.0	16.5	19.2	20.0
Other cereals ^a	12.8	20.5	18.8	19.6

Source: FAO.

^a Wheat, rye, barley, oats and rice.

The reasons why maize production developed more slowly than that of other cereals are varied, and present special features in the different countries. In Argentina, for instance, which is the only maize exporter of the region, the area under maize decreased from 4.4 million hectares to slightly more than 2.4 millions between 1934/38 and 1953/54. This situation was reflected in the loss of foreign markets after the Second World War. In other cases, like that of Mexico, where maize is one of the staple items of diet, consumption of other cereals—mainly rice and wheat—increased at a relatively higher rate than consumption of maize owing to urban development and to the rise in per capita disposable income. This phenomenon was still more marked in Peru, where the annual consumption of maize declined in absolute terms between the pre-war period and the 1952-53 average from 67.7 kilogrammes to 50 kilogrammes per capita, while the annual per capita consumption of wheat during the same period, rose from 30.5 to 44 kilogrammes, and that of rice from 17.4 to almost 25 kilogrammes. A similar process can be observed in many countries where maize is mainly an item of direct consumption, since increments in income enable the population to consume higher-quality foods.

Furthermore, maize is being increasingly used in the region for animal feeding. The fluctuations of the livestock industry therefore affect maize production to a greater extent. High prices for livestock products in recent years have justified the use of maize for animal feed rations, and played a decisive role in the remarkable recovery of this crop in 1953/54 and 1954/55. Argentina provides an illustration of the greater utilization of maize as fodder. In 1934/38 only 5 per cent

⁵ Wheat, barley, oats, rye and rice.

of its maize crop was used for this purpose, while in 1953 this proportion rose to more than 50 per cent. Unfortunately, lack of adequate data makes it impossible to go more deeply into this important matter, so closely related to the development of livestock production.

(b) *Surplus problems*

Though to a lesser extent than in the case of wheat, the problem of agricultural surpluses has affected maize as well as other cereals such as barley, rye and oats, which are mutually replaceable as fodder. In Canada and the United States alone, stocks of these cereals increased by 6.3 million tons between 1951 and 1954, the largest share corresponding to the United States,

where stocks rose to 28.6 million tons during the latter year.

In the specific case of maize, world production increased by 6.6 million tons between 1948-50 and 1952, but in this instance Latin America contributed a major share of the increment, with 4.7 million tons. Nevertheless, regional production did not exert a predominant influence on the accumulation of feed grains, since Latin America's maize exports declined both in absolute and in relative terms with respect to the world aggregate. This is natural enough since maize is primarily produced for domestic consumption in Latin America, except in Argentina and other minor exporter countries.

Table 55. Latin America: Comparison of regional and world maize production and exports. State of feed grain stocks

(Thousands of tons)

Period	Production			Exports ^a			Stocks ^b		
	World ^c	Latin America	Latin America Percentage	World ^d	Latin America	Latin America Percentage	North America ^e	United States	United States Percentage
1934-38 ...	110,240	17,978	16.3	10,200	6,624	64.9	..	..	..
1948-50 ...	137,790	14,528	10.5	5,250	2,144	40.8	..	..	..
1951/52 ...	129,250	14,997	11.6	4,650	837	18.0	27,900	25,200	90.2
1952/53 ...	138,380	16,535	11.9	4,300	669	15.6	21,800	18,200	83.5
1953/54 ...	144,530	19,178	13.3	5,150	1,360	26.4	29,600	24,500	82.8
1954/55 ...	134,900	19,958	14.8	5,200	2,200	42.3	34,100	28,600	83.9

Source: FAO.

^a Commercial year July-June, beginning with the first year indicated.

^b Comprises maize, oats, barley and rye.

^c Excluding the USSR.

^d Excluding the USSR's trade with the Peo-

ple's Republic of China and Eastern European countries, and the latter's reciprocal trade.

^e United States and Canada, on the following dates of the first year: United States, maize on 1 October, other cereals, 1 July; Canada 1 August.

But stocks have not accumulated in Argentina. Unofficial data supplied by the Instituto Nacional de Granos y Cereales indicate that inventories carried over from the previous crop stood at the following levels on 1 January (in thousands of tons):

1950	527
1951	187
1952	614
1953	381
1954	380
1955	70 ⁶

As an illustration of the state of maize production in Argentina, it should be mentioned that owing to the shortage of fodder exports of this grain were prohibited by an official decree dated January 1955.

In consequence, and because world maize exports have remained at normal levels, the main cause and the major effects of the accumulation of these stocks are to be found in North America. The phenomenon seems to have been basically due to the fact that record United States crops in 1952 and 1953 could not be absorbed by the domestic market. On the contrary, exports showed a strong rising trend.

Furthermore, the question of maize surpluses in the United States becomes more significant in view of the fact that private stocks have passed into the hands of

⁶ Non-official estimate as of 1 April, beginning of the new season.

the Commodity Credit Corporation (CCC), whose reserves rose from 7.7 million metric tons on 1 October 1952 to 18.4 millions by that same date in 1954, and to 22.3 millions on 31 April 1955. When domestic prices fell, producers and dealers sought refuge in the guarantee prices paid by the CCC. (See table 56.)

3. RICE

(a) *General considerations*

Rice is the crop that has developed most rapidly in Latin America since the pre-war period. Excluding rye and other minor commodities, the production of no other crop has expanded at the same rate as that of rice. Production rose from about 2 million tons in 1934/38 to more than 5 million tons in 1952/53, and to more than 5.5 millions in 1954/55.

This substantial increase in rice production was mainly due to the considerable expansion of the area under cultivation, which in the period 1934-38 to 1954 increased from 1.4 to 3.4 million hectares. The improvement in yields—from 15.2 to 16.3 metric quintals per hectare—was also a contributory factor. Nevertheless, these yields are much lower than those of other regions of the world, namely, Europe, North America and Australasia.

Latin America's rice production is almost entirely absorbed by a growing domestic demand. The exportable surpluses are very small, having amounted in 1953/54

Table 56. United States: Production, exports, apparent consumption and stocks^a
(Thousands of tons)

Period	Production (grain only)	Exports	Consumption	Total	Stocks	
					CCC	CCC (percentage)
1948-50	76,361	2,671	68,447	21,500	16,511	76.8
1951	66,483	1,913	71,012	18,800	12,370	65.8
1952	75,625	3,522	64,957	12,400	7,773	62.7
1953	72,892	2,413	66,710	19,600	14,809	75.6
1954	66,805	..	..	23,323	18,416	79.0

Source: Feed Statistics, U.S.D.A.; Feed Situation, U.S.D.A.; U.S.D.A. Agricultural Marketing Service; Grain Marketing News; and Statistics Report No. 44, October 1954; U.S.D.A.

Agricultural Outlook Charts, 1955.

^a During the agricultural year starting on 1 October.

to only 1.5 per cent of total production. There are still, however, some areas in Latin America which cannot meet domestic requirements and have to import large quantities of this cereal. This is true of the Caribbean zone where, although rice production rose from 65,000 to 311,000 tons between 1934/38 and 1953/54, imports also increased from 550,000 to 650,000 tons in the same period.

In those countries where rice is the staple cereal, such as Cuba and Puerto Rico, per capita consumption tended towards stabilization. In contrast, in other countries, where rice is only of secondary importance, its per capita consumption expanded considerably. In Chile, for instance, annual per capita consumption rose from 7.2 to 14.9 kilogrammes between 1934/38 and 1953, while in Peru it increased from 17.4 to 25; in Brazil, the annual per capita increment was more than 50 per cent—from 33 to 55 kilogrammes—over the same period; and in Haiti, per capita consumption expanded to a remarkable degree, from 2 to approximately 10 kilogrammes annually.

These increases are largely due to the improvement in income levels, which have led to the substitution of rice for other cereals of inferior nutritional value. Importance must also be attached to the fact that Latin America's soils and climate are very suitable for this crop, so that it was possible for increasing availabilities to be offered to consumers.

(b) Surplus problems

The accumulation of rice stocks on the world market is a phenomenon which primarily originated in Asia, but the smaller accumulation of stocks in other countries though smaller, has also been a contributory factor. Between 1951 and 1954 world stocks rose from 300 thousand to 1.7 million tons, of which 1.3 millions represented Asia's contribution, 220 thousand the share of the United States and the rest the stocks of some European countries, such as Italy and Spain.

Similar to the other crops already reviewed, world production of rice expanded considerably, by about 8.5 million tons, or 11.3 per cent, between the averages for the 1948/49-1950/51 crops and for 1953/54. Latin America contributed about one million tons to this increase. However, since Latin America's rice production constitutes only a minimum percentage of the total and its exports are not only insignificant but have declined in the period under consideration, no share at all in the problem of rice surpluses can be attributed to this region.

In South-East Asia the main causes of the accumulation lie in the considerable expansion of production following a period of shortage; high prices for this commodity, which have discouraged imports by countries where production is insufficient and at the same time have stimulated the latter's production and promoted the replacement of rice by wheat and other cereals; and, to a certain extent, the policy of building up reserves

Table 57. Latin America: Composition of regional and world rice production and exports. State of stocks
(Thousands of tons)

Period	Production (paddy)			Exports ^a (clean)			Stocks ^b (clean)		
	World ^c	Latin America	Regional percentage	World	Latin America	Regional percentage	World	Asia	Asia percentage
1934/35-38/39	151,380	2,038	1.3	9,650	110	1.1	...	...
1948/49-50/51	151,710	4,578	3.0	4,517	207	4.6	300 ^d	200 ^d	67.0
1951/52	152,680	4,793	3.1	5,000	298	6.0	700	660	94.2
1952/53	159,300	5,035	3.2	4,300	85	2.0	1,500	1,400	93.3
1953/54	170,900	5,458	3.2	4,450	49	1.1	1,700	1,300	76.4
1954/55	171,000	5,551	3.2	...	...	...	...	...	...

Source: FAO.

^a Exports 1934-38, 1949-51 and thereafter on calendar year corresponding to the second year named.

^b On several dates during the second half of the second year named.

^c Excluding the USSR.

^d 1951.

adopted by the main exporters. In Italy, Spain and the United States the accumulation of rice surpluses has been of recent date, and has been largely due, apart from the increase in production, to the difference between domestic and world prices, so that in the United States, for instance, the Commodity Credit Corporation was compelled to make heavy purchases at the guarantee price.

In general, however, the problem of rice surpluses, although it may cause some difficulties to exporters, has not attained the same magnitude as that relating to wheat, and a solution is expected in the near future, either through the restriction of production or through an expansion of consumption and imports.

4. SUGAR

(a) Production in importer countries

Because conditions in most Latin American countries are very favourable for sugar cane production, the development policy for this crop—which several countries have adopted in order to meet domestic require-

ments without having recourse to imports—is already nearing its climax. Only a few nations, Chile, Uruguay, Venezuela, Bolivia and Honduras (in order of importance), have had to import any considerable tonnage of sugar in recent years. Other minor importers are British Honduras, French Guiana and Surinam, while some countries, such as Guatemala, must occasionally supplement domestic production with imports. Finally, El Salvador, Colombia, Argentina and Ecuador, are countries which at times import sugar and at others dispose of exportable surpluses.

In the near future, however, several of these nations may be expected to cease to import. Among these are Argentina, which at the beginning of 1955 had exportable stocks amounting to 76 thousand tons, Venezuela, which will not require imports during the course of this year, Ecuador, which has not imported sugar since 1951⁷ and Colombia. A table has been drawn up to show domestic production and import trends in several of the countries to which reference has been made. (See table 58.)

⁷ However, it is foreseen that Ecuador will import sugar in 1955.

Table 58. Latin America: Supply and import^a trends for sugar^b in eight countries
(Thousands of tons)

	1934/35- 38/39	1948/49- 50/51	1951/52	1952/53	1953/54	1954/55
<i>Argentina</i>						
Production	405	576	651	560	710	778
Imports	1.0	2.6	0.1	39.1	—	..
Imports/supplies ^c	0.2	0.4	0.2	6.5	—	..
<i>Bolivia</i>						
Production	1	3	3	6	5	6
Imports	23.0	40.6	36.7	55.2	50.1	..
Imports/supplies ^c	95.8	93.1	92.4	90.2	91.0	..
<i>Chile</i>						
Production	—	—	—	—	4.5	6.5
Imports	12.0	179.0	140.6	146.0	254 ^d	..
Imports/supplies ^c	100.0	100.0	100.0	100.0	98.0	..
<i>Colombia</i>						
Production	46	174	161	198	218	225
Imports	11.1	^d	2.5	14.9	—	..
Imports/supplies ^c	19.6	^d	1.6	7.0	—	..
<i>Guatemala</i>						
Production	16	32	31	36	40	40
Imports	—	0.2	12.9	—	..	..
Imports/supplies ^c	—	0.6	30.1	—	..	..
<i>Honduras</i>						
Production	2	3	6	9	10	10
Imports	4.8	6.5	5.3	6.0	..	..
Imports/supplies ^c	71.0	68.0	47.0	40.0	..	..
<i>Uruguay</i>						
Production	2	5	10	17	24	24
Imports	54.0	87.0	64.9	78.9	46.0	..
Imports/supplies ^c	96.4	94.6	86.6	80.6	65.7	..
<i>Venezuela</i>						
Production	24	48	64	73	85	95
Imports	—	47.5	30.6	44.5	26.0	..
Imports/supplies ^c	—	49.7	32.3	37.9	23.4	..

Source: FAO/ECLA.

^a Imports during the second of the two calendar years indicated.

^b Production data are expressed in terms of crude centrifugal sugar excluding *panela*. Ex-

cept in the cases of Chile and Uruguay, imports comprise refined sugar.

^c Percentage.

^d Includes non-registered imports in previous years.

There was an appreciable rise in the demand for sugar—similar to that which affected wheat—in countries producing mainly for the domestic market. Efforts were therefore made to effect a rapid production expansion to prevent heavy expenditure of foreign exchange on imports. In the same eight countries—excluding only Chile—per capita supplies have risen sharply since the pre-war period. (See table 59.)

Table 59. Latin America: Net sugar supplies in eight countries

(Kilogrammes per capita annually)

	1934-38	1949-51	1952	1953
Argentina	29.9	33.6	36.1	32.6
Bolivia	9.2	14.4	12.9	19.7
Chile	25.9	31.2	23.7	24.0
Colombia	6.6	12.7	13.5	17.7
Guatemala	7.1	11.5	14.4	11.8
Honduras	6.6	7.6	7.7	9.8
Uruguay	26.9	38.7	30.2	38.8
Venezuela	6.8	19.0	17.7	21.4

Source: FAO.

In contrast to wheat, however, the production of sugar in these countries has extended so rapidly that, despite the increase in per capita consumption, imports have represented a steadily declining percentage of total stocks. (See again table 58 and figure X.) The trend initiated during 1948-50 in countries such as Honduras, Uruguay and Venezuela, where self-sufficiency has not yet been attained, is very revealing.

For reasons inherent in the nature of the cane crop—the growing season of which exceeds a calendar year—and others related to milling conditions, which depend on the degree of development of the sugar mills, as well as to the lack of adequate statistics, it is more difficult than in the case of wheat to analyse how far production increases have been due to the extension of cultivated acreage, to the improvement of unit yields, or to both factors simultaneously. Moreover, most of Uruguay's production is derived from sugar beet, so that data are not comparable with those of other countries. Nevertheless, sugar production in this group of countries has grown at a much faster rate than agricultural production as a whole. (See table 60.)

Table 60. Latin America: Annual rates of growth of sugar production and total agricultural production in given countries

(Average 1950-54)

Country	Sugar production	Total agricultural production
Argentina	8.0	6.5
Bolivia	20.7	..
Colombia	6.6	2.6
Guatemala	3.4	..
Honduras	66.0	..
Uruguay	57.4	9.4
Venezuela	12.8	2.1

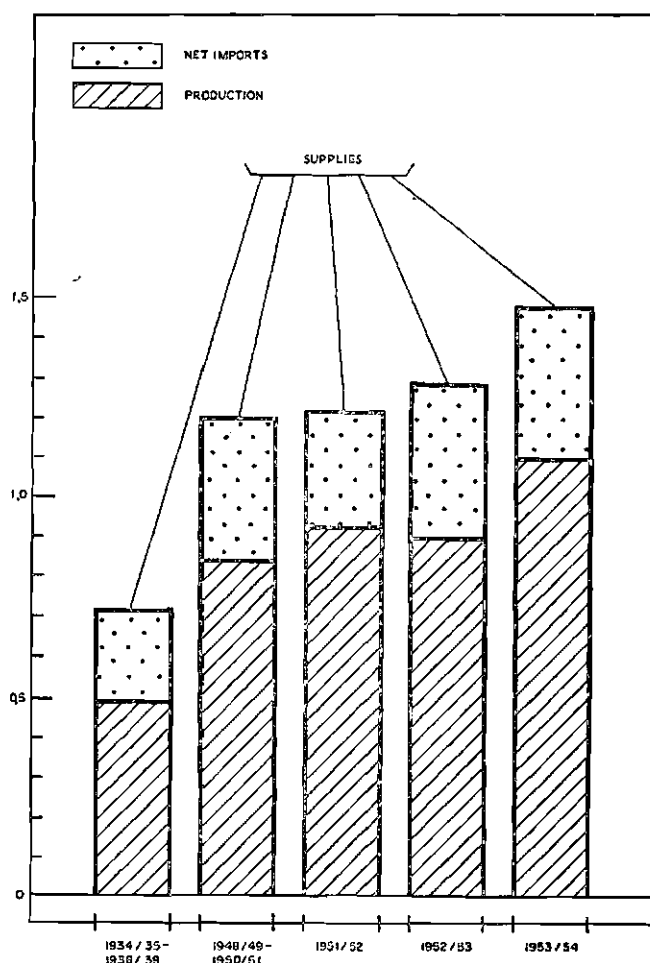
Source: ECLA/FAO.

Complete series are not available for domestic and import prices for sugar in the countries under review.

