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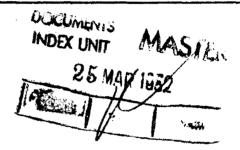
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RECANT DEVELOR DATS AND TRENDS IN THE ECONOMY OF EL SALVADOR

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#### INTRODUCTION

Productive activities in El Salvador have developed considerably, between the end of the Second World War and the present time, and the country's economy has passed through an intense period of prosperity. Various factors have combined to determine these trends, but the most important has been the increase in coffee prices on the world market, which took place at a time when the two most abundant harvests in the whole history of El Salvador as a coffee producer had been gathered.

The increase in the production of goods and services does not necessarily imply accomic development in the sense of increases in productivity. To achieve these it is necessary to increase the capital investment per verson spin fully employed, or to improve the methods, or the organisation of production. In the case of El Salvidor, however, the cyclical uncoming has apparently coincided with economic development in the same in which this is understood in the present survey. The volume of imports of capital goods during the 1946-49 period was three times greater than that for the 1936-39 period. This is principally reflected in increases in productivity through the use of better equipment in certain units of the sugar industry and in the action and sesame crops. In addition, the country but in 1950 to instal its first element factory and to build a hydro-electric plant with a capacity for 75,000 kilowatts.

The indices mulysed in the course of this report show that the volume of total agricultural production rose by 45 per cent and that of industrial production increased by 34 per cent between 1945 and 1949  $\frac{1}{4}$  Agricultural expansion took place principally in the field of exportable

<sup>1/</sup> When those substintial increases are judged it must be borne in mind that 1945 was a low production year on account of drought. This does not however affect the validity of the conclusions to be drawn from the figures used in the analysis.

by more than 39 per cent between the extremes of the period under review.

The rate of increase of export prices has been greater than that of prices of imported articles, and the terms of trade, which had favoured the country without interruption since 1942, continued to improve from 1945 until the present time, reaching levels which are highly beneficial to the economy of El Salvador. The fact that the highest prices for coffee were registered at a time when the prices of imported manufactured goods experienced a slight recession was an added advantage.

Quantum exported also increased at the same time as coffee prices and those of other products and the country's capacity to import between 1945 and 1949 was doubled.

Imports have traditionally followed the movements of exports. The volume of the former have thus risen substantially from 1945 up to the present time; nevertheless, due to difficulties in the supply of manufactured products during the war and the years immediately following it, the growth of imports was delayed.

The combination of factors mentioned chused the current account of the balance of payments to show a surplus during all the years of the period under review and the country has succeeded in continuing to accumulate heavy reserves of foreign exchange.

In spite of the expansive forces which have developed, the growth of inflation seems to have been more moderate than in many other Latin American countries, and increases in prices, wages and currency have been relatively small. The increase in the volume of production for domestic consumption has influenced this trend and the abundance of foreign exchange has enabled the economy to function openly, with the result that imported products have not been sold at searcity prices. The Government has not practised deficit spending and bank credit has expanded slowly, in spite of the considerable increase in reserves. On the other hand, although undoubtedly there has been a slight increase in the velocity of carculation of bank deposits in relation to the minimum observed in 1944-45, it would appear that there is still a

/greater

greater preference for liquidity among the high income groups than during the pre-war period. The growth of bank deposits has thus not necessarily come to represent a proportionate increase in demand.

This inclysis indicates that the country has in the last few years been free from the problem of dollar shortage which has so seriously affected the economies of the majority of Latin American countries and that at the beginning of 1951 the monetary and credit position of El Salvador is on a solid basis. Everything points to an increase in real income; the high prices of coffee have undoubtedly contributed to this insofar as they have signified an improvement in the terms of trade.

The intensity of development during recent years gives the impression of a new and vigorous economy, in full process of development. Nevertheless, the country has to face serious limitations to its future development. Natural resources are few and the population, which is already high, is increasing rapidly. The agricultural lands, which have been the country's main source of wealth, are already under full cultivation. Agriculture, therefore, faces serious problems of loss of fertility and soil erosion, aggravated by the stripping of forests and the continuous cultivation with primitive methods. New areas for the production of coffee are particularly limited.

Considerable labour is required in the cultivation of coffee in El Salvador, where conditions are not favourable to mechanization. The fact that coffee, which is the most important source of foreign exchange (and indirectly the principal means of increasing the stock of available capital) is dependent on a large amount of low productive labour is a serious obstacle to the process of economic development.

The low productivity obtaining in the hajority of economic activities is the result of a low level of income. Consequently savings

<sup>1/</sup> Data published by the Revista del Banco Central de Reserva indicates that the velocity of circulation of bank deposits which was approximately 0.030 during the 1939-40 period, dropped to 0.042 in 1944-45 and has risen to 0.059 in 1949-50.

and capital formation are also small, though due to the fact that the distribution of income in El Salvador is highly concentrated, savings are much higher than the figure of average income would otherwise suggest. It is therefore, possible that the lack of attractive opportunities for investment has at times proved a greater obstacle to progress than the shortage of savings.

The country urgently needs to raise the rate of investment to the maximum possible and to increase its stock of fixed capital in all sectors of the economy. The shortage of new agricultural lands and the shortage of fuels with a high calorific content point to the need for investment in projects of land rehabilitation by means of irrigation, drainage or soil-conservation methods, and in the construction of suitable hydro-electric plants. Moreover, the skill of the labour force must be raised through mechanisation of agricultural and industrial processes. The increasing preference for the investment of domestic capital in real estate, stocks of imported goods and, in recent years, in assets abroad, represents an additional problem at a time when the country's savings in the current account of the Balance of Payments have been more substantial.

In spite of the limitations to the future economy of El Salvador, there is no doubt that the country is now faced with very tangible opportunities for development. The substantial improvement in the terms of trade and the capacity to import, and the prospects that the high coffee prices on the world market will continue should increase the rate of domestic capital formation. The preference for import of capital goods the increase an the percentage of State expenditure for purposes of capital formation and the establishment of measures to prevent domestic private capital from leaving the country can all be very beneficial to the economy of El Salvador. With the necessary means to increase the scope of economic activities and an agriculture based on principles of conservation and selection of highly productive industrial crops the natural resources of the country could no doubt provide higher standards of living for the population.

Apparently transport is not a hindrance to development at present. The present rate of investment in this sector appears to be insufficient with perhaps a greater emphasis being placed on the construction of tributary roads.

#### CHAPTER I. AGRICULTURE

#### Introduction

Agriculture is the predominant factor in the economy of El Salvador. In 1946 it represented, at current prices, 4c per cent of the Gross National Product. Coffee contributed 12 per cent of the National Product, and the remaining agricultural activities, among which the most important are the cultivation of maize, sugar cane, beans, sorghur, rice, hennequen and cotton, and the production of meat and milk, represented 34 per cent. This importance of agriculture is probably greater at the present time, owing to the rapid increase of agriculture and in particular, the relatively greater increase in coffee prices in relation to rices of products and services in other branches of non-agricultural production.

The development of agriculture is conditioned by a high population density. The arable land, which is almost fully utilised, is subject to serious problems of loss of fertility and soil erosion, apart from that of over-cultivation.

According to official figures, there were almost 100 inhabitants per square kilometre in 21 Salvador in 1949. Nearly two thirds of the population live in the country, and if those persons resident in communities of less than 2,500 inhabitants were included, the rural population would amount to almost 75 per cent of the total.

<sup>1/</sup> Figures estimated by the staff of the Banco Central de Reserva de El Salvador and the Federal Reserve Bank of New York.

<sup>2/</sup> Estimates made by ECLA indicate that in 1949 agriculture accounted for 49 per cent of the Gross National Froduct in El Salvador.

<sup>3/</sup> Dirección General de Estadística and Departamento de Geografía y Cartografía of the Ministerio de Fomento.

There are no entirely reliable figures available regarding the use of the land. Nevertheless, it is interesting to note that the maximum cultivable area has been estimated at approximately one million hectares; this would represent slightly less than half of the territory of the Republic. Moreover, it is estimated that an additional 900,000 hectares could be economically exploited to varying degrees of intensity in the form of pastures or woodlands. 1/ Since there were 517,000 hectares under cultivation and almost 300,000 hectares lying fallow in 1949, it can be seen that in that year more than 80 per cent of the usable land had already been opened up for agriculture. The following : factors must also be taken into consideration: the poor quality of the soil in some sectors of the country; the broken nature of large areas of the country, with the consequent danger of erosion; the primitive methods of cultivation generally used; and the unhealthy conditions and difficulties of draining a large part of the small agricultural area as yet untouched. Practically speaking, the whole useful surface of the non-agricultural territory is being utilised more or less intensively for cattle raising and the felling of trees for timber, fuel and mangrove and the extraction of balsam and turpentine. In view of the foregoing, the serious Salvadorean problem of the pressure of the population on the land and the narrow margin for the empansion of agriculture can be appreciated more clearly.

During the last five years, the total area sown and the volume of agricultural production have increased more rapidly than the population. While in 1940/44 there was an average of 0.21 inhabitants per cultivated hectare, in 1949 the ratio increased to 0.24,2/ and while (at 1947 prices) the volume of agricultural production per capita in 1940/44 was 98 colons, in 1949 it rose to 108.7 colons.

This change has undoubtedly improved the lot of the population. Nevertheless, in view of the situation explained in preceding paragraphs, the real problem lies in ascertaining how long the economy of El Salvador can continue to develop along the lines it has followed up to the present

<sup>1/</sup> Departamento de Estudios Económicos y Estadística del Ministerio de Agricultura, 1947.

<sup>2/</sup> For purposes of comparison it is interesting to note that this ratio is approximately 0.10 in Bolivia, 0.23 in Guatemala, 0.40 in Brazil and 1.0 in the United States.

/time, without the

time, without the danger of a drop in the present low living standards of the population.

Coffee growing is the most important economic activity of El Salvador and it is practically the only source of foreign exchange. The area sown with this product cannot expand by more than 23 per cent in the future. as will be proved later. On the other hand, the small number of hectares available with a climate suitable for the growing of coffee, presents difficulties which can only be overcome by means of heavy investments. If the area sown with coffee should continue to expand, in spite of this. at the same rate as in recent years, it may be expected that the area cultivated with this product in El Salvador would reach its upper limit within ten years. This physical limitation, together with others of an economic nature, clearly indicates that the country will have to seek other sources of activity in order to raise the standard of living of a population with a vegetative growth which is among the highest in Latin America. The limitations indicated above are typical of a coffee economy, which in absorbing a large quantity of low-productive labour, prevents a speeding up of the development process.

The future expansion of the area used for growing maize, rice, beans and sorghum is also scriously limited due to the sanitary conditions and lack of drainage in a great part of the remaining virgin agricultural area. These conditions call for substantial investments of capital before this land can be cultivated. The Condition de Almacenamiento de Coreales (Cereal Storage Cormission) has estimated that, if the programmes of opening up lands at present under consideration are put into effect, some 95,000 additional hectares suitable for cereals could be rendered productive within the next 20 years. This means that, provided there is no change in the variable factors of the problem, the population of the country could maintain its present standards of consumption for a more or less similar period of time. Nevertheless, it is possible that within this period it will be necessary to stop growing maize on considerable areas of marginal land in the hilly region of the central plateau, and it is probable that part of the 95,000 hectares of new

<sup>1/</sup> Report of the Comisión de Almacenamiento de Cereales, Ministerio de Economía, 1950.

land will be used for crops with higher productivity than cereals. Events in recent years appear to indicate a trend in this direction. In fact, modern methods of cultivation have been introduced in the area used for products with a high yield per unit area, a development which it is believed to have considerably increased the efficiency of labour; and this area has grown relatively faster than the area used for growing traditional products. For example, the area growing cotton and sesame in the pre-war years scarcely exceeded 2,000 hectares, yet in 1948 the areas sown with these two products represented almost 32,000 hectares. If

This increase in the area of new products and the physical limitations of the agricultural frontier, suggest the possibility of a displacement of the principal food crops. However, this does not appear to be an insoluble problem since there is a wide margin for improving the methods of cultivation and the varieties grown, particularly of maize, sorghum, beans and rice, with a resulting increase in yields. This would permit better crops to be obtained from the same or a smaller area sown.

It should be noted that there are only about 3.000 hectares in El Salvador under irrigation. This area is mainly used for grasses, principally gramineous, and is utilised for cattle grazing. The available data indicate that the irrigated area has gradually decreased due to the drying up of the streams and the lack of new construction. In a country like El Salvador, where there is a very severe dry season lasting over six months and where a gricultural expansion meets with so many limitations, the small area under irrigation and the poor use made of it is remarkable. The systems of irrigation in use are insufficient, and the yield of the cattle pastured on these lands is very poor. In the eastern part of the country the topography is ideal for irrigation, and there are geological indications of the emistence of subterranean water supplies sufficient for this purpose. Furthermore, the conservation of water which would follow from the improvement of irrigation works - better water diversion, liming of the distribution

<sup>1/ 1937</sup> figure, Dirección General de Estadística.

<sup>2/</sup> The drying up of the streams has been caused by the intense deforestation and earth movements which have submerged the natural water outlets.

canals, and improvement with respect to section and gradient - would undoubtedly increase the actual irrigated areas.

It is not possible to study employment in agriculture with the information available. Recent estimates (1948) by the Ministerio de Economia classify 57 per cent of the population as gainfully employed. Of this working population (if those engaged in domestic service are excluded) 64 per cent was employed in agriculture. Under these conditions, El Salvador in 1948 had an average of 1.3 hectares under cultivation per person actively employed in agriculture. This figure would at first sight appear to be high, since it refers to a country with a dense population whose main industry is coffee cultivation.

Nevertheless, it is possible to consider the figure as close to the truth in view of the mechanisation of cotton and pilseed production and the tendency towards mechanisation of maize, as well as the heavy seasonal demand for labour of the ceffee industry.

#### Volume and Composition of Agricultural Broduction

The physical volume of agricultural production increased substantially during the last five years. These increases were mainly due to the expansion of the area under cultivation. It must be pointed out, however, that the years 1947 and 1949 show variations in production due to bumper harvests, particularly in the case of coffee. This was due to the timely rains and general climatic conditions which were very favourable to agriculture. On the other hand, there was a drought in 1945 which has been termed the most severe in the last 25 years, and in 1948 the country had to fight a serious invasion of locusts. As a result of these two factors, the row crops of 1945 and the coffee harvest of 1946, as well as the seedbeds of 1948, suffered considerably, and the rate of increase in agricultural production declined.

The 1945 agricultural year was so sonormal that many crops were lost. The area harvested for cereals was reduced and there was a decline in the normal yields. Consequently, in order to prevent erroneous conclusions being drawn regarding the development of agriculture in El Salvador, the

<sup>1/</sup> IBRD - Report on the Economy of El Salvador, 1949.

7/ For purposes of comparison it may be indicated the

For purposes of comparison it may be indicated that the ratio is 0.5 hectares per person employed in Guatemala, over 2.5 in Mexico and over 12.8 in the United States.

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average volume of production for the five year period 1940-1944 has been used as a basis of comparison in this survey.

The figures indicate a development at a greater rate than that of the population. In fact, while the latter increased by 17 per cent between 1940-1944 and 1949, agricultural production increased by 30 per cent.