Figure X

LATIN AMERICA: SUPPLIES, PRODUCTION AND NET IMPORTS OF SUGAR IN EIGHT COUNTRIES^a

(Thousands of tons)
Natural scale



Source: Food and Agriculture Organization and Economic Commission for Latin America.

^a Argentina, Bolivia, Colombia, Chile, Guatemala, Honduras, Uruguay and Venezuela.

In Argentina, the real prices paid to farmers register an upward movement between 1949 and 1953, while import prices, conversely, tended to decline. A marked downward trend was apparent for domestic prices in Colombia as deflated by the cost-of-living index. Import prices, on the other hand, were higher than local prices in 1949 to 1951, a sharp reversal of this ratio following in 1952 and 1953. Venezuela presents a different picture. While domestic prices remained relatively stable, import prices not only showed a declining trend, but were, throughout the five-year period, far lower than domestic prices. (See table 61.) This would seem to imply that in Venezuela domestic sugar production is heavily subsidized by consumers.

From these considerations, it may be deduced that only three Latin American Republics—Bolivia, Chile and Uruguay—will not become self-sufficient in the very near future. In fact, with the possible exception of Bolivia, self-supply is not the target at which these countries are at present aiming.

Table 61. Latin America: Domestic and import sugar prices per ton in three countries

Years	Argentina		Colombia			Venezuela		
	(A)	(C)	(A)	(B)	(C)	(A)	(B)	(C)
1949	813	200.0	438	149.1	288.1 ^a	1,045	305.7	125.7
1950	1,330	174.6	399	195.9	203.6 ^a	991	295.9	141.2
1951	1,175	—	278	116.1	201.7 ^a	931	297.3	130.4
1952	1,247	—	353	143.3	107.8	907	292.4	116.4
1953	1,472	118.2	277	123.4	75.1	929	296.6	102.9

Source: ECLA.

Note: (A) Price in local currency deflated by the wholesale price index. (The cost-of-living index was used for Argentina.)

(B) Domestic price converted to dol-

lars at an exchange rate assimilated to the real rate.

(C) Import prices c.i.f.

^a During these years imports were so small that they do not appear in table 58, as they did not amount to 1,000 tons. Prices are given for illustrative purposes only.

In Chile, for instance, the main objective is to avoid an expansion of imports that might arise from future consumption increases. Sugar production in Chile began only in 1954, and the present target for 1964 is 60,000 tons. Moreover, as has been noted in other documents,⁸ the purpose of encouraging the cultivation of sugar beet is not only to save foreign exchange, but also to promote dairy production on the basis of the by-products of sugar manufacture, and to improve land utilization in the areas where sugar beet is to be grown. As an incentive to its cultivation, the government-owned mill has established highly remunerative prices. Since the plant does not work at full capacity, however, current production costs are high, and stand above the market price for imported sugar, favoured as the latter is by a special exchange rate. If the mill were to work at full capacity and the exchange rate were set at a more realistic level, the price difference would tend to disappear. In any case, Chilean experts estimate that the indirect advantages of beet cultivation are so great that they might even justify the production of sugar on the basis of a moderate subsidy.

Large investments have recently been made in Uruguay both in beet and cane cultivation and in sugar mills. The installed capacity of the latter, which it is hoped to utilize fully by 1957, amounts to 50,000 tons annually; production would cover about 50 per cent of domestic consumption by that year. In Uruguay sugar production is heavily subsidized by the government, through a special fund formed by import and internal distribution taxes.

In Bolivia, where conditions are very favourable for sugar cane, the attainment of self-sufficiency depends exclusively on the rate of investment in the sugar industry. New equipment has been purchased to extend the capacity of the two existing mills, and another plant is being installed which will probably enter production in the course of 1955. It is estimated that once this mill begins operations, sugar imports will not exceed 10,000 tons annually, that is, that Bolivia will soon be in a condition to supply about 80 per cent of its own domestic requirements, estimated on the basis of average consumption over the last three years.

⁸ See *Report of the Third Regional Meeting on Food and Agricultural Programmes and Outlook in Latin America*, FAO, Rome, 1955, Annex C; and Economic Commission for Latin America, *Economic Survey for Latin America, 1954*, *op. cit.*, Part I, chapter IV, pp. 84 *et seq.*

The sugar-importing countries of the region are not likely to produce sizable exportable surpluses in the near future. The market situation is unfavourable, since each surplus would have to compete with traditional exporter countries, who are better fitted for such competition. It is advisable to recall what has happened in Mexico, where during the last two years about 380,000 tons of surpluses have accumulated, and are proving difficult to place on the world market. Mexico now seeks a solution to this problem in an enlargement of its export quota to the United States, but this will be difficult to obtain because it would conflict with established interests. Unless its foreign market expands, it is feared that this country may be forced to close down several sugar mills in order to restrict production.

(b) Surplus problems

It is interesting to note the distinctive features of the sharp upswing in world sugar stocks, which rose from 3.7 million to 6.9 million tons between 1951 and 1954.

While the aggregate production of other regions of the world remained stable between 1934-38 and 1948-50, Latin America's rose by 67.1 per cent; by 1951/52, it had almost doubled as a result of Cuba's record harvest of 7.2 million tons in that year.

Since that date, however, stocks have continued to accumulate, although Cuba's production declined; by 1953/54 and 1954/55 they stood at only 4.9 and 4.5 million tons respectively. During the same period, stocks in Cuba fell, both in absolute terms and as a percentage of world stocks. The decrease in Cuban production affected the aggregate production of the region, the contribution of which to world stocks thus declined.

Some major variations affected exports during the period under review. The level of world exports rose to a peak during 1953, Latin America having contributed to this record. But, and this accounts for the difficulties which regional sugar exports have been encountering, Latin America's percentage in relation to world exports has shown a manifest downward trend since 1948-50. (See table 62.)

Two periods must thus be distinguished in the process of accumulation of sugar stocks. The first was a direct consequence of the record Cuban crop of 1951/52, which raised Cuban stocks from 290,000 to 2.2 million tons, and the second, began in 1952/53, when the reserves of other countries increased from 3.5 to 4.9 millions, while

Table 62. Latin America: Regional and world production and exports of raw sugar^a. State of stocks
(Thousands of tons)

Period	Production ^b			Exports ^c			Stocks		
	World ^d	Latin America	Latin America percentage	World ^e	Latin America ^f	Latin America percentage	World ^g	Cuba ^h	Cuba percentage
1934-38 ..	22,588	7,219	32.0	9,800	4,030	41.1	..	..	..
1948-50 ..	27,827	12,062	43.3	10,600	7,020	66.2	3,680	290	7.9
1951/52..	32,208	14,368	44.6	11,150	6,850	61.4	5,660	2,160	38.2
1952/53..	30,759	12,721	41.4	14,039	8,409	59.9	5,170	1,510	29.2
1953/54..	34,118	12,965	38.0	12,200	5,970	48.9	6,870	1,940	28.2
1954/55..	34,200	12,738	37.2	..	..	..	..	..	..

Source: FAO.

^a Centrifugal sugar only.

^b Agricultural year Sept.-August, beginning with the year first mentioned.

^c Calendar year corresponding to the second year mentioned.

^d Excluding the USSR.

^e Excluding the United States' trade with its dependent territories.

^f At various dates in the second half of the second year.

^g On 1 December of the second year.

Cuban stocks registered a slight downward trend. This increment in reserves, however, was mainly recorded in importer countries such as Great Britain, where stocks rose from 560,000 tons in 1952 to 1.48 millions in 1954, in consequence of heavy purchases from Cuba as a first step towards ending sugar rationing.

Cuba has obviously been the country chiefly affected by over-production of sugar. The expansion of this island's production clearly exceeded the possibilities of absorption by the world market, owing to the fact that

additional consumption in most importer countries was mainly met from increased domestic production. Statistics show: 1) that production in other regions of the world, outside Latin America, rose sharply by 5.4 million tons between 1948/49-1950/51 and the 1953/54 farm year; and 2) that sugar production in other Latin American countries also expanded by 1.5 million tons in the same period. In the meanwhile, Cuban and aggregate regional exports remained at what might be called "normal" levels. (See table 63.)

Table 63. Production, exports and stocks in Cuba and other countries
(Thousands of tons)

	Production			Exports ^a		Stocks		
	Cuba	Rest of region	Other regions ^b	Cuba	Other regional countries	Cuba ^c	Other exporters ^d	Importers ^d
1948-50	5,515	6,547	15,765	4,622	2,398	..	..	..
1951/52	7,225	7,103	17,840	4,398	2,452	290	440	2,950
1952/53	5,159	7,562	18,038	5,516	2,893	2,160	540	2,960
1953/54	4,890	8,075	21,153	3,940	2,030	1,510	540	3,120
1954/55	4,534	8,204	21,462	..	..	1,940	760	4,170

Source: FAO.

^a Calendar year corresponding to the second year named. Excluding trade between the United States and its dependent territories.

^b Excluding the USSR.

^c On 31 December of the first year.

^d On several dates during the second half of the first year.

In conclusion, both producer and importer countries may be said to have contributed to the accumulation of sugar stocks. Nevertheless, since it would be erroneous to call the reserves of the latter countries "surpluses", the true problem is fundamentally that of the accumulation of stocks in Cuba. Since this country has already adopted stringent restrictive measures to remedy the situation, the integral solution of the problem now depends on the policy of other producer countries. In the meanwhile, heavy USSR purchases from several Latin American countries during 1955 have tended to ease the problem of the regional surplus. According to trade circles, a total of 516,000 tons had been bought by the USSR up to the beginning of July. Of these, 450,000 tons were bought from Cuba, 21,000 from Mexico, 15,000 from Argentina and 5,000 from Brazil.

5. COTTON

(a) General considerations

Cotton cultivation has also expanded considerably in Latin America. In the pre-war period there were less than 3 million hectares under cotton, as against a peak of 4.8 millions in 1952/53 and 4.6 millions in 1954/55. Production rose from 600,000 to a little over 1 million tons in 1952/53. After a slight decline in 1953/54, the cotton crop registered a recovery in 1954/55, with almost 1.2 million tons.

This remarkable increase in cotton production was due mainly to the rise in world prices and the pressure exerted by domestic demand. The increase in personal income in Latin America was accompanied by a parallel

expansion of demand for cotton, so that per capita consumption increased from 2.2 kilogrammes during the pre-war period to 3.4 kilogrammes in 1953. The countries where per capita cotton consumption between 1934-38 and 1953 increased most were Chile, where it rose from 0.5 to 2.1 kilogrammes; Argentina, from 2.3 to 3.8 kilogrammes; Brazil, from 4.2 to 6.7 kilogrammes; Colombia, from 1 to 2.7 kilogrammes; Guatemala, from 0.2 to 1.6 kilogrammes; and Cuba, from 0.3 to 0.9 kilogrammes. These increments are still more remarkable if compared to world per capita consumption, which, during the same period, increased from 2.87 to 3.00 kilogrammes, that is, by only 5 per cent.

The expansion of the textile industry in Latin America has also led to the substitution of domestic production for imported finished goods. Thus, in 1934-38 Latin America⁹ imported about 20,000 tons of yarn and 76,000 tons of cotton textiles from other regions, but these imports declined to only 9,000 and 28,000 tons, respectively, in 1953.

Special mention should be made of the effort of importer countries to increase cotton production.¹⁰ In Colombia, for instance, production rose from 5,000 tons during the pre-war period to about 30,000 in 1954/55.

Despite the considerable increment in domestic consumption, a remarkable export expansion has taken place, as will be shown in detail below. The main cotton-exporting countries are Brazil, Mexico, Peru and Argentina, which together account for more than 90 per cent of aggregate Latin American cotton exports.

World cotton prices have tended to remain stable since the spectacular upswing of 1950 and 1951 consequent upon the Korean war. For 15/16-inch fibre the average price in the United States in 1952, 1953, 1954 and during the first quarter of 1955 fluctuated between 74 and 76 cents per kilogramme. (See table 64.)

(b) Surplus problems

Between 1 August 1951 and the same date in 1954, world cotton stocks in the hands of producer countries increased by about 114 per cent, or by 1.76 million tons. However, since there was a certain reduction in the

⁹ Excluding dependent territories.

¹⁰ See *Economic Survey for Latin America, 1954, op. cit.*, Part I, Chapter IV, pp. 87 *et seq.*

reserves of importing countries, the real accumulation amounted to only about 72 per cent. In exporter countries almost the whole increase was produced in the United States (1.62 million tons) and the small balance in other nations. A further accumulation of stocks is taking place in 1955. (See table 65.)

Even if on a minor scale, Latin America may have exerted some influence on the accumulation of cotton surpluses. As a matter of fact, although the relative contribution of the region to world production rose by only 1 per cent, between the indicated years, its share of exports grew from 14.3 to 24.4 per cent with an absolute increase of 310 thousand tons.

Table 64. United States: Cotton prices^a

(Dollar cents per kilogramme)

Year	Price	Year	Price
1934-38	24.6	1951	86.9
1947	76.2	1952	76.1
1948	70.9	1953	74.0
1949	70.2	1954 ^b	75.2
1950	93.9	1955 ^c	74.6

Source: FAO.

^a Middling 15/16"; average for 10 United States markets; as from August 1954, average for 14 markets.

^b Estimated average.

^c Estimated average for January-March.

The accumulation of cotton stocks in the United States has been a direct result of the decline in exports from this country since the 1951/52¹¹ commercial year, when they accounted for 45.2 per cent of world exports. In the next two years this share fell to 26.8 and 29.2 per cent respectively. This falling-off in exports from the United States has undoubtedly been due to competition from other countries, and also to the policy pursued by several importer countries of restricting purchase in the expectation of further price declines.

The United States has adopted stringent measures to restrict cotton production the effects of which have been

¹¹ If United States cotton exports had remained at the 1951/52 levels, aggregate exports up to August 1955 would have exceeded the 1.6 million ton mark. In the same period, stocks would have expanded by only 0.65 million tons.

Table 65. Latin America: Comparison with world production and exports of cotton. State of stocks

(Thousands of tons)

Period	Production			Exports ^a			Stocks ^b		
	World	Latin America	Latin America percentage	World	Latin America	Latin America percentage	World	United States	United States percentage
1934-38 ..	5,980	595	9.9	2,950	380	12.9			
1948-50 ..	5,870	793	13.5	2,580	380	14.7	2,310 ^d	490 ^d	21.1
1951/52 ..	6,890	917	13.3	2,650	380	14.3	2,890	600	20.8
1952/53 ..	7,120	1,068	15.0	2,550	400	15.7	3,360	1,220	36.6
1953/54 ..	7,390	959	13.1	2,830	690	24.4	3,980	2,110	53.0
1954/55 ..	7,020	1,171	16.7	..	..	..	4,200	2,400	57.1

Source: FAO.

^a Commercial year August-July, beginning with the year first indicated.

^b At the end of the season, that is on 31 July of the second year mentioned.

^c Excluding the USSR.

^d On 31 July 1951.

partly frustrated by improved yields. The 1954 crop was, however, 600,000 tons smaller than that of the previous year. (See table 66.)

Table 66. United States: Cotton production and exports
(Thousands of tons)

Period	Production ^a	Exports ^b	
		Total	Percentage of world exports
1948-50	2,765	1,057	41.0
1951/52	3,284	1,197	45.2
1952/53	3,282	683	26.8
1953/54	3,564	827	29.2
1954/55	2,964	922 ^c	..

Source: FAO. *The World Cotton Situation*, U.S.D.A., 29 March 1955.

^a Production during the first year indicated.

^b Commercial year starting on 1 August of the year first named.

^c Estimate.

Although there has been some improvement in guarantee prices for the 1955 crop, the United States has imposed stricter limitations on the area which may be cultivated. Furthermore, this country has not yet adopted any decision with regard to export subsidies. Such a policy will depend on the success of its programme to reduce stocks and on the production policies of other cotton exporting countries. The United States has stated that it may alter its policy of not subsidizing cotton exports, if, while it takes steps to reduce the acreage under cotton, other exporter countries decide to extend such areas.

6. COFFEE

(a) *The abnormal 1954 coffee-year*

Coffee production in Latin America has shown no marked fluctuations since the pre-war years, when the average annual crop totalled 2.12 million tons. The 1952 harvest of 2 millions was the highest registered after the war, while later levels have all been slightly lower.¹²

For the reason given above, the region's coffee production has declined somewhat in relative importance within world production; it was equivalent to 88 per cent of the total in 1934-38, but had fallen to 82 per cent by 1954. This drop is naturally reflected in exports, whose contribution to the world total was reduced from 85 per cent before the war, to 78 per cent in 1953 and 75 per cent in 1954.

Coffee is among those Latin American exports which have suffered most from the major price fluctuations during the past two years, which arose from causes described in other ECLA and FAO documents.¹³ Nevertheless, since coffee is a product of such importance to the regional economy, it is of interest to add here some fundamental observations on this commodity, especially as regards demand, prices and possible future levels of regional production.

¹² In 1955, however, production figures exceeded those recorded for 1952, reaching 2.22 million tons. This increment was even greater than the increase forecast at the date when the present document was prepared.

¹³ See, for instance, ECLA, *Economic Survey of Latin America 1954*, *op. cit.*, and FAO, *The State of Food and Agriculture 1955*.

With respect to demand, the sharp fluctuations between November 1953 and April 1955 arose from specific causes which show how particularly sensitive are the prices for this product to the factors affecting its supply. To provide a clearer view of this phenomenon, table 67 and figure XI show the monthly coffee quotations on the New York market from July 1953 to April 1955.

Table 67. Latin America: Average monthly quotations for Santos 4 coffee on the New York market during the months indicated

(Dollar cents per pound)

Month	1953	1954	1955
January .....	..	71.8	67.0
February .....	..	77.6	54.5
March .....	..	91.4	58.3
April .....	..	91.1	58.0
May .....	..	85.1	..
June .....	..	84.2	..
July	59.3	83.9	..
August	61.5	80.0	..
September	61.5	74.4	..
October	60.0	71.5	..
November	58.5	76.0	..
December	61.3	72.7	..