Table 1. Èl Salvador: Recent Changes in the Total Area
Under Cultivation

(Relative to base 1948)

	- Average 19 <b>4</b> 0-1944	1945	1946	1947	1949
Coffee Cereals and Pulsesa/ Sugar Cane Vegetable Fibresb/ Oil Seeds c/ Other products	87 78 61 31 -	89 75 75 84 - 101	94 87 62 70 18 100	96 89 102 78 39 95	103 99 118 88 82 104
Total	76	78	86	89	100

Sources: Dirección General de Estadística; Departamento de Estudios Económicos of the Ministerio de Agricultura; and Cooperativa Algodonera.

n/ Maize, sorghum, beans, rice and wheat.

b/ Cotton and hennequen.

c/ Sesame, peanuts and castor oil.

d/ Improved pastures, roots and tubers, tobacco, vegetables, fruit and indigo.

Table 2. El Jalvador: Index of the Quantum of Agricultural Production

1948 = 100

Product	Average 1940-1944	1945	1946	1947	1949
Coffee ,/	106	.96	83	114	126
Coreals and pulses b/	78	65	. 86	93	103
Sugar Cane /	75	78	<b>7</b> 0	106	102
Livestock Productoc/	87	77	84	9€	111
Vegetable Fibros d/	67	86	73	100	10/4
Oil Seeds e/	9	11	19	53	73
Other Products f/	98	60	82	90	109
Total	86	*78	81	101	112

Sources: Dirección Ceneral de Estadística: Departamento de Estudios Económicos, Ministerio de Agricultura; Comisión de Almacenaciento de Cereales; Cooperativa Algodonera; and Comisión de Defensa Agucarera.

- a/ Weights are based on 1947 prices. The formula  $I = \frac{\xi(P\sigma, Qn)}{\xi(P\sigma, Qo)}$  was used.
- b/ Maize, sorghum, rice, beans and wheat.
- c/ Cattle and hogs slaughtered, and milk.
- d/ Cotton and hennequen.
- e/ Sesame, cottonsaed, peanuts, copra, caster oil and olive seed.
- f/ Indigo, balsom, roots and tabers, pulses, cocon, tobacco, honey and beeswen.

Furing the first two post-war years, per capita production dropped slightly. However, the most important variation took place in 1947, with a net increase per capita of 25 per cent over the preceding year. In 1948 and 1949, the volume of production was maintained at a high level in relation to the average for the years 1940-1944, and although there was a 5 per cent drop in production per capita in 1948 in relation to 1947; this dicadventage was offset in 1949 and agricultural production showed a new appared trend.

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Table 3. El Salvador: Volume of Agricultural Froduction for Export and for Domestic Consumption (1948 = 100)

Year	Agricultural Production Exported	Agricultural Production Consumed in the Country
Average		
1940/44	77	95
1945	78	79
1946	68	<b>9</b> 0
1947	90	113
1949	112	112

Cources: Dirección General de Estadística; Departamento de Estudios

Económicos, Ministerio de Agricultura; Comisión de Almacenamiento de Gereales; Cooperativa Algodonera; and Comisión de Defensa Azucarera.

Note: Weights are based on 1947 prices. Agricultural production consumed in the country was obtained by subtracting agricultural production experted from the total agricultural production.

Although both have increased more rapidly than the population, agricultural production for denestic consumption appears to have increased much less rapidly than that for export. In fact, the figures in Table 3 would indicate that while the former has increased by only 13 per cent, the latter has increased by 45 per cent between the base period and the year 1949.

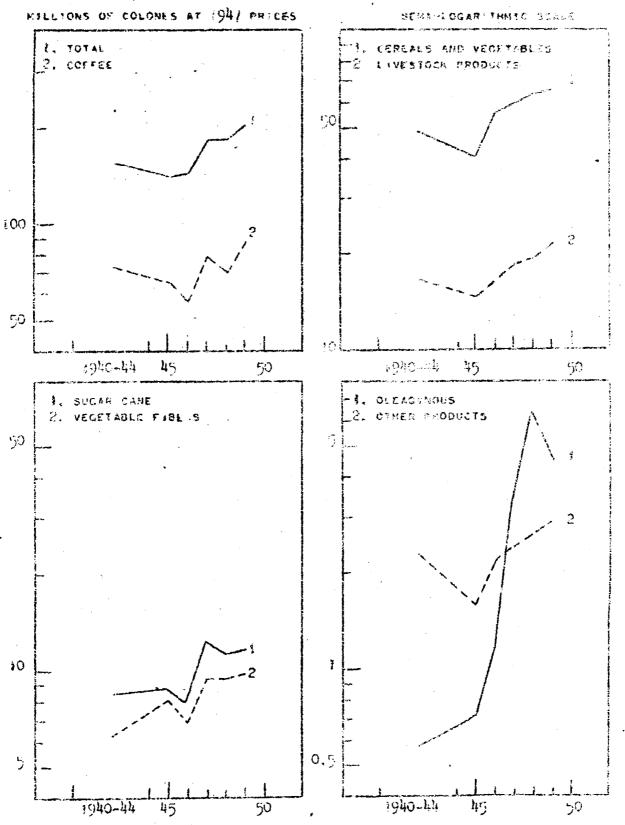
In those countries where the average income per capita is very low - in other words, in those cases where the great mass of inhabitants lives at subsistence levels - an increase in the real income and in the population may lead to an increase in demand (even in the demand for basic food products). This is particularly the case when these increases are accompanied by a rise in the prices paid to the producer.

The important increases in production analysed above have received the following principal stimuli in El Salvador:

- a) An increase in the population of 17 per cent between 1940-1944 and 1949;
- b) The fact that the population, the great majority of which lives at subsistence levels, has, according to all available information, substantially increased its real per capita income during the same period; and
- c) An increase of 25.5 per cent in the level of prices of agricultural /products for

#### EL ALVADOR.

QUANTUM OF AGRECULTURAL AND ERVESTOCK PRODUCTEDM AND ITS COMPOSITION



NOTE SEE FOOTNOTES OF TABLE 2

United Nations Econotic Commission for Latin America,

products for domestic consumption and of 86.7 per cent in that of prices of agricultural products for export between 1945 and 1949.

In spite of the influence of prices on the increase in production, in the case of coffee, due to the nature of the plant, the supply is scarcely affected by price variations over a short and medium period. However, the supply is affected by movements in long term prices, but in the particular case of El Salvador, present conditions in coffee growing appear to have considerably decreased this sensitivity in comparison with what has happened in other producing countries, particularly Brazil.

On the other hand, in spite of the fact that four harvests of beans and maize are reaped in El Salvador, as well as two of rice and one of sorghum in a complete agricultural year, the supply of cereals is on the whole unaffected by the seasonal price variations. This is due to the way in which production is organised and to the traditions and customs of cultivation. This does not mean that this same supply is not apparently very sensitive to long-term price movements and that there is not, as has been indicated, a marked trend towards the increase of production of these and other crops for domestic consumption.

The increases in production over the last five years have been achieved through expanding the area under cultivation. This trend will certainly be halted by the physical limitations of the agricultural frontier of El Salvador; any substantial and permanent future increase in agricultural production will therefore have to be based on increased productivity.

If the crops referred to in the quantum index of Table 2 were classified in order of their importance within the value of production, it would be seen that they had maintained their positions during the last five years. Oilseeds are an important exception; from being insignificant in 1940-44, they are now the basis for expanding oil and edible fats industries; and since 1947 they have begun to figure decidedly, either in a natural or processed form, as an item for export. This is the only important recent change to be noted in the composition of agricultural production in Il Salvader.

#### Coffee.

of the volume of agricultural production and 90 per cent of the volume of experts. With the exception of Venezuela and Cuba, no other Latin American country depends to such an extent on the expert of one single article. El Salvador is the third producer of coffee in America; nevertheless, its experts only represent 3.4 per cent of the total coffee marketed in the world.

The sudden variations shown in the index of coffee production are typical of this crop, which is very sensitive to changes in the amount and distribution of the rainfall. The 19 per cent increase shown in the index between the extremes of the period under review shows, nevertheless, a clear upward trend.

A large portion of the best lands between 800 and 1,500 metres above sea level is used for coffee plantations. The main coffee region is found in the western part of the country in the mountainous region formed by the Santa Ana Volcano and the adjacent slopes. The Nejapa-Santa Tecla region in the central part, and the San Miguel - Berlin - Santiago de Maria region in the eastern part of the Republic are also important areas of coffee production.

Table 4. El Salvador: Coffee in Relation to the Volume of Agricultural Production and of Exports.

(M illions of colons; values at 1947 prices).

Year	Total agricul tural production		Coffee as % of total production		Coffee Exports	Coffee as % of total production
1945	136.9	66.7	48	79.9	76.6	96
1.946	141.8	57.4	40	71.3	64.8	90
1947	176.8	78 <b>.9</b>	.44	93.5	84.2	90
1948	175.3	69.4	39	103.5	81.1	78
1949	196.7	87.7	44	114.3	100.3	88

Sources: For volume of agricultural production and coffee production see Tables 8 and 9; for exports Anuarios Estadísticos, Dirección General de Estadística, El Salvador.

Coffee is shade-grown (particularly in the case of trees of the Inga family), and cultivation has reached a relatively high technical

/level. The main

<sup>1/</sup> The 1940-47 and 1947-48 averages are according to the Interamerican Coffee Council.

level. The main variety used comes apparently from the natural mixture of Arábiga and Jorbón, and is more productive than the pure Arábiga sown in the other coffee regions of Central America.

The system of cultivation employed has given good results, since the qualities of coffee harvested are quoted among the best and the yields per surface unit are among the highest in Latin America, reaching as much as 20 metric quintals per hectare. Nevertheless, it is expensive, especially the practice of gathering by hand, the opening of fertiliser trenches, and the methods used to combat erosion.

The coffee producers all own the land they work, and the industry is entirely in the hands of nationals. Although about 33 per cent of the plantations have an area of less than 7 heatares, the bulk of the crop is produced in plantations exceeding 35 hectares.

The work is carried out by wage labourers. Harvesting absorbs the greatest number of workers, and this work is paid for according to the weight picked. Apart from basic wages, the peons receive rations of maize, beans, and salt twice a day. The tenant system, which is one of the principal sources of labour in the sugar plantations and cattle ranches and generally on those estates which grow cereals, is not commonly used on the coffee estates. The labourers come from villages close to the coffee regions and, during the harvest period, there are in fact migratory streams of workers who come not only from other parts of the country but from the border regions of Guatemala and Honduras.

It has been stated that the greater part of the coffee harvest is derived from large plantations. Although there are no complete statistics on the subject, the Asociación Cafetalera estimates that the 1948 production (approximately 60,000 metric tons) came from the different groups of plantations in the manner indicated in Table 5.

According to these figures, nearly 80 per cent of the harvest was obtained from 455 plantations whose area exceeded 35 hectares, with a total area of ever 57,000 hectares. The difference in the yields of the various types of plantation is also noteworthy. These figures would appear to suggest that, under present conditions of production in El Salvador, the most efficient plantations are those with an area

/hetween 35 and 70

between 35 and 70 hectares.

Table 5. El Salvador: Size, Number, Total Area, Production and Yield of the Coffee Plantations, 1948

Size (hectares)	Number	Arca (hectares)	Production (metric tons)	Yield (metric quintals/hectare)
Up to 0.7 From 0.7 to 7 From 7 to 35 From 35 to 70 Over 70	1,322	2,796 - 14,175 - 25,259 - 16,653 - 41,029	450 4,900 11,300 : 14,150 29,200	1.61 3.45 4.47 8.50 7.12
Totals	11,545	99,912	60,000	6.00

Sources: Ministerio de Agricultura, Departamento de Estudios Económicos and Asociación Cafetalera. El Salvador.

During a period of high prices, and when there is a high level of general economic activity, the area planted with coffee has shown a relatively slow rate of increase. Even in 1948 and 1949, when coffee prices reached unprecedented levels, there was no exceptional planting. Nor is the existence known of any plans to effect in the near future any substantial increases in the area planted with this crop. This situation appears to be governed by two principal factors:

- a) The experience of periodic declines in the expert market and the resultant uncertainty regarding future price conditions, which tend to make heavy long-term investments in coffee' agriculture unattractive;
- b) The limited area available for new plantings of coffee (which barely reaches 24 thousand hectares), and in particular, the increase in the costs of planting in these new regions, which have steep gradients, poor quality soils, and necessitate considerable investments for conservation and soil improvement works.

This limitation of the land available, together with the fact that yields cannot be increased without first re-sowing completely and improving agricultural methods over large sectors of coffee agriculture, /indicate that

indicate that El Salvador is reaching the limit of its capacity for coffee production and that any substantial increase will require the tying-up of considerable capital investments over a lengthy period of time.

Table 6. El Salvador: Area Used for Coffee Cultivation and Area

Available for Expansion of the Coffee Plantations 1938 - 1948

(hectares)

Departments	19	38	19	48	
	Cultivated	Available.	· Cultivated	Available	
Santa Ana	17,892	10,924	22,711	6,107	
Ahuachapán	8,333	3,111	10,598	846	
Sonsonate	9,503	7,449	9,940	7,012	
La Libertad	16,506	6,889	18,212	4,932	
San Salvador	/ 3,895	3,026	6,597	324	
Chalatenango	. 86	131	217	<b>-</b>	
Cuscatlán -	965	1,345	916	1,394	
La Paz	3,035	1,018	3,568	485	
San Vicente	647	536	668	51/4	,
Cabañas	325	183	236	272	
San Miguel	4,864	3,377	8,241	<u>-</u> `	
Usulután	15,093	2,708	16,322	1,480	
Morazán	827	.546	1,348	24	
La Unión	178	464	302	341	•
Totals	82,419	41,707	99,912	23,731	
		•	-	•	

Source: First National Coffee Census (1938) and Departamento de Estudios Económicos y Estadística of the Ministerio de Agricultura (1948).

Note: The difference which may be observed in comparing the sum of the cultivated area plus the available area in the years indicated, is apparently due to errors in enumeration.

I/ The increase in yields could be achieved simply by changing the older or less productive shrubs. The results obtained with the varieties of coffee used at present render capital investment for the purpose of finding better varieties unnecessary. In fact, simply by raising the average yields to the level at present obtained from the plantations of from 35 to 70 hectares, an improvement of 40 per cent would be obtained.

### Cereals and Fulses

Maize, together with beans, sorghum and rice, are the basic grains in the diet of the people of El Salvador. Sorghum is also used for feeding cattle, and in particular for poultry feeding.

Maize and sorghum are produced throughout the country; however, the main centres of cultivation are on the flat, hot lands situated around Sonsonate, Izalco, Armenia and Cuyagualo and in the coastal belt of the departments of La Paz, San Vicente, Usulutan and San Miguel.

Beans are grown only in the valleys of the central plateau, since the varieties harvested are very demanding as regards conditions of soil and climate. The main producing region is found around Armenia and Cuyagualo.

Part of the rice is sown in the low-lying coastal lands, but the most important production comes from the region of valleys and hills on the Central plateau.

Beans and sorghum are to a large extent secondary crops which are sown between the rows of maize. The rice grown is all unirrigated.

Grains are mainly grown in small lots of from one to three hectares, using rudimentary methods, primitive tools and rented lands, for which a fixed amount in money is paid. The small producer and his family consume a large part of their production, so that much of the total annual crop does not enter commercial channels.