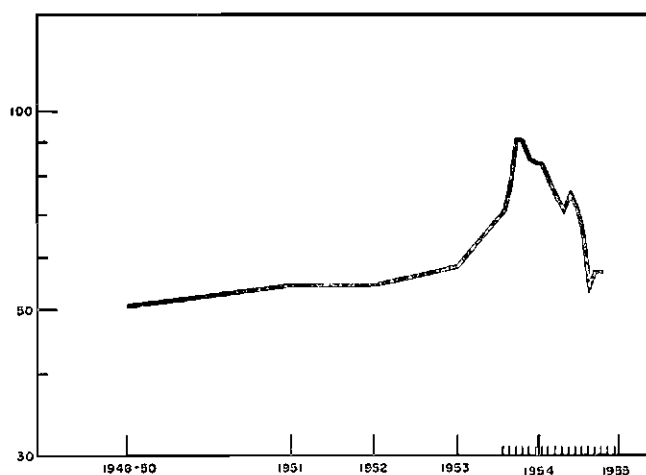
Source: FAO.

Figure XI

COFFEE: AVERAGE MONTHLY QUOTATIONS FOR SANTOS 4 ON THE NEW YORK MARKET

(Dollar cents per pound)

Semilogarithmic scale



The frosts which occurred in Brazil towards the middle of 1953 caused serious alarm, but the figures given above clearly show that any real effect on prices was not apparent until January 1954. This was partly because of the heavy purchases made by United States importers and the speculative factors which operated outside the normal supply and demand situation, according to the findings of a special committee of the United States Federal Trade Commission.¹⁴

¹⁴ Federal Trade Commission, *Economic Report of the Investigation of Coffee Prices*, 30 July 1954.

The fact remains that, from this time on, prices began to soar until they reached record levels in March and April 1954. Clearly 1954 was a completely abnormal year, remote from the trend of coffee prices during the past years. The situation did not return to normal until March 1955, when prices fell to approximately the 1953 average. Thereafter spot prices for Santos 4 weakened to 53 cents by the end of May, recovered somewhat to 55.5 cents at the end of June, but declined again to 52-53 cents during the first part of July.

What happened to coffee prices in 1954 would seem to show the fundamental importance of both Brazil, as the principal exporter and the United States, as the largest consumer, in the world's coffee economy. Significant also, although in a somewhat lesser degree, is Colombia, whose coffee exports have shown a tendency to rise in the last few years, whereas those of Brazil have either remained stationary or have declined. (See table 68.)

Table 68. Latin America: World and regional exports, United States imports and coffee prices on the New York market

Period	Exports			United States Imports			
	World	Latin America (Thousands of tons)	Brazil	Colombia	Total (Thousands of tons)	Per capita (Kilo-grammes per annum)	Prices ^a (Dollar cents per pound)
1934-38	1,650	1,398	875	230	790	6.2	9.7
1948-50	1,930	1,630	1,034	310	1,229	8.2	50.9 ^b
1951	1,930	1,559	982	288	1,219	7.9	54.3
1952	1,950	1,593	949	302	1,216	7.7	54.1
1953	2,090	1,700	934	398	1,261	7.9	58.5
1954	1,750	1,312	655	345	1,025	6.3	78.3

Source: FAO/ECLA.

^a Annual average prices on the New York

market for Santos 4, ex-dock New York.

^b 1950 average.

Statistical analysis seems to confirm the close relation existing between Latin American coffee exports and United States imports on the one hand, and between the region's exports and prices on the other. A comparison of 1948-50 with 1954 reveals that, with small fluctuations on either side, Latin American exports and United States imports of coffee followed an obviously parallel course. In consequence, as Latin American exports did not increase, United States per capita imports gradually declined, and this situation affected coffee prices on the New York market.

The effect on prices of the decrease in United States per capita imports would appear to indicate that in this country domestic demand for coffee has remained persistently firm. Nevertheless, the rise in prices which coffee experienced in 1954 was reflected in a decrease of approximately 10 per cent in United States consumption, in relation to previous years' levels. In the meantime, United States importers appear to be still awaiting a heavier fall in prices, with the result that visible stocks on the market have been reduced to minimum levels.¹⁵

(b) Estimated production in Latin America

Perhaps it is no strange coincidence that this holding-off on the part of United States buyers should be linked with reports on considerable prospective increases in Latin American coffee production, which, in the not-too-distant future, may surpass the levels of demand.

¹⁵ In April 1955, visible stocks of coffee in the United States stood at only 48,379 tons as against 73,070 in April 1954. From July to March of the trade year 1954-55, 616,526 tons were imported, as compared with 933,262 tons during the same months of the trade year 1953/54. However, during the first five months of 1955 imports of coffee into the United States were 10 per cent higher than during 1954 taken as a whole.

The difficulty of predicting future output is universally acknowledged. Nevertheless, in the case of coffee, a projection for a reasonable period of time is simplified by the permanent character of a coffee plantation; and a fair estimate of likely yields can be made, given the exact number of trees which have not yet produced a berry harvest. Unfortunately, the only data available on this point are incomplete.

An immediate grasp of the situation can be gained from the patent recovery of Brazil's exportable production, which, during the present year, shows trade balances higher than those recorded in the two previous years, and almost equal to export availabilities in 1952. In commercial year 1955/56 Brazil will, as the result of an excellent harvest, estimated at nearly 1.08 million tons, have approximately 1.42 million tons available for export, as against only 1.02 in 1954/55. (See table 69.) If some 48,000 tons were deducted for domestic consumption,¹⁶ about 1.03 million tons would still be available for export, as well as a carry-over of 390,000 tons representing the estimated carry-over as of 30 June 1955, which includes about 180,000 tons of government-held stocks.

However, the most serious question concerns what future coffee production will be in Latin America, and whether it will actually exceed possible levels of demand in the years to come. It has already been pointed out that this is difficult to predict, and could be forecast with the minimum risk of error only by means of methodical research in all producer countries, whereby the size of new plantations could be ascertained. However, merely

¹⁶ This figure refers exclusively to consumption in ports and for coastal trade. Total coffee consumption in Brazil is currently estimated at about 250 thousand tons.

to give some idea of this point, a projection of possible production over the next four years has been made, based on available data regarding the plantings effected from 1951 onwards.¹⁷

Table 69. Brazil: Coffee available for export
(Thousands of tons)

Year	Carry-over stocks ^a	Exportable production ^b	Available for export
1951/52	296	847	1,143
1952/53	177	912	1,089
1953/54	198	858	1,056
1954/55	199	822	1,021
1955/56 ^d	390 ^c	1,032	1,422

Source: Instituto Brasileiro do Café; *Foreign Crops and Markets*, U.S.D.A., 11 July 1955.

^a End-of-season carry-over on 30 June of the first year given.

^b Registered in port during the farm year indicated, deductions having been made for coastal trade and consumption in ports.

^c Including approximately 180,000 tons of government-held stocks.

^d Preliminary estimate.

Such data would appear to indicate that of the total number of coffee-trees in existence in the twenty Latin American Republics, about 14 per cent will have just entered production between 1955 and 1958. If this is the case, the region's coffee production in 1953 might reach 2.21 million tons, calculating the yield from new trees according to their location. This estimated production for 1958 would be about 16.5 per cent greater than that registered in 1954.

If a straight line is fitted to represent the trend between 1948 and 1954, and the corresponding projection up to 1958 is made, the results are very similar. (See figure XII.) In this case the estimated production for 1958 would be 2.16 million tons, that is, a figure only 50,000 tons lower than the direct estimate. This adjusted coincidence would seem at least to justify the assertion that coffee production in Latin America for the next four years will not substantially diverge from the trend shown from 1948 onwards. Table 70 and figure XII are given to permit comparison of the values corresponding to both estimates.

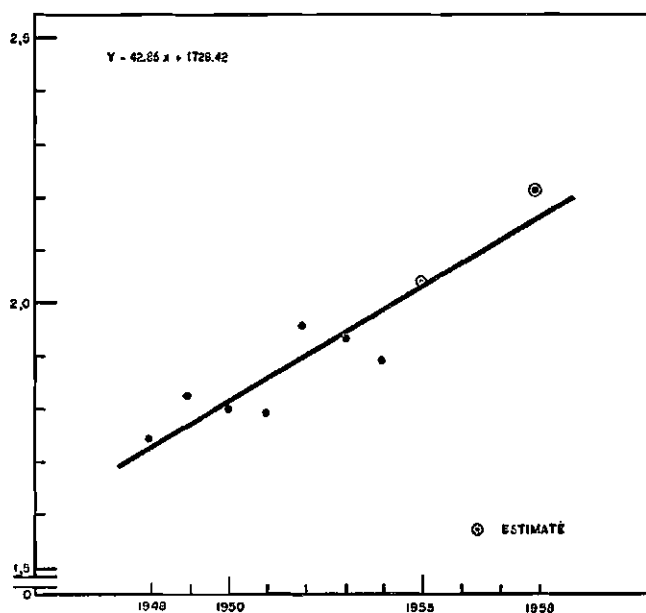
The trend appearing in the figure (see column B of table 70) indicates that the annual rate of growth of coffee production between 1948 and 1958 would be 2.5 per cent. The direct estimate, on the other hand, would justify the assumption that production could expand in the 1954-58 period at an annual rate of about 4 per cent.

The unknown variable is, of course, the possible trend of the demand for coffee in the future. As has already been pointed out, it is a fact that coffee consumption in the United States decreased in 1954, because of consumer resistance to the high prices and the consequent vigorous publicity campaign against coffee-drinking. But this is a situation which, with the return of more normal prices, will undoubtedly tend to disappear.

¹⁷ The main bases for this projection are data on new coffee plantations published by the Instituto Brasileiro do Café, similar information from the National Coffee Sample published by the Departamento Administrativo Nacional de Estadística de Colombia and data from the Joint ECLA/FAO Coffee Survey in El Salvador referred to later. See also ECLA, *Economic Development of Colombia* (E/CN.12/365), where two alternative projections are offered.

Figure XII
LATIN AMERICA:^a TRENDS IN THE PRODUCTION OF COFFEE

(Millions of tons)
Natural scale



^a Excluding dependent territories.

Table 70. Latin America: Real and estimated coffee production from 1948 to 1954 and projections for 1958^a

(Thousands of tons)

Year	Real production (A)	Estimated production (B)
1948	1,743	1,728
1949	1,821	1,771
1950	1,808	1,814
1951	1,792	1,857
1952	1,955	1,900
1953	1,933	1,943
1954	1,894	1,986
1958	2,211 ^b	2,157

Source: ECLA.

^a Excluding non-self-governing territories.

^b Direct estimate.

While the greatest increase in consumption is to be anticipated in the United States, a larger proportional increase is indicated for Europe. Prices and income-elasticities of demand are certainly higher in Europe than in the United States. Assuming no exchange difficulties, this would mean that the effects of income growth and reasonable prices could be expected to be particularly effective in Europe. It also appears that the potentialities of expanding consumption in other parts of the world—the low per capita income areas of Asia and Africa as well as Latin America—must be taken into account. In those regions the price elasticity is considerably higher than in the high-income countries and the rise in post-war prices has more or less counterbalanced real income

increases. If coffee prices were to decline due to a rapid rise in production, this, in addition to active promotion work, would enable the rising income factor to express itself in terms of greater consumption.

As the situation stands today, surveys carried out by various organizations on the demand for coffee indicate that it is likely to increase over the next five years at an annual rate of about 3 per cent, or more gradually than production, according to the tentative projections made above.

The probable supply and demand situation described here does not appear to be very dangerous in the immediate future. Nevertheless, the subject must be approached with all caution, since the absence of adequate information as to newly-planted areas may leave room for serious inaccuracies in the projection. The future trends of coffee production in Latin America should therefore be studied with maximum care by the countries concerned and the various international organizations whose services are at their disposal.

(c) *Stabilizing measures*

It is true that the abnormality noted in coffee prices during 1954, and their sharp fall at a later date, have had serious repercussions on the exporter countries of the region. The higher the percentage of total exports or of fiscal revenue represented by coffee, the more serious these effects have been. In the smaller exporter countries of Central America, such as Costa Rica, El Salvador and Guatemala, national budgets and public works investments for 1955 were based on the assumption that coffee prices would be between 65 and 75 dollar cents per pound. Further, many producers reserved sales at the beginning of the year, in the hope of a new price reaction, only to find themselves eventually compelled to sell at prices far below those anticipated.

It is idle to emphasize the effects of the fall in coffee prices upon the balance of payments in Brazil and Colombia, the two principal exporters. During 1954, however, its incidence was not very marked in Colombia, because this country had already sold almost all its crop by the time prices began to fall. In 1955, however, a different situation is apparent. In Brazil, on the other hand, the effects were really serious from the outset. Not only were export availabilities reduced, but overseas sales were held back at the middle of 1954, in virtue of the domestic policy of withdrawing exportable coffee from the outset. This prevented Brazil from benefiting from the favourable external prices which still prevailed in mid-1954.

The alarm aroused amongst purchaser countries by the rise in prices, thus later gave place to the current fears of exporting countries. This anxiety has led the latter to adopt emergency measures and to look for solutions which will permit future prices to be stabilized. On this point, the Meeting of the Ministers of Finance or Economy as the IV Extraordinary Meeting of the Inter-American Economic and Social Council—held at Quitandinha, Brazil, in November 1954—passed a resolution whose implied aim is undoubtedly the creation of an International Coffee Agreement, similar to that existing for wheat and sugar.

One of the first measures adopted by almost all exporter countries of the region was the establishment of minimum export prices fluctuating between 53.88 dollar

cents per pound in Brazil and 59.50 cents in Colombia. The latter country has also abolished the differential exchange rate for coffee exports established in 1951. Moreover, in April 1955 an agreement was announced between these two countries for the stabilization of coffee prices, which could be effected, as unofficially stated, by the withdrawal of several million bags of coffee from the market. All the other Latin American producers might adhere to this pact.

A meeting of the minor producers who make up the Federación Cafetalera Centroamericana, Mexico, El Caribe (FEDECAME) was held in Puerto Rico, also in April 1955. Among other resolutions, it was recommended that an International Coffee Bureau should be established to include all the producer countries of the world. The main objectives of this would be: (a) to create buffer stocks; (b) to organize campaigns for the promotion of consumption; (c) to supply technical assistance; and (d) to extend financial aid to member countries.

In Brazil, the Federação Brasileira do Café is actively endeavouring to secure the adoption of a series of domestic and external measures for the stabilization of the coffee market. Among others, for instance, proposals have been made that coffee should not be included in the transactions of the New York Exchange and that Brazilian coffee exchanges should be closed down; that studies should be prepared to facilitate the pursuit of a policy of better understanding among all producer countries; that improved methods of levying revenue earmarked for advertising Brazilian coffee abroad, and similar activities carried out by the Pan-American Coffee Bureau, should be reinforced;¹⁸ and that new markets should be opened up by means of trade agreements with consumer countries.

All this may result in a mechanism to enable stabilization agreements to be concluded between producer and consumer countries, although the latter do not at present seem to be very interested. In the meanwhile it seems that some agreement among producer countries is indispensable to prevent an unjustifiable expansion of coffee plantations. It will also probably be necessary to make a more detailed study of the region's coffee economy, in order to locate its weakest points.¹⁹

7. MEAT

(a) *Production trends*

According to the most recent statistics available, animal stocks in Latin America²⁰ seem to have increased in a higher proportion than in any other region of the

¹⁸ A similar resolution was adopted by the FEDECAME Meeting in Puerto Rico.

¹⁹ Mention should be made, in this respect, of the *Joint FAO/ECLA Study* which is being prepared in accordance with the express recommendation of the fifth session of ECLA, and on which a special report was prepared for presentation to the sixth session of ECLA at Bogotá. Briefly, the purpose of this research is to determine future production trends and labour and capital productivity in coffee-planting. The main objective of the survey—apart from giving a general notion of supply prospects—is to provide the governments with an instrument of analysis in order to increase the profitability of the plantations. The outlook described earlier would seem to give grounds for the opinion that future effort in coffee-producing countries should be aimed at an improvement of the yields from existing plantations, rather than at a dangerous enlargement of the area under cultivation.

²⁰ Cattle, sheep, pigs and goats.

world. The head of cattle apparently increased by 33 per cent between the pre-war period and 1954; sheep by 34 per cent, pigs by 43 per cent and goats by 28 per cent in the same period. The over-all index for productive animals²¹ has increased by 34 per cent against a 17 per cent increment in the world as a whole.

Despite the size of this increase, if it is compared with demographic growth in the region, it may be seen that it was insufficient to maintain the per capita level of animal stocks prevailing before the war. In recent years these stocks were 7 per cent lower than during the pre-war period. (See table 71.)

Table 71. Latin America: Animal stocks
(Millions of head)

Period	Cattle	Sheep	Pigs	Goats	Index of stocks Productive units ^a	
					Total	Per capita
Pre-war	128	103	39	25	100	100
1949/50	162	129	46	29	126	96
1950/51	165	130	48	30	128	95
1951/52	167	132	50	30	130	94
1952/53	170	135	55	32	133	94
1953/54	171	138	56	32	134	93

Source: FAO.

^a Conversion factors used: cattle 0.8; pigs 0.2; sheep and goats 0.1.

For this, and for other reasons, which will be discussed elsewhere, per capita meat production seriously deteriorated, gradually decreasing so that by 1953 it stood at only 81 per cent of the pre-war production level. The development of meat production displayed varying features both in the different sub-regions, and in their component countries. (See table 72.) Thus in Mexico and Central America, for example, average meat production kept pace with demographic growth, and in 1949-51 the per capita level even rose above that of the pre-war period. Conversely, in the Caribbean area there was a decline in per capita production, which was fundamentally due to the decrease registered in Cuba, since the aggregate of the other countries registered a considerable increase. A similar phenomenon is to be observed in the tropical sub-region of South America; while there was a pronounced downward movement in per capita production in Brazil, the rest of the area recorded an appreciable improvement until 1949-51, when per capital production began to fall. In contrast, the temperate zone, both Argentina and the remaining countries considered as one group, showed sharp decreases, which were, however, more marked in Argentina. As regards the remaining countries in this area, a distinction must be drawn between developments in Chile and those in Uruguay and Paraguay. While Chile's aggregate meat production expanded by less than 10 per cent between the pre-war period and 1953, in the other two countries the corresponding increment amounted to slightly more than 20 per cent in the same lapse of time.