Table 7. El Salvador: Percentage Distribution of Cercal Production
Among the Different Forms of Land Tenure

Product	Small tenants	Small landowners	Large landowners	
Maize	65	20	15	-
Sorghum	<b>7</b> 0 '	25	5	
Rice	10	87	3	
Beans	59	25	. 16	

Source: Comisión de Almacenamiento de Cereales, Ministerio de Economía.

The Comision de Almacenamiento de Cereales (Cereal Storage Commission) estimates that the total production is obtained from the different sized /farms and systems

farms and systems of land tenure outlined in Table 7.

However, in spite of the foregoing, part of Cereal production, particularly maize, is increasingly being cultivated with the use of modern methods and machinery.

Except for wheat, El Salvador has on the whole produced the basic foodstuffs necessary to sustain its population. Nevertheless, the disorganisation of the food market, the poor distribution system and the desire to grow expertable crops or those such as cotton and oilseeds, which find an easy and prefitable market, has from time to time caused seasonal scarcities of cereals which have had to be met by imports. During the last five years, the net deficits have never exceeded nine thousand tons, that is, 3 per cent of normal consumption.

The nature of these deficiencies may be better appreciated by noting that in 1947, for example, although the commercial balance of maize showed a deficit, 1,387 metric tons of the first crop were exported; these were later needed and had to be replaced before the end of the year by the import of 1,936 tons.

On the other hand, the fact that there has been no crisis in the cereal supply does not mean that El Salvador has no serious food problem, but simply shows that in recent years the production of cereals has been sufficient to meet the requirements of the population. These requirements have been traditionally small, due to the particular structure of supply and demand and the low average income, which is highly concentrated.

The marked upward trend, which seems to be clearly shown by the figures for the cultivated area and by the quantum index of cereal production, may not be as pronounced as these figures would appear to indicate. The Comisión de Almacenamiento de Cereales estimates that the statistics for the first years reviewed here contain compilation errors which were later corrected.

<sup>1/</sup> Wheat, wheat flour, oats, rye, etc., consumed in the country are almost entirely imported. In fact, the annual consumption of wheat is about 12,000 metric tons, and only 200 to 500 tons are produced within the country.

<sup>2/</sup> Report of the Comisión de Almacenamiento de Cereales, 1950.

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The systems of distribution for expertable products, and in particular for coffee, are well organised, but for the basic food crops these systems are still in a very primitive state. Due to inadequate storage facilities, a large part of the cereal crop is lost to insects, rodents and fungi.

#### Sugar Cane

Sugar cand is grown throughout the territory, but the largest plantations are situated mainly to the northeast of the volcances of San Salvador and San Vicente.

Table 8. El Salvador: Number and Size of Cane Sowings for the Production of Refined Sugar - 1948

Size (hectares)	Number of Plantations
Up to 70 From 70 to 140 From 140 to 210 From 210 to 280 From 280 to 350 From 350 to 420 Over 1,000	3 7 2 6 2 3 1
ын бөги Мобронуулгардана контуры догууруунун дунуулынын алануулуун дундалдаг часаны Аггадагаг	24

Source: Comisión de Defensa Azuenrera

Cane is grown in El Salvador for three purposes:

- a) For the production of refined sugar (plantation white type).
- b) For the manufacture of raw sugar "panela", which is delivered to the market in blocks or lumps.
- c) For the production of raw sugar "de purga en pilon".2/

The cultivation of cane for the ranufacture of refined sugar is generally carried out with tractors and scientific methods, including the use of fertilizers and improved varieties. Cultivation for the production of "panela" and "pilón" (raw sugar) on the other hand, is carried out with rudimentary methods and primitive tools.

<sup>1/</sup> See Report of the ECLA/FAO Mixed Working Group, Economic Commission for Latin America, Document E/CN.12/83, pages 147 on.

<sup>2/</sup> Sugar similar to "panela" from which the non-crystalisable syrups have been extracted by rudimentary methods.

The processing of refined sugar is concentrated in 24 mills, each of which is on an estate, usually a large one, which also grows other crops, or breeds cattle. Table 8 shows the number and size of the sowings of cane for the manufacture of refined sugar.

. On the other hand, the two types of raw sugar are produced on a large number of very small plantations, which usually have no sources of income other than cane. Table 9 shows the size and number of cane plantations for the production of "panela".

Table 9. El Salvador: Size and Number of Cane Plantations for the Manufacture of "panela", 1948.

Size (hectares)	Number of plants	ations
Up to 0.7	2,523	
From 0.7 to 3.5	1,913	
From 3.5 to 7	214	<u> </u>
From 7 to 14	78	· •
From 14 to 35	62	- 1
Over 35	<u>* 5</u>	•
Total	4,795	,

Source: Banco Hipotecario of El Salvador.

The whole production of sugar cane, even that for the production of raw sugar on very small holdings, unlike that of maize, sorghum and beans, is carried out on lands owned by the farmer.

Each of the holdings growing cane generally has the machinery for transforming its product to the extent where it can be sent to the market. There are very few which grow cane in order to sell it to refineries or sugar producers. In fact, of the 375,000 metric tons of sugar ground by the 24 mills in 1948, only 56,000 metric tons were bought; the rest was produced on the plantations belonging to the mills. Thus, of the 4,795 cane plantations which exist for the production of raw sugar, 4,603 had the machinery and ovens necessary for the processing of this type of sugar.

The production of refined sugar, "panela", "azúcar en pilón" and

<sup>1/</sup> Felix Choussy: El azucar en la economia agricola salvadoreña, Ministerio de Agricultura, 1949.

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final molasses, has increased considerably during the last five-year period. This increase is the result not only of the increased domestic demand, but also of the good prices at which the product, particularly refined sugar, can be sold abroad.

The per capita consumption of refined sugar seems to have remained stationary, while exports of this product and the per capita consumption of "panela" have increased considerably. This appears to be the result of the internal price policy of the Comisión de Defensa Azucarera, which is maintaining high prices, based on the costs of the marginal producers, has tended to displace demand towards sugars of inferior quality. The costs of inefficient producers, according to the publications of the Ministry of Agriculture, are nearly double those of local producers who can be termed efficient.

Any future increases in the production of refined sugar are thus closely linked to this situation on the domestic market, since the competitive position in relation to the great producing countries is so precarious that apart from the limited market on the southern coast of Honduras, it is not possible to count on a continued incentive from foreign markets encouraging the production of greater quantities of sugar.

#### Livestock products.

The increased production under this heading is due to an increase in slaughtering and in the number of milking cows rather than to any improvement in breeds or in the methods of emploitation adopted. Slaughtering, plus the net foreign market, appear to have been stabilised at about 13.5 per cent of the number of cattle in existence and 45 per cent of hogs. These percentages are low in comparison with those of other countries, so that there has been an increase in stocks of both types of animal. 2/

Among the components of this item of production, milk and dairy products show the most rapid growth, with an increase of 35 per cent between 1940-1944 and 1949, while the slaughtering of hogs has risen

<sup>1/</sup> Ibid

<sup>2/</sup> In Chile, where the number of cattle has been more or less stabilised, during the last 5 years slaughtering has been equal to a little more than 15% of total stocks. See Recent Trends in Chilean Agricultural Development, ECLA, 1951.

by 18 per cent and the consumption of beef seems to have risen on a par with the increase in population.

Table 10. El Salvador: Meat Production 1945-1949 (thousands of head)

	1945	1946	1947	1948	1949
Roef		-			
Stocks	. 660	650	686	765	743 ·
Slaughtered	85	82	86	91	97
<u>Amorts</u>	20	28	28	39	17
Imports	16	22	25	27	. 16
Net deduction from stoc	ks,% 13.5	13.3	13.0	13.5	13.2
Pork					
Stocks	382	342	384	398	503
Slaughtered	157	177	199	208	232
Exports	•••	÷.	-		-
Imports	9	10	11	- 32	33
Net deduction from stoc	ks.% 41.1	50.3	50.3	48.4	43.3

Source: Anuarios Estadísticos, Dirección General de Estadística y Departamento de Estudios Económicos del Ministerio de Agricultura.

In order to meet consumption requirements, the country has been obliged to purchase more and more hogs, as can be seen from Table 10. On the other hand, in the case of cattle, although there is quite an active foreign trade, the balance is in the country's favour. The main imports of cattle come from Honduras and exports are made to Guatemala.

Under present working methods, the country cannot substantially increase the productivity of cattle and hogs. Consequently there is a possibility that in the future even the foreign trade in cattle will prove unfavourable. A reversal of this trend could perhaps be achieved by means of tenacious and prolonged efforts to improve the breeds, the pastures and fodder, breeding methods and the utilisation of the animals. Experiments carried out up to the present indicate that there may be considerable hope in a broad use of coffee pulp as animal fodder.

In general, native breeds, descended from the cattle brought by the Spaniards during the colonial period, are used for both beef and milk.

/Mcthods are

Methods are rudimentary, for the cattle are bred in the fields and are mainly fed on grass; the pastures, which are sometimes irrigated in a very primitive fashion, receive little or no agricultural attention. In El Salvador, as in the majority of tropical countries, the lack of suitable sources of protein foods and the abundance of pests and diseases, the most important of which are ticks and anthrax, are the main obstacles in the way of improving the livestock herds. Very few dairy establishments are skillfully administered as regard selection of breeds—and individual animals, feeding of the cattle and industrialisation of products.

The breeding of hogs is a home industry; only in very few instances is it a systematic industry. The animals are generally left free to find their own food and only receive supplementary foods for fattening purposes in a very few cases.

### Oilseeds

The increase in the volume of oilseed production has been very pronounced over the last five years. Sesame and cotton have expanded most, while other oilseed plants have appeared such as cocoa trees, castor oil, peanuts and olives (Simaruba glauca) which were used only slightly or not at all before the Second World War.

Production increased fivefold between 1945 and 1949. This development has led to an increase in the consumption of fats, which formerly were traditionally scarce in the country, and to the export of substantial quantities of oilseeds, oils and vegetable fats and oilcakes. In fact, at 1947 prices, these items represented 1.93 per cent of total exports during 1947, and 4.12 per cent in 1949.

Tractors, improved plant varieties and large quantities of machine-sprayed insecticides are used for the cultivation of sesame and cotton. The holdings are relatively large. In 1948, for example, the 22,332 hectares of cotton which were sown were concentrated on only 400 plantations. Although no complete information is available regarding the system of land tenure in the growing of cotton and sesame, it can te noted that rented lands form a large part of the area cultivated.

The farmers who grow cotton and sesame on rented lands, unlike /the general

the general situation in regard to cereals, usually have written contracts for a period of several years, and they pay their rent in money.

#### Vegetable Fibres

During the last five years, the production of hennequen has remained below the annual average of the 1940-1944 period, while production of cotton has more than doubled. This situation with regard to hennequen seems to have originated in the small market for the product. In fact, the articles made from that fibre, mainly sacks, have, on account of their poor quality, been limited to the domestic market, where they are protected. The case of cotton is different because of the expansion of the cotton industry since the war.

Nevertheless, at present levels of income it would appear that the country's requirements have been amply covered, so that it is probable that there will be a decline in the rate of expansion in the next few years.

#### Other Products

Apart from the products already studied, potatoes, yucca and some vegetables should be mentioned, of which tomatoes and onions are particularly noteworthy. Almost all the production of these crops comes from small holdings which are cultivated in a primitive manner. The remaining products of El Salvador's agriculture are of little importance in the composition of the index. The production of articles such as indigo and balsam which formerly provided the country's main sources of foreign exchange, has become insignificant and is tending to disappear.

## Agricultural prices and wages

Agricultural products for expert have experienced very considerable price increases during the last five-year period. The index, with coffee predominating, shows an increase of 86.7 per cent between 1945 and 1949.

This price increase, together with bumper harvests of coffee, oilseeds and cotton, has made it possible to continue accumulating the heavy reserves in foreign exchange which began to appear during the /war period.

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war period.

Notwithstanding the expanding forces unleashed by these and other causes, the price increases of products for domestic consumption have been small in comparison with those of neighbouring countries. In fact, the indices compiled by the Economic Commission for Latin America on the basis of data published by official sources suggest that the increase in wholesale prices of the ten principal agricultural products for domestic consumption was scarcely 25.5 per cent between 1945 and 1948, and that this difference was reduced to only 13 per cent in 1949. The principal cause of this lies in an 18 per cent increase in agricultural production for domestic consumption. On the other hand, it would appear that the increase in bank deposits has not necessarily meant a source of demand for products which, in any case, are normally outside the orbit of consumption of the high-income groups, or for which the demand is completely rigid. To the foregoing must be added the fact that coffee wages, which necessarily have an influence on the general level of wages in the country and are therefore a source of pressure on prices. have in the last five years increased less than in other coffee producing countries. (See Table 11 and Graph 2).

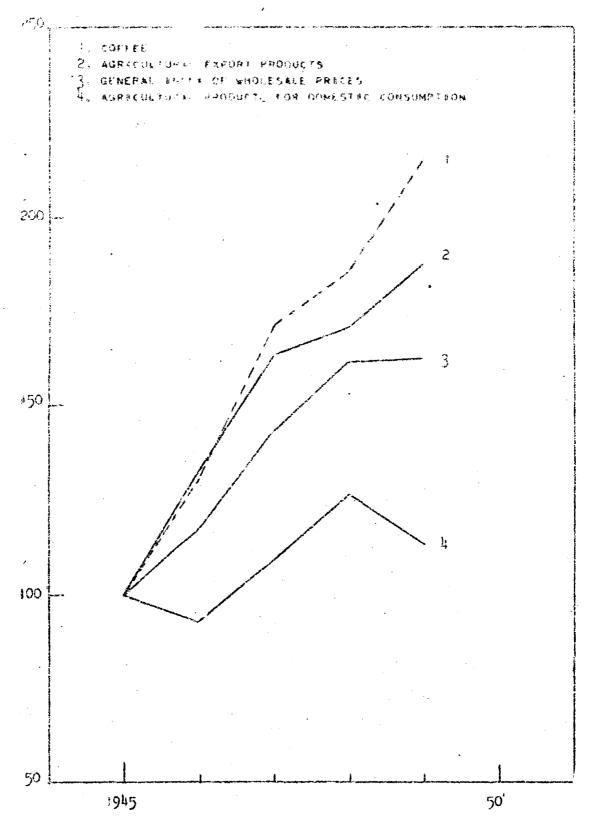
The conservative administration of the commercial banks, directed by a Central Bank which has adhered strictly to orthodox monetary principles, has also helped to prevent extreme price variations. The banking system has prevented an expansion of credit in proportion to the heavy increase of reserves of recent years. This policy, which is backed by the Central Bank and closely followed by the banking system, has arrested speculation and reduced the intensity of the upswing of the cycle.

While no serious cereal crises have taken place, the seasonal scarcity which occurs from time to time in the supply of these basic products of the popular diet, and the price variations during a single agricultural year, which sometimes drop 40 per cent between the time of sowing and harvesting (See Table 12), caused the Government of El Salvador to take action. This action consisted in the passing of a law creating the Institute Regulador de Cereales y Abastecimientos (Regulating Institute for Cereals and Supplies), which is an autonomous

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PRECE EMPERES

1945 = 100



NOTE: SEE FOOTNOTES OF TABLE !!