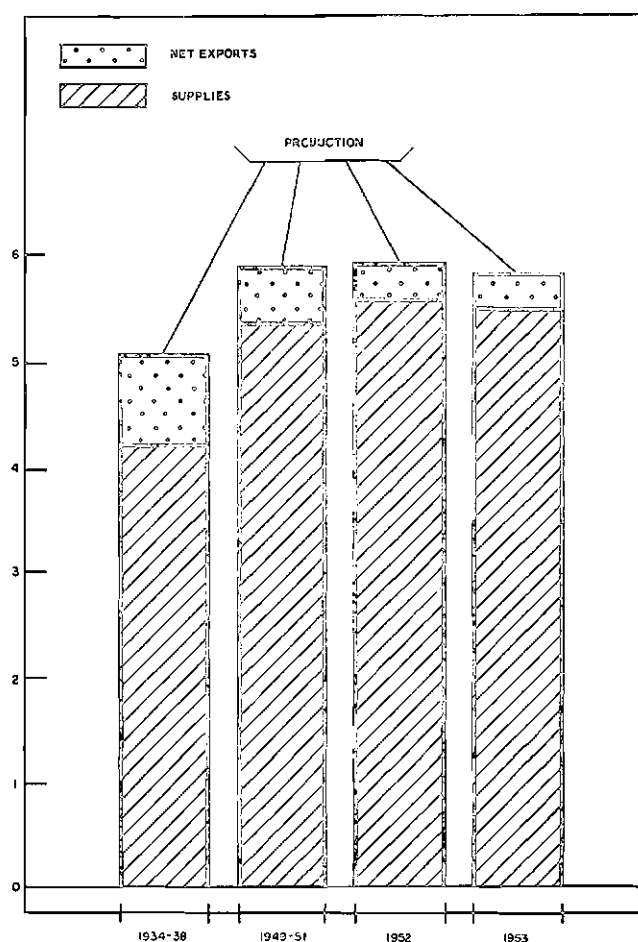
Mutton and pork production grew at a faster rate than that of beef in the region as a whole. Thus, while production of beef increased by about 10 per cent, that of mutton and pork expanded by about 20 per cent between 1934-38 and 1953. (See table 73.)

(b) Unit yield and rate of slaughter

In some countries the decline in per capita production has been affected by a drop in the unit meat yields of slaughtered cattle, as well as by the decrease in animal

Figure XIII
LATIN AMERICA: SUPPLIES, PRODUCTION
AND NET EXPORTS OF MEAT

(Millions of tons)
Natural scale



Source: Food and Agriculture Organization.

²¹ So entitled to distinguish them from draft animals.

Table 72. Latin America: Meat production by sub-regions and per capita production indices

	A. Aggregate quantum (thousands of tons)			
	1934-38	1949-51	1952	1953
Total Latin America	5,085	5,910	5,916	5,838
Total				
Mexico and Central America.....	467	650	687	664
Mexico	353	478	524	497
Central America	114	172	163	167
Total				
Caribbean Zone	203	246	250	250
Cuba	149	169	173	173
Other countries	54	77	77	77
Total				
Tropical Zone of South America.....	1,792	2,212	2,226	2,260
Brazil	1,325	1,494	1,494	1,555
Other countries	467	718	732	705
Total				
Temperate Zone of South America....	2,623	2,780	2,751	2,662
Argentina	2,066	2,182	2,188	2,010
Other countries	557	598	603	652

	B. Indices (1934-38 = 100)					
	Aggre- gate	Per capita	Aggre- gate	Per capita	Aggre- gate	Per capita
Total Latin America.....	116	88	116	84	115	81
Total						
Mexico and Central America	139	103	147	103	142	97
Mexico	135	98	148	103	141	94
Central America	151	112	143	100	146	100
Total						
Caribbean Zone	121	98	123	96	123	94
Cuba	113	90	116	88	116	86
Other countries	142	114	142	110	142	108
Total						
Tropical Zone of South America	123	92	124	89	126	88
Brazil	112	83	112	80	116	80
Other countries	153	114	157	112	151	105
Total						
Temperate Zone of South America ...	105	84	105	81	101	76
Argentina	105	82	104	77	97	71
Other countries	107	88	108	86	117	90

Source: FAO.

Table 73. Latin America: Meat production by species^a

(Thousands of tons)

	1934-38	1949-51	1952	1953
Cattle	3,993	4,682	4,527	4,436
Sheep ^b	340	293	416	409
Pigs	752	935	973	993
TOTAL	5,085	5,910	5,916	5,838

Source: FAO.

^a Including exports and excluding imports of live animals, both expressed in terms of meat.^b Includes goats.

stocks in relation to the population. This is true, for instance, of Brazil, where the average amount of meat obtained per animal has decreased notably since the pre-war period. In Uruguay, on the other hand, these yields

have slightly improved, while in Argentina they have remained practically constant. (See table 74.)

Table 74. Latin America: Meat yields per head of cattle

(Kilogrammes per head)

	Pre-war	1945-49	1950	1953
Argentina	218 ^a	219	206	223
Brazil	186 ^b	151 ^c	160	158
Uruguay	203 ^b	229 ^c	205	221 ^d

Source: Economic Commission for Latin America.

^a 1935-39.^c 1946.^b 1938.^d Estimate.

The rate of slaughter varies greatly from one country to the other but there is no clear evidence of an improvement since the pre-war period, except in the case of Uruguay. (See table 75.)

Table 75. Latin America: Rate of cattle slaughter in selected countries

	(Percentages)			
	Pre-war	1942-46	1947-49	1950-52
Argentina	24.0 ^b	25.0 ^c	26.0 ^d	23.0 ^e
Brazil	10.6 ^b	13.0 ^c	10.8 ^d	10.7 ^e
Chile	20.0 ^f	..	20.0 ^g	21.0 ^h
Uruguay	15.1 ⁱ	16.2 ^j	16.8 ^g	16.0 ^h

Source: ECLA/FAO.

^a Percentage of slaughter in relation to stocks.

^b 1938.

^c 1942.

^d 1947.

^e 1952.

^f 1939.

^g 1949.

^h 1951.

ⁱ 1937.

^j 1946.

(c) Supplies and prices

As a direct result of the slow rate of expansion of meat production in comparison with demographic growth, per capita supplies have deteriorated in most countries of the region. Some exporter countries, such as Argentina and Uruguay, have had to curtail their exportable stocks in order to cover growing domestic requirements, while importers—Chile, Cuba, Guatemala, Peru, Puerto Rico and Venezuela, for instance—have been obliged to increase meat imports in order to supplement their availabilities.

The most substantial decreases in per capita meat consumption took place in Argentina and Brazil. There was some recession in Cuba, though on a more modest scale. Conversely, there was marked improvement in Uruguay, and, to a lesser extent, in the group of tropical South American countries and the countries of the Caribbean area. Per capita consumption remained virtually stationary in Mexico and the Central American countries. (See table 76.) Apart from the specific countries for

Table 76. Latin America: Per capita meat supplies by sub-region

	(Kilogrammes)			
	1936-38	1949-51	1952	1953
Latin America	34.6	33.3	33.1	32.1
Mexico and Central America	17.0	18.0	17.4	17.6
Mexico	17.0	17.1	17.4	16.2
Central America	17.7	20.9	17.0	17.0
Caribbean Zone	17.9	17.9	18.0	17.5
Cuba	35.2	32.5	32.4	31.8
Other countries	9.6	10.6	10.5	10.2
Tropical Zone of South				
America	27.9	27.0	26.2	26.5
Brazil	33.2	28.3	27.5	27.8
Other countries	20.0	23.9	23.2	23.5
Temperate Zone of South				
America	86.8	84.9	86.4	80.6
Argentina	107.4	99.7	102.2	91.8
Uruguay	98.4	117.5	125.0	133.4
Other countries	31.1	34.6	32.0	33.8

Source: FAO.

which statistics are given, the following important modifications took place in per capita meat consumption between 1934-38 and 1953; in Costa Rica it fell from 40.9 to 31.4 kilogrammes; in Puerto Rico, from 13.8 it rose to 17.5 kilogrammes, and in Bolivia, from 22.5 to 35.4 kilogrammes; while it declined in Ecuador from 14.4 to 9.5 kilogrammes, and in Paraguay, from 81.2 to 64.4 kilogrammes.

It has already been pointed out that meat exports decreased from 921 thousand to 468.2 thousand tons between the pre-war period and 1953, whereas imports increased from 81 thousand to 140 thousand tons in the same period. Table 77 has been drawn up to show the most significant changes during the period under review. (See also figure XIII.)

Table 77. Latin America: Foreign trade in meat (Thousands of tons)

	1934-38	1949-51	1952	1953
A. Exports				
Latin America	921.0	662.9	457.5	468.2
Argentina	641.4	467.8	303.0	321.7
Uruguay	143.0	100.6	71.8	72.2
Brazil	71.6	24.9	5.0	5.2
Mexico	40.0	39.6	58.0	44.8
Other countries .	25.0	30.0	19.7	24.3
B. Imports				
Latin America	81.0	130.6	139.5	140.2
Puerto Rico ...	14.0	20.0	20.0	21.0
Venezuela	2.6	22.0	21.0	21.8
Chile	6.4	19.7	18.0	16.3
Peru	0.5	12.8	14.5	21.5
Cuba	2.1	5.1	9.5	10.5
Guatemala	1.0	6.2	6.1	8.2
Other countries .	54.4	44.8	50.4	40.9

Source: FAO.

In many countries, the lack of adequate meat supplies has caused substantial price increases which are out of all proportion to the rise in the cost of living and the over-all price index for foodstuffs. Data for several countries show that even in those like Mexico, which is a meat exporter and therefore has no serious supply problems, the rise in meat prices has been relatively much greater than the increase in prices for foodstuffs as a whole. (See table 78 and figure XIV.)

The foregoing statistics seem fully to confirm earlier statements to the effect that the failure of meat consumption to keep pace with the increase in real per capita income must be attributed to the inadequacy of the supply and the resulting higher relative prices for this commodity.

The countries of the region have been making undeniable efforts to expand meat production and they have succeeded in raising its level by 20 per cent in relation to the pre-war period. All countries have development programmes under way which envisage not only an increase but also an improvement in animal stocks. Per capita production and consumption figures, however, together with the sharp upswing in relative prices for meat, indicate that these endeavours have not as yet yielded fully satisfactory results.

Table 78. Latin America: Indices of prices for meat and other foodstuffs in selected countries

(1948 = 100)

Year	Brazil		Chile		Mexico		Peru	
	Meat ^a	Food-stuffs ^b	Meat ^c	Food-stuffs ^b	Meat ^d	Food-stuffs ^b	Meat ^a	Food-stuffs ^b
1947	97	88	83	86	93	95	93	74
1948	100	100	100	100	100	100	100	100
1949	108	96	134	115	112	104	133	116
1950	120	103	155	134	124	108	208	134
1951	148	108	186	169	159	124	208	150
1952	190	131	249	216	180	144	213	162
1953	229	172	326	263	157	139	305	180

Source:

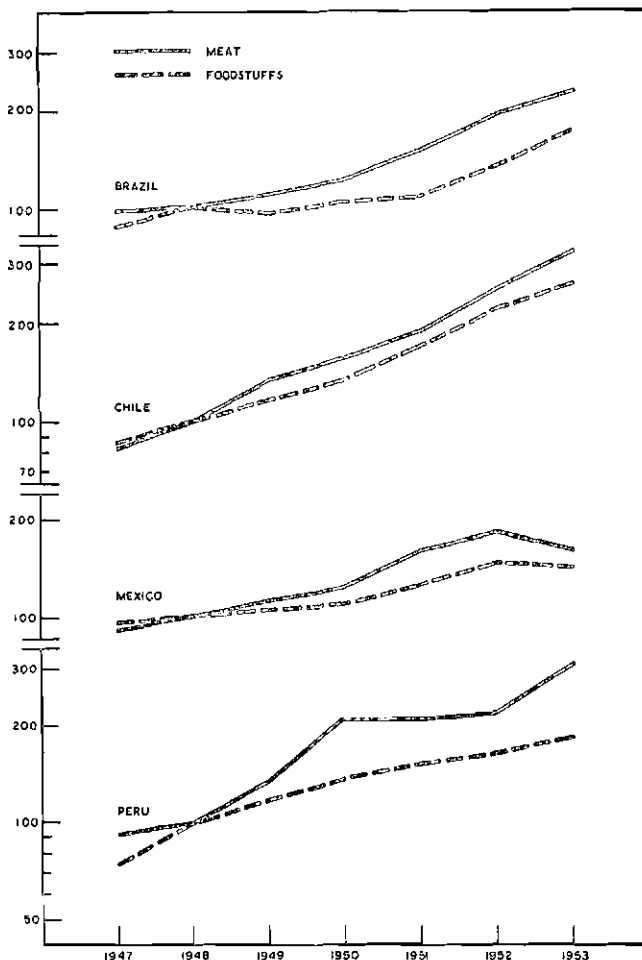
^a ECLA.^b FAO.^c Sinopsis Estadística 1953.^d Revista Estadística Mexicana.

Figure XIV

LATIN AMERICA: INDICES OF MEAT AND FOODSTUFFS PRICES IN SEVERAL COUNTRIES

(1948 = 100)

Semilogarithmic scale



Source: Food and Agriculture Organization.

8. MILK

Milk production in Latin America increased by more than 57 per cent between the pre-war period and 1953. If this increase is related with the growth of population, per capita production seems to have improved by almost 12 per cent in the same period. Since per capita meat production during the same period declined, the inference is that there was a marked tendency in Latin America towards the development of dairy cattle, to the detriment of livestock raised for meat only. Adequate statistics are not available for Latin American dairy herds in order to confirm this assumption, but even if milk yields per milch cow had improved, the previous statement would still be valid.²²

Development of dairy production was not uniform throughout the region. In some countries such as Argentina, Bolivia, Chile, Peru, Puerto Rico and Venezuela remarkable increases were registered, causing a substantial improvement in per capita consumption of this commodity. In others, such as Mexico, production lagged behind demographic growth, so that per capita consumption of milk decreased. Finally, Brazil was able to expand production at a rate similar to that of the growth of the population, so that per capita consumption remained almost the same as during the pre-war period.

Data on milk production and per capita consumption in some countries, and on the average for the whole region, show that notwithstanding the sizable increment in milk production in many countries, imports have had to be increased considerably in order to satisfy growing domestic requirements. (See tables 79 and 80.) Moreover, Argentina—which is virtually the only milk exporter in Latin America—was able to increase exports of this commodity in 1953, after the sharp reduction of the preceding year.

²² In Argentina, for example, the latest official data published on stocks of dairy cows are those for the 1947 census. So far the returns of the 1952 census have not been published. At all events, the 1947 census reveals that the numbers of dairy cows increased from 2.8 million, according to the 1937 census, to 4.6 million, or from 19.8 per cent to 27.4 per cent of the total number of cows in the country. See *Informe de la Sociedad Rural Argentina, 1954*, page 25.

Table 79. Latin America: Per capita production and supply of milk^a
in selected countries
(Kilogrammes annually)

Country	1934-38		1949-51		1952		1953	
	Production	Supply	Production	Supply	Production	Supply	Production	Supply
Latin America	100.0	100.0	108.0	110.8	109.0	112.9	112.0	113.7
Argentina	219.0	206.0	259.0	247.4	261.0	257.7	268.0	245.7
Brazil	103.0	105.0	97.0	97.2	95.0	96.7	100.0	100.6
Bolivia	76.0	76.9	133.0	138.3	131.0	136.9	130.0	134.1
Chile	79.0	80.1	126.0	129.6	123.0	124.0	129.0	133.3
Peru	30.0	34.1	40.0	43.8	41.0	46.6	45.0	50.9
Puerto Rico	36.0	59.1	76.0	127.8	81.0	134.8	87.0	140.9
Mexico	82.0	84.6	66.0	67.9	67.0	69.6	68.0	71.3
Venezuela	96.0	103.5	89.0	137.0	113.0	164.3	113.0	156.0

Source: FAO.

^a Excluding milk taken by calves direct from the udder, but including milk given them artificially.

Table 80. Latin America: Milk imports and exports^a

(Thousands of tons)

	Average 1934-38	Average 1949-51	1952	1953
<i>Imports:</i>				
Latin America	291.0	807.5	978.4	949.5
British West Indies	88.8	105.6	125.5	116.6
Cuba	6.4	64.3	78.2	83.0
Mexico	8.8	41.5	60.3	80.5
Peru	23.5	31.6	49.0	52.9
Puerto Rico	40.0	115.0	120.0	120.0
Venezuela	22.5	240.4	271.0	137.5
Other countries	101.0	209.1	274.4	259.0
<i>Exports:</i>				
Latin America	232.7	207.8	67.4	424.0
Argentina	222.7	201.2	61.2	420.0
Other countries	10.0	6.6	6.2	4.0

Source: FAO.

^a Including by-products in terms of milk.

9. WOOL

(a) Production and supply trends

Wool production in Latin America is mainly concentrated in four countries, Argentina, Uruguay, Brazil and Chile. Only the first two are important, as they account for more than 70 per cent of total Latin American production.

Wool production in these four countries expanded by about 25 per cent between the pre-war period and 1953/54. This increment, which is much less than the demographic growth of these countries, did not display similar characteristics in all the countries concerned. Thus, while Argentina's production remained virtually stationary, that of Uruguay increased by almost 80 per cent during this period. In Brazil and Chile increments were also recorded, although of less significance. This aggregate enabled Latin America to improve its position in relation to world production, since its contribution rose from 17 per cent during the pre-war period to about 19 per cent in recent years. (See table 81.)