LA 169 MATIONS ECONOMIC COMMISSION FOR LATIN MERICA.

## Table 11. El Salvador: Price Indices 1945-1949

(1948 = 100)

Year	Coffee <u>a</u> /	'Agricultural products for sport b/	Agricultural products for domestic consumption c/	General index of wholesale prices d/
1945	53.9	58.8	79.7	62.2
1946	70.6	77.6	74.3	73.0
1947	92.3	95.9	86.9	89.2
1949	116.9	109.8	90.2	100.8

Sources: Anuarios y Boletines Estadísticos of the Dirección General de Estadística; Boletín Algodonero of the Cooperativa Algodonera Salvadoreña Limitad; Informe de la Comisión de Almacenamiento de Cereales, Ministerio de Economía, 1950; and Review of the Banco Central de Reserva of El Salvador.

- a/ Relating to prices of washed coffee, F.O.B. Salvadorean ports.
- b/ The price index for agricultural export products includes the following: coffee of all kinds, ginned cotton, sugar, rice, cattle, honey, sesame, balsam; the index represents the price variations of these products F.O.B. Salvadorean ports. The following formula was used:

$$I = \frac{\sum P_n Q_n}{\sum P_o Q_n}$$
 in which  $P_o = 1947$ 

- c/ The price index for agricultural products for domestic consumption includes the following: coffee consumed in the country, beans, rice, maize, sorghum, slaughtered cattle and hogs, sugar, cottonseed and clean cotton; this index represents the wholesale price movements of these products in the market of San Salvador. Weights are based on 1947 prices.
- d/ The general index of wholesale prices is taken from the Revista del Banco Central de Reserva of El Salvador. It includes 40 different articles and is weighted with the production and imports of 1939.

/entity with its

entity with its own regulations, legal status and income. The original capital of the Institute is two million colons, and its purpose is to encourage the development of production of basic foodstuffs through the stabilisation of prices and the absorption of surpluses or the replacement of deficits in the harvests. The Institute is constructing a grain storage plant in San Salvador with a capacity of 92,000 metric tons and plans to extend its purchasing and storage facilities to other consuming or producing regions in the country.

Table 12. El Salvador: Scasonal Fluctuations in Wholesale Prices

of the Principal Rasic Foodstuffs

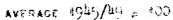
1945 - 1949

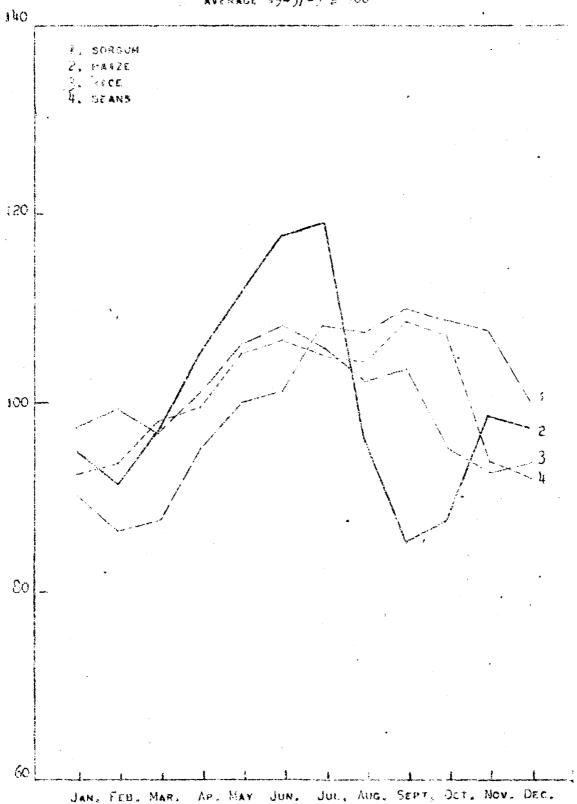
Months	Maize	Sorghun	Boans	Rice
January	94.8	89.9	92.4	97 <b>.3</b>
Fébruary	91.2	86.2	93.5	99.2
March	97.2	87.5	97.8	96.5
April	104.9	94.9	99.3	101.1
May	- 111.6	99.8	104.9	106.1
June	117.6	101.0	106.4	108.1
July	118.8	108.4	104.8	105.4
August	96.0	107.2	104.1	102.1
Sentember	85.2	109.7	1.08.4	1.03.3
October	87.6	108.4	102.9	94.9
November	98.4	107.2	93.7	92.4
December	97.2	99.8	91.8	93.6

Source: Report of the Cómisión de Almacenamiento de Cereales, Ministerio de Economía, 1950

There is no information on agricultural wages. Nevertheless, the evidence available seems to indicate that nominal coffee wages have increased only 25 per cent in the last five years. Because of the importance of this crop in El Salvador's economy, coffee wages have a decided influence on general agricultural wages and, to a lesser extent, on the general wage level for the country, so that it is possible to consider that the wages of other branches of agriculture have followed a trend very similar to those for coffee.

SEASONAL FLUCTUR, KONS EN WHOLESALE PRECES OF THE PREMERPAL BASEL FOODSTUFFS,





## The Technical Progress of Agriculture

It may be said that there are three main aspects of the problem of agricultural development in El Salvador: the low level of labour efficiency; the small yields per hectare; and the serious physical limitations of the agricultural frontier.

One of the most salient characteristics of agriculture in El Salvador is the large amount of labour used in production. According to estimates of the Departamento de Estudios Econémicos of the Ministry of Agriculture, in 1947 26 man-days were required to produce one metric quintal of coffee; the production of a metric quintal of naize required 7 days, while a metric quintal of cotton required 15 days. For purposes of comparison it is interesting to note that the production of a metric quintal of coffee requires approximately 33 man days in Guatemala; for maize the figure is 10 days in Guatemala, 3.50 in Chile and 0.47 in the United States; the figure for cotton is 12.50 in Mexico and 9.0 in the United States.

Agriculture in El Salvador is also generally characterised by the low unit yields of the harvests. Taking the year 1948 as an example, it will be found that 13.5 metric quintals of maize, 9.4 of rice and 10.0 of beans was produced per hectare. In the United States the yields of these same three crops were 26.8, 23.5 and 11.9 metric quintals.

During the same year, raw cotton production per hectare was 5.3 metric quintals; while cane production per hectare was 660.0 metric quintals, with a yield of 7.1 per cent, that is, approximately 45.0 metric quintals of sugar per hectare. In comparison, the yield for cotton was 9.3 metric quintals in the United States and for sugar, 74.0 metric quintals per hectare in Guatemala.

The main causes of the low productivity per man and the small unit yields lie in the methods of farming employed. It has already been seen,

<sup>1/</sup> ECLA, E/CH.12/164, Appendix B, and ECLA, Mconomic Development of Guatemala.

<sup>2/</sup> FAO Yearbook of Agricultural and Food Statistics 1949

<sup>3/</sup> FAO op. cit. and Felix Choussy, Estudio Comparativo entre las Industrias Azucareras de El Salvador y Guaterala

in dealing with general conditions of agriculture, that foodstuffs in El Salvador are mainly produced on small holdings, with the aid of hand tools and primitive implements of the ploughtail type, drawn by oxen. Mechanised agricultural equipment, selected seeds, fertilisers, insecticides and, in general, modern methods and usages in cultivation are employed more for the production of goods for export such as coffee, or for products which enjoy the protection of special laws or State concessions, such as sugar and cotton. However, even in these cases, productivity is low, as can be seen from the figures on the efficiency of labour and on yields.

The narrow agricultural frontier, which has already been discussed elsewhere in this survey, aggravates the problem of the agricultural development of El Salvador, not only as regards items for export, but also in relation to these for domestic consumption.

When the problem is seen from this engle, the raising of the level of income in agriculture could be achieved through the production of crops of high value per surface unit which could be easily mechanised (since this would permit a saving in the amount of labour employed at present). Coffee, oilseeds and cetten fulfil the first requirement, but unfortunately coffee in its turn is also a great consumer of labour, and it cannot be mechanised due to the way in which it is cultivated in El Salvador.

Nevertheless, the margin for achieving increases in productivity is so broad that substantial progress can be expected not only for these crops but also for the basic foodstuffs. The scarcity of arable land and the programmes of industrialisation which are at present being carried out and which will certainly drain labour away to the cities, will undoubtedly prove to be incentives for hastening the change.

The technical improvement of agricultural production, based on the preference for crops with a high value per hectare, is a trend which is beginning to be noticed in the agricultural economy of El Salvador in the struggle to increase unit yields and in the use of machinery to improve the labour efficiency.

It has in fact already been seen elsewhere in this survey that substantial increases have taken place in the cultivation of cotton /and oilseeds.

and oilseeds. On the other hand, Tables 13 and 14 show the imports of certain factors which and important in production. Since these goods are not manufactured within the country, or only on a very small scale, and since the principal supplier is the United States, the figures indicated show a fairly complete picture of their real consumption during the last five years. It should be noted that imports of insecticides, hand tools, farming implements and wire for fencing, show a clear upward trend. In the case of fertilisers the picture is different. The variation in the figures from one year to another seems to indicate that it is customary to keep reserves of fertilisers, which cause imports to increase in one year only to decrease in the next.

Table 13. El Salvader: Acipht and Value of Imports of Insecticides, Farming Implements, Wire for Fonces and Fertilisers a/

Year	Insecticides		Deplements		Wire		Fertilisers	
	Weight	Value	Wight	Value	Weight	Value	Weight	Value
1945 1946 1947 1948 1949	41 74 70 203,b/ 677 T/	31 97 117 208 <u>b</u> / 490 <u>b</u> /	41 72 116 174 102	56 95 192 317 211	364 341 777 533 1,100	94 103 361 231 543	4,500 2,572 6,582 1,606 5,258	638 348 1,104 333 898

Source: Direction General de Estadística de El Salvador, and Foreign Commerce and Navigation of the United States.

a/ Weight in metric tons - value in thousands of colons at current prices.

b/ Imports from the United States only.

Table 14. El Salvador: Value of Imports of Farm Implements from the United States, 1945-1949.

(Value in thousands of colons at current prices)

The second secon	1945	1946	1947	1948	1949
Cultivation implements Pulverisers Harvesting machinery Seed separators	36.0 11.0 1.0 27.0	64.2 29.5 2.0	157.0 113.5 30.5 23.7	1.08.5 96.5 2.5 10.2	172.2 38.3 4.8 12.2
*	75.0	95.7	324.7	214.7	227.5

Source: Foreign Commerce and Havigation of the United States.

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Taking two year moving averages for the import and probable consumption of fertilisers, the rise has been very slight and the consumption per hectare cultivated has declined instead of increasing. In fact, the consumption of chemical fertilisers is very low, and in none of the years in the period under review did imports exceed 15 kilogrammes of fertiliser per hectare cultivated. However, this represents considerable progress over pre-war years, when only 8 to 9 kilos were imported per hectare under cultivation.

The principal limiting factors for a more general use of inorganic fertilisers seem to be the following: the fact that the farmers are not accustomed to using them, the low value per hectare of many of the products for domestic consumption and the high price of imported fertilisers.

Approximately 60 per cent of fertiliser imports consists of nitrates of sodium and potassium, 30 per cent of ordinary superphosphates, and the remaining 10 per cent is mainly composed of muriate of potash, sulphate of potash and complete, ready mixed fertilisers.

The consumption of locally produced organic fertilisers, particularly pulp or compact of coffee pulp, dungs, ashes from boilers, cake from filter presses, molasses, ground bones, blood and compost made from city garbage, is also increasing, although it is still small. It is estimated that the annual consumption of all these types of fertiliser during recent years has been in the neighbourhood of 15,000 metric tons.

The most important step in regard to the supply of fertilisers has been the installation of two plants for producing compost from city garbage by the indoor system. One of these plants is in Santa Ana (1946) with a capacity for 400 metric tons a month, and the other in San Salvador (1949) with a capacity for 1,500 tons a month.

On the other hand, the use of pulses and crop rotation as means of restoring nitrate to the soil or preserving its fertility, has also been expanding fradually.

At the present time, the possibility of manufacturing chemical fertilisers locally must be set aside, due to the lack of raw materials, adequate markets and energy. It would therefore appear that the most logical development would be the increase in the manufacture of organic

<sup>1/</sup> Fertilisers in El Salvador, World Trade in Commodities, Vol. VI, Part 2, No. 30, U.S. Department of Commerce. /fertilisers. both

fertilisers, both domestically, on the farms themselves, and commercially, and an increase in the use of agricultural fertilisation practices, particularly by using green fertilisers and crop rotation.

Another aspect of the effort to increase the unit yields of agriculture lies in the distribution of seeds, which is carried out by the Ministry of Agriculture within its programmes for the selecting and mixing of maize, and the import and adaptation of new varieties of seeds for other crops which are important for domestic consumption. The coffee yields could be considerably increased merely by replacing the old or low productive bushes and improving the shade facilities and methods of cultivation. However, efforts are also being made to better the yields by improving the varieties.

The use of machinery to achieve an increase in the efficiency of agricultural labour also shows an upward trend. Table 15 shows imports of tractors between 1938 and 1949. The figures indicate that prior to 1945 the number of tractors in the country was very small and in fact mechanised agriculture did not exist. The need for increasing productive skill, encouraged by the special conditions which prevailed during the war period, brought about an increase in imports, which reached their maximum in 1947 (when the accumulated demand appears to have been satisfied) in order to drop to a more normal level during 1948 and 1949. From Table 15 and information gathered from the machinery salesmen, it is possible to assume that there are at present in service in the country some 370 agricultural tractors, with an average power of 27 H.P. Of these, 60 per cent have wheels. Caterpillar tractors practically all burn diesel oil; 80 per cent of the wheeled tractors burn gasoline.

Table 15. El.Salvador: Imports of Tractors from the United States
(Units and value in thousands of current colons)

	Caterpillar tractors		Wheel tr	actors	Tota	Total	
Year	Number	Value	Number	Value	Number	Value	
1938		_	4	.7.5	• 4	7.5	
1939	7	31.0	2	4.0	9	35.0	
1940	2	10.0	1	1.7	3	11.7	
1941	1.	1.7	4	7.8	5	9.5	
1942	. 1	10.0	_		\ <b>1</b>	10.0	
1943	1	6.5	_		1	6.5	
1944	9	78.5	2	4.7	11	83.2	
L945	19	80.0	26	89.0	45	244.0	
1946	33	238.5	- 53	110.2	86	348.7	
1947	28 `	230.5	114	279.7	142	510.2	
1948	15	195.2	28	111.7	43	307.0	
1949	25	349.2	29 ·	122.5	54	471.7	

Source: Foreign Commerce and Navigation of the United States.

If the figures for the cultivated area are compared with the number of tractors in use in 1949, it would be seen that there was apparently one tractor for every 1,397 hectares. However, since there are a series of crops such as coffee, indigo, banana and fruits which under the conditions prevailing in El Salvador, would be impossible to mechanise, an average which excluded these crops would provide a better idea of the degree of mechanisation reached in those agricultural tasks which can be mechanised. This would show an area of 1,000 hectares for each tractor. Since the lands where row crops are sown are largely hilly and cannot be worked by tractor without running the risk of completely destroying the soils, the previous figure still is incorrect. Unfortunately, the information available does not permit the breaking down of the figures of the area under cultivation into the number of hectares which are physically capable of being worked by tractor. In spite of the foregoing, the number of tractors in the country will always be small, no matter by what standard it is gauged.

The limited use of agricultural machinery in El Salvador is mainly due to the high prices of tractors and the high cost of maintenance, /added to the

added to the lack of purchasing power of the farmers and the relative costs of machine labour and of the man-labour which it would replace.

As in the case of fertilisers, tractors are used very solden for the production of foodstuffs; they are mainly used for the cultivation of cane, cotton and oilseeds. It is possible to assume that considerable progress would be achieved merely by changing the Egyptian plough and the own for a good type of modern hand plough and mules or horses. However, there are no signs that this is taking place, in spite of the serious limitations encountered by technical progress in agriculture on the basis of using tractors in a country where all the equipment, spares and fuel have to be imported.

## Agricultural Policy of the State

Until recently the Covernment of El Salvador preferred to influence agricultural development indirectly, through a series of autonomous entities with their own regulations which were created, supported and subsidised by the State. The first of these organisations was the Associación Cafetalora (Coffee Planters Association) of El Salvador. to which all the coffee producers belong. The Association studies problems related to production, distribution and consumption of coffee in El Salvador, issues technical and market information to the farmers, runs a school for training estate administrators and maintains close relations with the international organisations for defending coffee interests. The funds which it uses are supplied by the State. The Asociación Cafetalera is a very powerful factor in the economy of El. Salvador, and is the principal shareholder in the Banco Central de Reserva (Central Reserve Bank), 27 per cent of the shares; of the Banco Hipotecario (Mortgage Bank), 75 per cent of the shares; and of the Compañía Salvadoreña de Café (Salvadorean Coffee Company), 95 per cent of the shares. \_\_\_\_/

The price of sugar as well as production quotas for domestic consumption, export licenses of this product and import licenses for sugar machinery, are all fixed by the Comisión de Defensa Azucarera

If For details to accoming the nature and operations of the entities controlled by the Associación Confetalera, see Agricultural Credit in Central America, Economic Consission for Latin America,

Document E/ON,12/167, Add.2.

(Commission for Sugar Protection), an official entity in which the Ministries of Agriculture and Economy and the mill owners are represented. The expenses of this organisation are covered with funds from the budget of the Ministry of Agriculture.

All cotton producers in El Salvador are obliged by law—to be inscribed members of the Cooperativa Algodonera Salvadoreña (Salvadorean Cotton Cooperative). This institution is, moreover, the only one authorised to sell the cotton used for the manufacture of yarn and cloth within the territorial limits of the Republic. The Cooperative is the main ginner of cotton, has an edible oils factory using oilseeds (mainly cottonseed) and grants credits to its members. Its operating costs are financed from the profits on the sale of the members' cotton.

The State has also protected the formation of the Cooperativa Henequenera (Hennequen Cooperative), which controls the large-scale production of this fibre and whose members are owners of the factory which produces all the containers made of hennequen fibre. This last enterprise also enjoys concessions and privileges from the State. 2/

The Asociación de Ganaderos (Stockbreeders Association), of El Salvador, another guild entity maintained with public funds, owns 20 per cent of the shares of the Banco Hipotecario and runs campaigns for improving the livestock industry.

Finally, Mejoramiento Social (Social Welfare) purchased lands and has attempted a programme of redistribution of property, without achieving any apparent satisfactory results.

Agricultural credit institutions, as has been seen, were placed under the control of the guild associations, so that in practice all the Government support for the development of agriculture is carried out through these groupings of farmers or autonomous entities of the State.

<sup>1/</sup> Regulation for the growing of coffee.

<sup>2/</sup> Exemption from all types of customs duties for manufactured products and hennequen fibre which are exported; exemption from all fiscal and municipal taxes for the company; duty free imports of all machinery and spares used by the factory.

Since 1945, without withdrawing support from the organisations mentioned, the State began to take steps to have a more direct influence on the splution of agricultural problems. In that year the Centro Nacional de Agronomia (National Centre of Agronomy) commenced operation. This was an experimental station set up in cooperation with the United States Department of Agriculture. On the other hand, at the beginning of 1947 the Ministry of Agriculture was organised as a separate portfolio, and in 1948, taking into account the fact that the number of professionals in agriculture is extremely limited in relation to the country's requirements, a School of Agronomy was founded within the Faculty of Engineering of the National University.

In certain aspects, this system of guild organisations for producers has achieved good results. For example, thanks to the control exerted by the Cooperativa Algodonera, all the seed is disinfected and one sole variety is sown, so that healthier plantations are obtained which produce fibre of quite a uniform length. In other cases the results of this syndicalism have not been so satisfactory. In the case of sugar, inefficient units have been kept in production, profiting the more efficient producers and harming the interests of the consumer. In the case of hennequen, the monopolistic nature of the enterprise which manufactures containers, has eliminated the beneficial stimulus of competition to improve the products.

The Ministry of Agriculture has been of considerable assistance to farmers in combatting posts, particularly in 1947-1948 when it invested more than a million colons in the battle against the locust.— Moreover, it has experimented with agricultural mechanisation programmes and the sale of chemical fertilisers. However, it does not appear to have achieved up to the present any positive results worthy of mention.

The Centro Nacional de Agronomía, which has invested an average of 500,000 colons a year in research, is trying to improve the varieties of coffee, cereals and pulses, which constitute the basic foodstuffs of

<sup>1/</sup> Ministerio de Agricultura e Industria, Agricultura, Año 1, No. 1.

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the population, and it is trying to solve the serious problem of soil erosion. It has also worked fairly intensely on livestock feeding, particularly with dry coffee pulp which has been found to have a high protein content. All these problems are in an experimental stage and have not as yet had any direct beneficial effect on the technical progress of agricultural production.

On the subject of agricultural credit, during the last five years the State autonomous institutions have followed a restrictive loan policy.

The Banco Central has guided the credit activities of El Salvador's banking system by limiting exaggerated credit expansion, and proventing, as far as possible, the granting of direct credits; short term operations have been directed towards the commercial banks and the Banco Hipotecario. This policy of the Banco Central produced an almost complete stalemate in agricultural production credits in the banking institutions during the last five years, and only a very slight increase in long term credit. Under the peak conditions prevailing and the consequent rise in prices and production costs, it is possible to state that the restrictive credit policy of the Banco Central has not only arrested expansion of banking credit, but has, in view of the increases in levels of prices and wages, led to a relative decline in the assistance given to agriculture by the Banks.

In fact, agricultural production credits of El Salvador's banking institutions—varied between 2.0 and 2.1 million colons between 1945 and 1949, while those of the Central Bank have declined from 0.79 to 0.06 million colons during the same period. The long term credits for agriculture have only risen from 11.6 million colons in 1945 to 13.0 million colons in 1949.2

<sup>1/</sup> All figures given in this paragraph are balances as at 30 June each year.
2/ The figures on long term credit apply only to the Banco Hipotecario, which carried out almost all operations of this type in El Salvador's banking system. In fact, since the creation of the Banco Hipotecario, there has been a displacement of long-term credits from the commercial banks to the Banco Hipotecario. Thus, of 14.2 million colons in long-term loans in force (rural and urban) in 1934, 10.7 million corresponded to commercial banks and 3.5 million to the Banco Hipotecario; on the other hand, in 1939, of 24.6 million colons in credits, 20.3 million corresponded to the Banco Hipotecario and 4.3 millions to the commercial banks.

However, it should be stated that the sector of coffee producers has escaped from the controls of credit expansion attempted by the Banco Central de Reserva. In fact, on 30 September 1949 the coffee growers had loans with the Compañía Salvadoreña de Café with a value of 12.7 million colons, the greater part of which were financed by funds obtained by the Company from private banks in the United States. On 30 September 1945, the credits of the Coffee Company amounted only to 2.1 million colons.

This situation appears to have been revealed-in other non-banking credit sectors, so that the increase in the demand for credit appears to have been satisfied by means of a displacement of borrowers towards sources not controlled by the Central Eank.

The very direct and dominant intervention of the Asociación. Cafetalera of El Salvador in the principal credit institutions (Banco Central de Reserva, Banco Hipotecario of El Salvador and Compañía Salvadoreña de Café) explains why the interests of coffee have always received preferential treatment to the apparent detriment of the interests of crops for domestic consumption.

### CHAPTER II - INDUSTRY

### Introduction

The agricultural resources of El Salvador, if fully utilized, would be sufficient not only to meet the country's food requirements but also to produce much greater quantities of raw materia's for industry. There is still much to be done before optimum production can be achieved. Large areas of land are not fully cultivated which, with adequate irrigation or drainage could produce valuable crops. The soil is the country's fundamental natural resource. Farming based on conservation principles, and a careful selection of industrial crops with a high yield should enable El Salvador to provide much higher standards of living for its population. Agricultural limitations must, however, be borne in mind, particularly with regard to the future expansion of coffee production.

The results of geological surveys to date suggest that mining capacity is small. The geological formations are almost all recent and of volcanic origin. Only along the northern frontier, and particularly in the northwest corner of the country have outcroppings of older formations been found. As a result the known mineral resources are very limited indeed, and it does not appear likely that much can be expected in this field in the immediate future. Gold and silver are the only minerals which are commercially exploited in small quantities 1/. There is no evidence of the existence of petroleum or coal and the potentialities of the existing deposits of lead and iron are not known. With the exception of raw materials for the manufacture of cement, and the extraction of household salt, lime, gold and silver, miring for the time being seems unlikely to prove an important source of raw materials for industrial purposes.

El Salvador's capacity to produce raw materials is limited and

<sup>1/</sup> The amount of exports of non-monetary gold is shown in Table 25.

/consideration should

consideration should therefore be given to the possibility of obtaining certain types of minary goods for processing from neighbouring countries, particularly Honduras and Nicaragua. El Salvador has few forests and small livestock resources, but there is an abundance of labour and relatively cheap electric energy will sonn be available from the plants of Rio Lempa. It would therefore be feasible, for example, for El Salvador to import leather from Nicaragua and timber from Honduras for the development of its shoe industry and the manufacture of certain types of paper and cardboard.

The use of foreign raw materials in industry has declined during the last five years, in spite of the potential importance of these products to the industrial development of all Salvador. Data published by the Dirección General de Estadística and calculations made by the Economic Commission for Latin America, indicate that whereas the quantum of imports of raw materials only increased by 4 per cent between 1945 and 1949, the index of industrial production over the same period has increased much more. This seems to indicate that industrial development in these last few years has been meinly based on raw materials produced within the country. Moreover, it should be noted that the type of raw materials imported up to the present time bears no relation to the possibilities mentioned earlier. Present imports include mainly wheat, tobacco, malt, hops and semi-manufactured materials for the manufacture of shoes, soap, candles and pharmaceutical products.

Apart from the shortage of raw materials of domestic origin, the country's industrial development is seriously hampered by the lack of fuels with a high calorific value, the small number of consumers, low productivity and the small per capita income.

At present, therefore, industry is of relatively little importance in the economy of El Salvador. In 1946 it represented at current prices only 10.6 per cent of the gross national product. The volume of industrial production undoubtedly increased during the following years, though there are no available indications of any improvement in the position of industry. On the other hand, the substantial increases in the volume and prices of agricultural products and the growth of trade and other services suggest that the importance of industry within the whole economy may have diminished somewhat.

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The principal industrial establishments process agricultural products or manufacture light consumer goods. In general, the work is on a small scale, representing insignificant capital investments and (except for the processing of washed coffee) production is for a limited local market, while occasionally, small quantities are exported to neighbouring countries.

Although the use of modern industrial machinery is increasing, many industries are still at the artisan stage. In view of the present stage of industrial development, all machinery and practically all capital goods have to be imported. Industry at present is mainly concentrated near the cities of San Salvador, Santa Ana and San Figurel.

The growth of industrial production in El Salvador has been principally determined by the shortage of manufactured goods on the world market and the lack of transport facilities during the Second World War as well as by the increase in per capito income in recent years. Unlike the situation in other Latin American countries, however, the composition and structure of industry in El Salvador did not change substantially as a result of the war. Although some new industries and equipment have been installed, expansion has been mainly achieved by more intensive use of already existing equipment.

Table 16 and Chart 4 trace the development of the quantum of industrial production during the last five years. The figures cover the movements of some of the more important industries, such as the processing of washed coffee, sugar, vegetable oils, beer, digarettes, textiles and hemsequen products. Other activities of some importance, such as the shoe industry, alcohol and alcoholic beverages, soft drinks, bread, preserves, sweets, hats and palm goods, salt, candles, scap, matches, and furniture have been excluded for lack of data; as well as the new industries, which were established under the influence of the Second Corld for, such as tose for the manufacture of sulphuric acid, phormaceutical products, iron smelting, rubber goods and farm implements. Although the indices are based on data representing possibly wabout 90 per cent of the total value of the industries, they show the development of traditional industrial activities, closely linked with agriculture, rather than the recent industrial trends.

The figures indicate that industry has expanded more rapidly than the population. While the population has increased by some 10 per cent between the two extremes of the period under review, the quantum of industrial production appears to have increased by 35 per cent. Agricultural production at constant prices rose by 45 per cent during the same period.

The Government has employed different methods to encourage industrial development. Import tariffs have been used to protect the production of sugar, flour, cotton textiles, vegetable oils, shoes and hernequen sacks. The practice of exempting new industries from taxes and allowing duty free entry of new machinery and plants, which is fairly common in Central America, has also been followed. Government action has recently been more direct. Certain official institutions and Government, departments, particularly Mejoramiento Social (Social Welfare), the Comisión Ejecutiva Hidroeléctrica del Rio Lempa (Executive Hydro-Electric Commission of Rio Lempa) and the Ministry of Economy have made preliminary surveys for a co-ordinated industrialisation scheme. Mejoramiento Social has also recently installed a textile factory with 38,600 spindles and 800 looms and the Comisión del Rio Lempa is constructing a dam with a final capacity of 75,000 kilowatts.

There is no doubt that industrialisation could provide the population of all Salvador with outlets to offset the country's limited capacity for the production of primary agricultural and mineral products. The development of hydro-electric rescurces, the production of a greater quantity and variety of secondary goods for domestic consumption, and of certain selected industrial articles for sale on the international market, as well as the increased processing of the traditional primary export goods, should help to raise the level of income. The policy of industrial development and the efforts now being made to establish a capital market are therefore steps in the right direction. Nevertheless, the process of capital formation should be accelerated by taking full advantage of the opportunities provided by the substantial improvement in the terms of trade. This would entail increasing the proportion of international expenditure for the purpose of purchasing reproductive goods, and preventing the export of savings formed within the country.

Table 16.	El Salvador:	Index o	f quantu	m of Indus	trial Froduction	a/
			1948 =	: 100		
		1945	1946	1947	1949	
Foodstuffs a Textiles	nd beverages	83 74	80 <b>79</b>	105 108	110 113 h/	
Building mat Hennequen ar		66 108	79 96	69 122	114 104 b/	
Total	oreres .	81	79	105	110	

Sources: Dirección General de Estadística, Anuarios Estadísticos; Thoussy, Economía Agrícula Salvadoreña; Armour Research Foundation, Preliminary Technological Survey for the Industrial Development of El Salvador.

b/ SCIA estimates based on the apparent consumption of raw materials.