Latin America's contribution to world exports also increased, except in 1952, notwithstanding the substantial

Table 81. Latin America: Production of wool

(Thousands of tons: clean basis)

	1934-38	1948-50	1952/53	1953/54
Latin America	153	179	184	191
Argentina	92	98	94	97
Uruguay	32	46	53	57
Brazil	11	12	14	15
Chile	8	12	12	11
Other countries	10	11	11	11
Share of world production (percentage)	17.1	20.2	19.0	18.7

Source: FAO.

development of the textile industry in the region and the growth of domestic demand. Thus, wool supplies more than doubled over the two-year period 1949-51, and in 1952, in relation to pre-war levels. The role of imports within total wool supplies is of little importance, since they account for only about 5 per cent of the latter. (See table 82.)

Table 82. Latin America: Wool supplies and foreign trade

(Thousands of metric tons: clean basis)

	1934-38	1949-51	1952	1953
Supplies	37.4	75.1	86.6	^a
Supplies excluding Argentina	22.8	41.4	58.4	30.7
Exports	117.5	109.4	104.4	161.2
Imports	1.7	5.2	4.7	3.7
Proportion of world exports (percentage)	17.7	18.3 ^b	14.9	20.6

Source: ECLA-FAO.

^a The regional total is not given for this year because Argentina's exports exceeded production.^b 1948-50.

The wool textile industry in Latin America, like that of cotton, has developed at a rapid rate since the Second

World War. Thus it has been possible to produce substitutes for some of the processed wool commodities which used to be imported from outside the region. While in 1934-38 imports of wool textiles by the twenty Latin American Republics amounted to almost 7,000 tons, in 1952 and 1953 such imports did not reach 2,500 tons, in spite of a large increase in consumption.

(b) Prices and exports

World wool prices fluctuated sharply in the latter years of the period under review, as a consequence of the Korean war. Marked increases were registered in the quotations for this fibre, which reached a peak level in 1951 with a rise of more than a hundred per cent in relation to 1947. (See table 83.) Thenceforward prices tended to return to normal, and for clean wool still reveal a slight tendency to decline, although for greasy wool they show symptoms of recovering an upward trend.

Table 83. Wool prices in specific countries

(Dollar cents per kilogramme)

	1947	1948	1949	1950	1951	1952	1953	1954	1955 ^a
United States (clean basis) ^b	273.8	362.9	366.8	439.2	596.4	364.4	381.4	376.1	341.0
United Kingdom (clean basis) ^b	236.2	376.8	355.9	443.6	538.6	349.8	419.2	368.5	324.9
United Kingdom (greasy) ^c .....	..	129.6	126.7	195.5	213.5	133.8	157.0	169.8	180.0

Source: FAO.

^a January-March.^b 70's.^c First white Joria.

In contrast with other Latin American agricultural exports, wool creates no problem of surpluses on the world market. Available stocks do not cover more than eight months of world consumption, although they increased slightly during the last year of the period. A certain weakening of demand, however, together with this expansion of supplies, caused a slight fall in prices in comparison with the preceding year. In 1954 world wool consumption was estimated to have been 4 per cent less than in 1953, but greater than in any other post-war year except 1950 and 1953.

After the heavy exports made during the 1952/53 wool year, Latin American stocks also tended to increase. One of the main causes, however, was the reluctance of sellers to liquidate their clip at prices lower than they had expected. This is specially true of Uruguay at the beginning of 1955, when producers were urging the authorities to modify the exchange rate or abolish certain export taxes. In general terms, the Consejo Nacional de Gobierno refused these requests, although on 8 February certain concessions were granted in relation to exchange rates for exports of wool tops and by-products, to offset increased production costs. For a long time, however, the wool market continued sluggish, so that most of the new clip remained unsold, and exports for the first half of the 1954/55 wool year were a little more than 3 per cent less than during the same period of the previous season.

Argentina's exports, conversely, have increased during the current season with respect to the previous year. In order to encourage sales, at the beginning of the year the government suspended the 8 per cent sales tax on wool for

several weeks, and in June a measure was adopted to extend to other currencies the preferential rate of 6.25 pesos to the dollar which is applied for exports of wool and sheepskins. This measure is expected to stimulate wool exports to countries with which reciprocal trade agreements have been signed.

10. FISH PRODUCTS

Latin America's fish production has been steadily increasing, particularly in some countries such as Argentina, Brazil, Chile, Mexico, Peru and Venezuela, which contribute with more than 80 per cent of the total landings of the region and maintain large fishery industries. (See table 84.) The remaining countries have a comparatively small scale production, due mainly to low productivity per fisherman. Substantial progress has, however, been made during the post-war years regarding mechanization and the improvement of the fishing fleets, but much has to be done in this respect, particularly in some countries of Central America and the Caribbean area.

Credit schemes and protective laws to facilitate the importation of fishery equipment, together with the organization of the small fishermen in co-operatives, should help to raise production.

The output has also been hampered by the deficient systems of marketing and distribution. Large sections of the population of the area, mainly the rural population, are not adequately supplied with fish, due to a lack of transport and storage facilities for fresh fish. This causes wastage, limits regular availability and increases the prices.

Table 84. Latin America: Total catch and landings of fish, crustaceans, molluscs, etc., 1938, 1947-53^a

(Thousands of tons)

Country	1938	1947	1948	1949	1950	1951	1952	1953
Latin America	263.0	458.6	514.5	525.2	571.2	621.8	659.0	
Argentina	55.3	65.1	71.2	65.3	57.6	77.6	78.7	..
Brazil	103.3 ^b	139.7	144.8	152.6	153.1	158.3	174.6	..
Chile	30.1	60.0	64.4	76.3	86.8	91.1	118.2	106.8
Mexico ^c	17.1	54.3	68.4	68.0	74.3	75.0	58.1	67.3
Peru	4.8 ^b	30.8	35.9	45.3	73.5	97.1	106.6	..
Venezuela	21.7 ^b	76.2	92.3	75.4	78.4	75.0	75.0 ^d	..
Other countries	30.7	32.5	37.5	42.3	47.5	47.7	47.8	..

Source: Yearbook of Fishery Statistics, 1952-1953, FAO, Rome, 1955.

^a Excluding dependent territories.

^b 1939.

^c Figures for Mexico exclude "via la pesca", i.e., quantities caught by foreign fishermen

(usually from the United States) under Mexican permits. These quantities are included in the United States landing statistics; Mexico includes them in its export statistics, but they are excluded from the United States import statistics.

^d Estimate.

The existing tendency in some countries of increasing the production of salted, dried and smoked fish seems to be one of the possible ways of solving the present acute problem of distribution. It also would be an outlet for seasonal surpluses, which are used to a large extent for manufacture of fish meal and oil.

Most of the fish production is generally absorbed by the fresh and frozen market. Processed, cured and canned products absorb a small percentage of the total production. Fresh fish consumption is, however, below the potential market capacity. The handling of this product from the time it is caught to the moment it reaches the consumer is very deficient. The small use of ice and lack of storage facilities depreciates the product and restricts demand. In a number of countries, such as Chile, Peru, Mexico, Argentina and others, fish is, however, becoming increasingly important as a replacement for meat products, and it is thought that present meat shortages will help the fishing industry to further develop and it is expected that a steady and larger demand for fishery products will continue to take place.

The external trade of Latin America's fisheries is gradually increasing. Both imports and exports have risen substantially since the pre-war period and Latin America has reversed its position as a net importer before the war to one of a net exporter of fish and fish products. However, trade restrictions and competition in quality and prices from traditional fish-producing countries outside the region, have strongly affected the fishing industry of countries such as Mexico, Venezuela and Peru, which based the development of their fishing industry on exports. These countries are now fostering the domestic trade and consumption to safeguard the industry from fluctuations and competition of the foreign trade.

11. WOOD PRODUCTS

(a) Production trends

The largest forest resources of the world are found in Latin America; they cover 922 million hectares and account for 24 per cent of aggregate world resources. The volume of wood felled in 1953, however, represented

only 11 per cent of world removals. How low this level really is may be appreciated from the fact that Europe (excluding the USSR) and North America—with a smaller forested area contributed 43.5 per cent of the world aggregate. (See table 85.)

Table 85. Forested area and roundwood removals in the world

Region	Forested area		Total removals	
	(Millions of hectares)	Percentage	(Millions of cubic metres)	Percentage
Europe	136	3.5	252	17.5
USSR	743	19	400	27.5
North America ..	656	17	373	26
Latin America ..	922	24	163	11
Africa	801	21	108	7.5
Asia	526	13.5	127	9
Pacific Area	86	2	22	1.5
TOTAL	3,870	100.0	1,445	100.0

Source: FAO (partially estimated).

Available statistics and estimates show that roundwood removals in Latin America have remained at relatively stable levels in recent years. There has been no marked trend towards a greater industrial utilization, however, so that per capita industrial production had declined in the last four years. (See table 86.)

The table shows that sawnwood production is increasing, notwithstanding a modest decline in 1953 due to the smaller production in Brazil and Argentina. It is interesting to note that the proportion of softwoods and hardwoods is virtually the same, since it would be logical to expect production of hardwoods to be considerably greater in view of the fact that 85 per cent of the utilizable forest area is covered by these species. This high proportion of softwoods in current production is due to the fact that 60 per cent of the aggregate is contributed by Brazil's production of Parana pine. The natural trend will be towards a greater production of sawn hardwoods. (See table 87.)

Table 86. Latin America: Removals for fuelwood and industrial use

(Millions of cubic metres)

	1950	1951	1952	1953	1954
Removals for fuelwood	150	150	145	145	145
Removals for industrial use	15	20	19	19	20
TOTAL	165	170	164	164	165

Source: FAO (partially estimated data).

Table 87. Latin America: Production of sawnwood

(Thousands of cubic metres)

	1950	1951	1952	1953	1954
Sawn hardwoods	4,360	4,730	4,720	4,740	5,000
Sawn softwoods	3,784	4,765	5,092	4,952	4,999
TOTAL	8,144	9,495	9,812	9,692	9,999

Source: FAO (partially estimated data).

Production of plywood has increased progressively and by 1954 is estimated to have doubled the 1950 figure. (See table 88.) The main producers are Argentina and Brazil, which contribute 50 and 18 per cent respectively. The trend is towards a growing expansion of this industry which has found new markets both for common plywood and for fine grades requiring decorative grains.

Table 88. Latin America: Production of plywood

(Thousands of cubic metres)

1950	85
1951	125
1952	150
1953	160
1954	170

Source: FAO (partially estimated data).

FAO and ECLA have been particularly concerned with the development of Latin America's wood resources for the manufacture of pulp. The joint study made by these two organizations, which served as a background document for the meeting held in Buenos Aires in 1954, gives an optimistic picture of the future development of this industry. Many countries are interested in establishing pulp plants, particularly those with tropical and sub-tropical forests containing a large number of species which are difficult to use for other purposes. The FAO/ECLA survey indicates that pulp and paper

consumption will probably double by 1965, and it will be difficult to cover this amount through imports.

Table 89 shows that production of mechanical pulp has increased by 33 per cent during the last four years, while that of chemical pulp expanded by 57 per cent during the same period. More than 95 per cent of production is contributed by 5 countries, of which the principal producers are Brazil, Argentina and Mexico.

Table 89. Latin America: Production of chemical and mechanical pulp

(Thousands of tons)

	1950	1951	1952	1953	1954
Mechanical pulp ..	120	120	150	150	160
Chemical pulp	140	180	200	200	220
TOTAL	260	300	350	350	380

Source: FAO (partially estimated data).

The total value of forest exports in 1952,²³ as reported by 8 countries, reached 59,404,000 dollars while the value of such imports during the same year amounted to 306,353,000 dollars, which left a net import balance of 146,949,000 dollars, of which 76 per cent was spent on pulp and paper imports.

²³ Figures for 1952 were used, since data available for 1953 and 1954 were incomplete.

Table 90. Latin America: Wood exports

(Thousands of cubic metres)

	1950	1951	1952	1953	1954
Roundwood (hardwoods)	180	240	200	190	200
Sawnwood (softwoods)	1,400	1,540	1,090	1,410	1,475
Sawnwood (hardwoods)	250	250	220	210	230
Plywood	25	30	15	15	30

Source: FAO (partially estimated data).

The preceding analysis clearly shows that the region's forestry production has progressed at a far from satisfactory rate, notwithstanding the modest expansion of wood industries and pulp manufacture. Several causes have contributed to this situation and various measures are required for improvement. The main problems of the Latin American forest industry and the possible solutions can be summarized as follows.

(b) *Basic forestry problems*

The exact extension and composition of the forests is unknown in vast areas of Latin America, especially in the tropical regions. This knowledge is indispensable for industrial development. Preparation of forest maps based on aerial photographs and ground inventories should be gradually undertaken by each country.

The forests of Latin America contain thousands of tree species but only a small number is known. Research is badly needed to investigate the wood properties of many species and ascertain their commercial value. A very important step in this direction has been the creation of the Latin American Research and Training Institute at Merida, Venezuela, sponsored by FAO and the Venezuelan Government. The Institute will start operating in 1956 and will co-operate with Experimental Stations in several Latin American countries. It is in the interest of each country to support and utilize the services of the Institute as much as possible.

There is a great lack of professional foresters in most of the Latin American countries. In some places this is alleviated by the employment of agricultural engineers with a limited training in silviculture, but this is far from satisfactory. At present there are Forestry Schools at the University level in Argentina, Chile, Colombia, Cuba, Mexico and Venezuela, but the foresters trained in those schools are only a fraction of those actually needed. In many countries the salaries offered to foresters are so low that students are not attracted to this field. Training of workers in the forest industries is also much

needed. To this end, FAO, in co-operation with the Governments of Brazil and Chile, has established Training Centres in Logging, Transportation and Saw Milling.

The machinery and equipment of a great number of industries are completely obsolete and its renewal is essential to better quality and lower costs of production. Help of the Governments to industrialists for the importation of machinery and equipment is highly desirable.

Waste of wood in exploitation and manufacture is exceedingly high. The establishment of integrated industries would allow a much more economical use of the forest resources, especially in the tropical areas. The main industries to be considered in such a scheme would be: saw-mills, plywood plants, fibreboard plants, pulp mills. These industrial centres should be combined, when possible, with agricultural colonization projects.

In many countries the readily accessible forests are disappearing and transportation costs are excessively high. The construction of roads and railroads and the habilitation of waterways are imperative.

Forest plantations are becoming more and more an important source of raw materials for industrial production and their protective value in soil and water conservation is generally recognized. Afforestation should be encouraged to the maximum through Government help in ways of credits, tax exemptions, etc.

Investment is not always sufficient to meet the high costs of establishing new industries, consequently a higher note of investment from domestic or foreign sources would be desirable.

In general it may be stated that the exploitation of forest resources in Latin America offers great possibilities, if only to meet the increasing domestic demand for forest products. Evidently, forest production could be an interesting line of development within the selective expansion approach referred to in this document.

Chapter VII

PRODUCTION AND DEMAND PROSPECTS FOR AGRICULTURAL PRODUCTS

I. GENERAL PROSPECTS

The analysis so far reveals some of the basic problems of agricultural development in Latin America. It should now be seen to what extent past trends may continue into the next few years. Naturally, the establishment of projections is by no means simple and is subject to many errors. Nevertheless, to estimate such trends, FAO has followed the practice of requesting Member States for information on their plans and programmes and the targets they set for the various products. But, whenever necessary, FAO has made projections to fill existing gaps in order to arrive at regional totals for a given year; this method, as an instrument of analysis, to some extent enables future prospects to be viewed more clearly.

To this end, since 1953, FAO has requested information from Member States that would permit the agricultural production in Latin America and in other regions of the world to be assessed for the agricultural year 1956/57. These estimates were summarized and commented upon in two FAO documents¹ presented to the Third Regional Meeting of FAO on Agricultural Programmes and Outlook. The basic conclusions drawn from the 1956-57 estimates were that Latin America's agricultural production would increase substantially and that if targets were attained and estimates fulfilled, regional per capita production would recover its pre-war level.

In an attempt to measure the possible effects of the future development of agriculture on supplies and on imports and exports of agricultural products, the following hypothesis of future demand was established: (a) that real per capita income would increase by 1.5 per cent annually or, alternatively, by 2.5 per cent; (b) that population would increase by 2.4 per cent per year; and (c) that the income-elasticity of demand for agricultural products would be 0.5. Using this same hypothesis, a new evaluation of future prospects in 1956/57 was made in table 91. (See also figure XV.)

If the targets and estimates are reached, agricultural production in Latin America during 1956/57 would be about 50 per cent higher than before the Second World War. This would mean, in turn, that per capita production would recover its pre-war levels. However, this increment would be insufficient for Latin America to regain its pre-war position as an exporter of agricultural products, if these exports are measured on a per capita basis, whether future per capita income increases at 1.5 or at 2.5 per cent. Simultaneously, imports of agricultural products would also expand substantially to almost double their pre-war volume.

¹ See documents LA/3/1, *op. cit.*, and LA/3/2, *op. cit.*, Annex C.

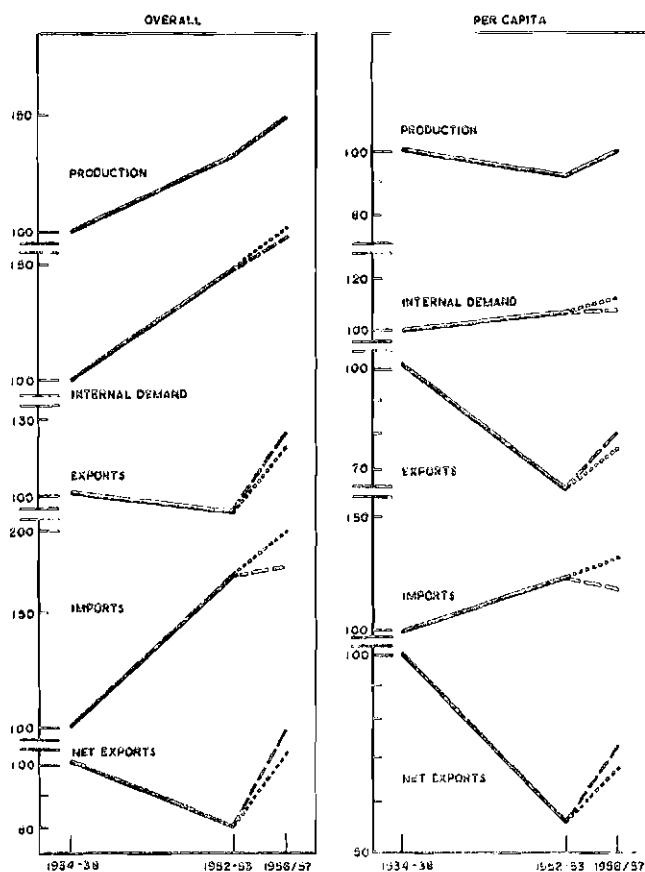
Figure XV

LATIN AMERICA: PRODUCTION, DEMAND AND TRADE PROSPECTS FOR AGRICULTURAL PRODUCTS

(Indices 1934-1938 = 100)

Semilogarithmic scale

----- ALTERNATIVE (A)
- - - - - ALTERNATIVE (B)



Source: Food and Agriculture Organization and Economic Commission for Latin America.

Average figures for the two years 1952 and 1953 show the progress made by the region's agricultural production and the distance to be covered until the agricultural year 1956/57. The rate of growth in the past (since 1948-50) has been somewhat slower than is necessary if the over-all production estimated for 1956/57 is to be achieved and consequently it will have to be much more rapid in the years ahead. Although returns are still incomplete, production in 1954/55 shows a considerable improvement over the previous season's and this en-

Table 91. Latin America: Production, demand and trade prospects for agricultural products

	Aggregate		Per capita	
	Average 1952-53	Estimates 1956/57	Average 1952-53	Estimates 1956/57
Production	131	150	92	100
Domestic demand	147		106	
Alternative (A)		170		111
Alternative (B)		167		109
Gross exports	94		66	
Alternative (A)		119		77
Alternative (B)		122		80
Gross imports	171		121	
Alternative (A)		200		130
Alternative (B)		179		117
Net exports	80		56	
Alternative (A)		105		68
Alternative (B)		112		73

Source: FAO/ECLA.

Note: Alternative (A) assuming a 2.5 per cent increase annually in per capita income and (B) assuming only a 1.5 per cent increase in the rate.

courages the hope that the 1956/57 production levels may come closer to the projections than was expected in 1954.

In fact, it should not be extremely difficult to reach the 1956/57 over-all levels estimated, since some crops have already surpassed them. (See table 92.) However, there are some products which are lagging considerably behind, such as edible oils, meat and maize. Production of the first two products was lower in 1952-54 than in

Table 92. Latin America: Production estimates for 1956/57 and progress made up to 1952-54

(Millions of tons)

	Average 1948/49-1950/51	Average 1952/53-1954/55	Estimates 1956/57
<i>Food products</i>			
Wheat	8.1	10.2	10.6
Maize	14.5	18.6	24.2
Rice	4.6	5.4	5.6
Other cereals	2.5	4.0	3.6
Dry beans	2.0	2.3 ^b	2.5
Roots and tubers	23.4	24.5 ^b	26.4
Sugar	12.1	12.9	13.0
Edible oils	0.65	0.6 ^b	0.8
Meat	5.9 ^a	5.9 ^c	6.4
Milk	17.3 ^a	18.7 ^c	20.7
Index for the group.....	100	109	120
<i>Non-food products</i>			
Coffee	1.8	2.0	2.2
Non edible oils	0.35	0.36	0.55
Tobacco	0.30	0.32	0.35
Cotton	0.8	1.1	1.25
Wool	0.18	0.19	0.2
Hard fibres	0.27	0.27	0.3
Index for the group.....	100	115	129

Source: FAO.

^a 1949.

^b 1952/53-1953/54.

^c 1952/53.

1948-50. As for maize, the necessary increase to enable the estimate to be reached would have to be much more substantial than that achieved so far. The situation appears favourable regarding milk; fodder crops—oats, barley and rye—which have already exceeded the 1956/57 estimates; wheat, rice, sugar and beans, which are very close to the estimates; and roots and tubers, which, although somewhat further from the 1956/57 figures, may not encounter too many difficulties in reaching the expected levels.

The position is obviously somewhat different in the various sub-regions. It would be unnecessary to enter into details with respect to their future production trends, which may be easily discerned from the analysis in previous sections. As an illustration, however, the corresponding production indices are given, with projections for 1956/57. (See table 93.) It may be seen that the Tropical Zone of South America is the sub-region where over-all production is approaching nearest to the 1956/57 estimate, whereas the Temperate Zone is the one lagging farthest behind.

Table 93. Latin America: Indices of food production, estimates for 1956/57 and progress made till 1952-54 in the various sub-regions

(1948-50 = 100)

	Average 1952/53-1954/55	Estimates 1956/57	1952-54 production as percentage of 1956/57 estimates
Latin America	109	120	91
Mexico and Central America	113	124	91
Caribbean Zone	99	109	90
Tropical Zone of South America	109	113	96
Temperate Zone of South America	111	130	85

Source: FAO.

If future agricultural development is considered in the light of what has been previously discussed here, it may be seen that, in general, and by a striking coincidence, the various products which are lagging behind in government programmes or which are mainly required to reach better nutritional standards are precisely those which are not in over-supply on the world market. This is the case, for instance, of meat and edible oils, or even maize, for which there is an ample domestic market and no major export difficulties.

2. ADDITIONAL REMARKS ON THE FUTURE PROGRAMMING OF AGRICULTURE

Although chapter I of this document included general considerations in relation to the need for more comprehensive programming of agriculture and of the over-all economy, it is not redundant to lay further stress on the matter here. Obviously, in relation to the surplus problem, agricultural programming must be directly related to supply and demand prospects. Programming must also consider the balance-of-payments situation and, whenever necessary, considerations of a strategic nature. Factors related to the balance of payments are of such importance in Latin America owing to the traditional position of agriculture in exports from the re-

gion, that an increase in these exports is essential for future development. Regarding this point, the seventh session of the FAO Conference noted the need to earn or save foreign currency as one factor to be taken into account in agricultural programming wherever exchange problems exist. Non-economic considerations are related to the need for many countries to produce specific crops which will ensure them adequate supplies in the event of war.

These two factors have, as noted earlier, prompted countries to establish self-sufficiency policies which have an adverse effect on world trade or which may be reflected in higher production costs, to the detriment of the consumer. For this reason, schemes for agricultural progress should carefully weigh the possibilities of maintaining a substantial and constant flow of trade. This deep problem, of regional specialization as against self-sufficiency, merits special attention from the Latin American countries. As far as a better regional co-ordination of development is concerned, the countries in the area should decide whether such co-ordination is desirable and, if so, which are the most suitable areas in Latin America for certain crops.

Various techniques are also essential if the programme's objectives are to be achieved. Since the improvement in demand and consumption of agricultural products is intimately related to family income, particularly for the less-favoured social groups, it is of vital importance to adopt a balanced price formula which would favour consumption without adversely affecting the income of farmers. This, of course, is apart from the influence that the development of industry and other economic activities may exert upon consumption. It may be asserted that future demand levels could be strongly influenced by deliberate changes in price structure. For example, official programmes may have as one of their principal objectives, in addition to raising production, the improvement of technical standards in certain productive branches, such as milk and meat, in order to reduce the relative prices of these commodities and thus make them more accessible to the consumer. Among other measures are those aimed at reducing retail prices by improving marketing and distribution of agricultural products, curtailing local taxes and, further, granting special subsidies to stimulate consumption of better quality commodities among vulnerable groups of the population.

It is clear that in most of the countries the main direction for a selective expansion from the nutritional angle should be an increase in the consumption of protective foods, especially those rich in protein. Such a development would not only be helpful in raising the

nutritional levels of the population but also in improving the agricultural economics of the countries. As pointed out already, milk should receive a special priority, but other protective foods—pulses, fish, fruits and vegetables—are also important in this connexion.

The need for an expansion in the consumption of protective foods thus seems to be apparent. However, one point needs emphasis in this context. Although per capita consumption of the relatively more expensive protective foods can be expected to increase somewhat automatically as a result of higher family incomes, special measures will still be required to facilitate this development along progressive lines.

If agricultural targets are to be achieved on the basis of an improvement in agricultural methods—and no agricultural programme can overlook this point—government action should be basically aimed at ensuring that farmers are in a position to adopt such improved methods. One of the main functions in this respect must be assigned to agricultural extension services, which, as has been repeatedly stated, are deficient in most Latin American countries. However, it is only through such services that farmers may be advised regarding the programme's objectives, informed of the specific production targets or asked to give an opinion of the programme. For this reason the reinforcement of agricultural extension services may in many instances be a prerequisite for the implementation of an agricultural programme.

It has already been remarked that one of the main drawbacks to the expansion of agriculture in underdeveloped countries is the lack of sufficient capital for investment. Agriculture is normally the largest single source of national income, but only a minor share of its proceeds is reinvested in the land. Sometimes farm incomes are so low that there is little possibility of net reinvestment by the farmers themselves. Furthermore, domestic savings are not always properly channelled and there are not sufficient incentives for capital investment in agriculture. In this respect, the lack of an adequate credit machinery should not be overlooked. In many countries in the region farmers are unable to secure medium and long-term loans for investment purposes.

To supplement the lack of domestic capital, loans are often requested from international organizations. Nevertheless, since investment in agriculture must mainly be derived from domestic sources, governments should make every possible effort to devote a sufficient share of their resources to agricultural development and to channel domestic savings towards agriculture. The adequacy of this share can be only secured through well-balanced development programmes.

ANNEXES

The main conclusions of the preceding document were amply corroborated during the course of the discussions held in Committee IV of the Sixth Session of ECLA, which at the same time served as a forum for FAO's Second Latin American Regional Consultation on the Selective Expansion of Agricultural Production and Consumption. It is therefore of special interest to include in this publication the text of the report prepared by the rapporteur of the said Committee as well as that of the resolutions approved.

I

Report of the Rapporteur of Committee IV on the Economic Problems of Agriculture adopted by the Economic Commission for Latin America at its Sixth Session, Bogotá, August-September 1955¹

Committee IV, which dealt with Economic Problems of Agriculture, held eight sessions between 2 and 13 September under the chairmanship of Mr. Guillermo Vildósola (Chile). All or some of these meetings were attended by the representatives of Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, France, Guatemala, Haiti, Honduras, Mexico, Netherlands, Nicaragua, Panama, Peru, United Kingdom, United States of America, Uruguay and Venezuela. Also present were observers from the following international organizations: the Inter-American Economic and Social Council, the International Monetary Fund, the International Bank for Reconstruction and Development, and the General Agreement on Tariffs and Trade.

By agreement between the Economic Commission for Latin America and the Food and Agriculture Organization of the United Nations, the second Latin American Regional Consultation on the Selective Expansion of Agricultural Production and Consumption formed part of the meeting of Committee IV during the sixth session of the Economic Commission for Latin America held at Bogotá from 29 August to 17 September 1955.

In view of this development in addition to examining the chapter on agriculture appearing in the *Economic Survey of Latin America, 1954* (E/CN.12/362/Rev.1), and the Progress Report on the ECLA/FAO Coffee Survey (E/CN.12/379), the Committee also studied the two following documents: *The Selective Expansion of Agricultural Production in Latin America and its Relationship to Economic Development*, prepared jointly by the secretariats of ECLA and FAO (E/CN.12/378) and *Review of the Agricultural Commodity Situation with Special Reference to the Problem of Surpluses and the Activities of FAO in this Field* (FAO/55/8/4912 and FAO/55/8).

As a result of the above-mentioned agreement, the present report will also be submitted at the next session of the Conference of FAO.

The following agenda was adopted for discussion in Committee IV:

- (1) Recent events and trends in Latin American agriculture.
- (2) The position of agriculture within over-all economic development.
- (3) The situation of agricultural surpluses and the activities of FAO in this field, including:
 - (a) The general surplus situation;
 - (b) Surplus disposal policies;
 - (c) Measures for the utilization of surpluses for economic development.

- (4) National production and trade policies, and the situation of the various branches of production:
 - (a) Products of animal origin and livestock development;
 - (b) Agricultural products with surplus problems:
 - (i) Wheat,
 - (ii) Maize,
 - (iii) Rice,
 - (iv) Sugar,
 - (v) Cotton;
 - (c) Other products:
 - (i) Coffee,
 - (ii) Miscellaneous.
- (5) Agricultural programming and development in the immediate future, in accordance with the principles of selective expansion of production and consumption.
 - (a) The branches of agricultural production most suitable for future developments, bearing in mind: (i) domestic demand and dietary standards; (ii) world market prospects.
 - (b) Measures to increase consumption and to improve the marketing of agricultural products.
 - (c) Consideration of a better regional co-ordination of Latin American agricultural production policies.
 - (d) Agricultural research and extension and its relationship to economic development.
- (6) Other topics.

By consent of the Committee, the subjects related to point (2) were discussed in a joint meeting with Committee II.

The study of all these aspects called forth important observations from Committee members and observers which will be of significance to the region's future agricultural policy and to a more balanced economic development of the Latin American countries. The most salient points were expressed in resolutions and recommendations seeking to amplify and to deepen the studies and research, which will serve as the basis and background information for a better direction of agricultural policy in the countries of the region. It was also recommended that the interested governments take action, which might have the beneficial effect of rendering both national and regional agricultural development speedier and more efficient.

Discussion of the varied problems confronting Latin American agriculture and the analyses of the measures to facilitate their adequate solution, favouring agricultural and economic progress throughout the region, developed in an atmosphere of liberal co-operation on the part of the several countries represented in the Committee, who demonstrated their anxiety to promote an effective international understanding for the fostering of speedier and more balanced development of the region's economy. This focussing on problems from a regional point of view with consideration also being given to developments in countries outside the region rather than from an exclusively national viewpoint undoubtedly offers the most promising possibilities for the economic and agricultural future of Latin America.

THE PRESENT STATE OF AGRICULTURE IN LATIN AMERICA: OBSTACLES AND POSSIBILITIES

Most of the delegates described the agricultural situation in their respective countries, the progress achieved recently and problems of all kinds involved in accelerating the development of this branch of economic activity.

¹ Document E/CN.12/AC.30/10/Rev.1.

A relatively unsatisfactory rate of expansion of total agricultural production in comparison with demographic growth has resulted in a situation of considerable significance, which has found expression in a reduction of per capita agricultural exports and in a market increase in imports of agricultural commodities. The position of the region as a net exporter of agricultural products has deteriorated. Although Latin America is retaining its importance in this field and is still far from being a net importer, the region as a whole now depends much more than before on imports of foodstuffs.

With special reference to the last agricultural year, the Committee emphasized that although in 1953/54 the growth of production kept pace with the rate of demographic growth—2.5 per cent per annum—in 1954/55, conversely, the rate of expansion—according to preliminary data—apparently did not exceed 1.5 per cent, with a consequent deterioration in the level of the per capita agricultural production.

Owing to the slow rate of development of agriculture, per capita production in Latin America is at present lower than that of the pre-war period.²

It was noted, however, that in several countries agricultural production has shown a favourable trend which differs from that of the general situation.

In recent years, all the countries of Latin America have tried to rectify the unfavourable development of agriculture by adopting official measures; but there is no doubt that much remains to be done. The main obstacle hindering the acceleration of agricultural development would appear to be a shortage of capital and inadequate technical progress, since the region lacks neither land nor labour. Enough land is available, which is already being cultivated or is suitable for cultivation, to satisfy the requirements of present demand and even its future increase. One essential aspect of the problem is better land utilization, a point about which the Committee was in complete agreement.

The productive area of Latin America is estimated at 1,380 million hectares. Of this total barely 38 per cent is at present devoted to agriculture, and of this 38 per cent actual cultivation, including artificial pastures, forms scarcely 17 per cent; the rest consists of natural grasslands with a very limited carrying capacity. If these figures are compared with the statistics of any other continent—Africa included—it can be verified that Latin American land use is at a very low level.

It was noted, with reference to the region's agricultural possibilities that among the immense resources of virgin soil exists the vast tract area known as the Amazon Basin. With an area perhaps larger than that of the United States, the Amazon Basin offers immeasurable prospects for agriculture. The Committee considered that preliminary studies should be initiated on the possibilities of this zone. Such studies would form a point of departure for future development projects in which the various countries possessing territories in the Amazon Basin would have a common or individual interest.

The Committee agreed that if agricultural production is to expand unit yields must increase. Maize represents a case in point. There are numerous possibilities of increasing the production of this commodity, now that many countries have proved the efficacy of using hybrid strains and improved varieties. Until quite recently, the agricultural authorities of the Latin American countries were seriously concerned with the problem of expanding production, since a progressive decline in unit yields was becoming increasingly evident. Although it is somewhat premature to believe that this decline has been halted, for experiments with hybrids and improved varieties have been few, it is nevertheless evident that their use offers very great possibilities of reversing this trend.

In 1953/54, for example, average yields in the region's principal producing countries improved by 11 per cent over the figures for 1952/53, and by somewhat more than 6 per cent in

comparison with the previous quinquennium. The immense possibilities of increasing yields in Latin America becomes still more manifest if account is taken of the development of unit yields in some countries of the region, and also in the United States, the world's principal producer. Although unit yields in certain Latin American countries showed a decline which in some cases reached 28 per cent between the quinquennium 1930-34 and the years 1950-53, in the United States they improved by more than 73 per cent. Of special significance is the progress achieved in this latter country after the five-year period 1940-44, when it found itself in the difficult situation of having to effect a substantial increase in its agricultural production. These facts demonstrate that important results can be obtained in a fairly short time, on the basis of a continued agricultural research and of the dissemination of its findings.

Another outstanding aspect considered by the Committee is the high proportion of labour employed in agriculture, and its very low level of productivity. Far from lacking manpower, the agricultural sector of Latin America generally constitutes a reserve of labour which could be employed in other activities, notably industry and services.

In considering that the deficient or inadequate use of land and the low productivity of labour may be the basic problem in the stagnation of Latin American agriculture, the Committee also noted the persistence of adverse institutional factors which represent a serious obstacle in the path of progress of agricultural production. Among these factors the structure of land ownership deserves special mention; it is characterized almost throughout the whole region by the existence of a large number of small-holdings, on the one hand, and on the other, by a vast accumulation of land in the hands of a few, who do not always possess enough capital and sufficient enterprise to exploit it on a technical basis.