### Production and Consumption of energy

The absence of suitable fuels is one of the principal hindrances to the industrial development of El Salvador.

Until now wood has been the principal fuel used, and is practically the only natural resource exploited on a large scale for the production of energy and heat. However, the almost total destruction of the forest resources, together with urban and industrial growth, have led to other sources of energy being used. During recent years, cane bagasse and coffee pulp and shell have been used as substitutes for wood in almost all sugar, unrefined sugar and coffee plantation, and the country's of consumption of petroleum and electric energy has increased considerably.

All petroleum and its derivatives are imported. Up to the present there are no signs of the existence of petroleum in El Salvador. On the other hand, there are no coal resources. There are a few highlite deposits, but the product is of ppor quality and is not considered suitable for combustion. While there is a shortage of fuels with a high calorific value, the potential hydro-electric resources are considerable in comparison with the size of the country; and the development of these resources has scarcely begun.

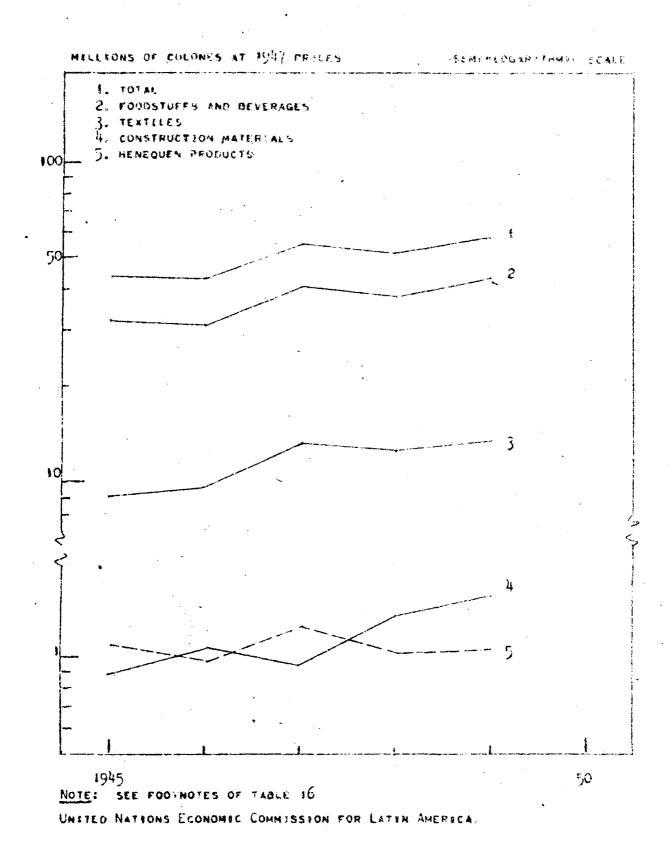
Tables 17 and 18 trace the development of apparent consumption of /fuels and electric

a/ The index numbers presented in this table were calculated on the basis of the value added by industrial processes in the headings indicated.

The 1947 prices were used for weighting.

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fuels and electric power between 1945 and 1949. 1/ The figures indicate that wood is still by far the most important source of energy. Nevertheless, it may be observed that while the consumption of this fuel keeps pace with the increase in the population, consumption of other sources of energy shows an obvious upward trend. The explanation for this lies in the fact that wood is being relegated almost exclusively to household uses. The forests were destroyed by using wood on the railways, in the coffee plants and sugar mills, in refining gold and silver and in the production of lime and household salt, nowever, wood for these ases has already been partially or entirely substituted by other fuels. This process of substitution continues due to the increasing shortage of wood. Even wood for household use has begun to be replaced by other fuels with a higher calorific 2/ value and by electricity, and the processing industries have begun to use petroleum for their boilers to supplement the burners of vegetable residue, and to depend more and more on private generating plants or on public services to obtain energy.

Table 17. El Salvador: Apparent Consumption of Petroleum and Derivatives, Wood and Vegetable Residue (Thousands of metric tons)

Ysar	Petroloum a/	Gasoline	Kerosene	Wood	Vegetable Residues
1945	26	6	2	2.346	125
1946	30	. 11	3	2.396	144
1947	37	15	3	2.425	208
1948	48	20	4	2.440	210
1949	53	23	4	2.457	240

Sources: For the data on petroleum and derivatives, Anuarios Estadísticos de Comercio Exterior, Dirección General de Estadística; for wood and vegetable residues, Department of Economic Studies of the Finistry of Agriculture.

includes petroleum, diesel oil and other fuel oils,

2/ Particularly kerosene and natural petroleum gas sold in a liquid form in high pressure containers.

/Table 18.

In order to make a comparison between the different sources of energy, the data in Table 17 have been reduced to Kilowatt hours of electric equivalent in Table 18. These figures should be taken as general indications rather than as exact measures of the annual consumption of energy, mainly due to the somewhat ample margin of error which must exist in estimates on the consumption of wood and vegetable residues, to the approximations provided by the conversion methods used, and to the fact that the quantities of petroleum and its derivatives which are stored from one year to another are unknown.

Table 18. El Salvador: Total Apparent Consumption of Energy Classified by Origin

(Millions of Kwh of Electric Equivalent)a/

Year	Electricity	Vegetable Residues	Petroleum and derivitives b/	Wood	Total	Ratio 1948 = 100
1945	41	53	78	1.196	1.368	88
1946	43	60 .	101	1,222	1.426	92
1947	45	87	126	1,237	1.495 .	97
1948	47	88	168	1.244	1.547	100
1949	68	<b>1</b> 00 ·	170	1.253	1.591	103

Source: Table 1, Comisión Macional de Electricidad and Comisión Ejecutiva Hidroeléctrica del Rio Lempa.

Table 19. El Salvador: Apparent Consumption of Energy Excluding Wood Energy

(Millions of Kilowatt Hours)

Year	Vegetable Residues	Petroleum <u>a</u> /	Gasol <u>i</u> ne	Kerosene	Electricity	Total	Ratio 1948 = 100
1945	53	58	15	5	41	172	57
1946	<b>6</b> ()	67	27	7	43	204	67
1947	87	, 82	37	7	45	258	85
1948	88	109	49	10	47	. 303	100
1949	100	103	57	10	68	338	112

Source: See Table 18.

Table 19 shows the a parent consumption of energy excluding wood. The figures indicate that, while in the 1945-49 period the increase in the total per capita consumption was only 5 per cent, the increase in the per capita consumption of petroleum derivatives, electricity

Conversions to electric equivalent made by the Economic Commission for Latin America following the methods which appear in Appendix E of Energy Resources of the World (U.S. Department of State, 1949). Excludes petroleum used in the generating plants.

a/ Includes petroloum, diesel oil and other fuel oils. Excludes the quantities of petroloum used in the generating plants.

and veg table residues was 84 per cent. 1/

The rapid increase in the consumption of these fuels (which it is interesting to analyse since they have had the most decided influence on the country's economic development) was due to the substitution of wood already described, to industrial development and to the increase of transport, particularly after the end of the Second world war.

Vegetable residues constitute the principal fuel used in the agricultural processing industries, particularly those of sugar, brown sugar and coffee. Electricity is mainly used for lighting. Petroleum derivatives are consumed mainly by transport. Until 1949 only a very small percentage of petroleum was transformed into electricity. In that year, additional generating plants were built for a little more than 5000 kilowatts, and about 27 million kilowatt hours of electricity were produced with petroleum by public utility companies. 2/

The production of electric energy for public use has developed slowly due to the paucity of natural fuel resources. The principal reason for this seems to lie in the fact that until recently, investments of private capital in this activity were not considered very remunerative in comparison with investments in other enterprises. Moreover, during the Second World Mar and the years which followed, it was difficult to obtain the machinery required to increase production of electric energy.

The majority of the hydro-electric plants now in service were constructed in the period 1916-1924, when the expansion in public

I/ The total consumption of energy per capita in all Salvador has increased, from approximately 698 kwh in 1945 to 735 kwh in 1949. In 1937, according to estimates and electricity consumption, this figure was 670 kwh. The world average for the same year, according to the calculations in Energy Resources of the world was 1675 kwh and the difference between annual per capita consumption in all Salvador and in the most industrialised centres of the world was over 9000 kwh. The calculations in Energy Resources of the world indicate a per capital consumption for all Salvador, in 1937, of only 160 kwh. The difference between BOLA's estimates and those of the U.S'. Department of State lie, principally in the fact that the latter seems to have undergestimated the consumption of wood and omitted from its calculations the consumption of vegetable residues, which constitute the most important fuel for El Salvador's processing industries.

lighting and the manufacture of ice encouraged the formation of central utility services, mainly supplied by hydro-electric plants not dependent on large reservoirs. In recent years, the greater part of the new installed capacity has come from diesel engines and turbo-generators, but with the hydro-electric plants under construction in Rio Lempa this can be considered a provisional trend, possibly motivated by the need to increase the supply of electric power rapidly and to put the service on a normal footing. Because of the great demand for energy and the inadequacy of the existing installations, this service had fallen far below the acceptable levels of efficiency. 1/

The total installed capacity in El Salvador in 1949 was approximately 33,500 kilowatts, of which 18,450 were supplied by the public utility systems and the rest by over 200 private industrial plants, independent one from the other. Almost 75 per cent of the power supplied by these separate plants came from direct-coupled turbo-generators. The principal fuels used by these plants were cane bagasse and coffee pulp and shell. The remaining 25 per cent of the installed capacity in private hands used diesel oil or petroleum. 2/

The large number of individual private plants proves that there was a marked insufficiency in the public services for the production of energy.

In 1949 the 18,450 kilowatts of power in public utilities were distributed between 34 plants, the capacity of the largest being only 5,000 kilowatts, Of the total, 9,125 kilowatts were hydro-electric and 9.325 kilowatts were thermo-electric. The number of consumers, in El Salvador, was 37,146, only 7,456 of whom had a meter service. Industrial consumers were included in this last figure, but it is impossible to determine their exact number or their consumption of energy. In 1949, two small plants for the production of 1,850 kilowatts of hydro-slectric power were under installation, 3/

The situation has changed in the last five years, from the time when hydro-electric installations predominated. Of a total of 11,200

<sup>1/</sup> H. R. Faison, op. cit., page 49 2/ H. R. Faison, op. cit., page 49 3/ Harza Engineering Co., Report on Chorrera del Guayabo.

kilowatts of power installed in public utilities in 1945, 8,870 kilowatts were hydraulic and 2,330 thermic.

The central and western regions of the country are now served, (though not adequately) by an inter-connected system with transmission lines for 35, 22 and 13 kilovolts. This is not the case in the eastern region, which has seven public utility systems which are not yet interconnected.

El Salvador must necessarily take its energy resources into account in planning its programmes of industrial development. The production of energy using demestic elements is confined at least for the present, to the possibilities of electrification and to the energy which could be produced by using the agricultural or industrial residues. The value of cane bagasse and coffee pulp as industrial raw material and cattle fodder, respectively, plus the important outlay of foreign exchange required for supplies of fuel with high heating value (see Table 20), make it even more urgently necessary for the country to make substantial increases in the production of hydro-electric energy.

In 1939 the Comisión Nacional de Electricidad (National Electricity Commission) 1/ began to carry out surveys on the Rio Lempa at a point known as La Pintada, which were continued by the Comisión Djacutiva Hidroeléctrica del Rio Lempa (CLE) after its inception in 1945. On the basis of these surveys and the study of the river flow over a period of twenty years, the Commission made its calculations for predicting variations in water levels at the critical points.

From the sites surveyed, CEL chose Cherrera del Guayabr for the construction of the first important dam, with a capacity of 75,000 kilowatts. In addition to the Guayabo reservoir, of 158 million cubic metres, there were projects for storing and controlling the water in the Guija Lake, which will provide an additional 200 million cubic metres.

<sup>1/</sup> Government body founded in 1936 to administer the laws regulating the production and distribution of electricity for public service.

Table 20. El Salvador: Value of Imports of Fuels
(Thousands of current colons)

Year	Petroleum	Gasoline	Kernsene	Total	% of General Imports	ļ
1945	788	521	114	1,423	4.2	
1946	817	825	157	1,799	3.4	
1947	1,396	1,450	299	3,145	3.4	
1948	2,381	2,305	385	5.071	4.8	
1949	2,667	2,711	443	5,821	5.9	

Source: Anuarios Estadísticos de Comercio Exterior, Dirección General de Estadística.

a/ Includes crude petroleum, diesel oil and other fuel oils.

The first stage of the plans and budgets of expanditure already approved include an initial development in the Chorrera del Guayabo for 30,000 kilowatts, at a total cost of 44,35 million colons, 1/

It is estimated that this installation will produce, with a 50 per cent load factor, an annual average of net energy for sale in San Salvador, of 182 million kilowatt hours, of which 132 million kilowatt hours will be steady power and the rest will be produced during the rainy season. For this stage of the work two high tension lines are planned, one of 115 kilovolts, to connect El Guayabo with San Salvador and the western and central electric network, and another of 35 kilovolts to link El Guayabo to San Miguel and the eastern network which has been planned.

The hydro-electric development of the Lempa has been financed by means of a loan from the International Bank of Reconstruction and Development for 31.25 million colons and antirternal loan for 13.1 million colons, which will cover the cost of the project.

According to calculations of CEL, the new plant will begin to produce in 1952, and by 1956, all the energy obtainable from the first stage of development of El Guayabo will have been sold. It will then be possible to commence expansion until the maximum capacity of 75,000 kilowatts is reached.

<sup>1/</sup> This figure includes the cost of the dam, installation, transmission lines and the work of storing and regulating the volume of the Guija Lake.

The energy of the Lumpa plants will be distributed by the CEI through the private companies already in existence, through the municipal corporations and consum rs' cooperatives.

On the basis of calculations made up to the present, it is possible to predict a production cost of 0.0175 colons per kilowatt hour delivered in San Salvador. At 1949 prices, a kilowatt hour produced with diesel oil cost 0.0476 colons, while a kilowatt hour produced with steam plants cost 0.0253 colons, excluding administrative costs.

The present load per capita in El Salvador is 0.01 kilowatts, compared with 0.08 in Urugaay, 0.05 in Purto Rico, 9.05 in Mexico and 0.30 in the United States. By adding 75,000 kilowatts to the Guayabo installations (at full capacity) this per capita average would only be raised to 0.035 kilowatts.

### **Markets**

Except for the processing of washed coffee, all the other industries of El Salvador necessarily depend on domestic demand as their main incentive to expand. This market is very limited, not only by the number of consumers but also by the extent of their purchasing power. The national per capita income seems to have risen from 200 colons (80 dollars) to almost 325 colons (130 dollars) between 1945 and 1949 (see Table 23) and the increases in coffee prices have undoubtedly meant an increase in real income insofar as they have signified an improvement in the terms of trade. Nevertheless, recent estimates indicate that of a total population of two million inhabitants, only 10 per cent has a purchasing power sufficient to have any appreciable bearing on the development of industrial production.

In 1946, 90 per cent of families in El Salvador received incomes of less than 1200 colons (480 dollars). Moreover, these families were mainly rural, so that a large part of their income was received in kind and not in money (see Table 21). The urban population appears to have slightly higher incomes, since the distribution of family incomes of city dwellers in 1949 indicates that 20 per cent of the families had incomes exceeding 1440 colons (576 dollars - see Table 22).

Industrial development and the size of the domestic market are closely tied to these standards of living. Only an improvement in the purchasing /power of the

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power of the mass of the population, which at present only constitutes, a group of potential consumers, could lead to intensified industrial development on a solid commercial basis.

The vicious circle inherent in this situation can be broken through an increased productivity, that is, through improvements in technical skill.

The chapter on agriculture indicated the low standards of productivity which prevail in that sector of the economy and the efforts made in recent years to improve them. As far as industry is concerned, no specific data on productivity is available; however, it may be supposed that the standard is almost as low as in agriculture, since most of the equipment and methods used are antiquated, and a large amount of labour is employed, while the unsatisfactory competitive conditions are another unfavourable factor. On the other hand, cartain measures were taken in earlier years which hampered industrial progress, restraining the efforts to achieve increases in the levels of productivity. These measures included examples of the prohibition of the use of machinary in the shoe industry, and State protection for handwoven textiles. 1/

There is plenty of available labour in El Salvador, and this fact, combined with the country's geographic position in the Central American area and the present opportunities for capital formation offered by the high coffee prices and the improvement of the terms of trade, suggests that El Salvador might also produce a certain number of articles for the international market, particularly directed towards neighbouring countries.

The standards of living in the region are similar to those existing in El Salvador. Thus, the potential foreign market of the easily accessible border regions might also be small; novertheless, the possibilities of El Salvador's industrial development would be considerably expanded by taking full advantage of such markets.

<sup>1/</sup> In cases where these can be made by machine.

Table 21. E	l Salvador:	Catugories o	f Family Income.	, 1946
	· · · · · · · · · · · · · · · · · · ·	(In Colons	per Family)	
Annual income	Average income	No, of families	No of	% of total population
Less than 600 600 - 1,200 1,200 - 2,400 2,400 - 3,600 Cver 3,600	584.6 877.5 1,749.5 2,911.4 12,528.0	240,000 120,000 20,000 10,000	1,200,000 600,000 100,000 50,000 50,000	60.0 30.0 5.0 2.5. 2.5
Structurals: sin the are considerate adjugate annihilation of	1,087.5	400,000	2,000,000	100,0

Source: Adapted by ECTA from Henry C. Wallich and J. Adler, <u>Froyecciones</u>
económicas de las <u>finanzas cúblicas</u>, <u>Un Estudio Experimental en</u>
El Salvador, Fondo de Bultura Económica, 1949.

Table 22. El Salvador: Distribution of the Incomes of Urban Families, 19/19.

(Colons per Family)

Annual income	Number of families	Number of persons	f or Urban Population
Less than 600	15.000	75,000	10
601 <b>–</b> 1960	90,000	450,000	60
960 - 1,440	15,000	75,000	10
1,440 - 3,000	15,000	75,000	10
3,000 - 6,000	7 500	37,500	5
over 6,000	7,500	37,500	5
Market Market State State Control of the State S	150.000	750,000	100

Source: Fublic Administration Service, Report on Housing in El Salvador, 1949.

## Capital formation

The possibility of making new capital investments in El Salvador is influenced by the low productivity and small per capital income, factors which in turn are closely related to the low degree of existing capital formation. Nevertheless, to enable the rate of development to be increased, the country needs heavy investments in all sectors of its economy.

It is clearly urgently necessary to raise the rate of investment to /the maximum.

the maximum. Apart from the prevailing low income levels, the peculiar conditions of El Salvador's economy, particularly the shortage of new farm lands and the absence of fuels, impose certain conditions for achieving a faster rate of development. Such development would necessarily entail the tying up of considerable amounts of long-term capital in projects for preparing lands by means of irrigation, drainage and soil conservation schemes, in the construction of hydro-electric installations and in the mechanisation of existing farming and industrial processes, or in the introduction of others which would provide new sources of activity.

In spite of present limitations for capital formation, the country has been developing with its own resources in recent years. Foreign investments have remained at a very low level in spite of the favourable conditions created by the free exchange market and by the stability of the exchange since 1934. This may possibly be due to the absence of large min ral resources into the increage of lands suitable for growing bananas, which have up to now been the principal incentives for the investment of foreign capital in neighbouring regions. On the other hand, the domestic market is too small to encourage foreign investment in industries which cater for it, while the delay in servicing the foreign debt at the end of the 'thirties may also have discouraged foreign investors.

There is insufficient information available to estimate the real size of the not investments made in the country during the last five years. In particular, there are no data relating to withdrawals of investments and the replacement rate of fixed capital. Nevertheless, based on the occasional figures available, it has been estimated that the rate of gross investments made within and outside the country has varied possibly between 10 and 16 per cent between 1945 and 1949, increasing during the period mentioned until it reached its maximum in the year 1949 (see Table 23).

Bearing in mind the increase in the population, the gross rate of investment would be very low for the country, particularly as there is a negative movement of capital in the balance of payments and that such movement tends to be more pronounced during those years when the rate of investment has been highest. This can be proved by comparing the figures in tables 23 and 25a.

/Table 23.

		-			- 1	
Table 23. El Salvador:	Esti:	mate of t	he R to of	Cross	Investment a	/
	1945	1946	1947	1948	1949	
Balance of Payments, Surplus in current account	15.7	8.5	. 7.i	3,9	38,9	
Imports of capital goods	7.1	12.0	25.5	32,1	28,1	
Value added to capital goods	2,5	4.2	8.9	11,2	9.8	
Value added by building	12.6	15.0	21.5	31.7	33.0	
Sowings of coffee and Movements of cattle stocks	0,9	1.0	3.8	7.0	4.0	
Total of gross internal and foreign investments	38.8	40.7	66.8	85.9	113.8	
Gross National Income	398.0	435.0	590.0	661.0	705.0	
Rate of gross investment	9.7	9.4	11.3	13.0	16,1	

Source: Economic Commission for Latin America

On the other hand, there is a very marked tendency to invest in real estate or stocks of export businesses. There is therefore an apparent reluctance to invist money in enterprises of a more risky nature, among which might be included new industries or works necessary for increasing the productivity of those already in existence. At present El Salvador is an exporter of capital. At the same time investments are not always made in the economic sectors most suitable for increasing the rate of development. In view of this, and of the situation described at the beginning of the paragraph, the necessary incentives should be provided to encourage domestic capital to accept the somewhat unfamiliar risks offered /by new enterprises.

The total of gross internal and foreign investments has been estimated by ECLA on the basis of the official data of the Balance of Phyments, imports of capital goods, increases in cattle stocks and budget surpluses, and the sporadic figures available on the value added by construction and new coffee plantations. ECLA also estimates that 45 per cent of the cif value of capital goods (excluding building materials) is added to imports within the country.

b/ For 1945 and 1946 the figures on the gross national income were taken from H.C. Fallich and J. H. Adler, Proyectiones economics de las finenzes públicas: Un estudio exparimental en al Salvador. (Fondo de Cultura Economica 1949). For the remaining years, ECLA estimates made on the basis of available data on production of goods and State expenditure.

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by new enterprises.

In recent years the only bond subscription of any importance has been that for guaranteed amortizable bonds of the Comisión Ejecutiva Piarceléctrica del Rio Lempa.

The total issue was 13.1 million colons; it was subscribed very rapidly and is being paid in the manner shown in table 24. These funds will be invested in local labour and materials to be used in constructing the dam of Chorrera del Guayabo. The bonds expire on 15 January 1975, the Comisión Ejecutiva Hidroeléctrica del Rio Lempa is directly responsible for them, and payment of interests and capital, by the Republic is unconditionally guaranteed; they are exempt from all present or future taxes, pay 5 per cent annual interest, payable every six months, will be amortized by lot after 15 July 1954, and may be totally redeemed at the option of the Comisión Hidroeléctrica del Rio Lempa at 15 days' notice.

This shows that the bonds offer very great advantages. In fact, this is a type of investment without risks. Nevertheless, investments by private individuals have been relatively small. This effort, however, enjoys the unquestionable merit of having been the first of its kind in a money market which is not used to these transactions. It will be interesting for the country to see whether in future it will be possible to maintain a constant flow of capital for productive investment towards those sectors of the economy which most require it.

The substantial improvement in the terms of trade and in the capacity to import which have taken place during the last five years, the good coffee harvests and the prospects that the high coffee prices on the world market will continue, give the country a very tangible opportunity for raising its rate of capital formation. As long as these favourable conditions prevail, the economy would benefit considerably from any efforts designed to give preference to imports of reproductive goods, to increase the percentage of Government expenditure assigned to capital formation and to give private domestic capital all the incentives necessary to prevent its emigration.

Table 24. El Salvador:

Distribution of Heldings and Denominations of Guaranteed Amortizable 5 per cent Bonds by the Comisión Ejecutiva Hidroeléctrica del Rio Lempa a/

(Thousands of colons)

	Amount of bonds	Bonds paid	for
	subscribed	Denomination	Amount
Government	4,000.0	1,000	4,000.0
State institutions	1,500.0		_
Commercial Banks	2,885,0	1,000	2,885.0
Limited Companies	450.0	1,000	450.0
Private individuals	2,492.0.	1,000	2,008,0
Private individuals	📥	500	94.0
Private individuals	· ·	100	66.9
Central Bank	1,772,9	500	2.0
Central Bank		100	0,2
★ 3.00	13,100.C	:	9,506.1

Source: Banco Central de Reserva of 21 Salvador

Total issue 13.1 million colons. The table shows the state of placement at 30 January 1951.

### CHAPTER III

#### FOREIGN TRADE

Foreign trade has in recent years represented only about 15 per cent of the gross national product, though its qualitative importance to the country's economy is much greater. In fact, the small degree of industrialisation and economic diversification which exist in El Salvador implies that the majority of manufactured goods, particularly durable consumer goods and capital goods, have to be obtained outside the country and paid for with exports. The fact that the economic interests represented by the organised group of coffee producers are identified with foreign trade, makes that trade all the more important within the economy of El Salvador. 2/

## Characteristics of the Export Trade

The information on international receipts analysed in Table 25, indicates that about 80 per cent of the foreign exchange obtained each year is derived from exports of coffee. This makes El Salvador a one-crop exporter and implies that, in the final instance, the state of its economy is in direct ratio to the volume and price of the coffee harvest.

The slight agricultural and industrial diversification which took place between the Second World War and the present time has somewhat lessened the overwhelming dependence of the economy on coffee. Exports of other products, which only represented about 6.0 per cent of the total in 1937-38, rose to 19.5 per cent in 1948. The principal new 1/H. Wallich and J. Adler, Proyecciones Economicas de las Finanzas, un estudio experimental en El Salvador, Fondo de Cultura Economica, 1949.

<sup>2/</sup> Chapter I of this report deals with the control exercised by these coffee planters' associations on the coffee company and on the Banco Central; on the other hand, the majority of the principal producers are in turn coffee exporters.

Table 25. El Salvador: Balance of Payments 1945 - 1949 Receipts
(In thousands of colons)

	1945	1946	1947	1948.	1949
Transactions in current account:  1. Marchandise 1/. (Export of coffee) (export of other goods)	52,421 (46,733) (5,688)		99,135 (84,253)		140,526 (119,002)
2. Net exports of non-monetagold  3. Travelling expenses b/  4. Dividends and interests of covernment expenses d/  6. Donations e/  7. Other items in current account including insurance f/	616 687 250 250 1,032		824 683	3,668 585	1,483 4,603 832 834 278
lovements of capital (net)	- <del>-</del>			-	
Changes in the gold, monetar and foreign exchange resignert)		711	10,430	_	_
Errors or omissions g/	405	-	_		. <del></del>

Source: Balance of Payments of El Salvador, Banco Central de Reserva.

- b/ For the years prior to 1947 the figures are based on estimates for tourist expenses, from 1947 on they include the total for traveller's cheques, letters of credit and foreign currencies purchased by local banks to meet travelling expenses.
- c/ Profits obtained from investments by local banks in foreign shares, and intrests on foreign debt bonds.
- d/ Expenses of foreign missions and consulates accredited to the country.
- e/ Based principally on an estimate of private donations and includes government receipts from abroad in the form of donations from the United States and other similar items.
- f/ Indemnities paid by foreign companies for life insurance and fire in El Salvador. This same heading also includes remittances of savings by the workers, pensions, administrative expenses of foreign companies, compassions, etc.
- g/ Residue of other items.

a/ Exports fob.

Table 25a. El Salvado	r: <u>Bal</u>	ance of Pa	yments 194	+5-1949 Dis	bursements	1
	(	(In thousa	nds of co	lons)		
•	1945	1946	1947	1948	1949	
Transactions in current			,			
account:  1. Merchandise <u>a/</u> (Imports of coffee)	42,015 33,751	•	104,963 91,860			
(Imports of other goods 2. Net imports of non-mon		(52,125)	(91,860)	(103,626)	(98,190)	
gold  3. Travelling expenses b/ 4. Dividends and interest		4,907	5,217	7,511	7,636	
c/ 5. Government expenses d/ 6. Donations e/ 7. Other items in current account including	60	2,053 1,108 70	2,986 1,915 91	3,560 1,578	3,551 2,338 50	
insurance <u>f</u> /	2,145	2,060	2,894	3,400	3,500	
Movements of capital (nut	) 7,020	8,761	15,088	2,092	27,140	
Changes in gold monetary foreign exchange reserve						
(net)	9,095	· -	<b>-</b>	1,148	6,561	
Errors or omissions g/	-	427 <sup>′</sup>	2,398	615	5,238	

Source: Balance of Payments of El Salvador, Banco Central de Reserva.

- b/ For the years prior to 1947 the figures are based on estimates for tourist expenses; from 1947 on, they include the total for travellers cheques, letters of credit and foreign currency sold by local banks to meet travelling expenses, as well as fares sold by the aviation companies.
- c/ Inter sts paid on the foreign debt, as well as dividends and profits remitted to companies and residents abroad.
- d/ Expenses for maintaining the foreign survice, missions, scholarships etc.
- e/ Based principally on an estimate of private donations.
- f/ Premiums paid to foreign life insurance and fire insurance companies operating in El Salvador. This item also includes communication expenses, subscriptions, tickets for foreign lotteries, etc.
- g/ Residue of other items.

a/ Imports cif.

export items are vegetable oils, cotton and cotton textiles, sugar and rice; though coffee still dominates foreign trade and will probably continue to do so for a long time.

During the last few years the country sold over 70 per cent of its exportable products to the United States, and is therefore almost entirely dependent on a single market for the foreign exchange required to finance its imports. The obvious risks of an export trade based on the sale of one single product to one single market, have been partly offset in the case of El Salvador by certain aspects of the market for mild coffees in the United States, so that the country has had little difficulty in selling the whole of its coffee harvest.

## Characteristics of the Import Trade

The import trade mainly covers manufactured products. Imports of capital goods have increased remarkably during the last few years. On the other hand, present imports of textiles and foodstuffs, which could to a large extent be replaced by domestic products, indicate that the country could, by utilizing the capacity to import it has enjoyed during the last five years, increase its imports of capital goods by about 80 per cent. This feature of the import trade partly offsets the limitations in increasing coffee exports and seems to indicate that El Salvador has real opportunities to increase its rate of capital formation and achieve increases in real income. The fact that El Salvador could become almost self-sufficient as regards basic foodstuffs and clothing, and that imports could be increasingly directed towards capital goods, to the benefit of industrialisation, constitutes only a phase in the solution of the country's economic development problem. The limitation of the local market might soon put a brake to very pronounced changes in this direction and from this point of view El Salvador has been wise in trying to bring its market into line with that of other Central American countries.