AGRICULTURAL SURPLUSES

In examining the present situation of Latin American agriculture, the Committee emphasized how important for the economy of many countries of the region is the problem of agricultural surpluses which has been affecting the world since 1953. The Committee felt that the accumulation of surpluses was basically due to expanded production in some countries to meet wartime and immediate post-war needs, as well as to the fact that it had not been possible for the expansion of production, achieved through the considerable progress made by agricultural productivity in a number of countries, to be utilized for the improvement of the unsatisfactory levels of consumption which still prevail in many countries on account of the low consumer purchasing power.

At the present time surpluses of many products are registered, the existence of which affects interests that are vital to the region's economy. The fact that in the world markets there are surpluses of three of Latin America's staple export products, namely, wheat, cotton, and sugar, aroused serious concern, on the part of some countries, since this is a situation which may seriously prejudice the region's capacity to export.

On this account, the Committee showed great interest in the activities undertaken by FAO since this surplus problem presented itself, and in the valuable contribution to solving it which may be made by the Consultative Sub-Committee on Surplus Disposal set up in Washington. The Committee likewise took note of the code of principles for the surplus disposal recommended by FAO, to which nearly 35 countries have already acceded, among them being many of the world's greatest exporters and importers of agricultural products. The possibility of utilizing surplus products both for the promotion of special diet programmes to benefit certain social groups whose standard of living is low, and as a means of financing projects for economic development, was also felt by the Committee to be of great interest. The research carried out by FAO on this point in India and other countries, was considered to deserve study by the Latin American governments, which might consider the possibility of utilizing agricultural surpluses for the same ends.

² According to data for ten countries, which represent 80 per cent of the regional total, in 1954 Latin American exports were therefore inferior to those of preceding years and even to pre-war levels.

Nevertheless, several of the delegations present expressed their anxiety, not only because they considered that the export of agricultural surpluses by the countries concerned had in some cases proved detrimental to the interests of other exporters but also because this same prejudicial effect may continue to be felt in the future. In order to facilitate agreement on this point, a sub-committee was appointed to study in detail a draft resolution on the surplus problem presented by one of the delegations. Among the principle measures recommended in the draft resolution were included that of increasing the number of member countries forming the Washington Consultative Sub-Committee, and that the Sub-Committee make recommendations direct to governments or, failing this, that the advisability be considered of arranging for more frequent meeting of its parent body, the Committee on Commodity Problems.

The first recommendations was necessary in view of the fact that when FAO invited its members governments to associate themselves with the work of the Sub-Committee in question, only two Latin American countries, Argentina, and Cuba, out of the 21 who are at present members, accepted. Many others, however, sent observers.

The Sub-Committee appointed for this purpose, and constituted by delegates from Argentina, Chile, France, Haiti, Mexico, the United States of America and Uruguay, fully discussed the draft resolution submitted to its consideration and finally presented to the Committee an amended draft resolution which was unanimously approved. Apart from requesting FAO that membership of the Washington Consultative Sub-Committee should be expanded, the resolution recommended that countries possessing surpluses in determining and adjusting their agricultural production and surplus disposal policies, particularly bear in mind the repercussions which such policies may have on the trade of other countries of the hemisphere. It also suggests, among other recommendations, that these same countries should adopt measures designed to remove the underlying causes of the problem.

THE SELECTIVE EXPANSION OF AGRICULTURE AND ITS RELATIONSHIP TO ECONOMIC DEVELOPMENT

The fact that Latin American agriculture as a whole displays a relatively unsatisfactory rate of development in comparison with demographic growth and real per capita income was a matter of concern to the Committee. Agriculture is still one of the strongest pillars of Latin America's economic development. It must be recognized that in recent years, and above all in the more industrialized countries, this sector has been losing its relative importance. Nevertheless, a more rapid rate of increase in agricultural production is vital in most of the Latin American countries not only to satisfy their growing demand for food-stuffs and raw materials, but also to obtain the foreign exchange needed to import the capital goods required by over-all economic development.

The Committee unanimously considered that one of the fundamental causes of the lag in agricultural development was that investment in this sector has remained at a very low level, and that per capita investment has even declined in recent years. The joint analysis conducted by the secretariats of ECLA and FAO show that during the period 1950-54 the coefficient of net investment in agriculture was 3.4 per cent, in comparison with 13 per cent in industry, building and mining, and 14.2 per cent in services. There is no doubt that in the initial stages of industrial development relative increases may appear spectacular, but the fact remains that agriculture should maintain a rate of growth in harmony with other sectors of the economy in order to avoid the tensions arising from inadequate development. The principal factors which have influenced investment and reinvestment in the agricultural sector are to be found in inflation—a process which discouraged investment in farming and directed it towards urban activities—in exchange and price policies, in the lack of incentives, in the unsatisfactory systems of land tenure and in the need for technical training.

Bearing in mind that investment will play a vital role in the development of the agricultural sector, the Committee gave its

unanimous support to a draft resolution recommending that a more thorough and comprehensive character be imparted to the studies on the causes and factors hindering a rise in the investment coefficient in agriculture. The aim of this resolution is to ensure that the necessary measures be adopted to stimulate an expansion of such investment and a greater flow of both domestic and foreign capital towards agricultural activities. It is worthy of note that the International Bank for Reconstruction and Development was interested in this resolution and offered the co-operation of its technical personnel in the preparation of such studies.

Since an indiscriminate expansion of agriculture is not desirable, under present world economic conditions, the following basic elements were considered indispensable for the shaping of an agricultural policy:

(a) The prospects for domestic demand and the need to improve consumption and dietary levels.

(b) World prospects for commodities, with due regard to surpluses.

(c) The trend towards self-sufficiency and extent to which this process is advisable;

(d) The need to increase agricultural exports as a means of importing the capital goods required for economic development.

For the sound application of these basic criteria countries must extend their research on ecological conditions and investigate the best possibilities of utilizing their own resources: they must also be in possession of information on the trend, programmes and achievements of agriculture in other countries. For this reason, the Committee thought it appropriate to adopt a resolution on the selectivity and productivity of Latin American agriculture, which recommends that the secretariats of both ECLA and FAO continue their joint study on this matter in order to contribute to the elucidation of prospects for a more rapid agricultural development within the region, arising from better planned and more efficient development in each individual country.

Since the better planning of agricultural development and the more efficient use of available resources require a careful and highly technical investigation of the ecological, economic, social and even political conditions which prevail and of the possibilities within each country, the Committee thought it desirable that a study be made of the technique of agricultural programming with special reference to the economic structure and requirements of over-all development of the Latin American countries. A study of this kind as well as technical assistance in programming would play a decisive role in the improvement of the agricultural policy of the countries of the region. With this aim in view, the Committee adopted a resolution which recommended that the secretariats of ECLA and FAO should jointly undertake the preparation of a study on the technique of agricultural programming and that, when so requested by governments they should also contribute to the preparation of basic studies, organization of research centres and formulation of programmes.

The drafting or revision of an agricultural policy and the adoption of public measures to influence the activities of this sector—taken purely on a national level and without regard to the orientation of the policies adopted by other countries—may often lead to unfavourable results for international trade, create conflicting positions or originate the need to establish restrictive mechanisms to eliminate competition. The Committee, therefore, also deemed it indispensable, in the preparation of agricultural programmes, to take into consideration world market conditions and the orientation and nature of the programmes of other countries.

Because of the importance of this question, the Committee decided to adopt a resolution recommending that closer contact be established between countries in the question of agricultural programming, a development which would undoubtedly benefit the region as a whole. To the section of this important resolution which recommends that governments should take into account ecological, economic and social factors in programming their agricultural development, one delegation proposed an addition

to the effect that "the share in traditional markets" of various countries should also be borne in mind. This amendment was not approved by the other delegations which thought that its inclusion would distort the meaning of the resolution and would be equivalent to an admission that certain countries should not enter specific branches of production. The amendment was rejected with one vote in favour and one abstention.

In general the Committee attached great importance to the principle of a selective expansion of production and consumption of agricultural commodities, considering that it is fundamentally synonymous with good programming in this sector of economic activity.

During the Committee's debates mention was made by some delegations that:

(a) The principle of selective expansion does not imply a restriction of the exportable production in countries where surpluses do not exist, but rather the need to follow a prudent policy in order not to aggravate this problem.

(b) It is desirable, under present circumstances, to give particular impetus to those branches of production which satisfy urgent consumer needs and contribute to an improvement of dietary standards.

(c) For the above purpose it will be indispensable, *inter alia*, to improve the systems of distributing agricultural commodities.

For all these reasons, the Committee recommended that the secretariats of FAO and ECLA continue their studies on the selective expansion of agriculture.

Finally, the Committee also considered the need to promote agricultural research and to improve educational and extension services as a prerequisite for increasing productivity in regional agricultural activities.

SPECIAL SITUATION OF CERTAIN AGRICULTURAL PRODUCTS

When the Committee analysed the stockbreeding situation of Latin America, it observed that animal stock increased at the very low annual rate of barely 1.1 per cent, in comparison with that of 3.8 per cent registered in the United States during recent years. Animal stocks in the region did not increase at the same rate as the population, so that by 1953-54 the per capita index decreased to 93 per cent of the level prevailing during the period preceding the Second World War. The situation has been still less satisfactory in relation to stocks for slaughtering. In the last seven years, 1948-54, production of cattle in seventeen Latin American countries fell from 21.6 to 20.4 million head. At the same time sheep production decreased from 19.5 to 18 million head.

If per capita changes are taken into account, it will be seen that per capita meat production declined by almost 20 per cent for beef, 21.3 per cent for mutton and 12 per cent for pork. In short, aggregate per capita meat supplies have dropped to 81 per cent of the pre-war level. This reduction has been felt in all Latin American countries but with few exceptions.

The situation was still more unfavourable from the standpoint of foreign trade in meat. The Committee noted that according to available statistics exports began to decline in 1953 until they reached a level about 50 per cent lower than in 1934-38, while imports increased by 73 per cent. Special mention was made of the effect of these developments on the foreign exchange availabilities of the traditional meat exporters. With the exception of Argentina, Paraguay and Uruguay, meat consumption was still low and in 1953 averaged only 20 kilogrammes per capita, that is, 2.5 kilogrammes less than in the pre-war period.

As a consequence of inadequate production and low consumption of other protein-rich foods, in conjunction with a smaller availability of meat per capita, dietary standards deteriorated, although several countries of the region were obliged to resort to imports of large quantities of dairy products and eggs in order to compensate, at least in part, for the low level of meat consumption.

On the other hand, it was borne in mind that demand for meat and other animal products is expanding in Latin America owing

to greater consumer purchasing power. For this and other reasons prices of these commodities increased by 100 per cent between 1938 and 1953.

The real causes of the stockbreeding crisis in Latin America are not fully known. There is no doubt that certain common factors have adversely affected production in several countries, but the Committee was of the opinion that the fact that the decline in per capita meat supplies was felt simultaneously in several countries, together with the obstacles hampering an increase in production, are questions which call for careful study. This research would be of great importance in the development of stockbreeding in Latin America and might be of fundamental value in guiding governmental policy in this respect. The relevant resolution adopted by the Committee had this precise aim in view.

The coffee situation. When dealing with this subject the Committee bore in mind that coffee plays an important role in the economy of fourteen Latin American countries and for several of them is their staple export product. These countries now face a period of uncertainty, aggravated by the erratic behaviour of the world coffee market. Several delegations expressed their fear that the price of this commodity would drop to a dangerously low level.

It was pointed out that since the war the world community had been trying to overcome the effect of the cyclical depressions characteristic of capitalism during the last century and to achieve stability in the fundamental sectors of the economy. These endeavours have materialized in the establishment of the International Monetary Fund, and the International Bank for Reconstruction and Development, as well as in existing international agreements on various commodities.

Coffee provides a typical example of a commodity subject to cyclical fluctuations. The relative stability of demand and the constant change in supply, as well as speculative activities, cause sharp fluctuations of world market prices.

Judging by available statistics, the Committee thought that a period of over-production might be approaching. All the delegations agreed that sharp fluctuations benefit neither the producer nor the consumer and that there is every reason for consumer and producer countries to study the possibility of a joint effort to avert this danger. The draft resolution adopted by the Committee tends to support the work aiming at the solution of this problem which was proposed at the meeting of Ministers of Finance or Economy of the Latin American countries held in Quitandinha in November 1954.

Some delegations suggested that any international action on this problem, which the FAO/ECLA or IA-ECOSOC studies might show to be possible, should be open to participation by countries in other regions, apart from Latin America, since the main coffee consumer is the United States and 20 per cent of the world stocks are supplied by Africa.

INDUSTRIALIZATION OF AGRICULTURAL COMMODITIES

One effective way for stimulating the expansion of certain types of production is the creation of new possibilities of utilizing the commodities concerned. Industrialization is a factor which favours a higher level of consumption and therefore an expansion of production, particularly when this process fills a hiatus in supply or when it helps to provide final goods at low prices.

Latin American farmers have grasped the implications of this possibility and have made increasing efforts to achieve a greater industrial utilization of their own products. Industrial processes which add to the value of primary commodities are generally of economic significance, since they create new opportunities for employment and tend to increase the national income. This is why the study of the prospects for industrializing certain essential agricultural commodities was considered indispensable—as one of the delegations pointed out—to improve the economic situation in various countries of the region. This will result in the better utilization of resources and in the progress of agricultural development.

In view of these considerations, the Committee was very interested in the draft resolution which recommended that ECLA, in collaboration with the other international agencies concerned, should carry out studies on the possibility of the industrialization of certain products such as bananas, hard fibres and others of importance for the agricultural economy of the Latin American countries.

II

Text of the resolutions relating to agriculture adopted by the Economic Commission for Latin America at its Sixth Session, Bogotá, August-September 1955

SELECTIVITY AND PRODUCTIVITY IN AGRICULTURE

*Resolution 87 (VI) adopted on 15 September 1955
(E/CN.12/396)*

*The Economic Commission for Latin America,
Considering:*

(a) That the expansion of agricultural production in Latin America is one of the necessary bases for the region's economic development,

(b) The conclusions reached in the joint ECLA/FAO study on the need of selectivity in the expansion of Latin America's agriculture, and expressing its satisfaction at the collaboration of the two organizations in this type of study,

(c) The desirability of broadening the scope of such studies in order to complete the factual basis for the effective programming of agricultural development,

(d) That fundamental knowledge which enables conclusions to be reached on problems of labour productivity and the profitability of agricultural investment, ecological conditions in each country, and other factors, is an indispensable prerequisite for the success of such programming, and

(e) That labour productivity is closely linked with the density of population,

Recommends:

1. That FAO and the ECLA secretariat continue and extend their joint studies on the selective expansion of agricultural production in Latin America; and

2. That the ECLA secretariat and FAO jointly proceed with their research into the productivity of labour and capital in Latin America's agricultural activities, taking into due account the diverse problems which arise from existing differences in densities of rural population.

CO-ORDINATION OF AGRICULTURAL PROGRAMMING

*Resolution 88 (VI) adopted on 15 September 1955
(E/CN.12/397)*

*The Economic Commission for Latin America,
Considering:*

(a) That a satisfactory co-ordination of national agricultural development programmes would be desirable, so that available resources might be more fully utilized and inter-Latin-American and world trade intensified,

(b) That this improved co-ordination of agricultural production among all countries would help to avoid the drawbacks of exaggerated policies of national self-sufficiency,

(c) That in the selective expansion of agricultural production due regard should be paid to the ecological characteristics of the various sub-regions of Latin America, and likewise to the economic and social conditions prevailing in each of them,

(d) That the selective expansion of agricultural production should be complemented by an appropriate increase in consumption and an improvement in standards of nutrition, and

(e) That a faulty distribution mechanism hinders the full utilization of agricultural production for the purposes of internal consumption and foreign trade,

Recommends:

1. To Member Governments:

(a) That in formulating their agricultural development programmes they bear in mind both the ecological, economic and social factors affecting their respective countries, and the corresponding programmes of other countries, especially those of Latin America; and

(b) That as a fundamental aspect of their programmes for agricultural development and the improvement of consumption, they take into account the need to solve existing distribution problems; and

2. To the ECLA secretariat and FAO that, with active co-operation on the part of Member Governments, they continue to provide information on the agricultural development programmes of the various countries of the region, and to carry out analyses of the relationships between those programmes, with a view to the better co-ordination and integration of the economic development of groups of countries on a regional basis.

PROGRAMMING OF AGRICULTURAL DEVELOPMENT

*Resolution 89 (VI) adopted on 15 September 1955
(E/CN.12/398)*

*The Economic Commission for Latin America,
Considering:*

(a) That the need to raise the standard of living of the population of Latin America requires an expansion of agricultural production,

(b) That this expansion should be achieved in accordance with organic programmes adjusted to basic economic factors, to domestic requirements, to a suitable distribution of the factors concerned among the various activities and to the situation and prospects for foreign markets,

(c) That the formulation of an organic programme of agricultural development requires the prior preparation of a technique of programming in the field, whose standards should be integrated with a general methodology of economic programming and the availability of complete statistics and basic studies,

(d) That the document entitled "The Selective Expansion of Agricultural Production in Latin America and its Relationship to Economic Development" (E/CN.12/378), jointly prepared by ECLA and FAO, represents a valuable contribution to the progress of work on the technique of agricultural programming, and

(e) That resolution 64 (V) of the Economic Commission for Latin America requests the secretariat, FAO and the Inter-American Statistical Institute to undertake research work into the systems of agricultural statistics of the Latin American countries,

Resolves:

1. To recommend to the ECLA secretariat and the Food and Agriculture Organization that they collaborate in carrying out a study of the technique of agricultural programming, as a component part of the general studies on the technique of programming undertaken by the ECLA secretariat, with special reference to the economic structures and the general development requirements of the Latin American countries;

2. To recommend to the ECLA secretariat, to FAO and to the Inter-American Statistical Institute that they provide the advice and assistance required by the governments of member countries for the thorough preparation and compilation of the statistics and basic studies which are essential for the programming of agricultural development; and

3. To recommend to the governments of member countries, that, in accordance with the indications and advice of the entities mentioned in the foregoing recommendation, they organize wherever necessary, the centres of statistical, economic and social research necessary for this purpose, and that these centres establish a permanent interchange of statistical information for the countries of the region through the ECLA secretariat.

STUDIES CONCERNING COFFEE PROBLEMS

Resolution 90 (VI) adopted on 15 September 1955
(E/CN.12/399)

The Economic Commission for Latin America,

Considering:

(a) That the meeting of Ministers of Finance or Economy, at the Fourth Extraordinary Meeting of the Inter-American Economic and Social Council, in November 1954, unanimously approved a resolution providing that the Special Commission on Coffee of IA-ECOSOC should make, through a special committee appointed from among its members, a detailed study of the world coffee situation and its prospects for the future; and that if this study should show the possibility of adopting measures of international co-operation capable of appreciably reducing the range of fluctuations in the price of coffee and keeping them within limits satisfactory for producers and consumers, the Special Committee should prepare draft texts suitable for attaining that objective, to be submitted for the consideration of the member countries affected by the problem;

(b) The great importance of the coffee industry, not only to the coffee-producing countries where its rate and state of development is a fundamental element in determining economic stability, but also for many coffee-consuming countries, since it is a major factor in international trade and enables the coffee-producing countries to purchase manufactured goods from the coffee-consuming countries;

(c) That resolution 63 (V) approved at the fifth session of the Commission recommends that the secretariat, in collaboration with FAO and other intergovernmental bodies, make a study in specified areas where coffee is the main source of income of those economic and technical aspects of coffee production which exert the greatest influence on economic development, and

(d) That the progress report on this study, which has been made to the sixth session of the Commission, indicates that the completed study will provide information of considerable value to the governments of countries interested in the production and consumption of coffee,

1. Requests the ECLA secretariat and FAO to make available, both to the interested governments, and to the Special Commission on Coffee of the Inter-American Economic and Social Council, whatever information resulting from the studies on the coffee industry in which they are now engaged, they feel would be of interest; and

2. Expresses the hope that the Special Commission on Coffee of the Inter-American Economic and Social Council will endeavour to complete the study in which it is engaged in the shortest possible time, and make its results available to governments interested in the international trade in coffee, so that they may be in a position to judge whether, and the extent to which, it may be possible to adopt measures of international co-operation designed to stabilize world coffee markets, and the possible nature of such measures.

LIVESTOCK DEVELOPMENT

Resolution 91 (VI) adopted on 15 September 1955
(E/CN.12/400)

The Economic Commission for Latin America,

Considering:

(a) That, according to official statistics, production of goods of animal origin is expanding in Latin American countries at a slower rate than aggregate crop and livestock production,

(b) That in consequence of this slow rate of increase, an appreciable decline in per capita meat consumption has occurred during the last seven years in several countries, to the serious detriment of the dietary standards of their populations,

(c) That a greater encouragement of production of goods of animal origin would contribute decisively to a better balance

between crop and livestock production, as well as between these two sectors and general economic development,

(d) That there is a lack of accurate and comprehensive information on the factors retarding the progress of stockbreeding and of production of goods of animal origin in the region,

(e) That the need to accelerate the development of the production of goods of animal origin in Latin America has been the object of special resolutions at a number of international meetings, particularly the third FAO meeting on Food and Agriculture Programmes and Prospects in Latin America, held at Buenos Aires in September 1954,

(f) That at the said meeting a recommendation was made to FAO that in co-operation with ECLA and other appropriate organizations, it should carry out a study of the possibilities of accelerating the development of stockbreeding and of the measures which should be adopted for this purpose, and

(g) That close and satisfactory collaboration and understanding exist between the ECLA secretariat and FAO to undertake a joint study of Latin America's agricultural problems,

Resolves:

1. That the ECLA secretariat and FAO be requested to take appropriate steps to include in their joint work programme, with the highest possible priority, the study on the development of stockbreeding to which reference is made in the resolution adopted at the third meeting of FAO referred to above;

2. That this study include, *inter alia*, the following basic aspects:

(a) An analysis of the technical and economic factors which hinder livestock production and improved supplies of goods of animal origin in Latin America, and which thus obstruct better dietary standards;

(b) The possibilities and outlook for the development of the livestock industry in the Latin American countries; and

(c) The measures which should be adopted to promote the development of stockbreeding and the consumption of products of animal origin; and

3. That for those purposes typical areas be chosen which are representative of the different ecological and economic conditions in which stockbreeding activities are carried out in Latin America.

AGRICULTURAL INVESTMENT

Resolution 92 (VI) adopted on 15 September 1955
(E/CN.12/401)

The Economic Commission for Latin America,

Noting with satisfaction the study of the selective expansion of agricultural production in Latin America and its relation to economic development (E/CN.12/378), submitted jointly by the secretariat of ECLA and the Food and Agriculture Organization of the United Nations, and

Considering:

(a) That investment in agriculture has been very low in Latin America, particularly in relation to the income accruing from this activity,

(b) That the total of such investment is not clearly or precisely known, since much of it does not appear in official statistics,

(c) That the real opportunities for utilizing the investment resources available for agriculture are not precisely known,

(d) That the International Bank for Reconstruction and Development has offered its collaboration in technical research designed to promote agricultural development in Latin America, and

(e) That it is of fundamental importance for the over-all economic development of Latin America that the rate of investment in agriculture be raised,

Recommends:

1. To member governments that, through their appropriate agencies, they initiate or intensify research and studies designed to determine (a) the quantity and quality of investments in agriculture; (b) the volume and use of income accruing from agricultural activities; and that they should supply this information to the secretariat of ECLA and to FAO; and

2. To the ECLA secretariat that, in conjunction with FAO, it begin a thorough investigation into the possibilities of raising the rate of investment in Latin America's agriculture and into a better use of available investment resources, and that in carrying out this research it seek the collaboration of the technical experts of the International Bank for Reconstruction and Development.

RESEARCH IN THE AMAZON AREA

*Resolution 93 (VI) adopted on 15 September 1955
(E/CN.12/402)*

*The Economic Commission for Latin America,
Considering:*

(a) The importance which the development of the great wealth of the Amazon Basin represents both for the group of nations which share it and for this continent, and the benefits for the welfare and progress of humanity to be derived from its exploitation,

(b) That the Amazon area is a zone which covers approximately half the territory of South America, and which possesses vast possibilities for economic development,

(c) That the immensity of this area requires joint and co-ordinated action for its exploitation by the countries concerned, and

(d) That the resolution adopted on 13 June 1949 at the second session of ECLA (E/CN.12/151) attached great importance to the study of this topic;

Recommends:

1. That the ECLA secretariat and FAO, with the collaboration of the specialized international agencies, carry out in so far as possible a joint preliminary study of the general Amazon area;

2. That on the basis of the foregoing study they draw up a programme of research designed to promote the exploitation and development of the resources of the Amazon Basin;

3. That the countries concerned:

(a) Exchange information, through the ECLA secretariat and FAO, on their experience and research in the area in question, and

(b) Co-operate fully in the carrying-out of the studies mentioned.

INDUSTRIAL TRANSFORMATION OF AGRICULTURAL PRODUCTS

*Resolution 94 (VI) adopted on 15 September 1955
(E/CN.12/403)*

*The Economic Commission for Latin America,
Considering:*

(a) That the efficacy of the industrialization process and the feasibility of programmes directed towards that end suggest, in certain countries, the development of industries, not requiring a major investment effort, for the transformation of agricultural products, and

(b) That resolutions 67 (V) and 68 (V) of the Economic Commission for Latin America referred to the industrial transformation of bananas and hard fibres, respectively, and make specific recommendations on these subjects,

Recommends to the secretariat that, in addition to the studies on bananas and hard fibres, research be carried out, as far as its resources permit and in collaboration with other international bodies concerned, on the industrial transformation of

certain agricultural products essential to the economies of the Latin American countries, bearing in mind, in view of the special situation of some countries, the desirability of adopting processes which do not involve a high density of capital per unit of product.

AGRICULTURAL SURPLUSES

*Resolution 95 (VI) adopted on 15 September 1955
(E/CN.12/404)*

*The Economic Commission for Latin America,
Bearing in mind:*

(a) That the accumulation of agricultural surpluses is a current economic fact,

(b) That the disposal of a considerable part of such surpluses is being effected by their sale on foreign markets,

(c) That some of the countries exporting agricultural commodities have stated that the accumulation of surpluses and the procedure employed in disposing of them have, in some cases, caused disturbances in their normal trade patterns, and

(d) That such procedures could cause disturbances in the future by limiting sales possibilities for other traditional exporters, who are heavily dependent upon the exportation of foodstuffs and raw materials, and

Having regard to:

(a) The most recent resolutions adopted with reference to the problems and prospects of agricultural surpluses, the statements and intentions evidenced by the countries having those surpluses, and the efforts made by the Food and Agriculture Organization of the United Nations to reduce to a minimum the unfavourable effects of the agricultural surplus problem, and

(b) The "Principles of surplus disposal" recommended by FAO and already accepted by thirty-four countries, and the "Guide lines for dealing with agricultural surpluses" formulated by the Committee on Commodity Problems of the said organization at its twenty-third session,

Resolves:

1. To recommend to the governments of member countries, and by virtue of resolution 38/54 approved at the Meeting of Ministers of Finance or Economy at the Fourth Extraordinary Meeting of the Inter-American Economic and Social Council, particularly to those forming part of the inter-American system;

(a) That in determining and adjusting their agricultural production and surplus disposal policies, they particularly bear in mind the repercussions which such policies may have on the trade of the countries of this hemisphere characterized by their dependence on exports of agricultural products; and

(b) That they strengthen the existing consultative procedure to make the greatest and most effective contribution possible to the satisfactory execution of an orderly agricultural surplus disposal policy, designed to prevent this process from interfering with the normal patterns of trade; and

2. To request FAO:

(a) To take appropriate measures for the immediate reopening of the register of members of the Consultative Sub-Committee on Surplus Disposal of the Committee on Commodity Problems, to allow the enrolment of countries which have not yet subscribed;

(b) To adopt the necessary measures to enable the Consultative Sub-Committee on Surplus Disposal to undertake a thorough study of the problem covered by its terms of reference, and especially of the application of practical procedures for the disposal on a global basis of existing surpluses in general;

(c) That, in view of the urgency of the problems of surpluses and the rapidity with which this problem must be solved, the advisability be considered of arranging for more frequent meetings of the Committee on Commodity Problems; and

(d) That the Committee on Commodity Problems continue and expand its study of procedures aimed at avoiding further surpluses which harmfully interfere with normal trade patterns.

SALES AGENTS FOR UNITED NATIONS PUBLICATIONS

ARGENTINA

Editorial Sudamericana S.A., Aizina 563, Buenos Aires.

AUSTRALIA

H. A. Goddard, 255c George St., Sydney; 90 Queen St., Melbourne.
Moleseano University Press, Carlton N.3, Victoria.

AUSTRIA

Goreld & Co., Graben 31, Wien, 1.
G. Wöllnerstraff, Mariahilferstrasse 16, Salzburg.

BELGIUM

Agence et Messageries de la Presse S.A., 14-22 rue du Persil, Bruxelles.
W. M. Smith & Son, 71-73, boulevard Anselpho-Max, Bruxelles.

BOLIVIA

Libreria Soloscoinos, Casilla 972, La Paz.

BRAZIL

Revista Agir, Rio de Janeiro, Sao Paulo and Belo Horizonte.

CAMBODIA

Papeterie-Librairie Neuvillo, Albert Perret, 34 Avenue Souffache, Phnom-Penh.

CANADA

Rycman Press, 299 Queen St. West, Toronto.

CYPRUS

Lato House Bookshop, The Associated Newspapers of Ceylon, Ltd., P. O. Box 244, Colombo.

CHILE

Editorial del Pacifico, Ahumada 57, Santiago.
Libreria Ivona, Casilla 205, Santiago.

CHINA

The World Book Co., Ltd., 99 Chung King Road, 1st Section, Taipei, Taiwan.
The Commercial Press Ltd., 211 Nansen Rd., Shanghai.

COLOMBIA

Libreria Am6rica, Medellin.
Libreria Buchholz Color6, Bogot6.
Libreria Nacional Ltda., Baranquilla.

COSTA RICA

Trojes Hermanos, Apartado 1313, San Jos6.

CUBA

La Casa Bolga, O'Reilly 456, La Habana.

CZECHOSLOVAKIA

Československý Spisovatel, Národní Tržba 9, Praha 1.

DENMARK

Kj6er Munksgaard, Ltd., Nørregade 6, København, K.

DOMINICAN REPUBLIC

Libreria Dominicana, Mercedes 49, Ciudad Trujillo.

ECUADOR

Libreria Cientifica, Guayaquil and Quito.

EGYPT

Libreria "Le Renaissance d'Egypte", 9 St. Adly Pasha, Cairo.

EL SALVADOR

Manual Novas y Cia., 1a. Avenida sur 37, San Salvador.

FINLAND

Ahvenainen Kirjakauppa, 2 Koskisenkatu, Helsinki.

FRANCE

Epitens A. P6d6ne, 13, rue Soufflot, Paris V.

GERMANY

R. Eberschmidt, Kaiserstrasse 49, Frankfurt/Main.
Kwort & Maurer, Hauptstrasse 161, Berlin-Schöneberg.
Alexander Mann, Spiegelgasse 9, Wiesbaden.
W. E. Starbech, Gorenstrasse 25-29, Köln (22c).

GREECE

Kaufmann Bookshop, 28 Studen Street, Athens.

GUAYMALA

Sociedad Econ6mica Financiera, Edificio Briz, Despacho 207, 6a. Av. 14-33, Zona 1, Guatemala City.

HAWAII

Libreria "A la Corevolio", Belle P6stale 711-B, Port-au-Prince.

HONDURAS

Libreria Panamericana, Tegucigalpa.

HONG KONG

The Swindon Book Co., 25 Nathan Road, Kowloon.

ICELAND

Behvarfalu Sigfuzur Symundsson M. F., Austurstr6m 18, Reykjavik.

INDIA

Oriental Longmans, Calcutta, Bombay, Madras and New Delhi.
Oxford Book & Stationery Co., New Delhi and Calcutta.
P. Veredachary & Co., Madras.

INDONESIA

Pembangunan, Ltd., Gunung Seber 94, Djakarta.

IRAN

"Guity", 482 Avenue Fordowal, Téhéran.

IRAQ

Mekhonzi's Bookshop, Baghdad.

ISRAEL

Blumstein's Bookstores Ltd., 35 Allonby Road, Tel-Aviv.

ITALY

Libreria Commissionaria Sansoni, Via Cino Cappelletti 26, Milano.

JAPAN

Maruzen Company, Ltd., 6 Tori-Kichicho, Nishinbochi, Tokyo.

LEBANON

Libreria Universalle, Beyrouth.

LIBERIA

J. Momolu Kamara, Monrovia.

LUXEMBOURG

Libreria J. Schummaer, Luxembourg.

MEXICO

Editorial Norma S.A., Ignacio Morones 41, M6nica, D.F.

NETHERLANDS

N.V. Martinus Nijhoff, Leego Veerhout 9, 's-Gravenhage.

NEW ZEALAND

United Nations Association of New Zealand, C.P.O. 1011, Wellington.

NORWAY

Johan Grundt Tanum Forlag, Kr. Augustsgt. 7A, Oslo.

PAKISTAN

The Pakistan Co-operative Book Society, Dacca, West Pakistan (and at Chittagong).
Publishers United Ltd., Lahore.
Thomas & Thomas, Karachi, S.

PANAMA

Jos6 Men6ndez, Plaza de Arango, Panama.

PARAGUAY

Agencia de Librerias de Salvador Nizra, Calle Pto. Franco No. 39-43, Asunci6n.

PERU

Libreria Internacional del Per6, S.A., Lima and Arequipa.

PHILIPPINES

Alomar's Book Store, 749 Rizal Avenue, Manila.

PORTUGAL

Libreria Rodrigues, 186 Rua Aurora, Lisboa.

SINGAPORE

The City Book Store, Ltd., Winchester House, Collyer Quay.

SPAIN

Libreria Bosch, 11 Ronda Universidad, Barcelona.
Libreria Mundi-Press, Leganes 30, Madrid.

SWEDEN

C. E. Fritze's Kungl. Hovbokhandel A-B, Fredsgatan 2, Stockholm.

SWITZERLAND

Libreria Peyer S.A., Leuvenne, Geneva.
Hans Raunhardt, Kirchgasse 17, Zurich 1.

SYRIA

Libreria Universalle, Damas.

THAILAND

Premson Mit Ltd., 39 Chakrawat Road, Wat Yek, Bangkok.

TURKEY

Libreria Hachotta, 469 Istiklal Caddesi, Beyo6lu, Istanbul.

UNION OF SOUTH AFRICA

Van Schaik's Bookstore (Pty.), Ltd., Box 724, Pretoria.

UNITED KINGDOM

H. M. Stationery Office, P.O. Box 269, London, S.E.1 (and at M.M.S.O. shops).

UNITED STATES OF AMERICA

International Document Service, Columbia University Press, 2960 Broadway, New York 27, N. Y.

URUGUAY

Representaci6n de Editoriales, Prof. H. D'Elia, Av. 18 de Julio 1393, Montevideo.

VENEZUELA

Libreria del Este, Av. Miranda, No. 32, Edif. G6lpean, Caracas.

VIETNAM

Papeterie-Librairie Neuvillo, Albert Perret, Belle P6stale 263, Saigon.

YUGOSLAVIA

Centarjova Zelenka, Ljubljana, Slovenia.
Drzevna Produkcija, Jugoslovenske Knjige, Yarsuljo 27/11, Beograd.

Orders and inquiries from countries where sales agents have not yet been appointed may be sent to: Sales and Circulation Section, United Nations, New York, U.S.A.; or Sales Section, United Nations, Palais des Nations, Geneva, Switzerland.