<sup>1/</sup> At least for a period sufficiently long to permit substantial increases in existing capital, with perhaps the very important exception of wheat.

Table 26. El Salvador: Composition of Imports
(Percentages of total value at 1948 prices)

and the second s	1945	1946	1947	1948	1949
Capital goods Textiles Foodstuffs and tobacco Chemical products Fuels and lubricants Durable consumer goods Paper and its manufactures Furs and leathers Non-edible oils and fats Rubber and its manufactures Stones, earths and glass Metals and appliances Timber and its manufactures Sundries	26,75 21,68 18,99 12,99 5,24 0,43 3,10 3,12 11,78 1,08 1,03 0,79 0,27 2,75	27.80 22,32 12,73 13,26 5.29 2.33 3,63 1,05 1,67 2,08 1,62 1,68 0,29 4,25	30.53 23,37 12,16 10,96 4,74 4,94 2.73 0,66 1,28 2,23 1,23 1,51 0,43 3.23	31,51 20,48 13,10 7,74 5,52 5,98 3,31 1,02 1,18 1.80 1,84 1,80 6.30 4.35	30.10 20.17 13,36 10,14 5,97 6.13 2,95 1,16 1,14 1,37 1,04 1,88 0.44 4,15
Total	100.00	100,00	100,00	100,00	100.00

Source: Dirección General de Estadística, Anuarios Estadísticos de Comercio Exterior.

## Geographic Distribution of Foreign Trade

When trade with Europe was interrupted by the war, El Salvador's imports and exports were diverted towards the United States. Even before the war there had, however, been a change in the direction of the country's foreign trade. Europe (particularly Germany and the Scandinavian countries) had, prior to 1934, been the most important purchaser and supplier of goods. According to figures of the Dirección General de Estadística, Europe absorbed in 1934, 68 per cent of exports and supplied 36 per cent of imports. By 1935-39, the United States had already purchased 59 per cent of exports and sold 43 per cent of imports. During the war the change in the direction of El Salvador's trade became complete, and in the following years, the United States bought up to 85 per cent of the country's exportable products and supplied up to 78 per cent of the total imports. (See Tables 27 and 28).

Table 27. El Salvador: Exports Classified by Destination (Percentage distribution of the current values)

er in destructive and a contractive of the contractive principal and guardiag groups (a), productive and contractive and contr	Average 1935-39	1945	1946	1947	1948	1949
Value of exports a/-	30,1	53,3	65,4	100.1	114,0	137,4
Percentage consigned to:	50	o.e	, מח	<b>7</b> 0	nn.	du
United States Canada	<i>5</i> 8 1	85 6	71	78 L	77 ·	84 2
Honduras	2	3	· ģ	4	$\tilde{4}$	3.
Guatemala	1	2	4	3	5	3
Other Latin American countries	<del>-</del>	3	4	5	5	3
Germany	12	-	**	-	-	-
Denmark, Norway and Sweden Other European countries	13 10	ī	3	. 4	7	<del>-</del> 5 :
Africa, Asia and Oceania	1	-		-	_	-

Source: Dirección General de Estadística, Anuarios de Comercio Exterior a/ Billions of colons.

Table 28: El Salvador: Imports Classified by Origin
(Percentage distribution of the current values)

	Average 1935-39	1945	1946	1947	1948	1949
Value of imports <u>a</u> /	23,0	, 33,8	52,8	92,3	103,7	98.7
Percentage obtained from: United States Canada Honduras Guatemala Other Latin American countries	43 1 2 1	68 3 6 1	71 3 5 1 12	78 2 3 1	73 3 5 -	72 3 4
Germany Great Britain Other European countries Asia, Africa and Oceania	26 10 13 1	2 3 -	3 5 -	- 3 7 -	13	1 3 12

Source: Dirección General de Estadística, Anuarios de Comercio Exterior.

a/ Millions of colons.

/The war also expanded '

The war also expanded other markets on the American continent for El Salvador, and at present exports to Canada, Honduras, Guatemala and the other Latin American countries are almost three times as great as during the 1935-39 period. Imports from these countries have also increased considerably and were particularly important in 1945 and 1946. It is interesting to observe that, whereas the other European countries have by now recovered their pre-war positions on El Salvador's market, Great Britain has not succeeded in selling as great a proportion as in 1935-39. German products had only just begun to make their reappearance in 1949.

As a result in the change in geographic distribution, El Salvador has not been affected by the difficulties prevailing in Europe with regard to exchange and international payments. El Salvador would undoubtedly have been in a difficult position had it not been able to divert its trade towards the United States. There are certain risks in the present position, however, since El Salvador now depends on the sale of one single product, with a highly unstable price, to one single market, though because of the nature of the North American market these risks are not so great as they at first appear.

El Salvador is one of the principal suppliers of mild coffee, which is used in the United States for mixing with the strong Brazilian coffees. There is generally a fairly elastic demand for coffees of the Salvadorean type because of changes in the price ratio; in other words, a drop in the price of mild coffee in relation to that for strong coffee, greatly increases the saleable volume of the former. On the other hand, it has up to the present been possible to place coffee freely on the North American market, since there were no domestic competitors and therefore no vested interests to exercise pressure for obtaining tariff protection.

Some of the structural aspects of El Salvador's economy help to lessen the effects of the cyclical downswings.

It is probable that the economy of El Salvador could in periods of contraction, revert to almost subsistence levels without mass unemployment taking place. This might be possible due to: the practical self-sufficiency of the country as regards basic foodstuffs; the fact that a large part of its imports could either be replaced by domestic

/products or

products or deferred; and the system of coffee production which would enable the peons to grow food crops on small allotments. This situation might be changed in the future if El Salvador should reach a more advanced stage of industrialisation.

## Volume of Foreign Trade, Terms of Trade and Capacity to Import

The country's volume of exports has increased considerably during the last five years. The index rose by 39 per cent between 1945 and 1949, mainly due to increases in coffee exports, vegetable oils and sugar. At current prices exports have almost trabled during this period.

El Salvador's imports have traditionally followed the movement of exports, though due to difficulties in obtaining manufactured products during the war and the years immediately following it, the increase in imports was delayed. This enabled the country to accumulate heavy foreign exchange reserves. Between 1945 and 1948 the quantum of imports doubled, but though exports continued to increase between 1948 and 1949, imports remained almost at the same level. This was possibly because the demand accumulated during the war had by this time been fully supplied.

On the other hand export prices, particularly those for coffee, have risen much more rapidly than the prices of imported articles, while the highest coffee prices came at a time (1949 and 1950) when the prices of manufactured goods purchased by El Salvador suffered a slight drop.

Under these conditions, the terms of trade and the capacity to import, which favoured the country since 1942, have continued to improve and at present remain at very high levels. Thus the terms of trade in 1949 were 40 per cent more favourable than in 1945 and the capacity to import almost doubled during the same period.

The indices analysed here show that El Salvador's economy is at a stage of very considerable expansion. The country could use the real profits at present derived from exports to accelerate its development

<sup>1/</sup> When exports begin their upward movement, imports increase, but imports as a rule take longer to reach the same proportionate increase.

<sup>- /</sup>particularly by

particularly by increasing the rate of capital formation.

Table 29. El Salvador: Quantum of imports and exports, terms of trade and capacity to import.

(Index numbers, 1948 = 100)

	1945	1946	1947	1949
Imports Exports Terms of trade Capacity to import	47,0	63,3	95.4	100.8
	82,6	72:.0	94.7	115,2
	80,6	95,7	99.1	112.9
	66.6	68,9	93,8	130.1

Source: Dirección General de Estadística, Anuarios Estadísticos de Comercio Exterior.

Table 30. El Salvador: Indices of Prices of Imports and Exports
(1948 = 100)

	Prices of imports	Prices of Exports
1945	68,9	55.5
1946	78,6	75,2
1947	92,8	92,0
1948	100,0	100,0
1949	93,0	105,0

Source: Dirección General de Estadística, Anuarios Estadísticos de Comercio Exterior.

Future prospects for El Salvador's international trade are apparently good. The coffee production of Brazil which determines the world market price of the product will not recover its old levels for some time,  $\frac{1}{s}$  so that possibly the prices of Salvadorean coffee will remain high. However, the terms of trade would be adversely affected

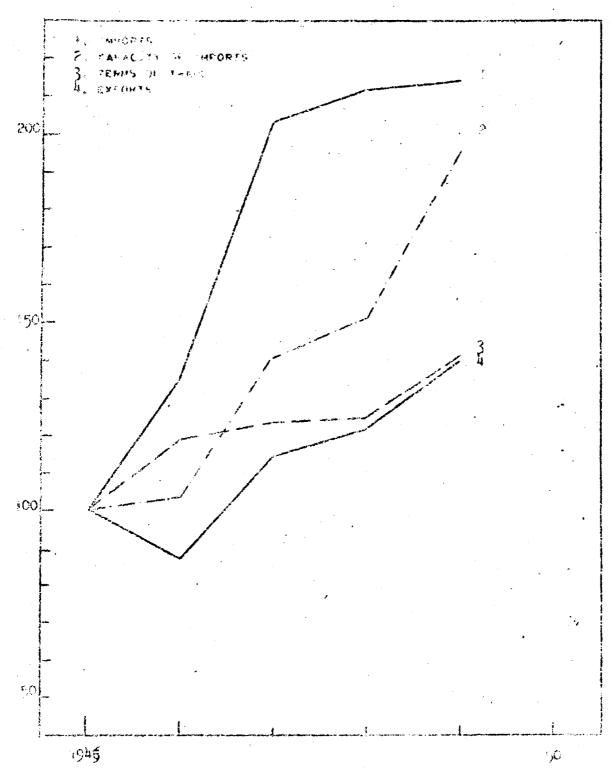
/at any time

<sup>1/</sup> See Recent Trends and Events in Brazilian Economy, ECLA, 1951

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QUANTUM OF MEDICA AND EXPORTS, STRING OF TRADE AND CAMAL OF OF IMPORTS

(1945 g. 182)



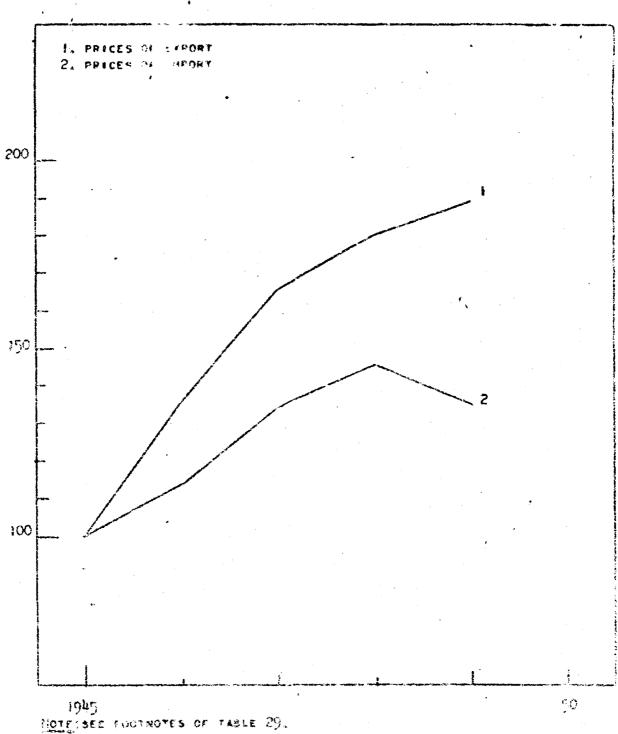
NOTE: SEE FOUTHOMES OF TABLE 25.

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# NICKES OF IMPORT AND EXPORT PRICES.

1945 = 100



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at any time if the prices of United States manufactured goods should rise. The present terms of trade of coffee enable the country to continue reducing its dependence on this article through economic diversification for domestic consumption and an increase in exports of other items.

## The Balance of Payments

During the last five years, El Salvador's balance of payments has shown a surplus in current account and a difficit in capital account. The structure has not changed much in relation to the prower period and mirchandiss continues to be the most important item in current account, both as regards receipts and expenditure.

Surpluses in current account are the result of a favourable trade balance. Deficits, which usually occur in other items of current account, are relatively small and have no great effect on the balance. The column "Other items in current account, including insurance" which usually showed a debit balance before the war, shows a credit balance since 1945, because of the increase in remittances of Salvadorean workers resident abroad, the increase in administrative costs of the foreign companies operating within the country, and the greater commissions of Salvadorean agents representing foreign companies.

The deficits in capital transactions are partly due to the fact that receipts from direct investments or other private sources have been relatively smaller than the outflow of short-term private capital. While the advantages inherent in a free exchange market and a stable currency have attracted short-term banking credit, long-term capital has not entered the country in any appreciable quantity in recent years. This may possibly be due to the shortage of natural resources and the small size of the market, which discourages foreign investment in industries catering for domistic consumption. On the other hand, the absence of exchange restrictions has permitted an almost continual outflow of short term capital in the form of funds kept abroad by the coffee exporters, and increases in the value hald abroad by the Coffee Company and other institutions. There are no exact data available on the amount of Salvadorean invistment outside the country, but the Banco Central de Rusurva considers that all the known figures are much too /consurvative. It would

conservative. It would appear that most of the profit of private capital invested abroad is capitalised and does not enter the country. A large part of the funds retained in the United States by the coffee exporters is in the form of sight bank deposits, so that they cannot be classified as Salvadorean investments. On the other hand, these sums could, given sufficient incentive, eventually be repatriated for investment within the country, since the small scale of economic development of El Salvador suggests that there would be a greater marginal profit on capital than can usually be obtained in the United States.

## Trade Policy

In Central America various attempts have been made to establish a customs union. They have all failed before they could be put into effect or else the results been short-lived. El Salvador and Honduras have proved to be the exception, having since 1918 observed a free trade treaty for all products of national origin, excluding coffee, leathers and digarettes. A similar agreement with Guatemala lapsed in 1943, after a trial period of two years. This lapse was apparently due to the fact that it caused a substantial drop in customs receipts.

However, El Salvador has since 1932 maintained the Central American Tariff which applies preferential import duties to products originating in neighbouring countries. It also has a commercial treaty with the United States, negotiated in accordance with the United States. Reciprocal Trade Agreement Act, as well as most-favoured nation clauses with Mexico, Switzerland, Canada and the United Kingdom. Moreover, a trade agreement with Switzerland is in force, as well as trade and navigation treaties with the Low Countries and Norway.

El Salvador has used the customs thriff to protect the production for processing of certain articles, particularly sugar, cotton, cotton, textiles, shoes, vegetable oils, flour and hennequen sacks. On the other hand, it has followed the practice, which does not appear to be systematic, of exempting from customs duties machinery for new industries.

It has often been said that the economic problems of the Central American countries could best be solved by considering them as a single economic unit, and by planning their development around that unit. The political and nationalist factors which at present hinder the fulfillment

of such a plan make it necessary to sign mutual trade treaties on an individual basis. A broad plan for the economic development of El Salvador should take into account not only the reserves of natural rescurces of the neighbouring countries and their requirements of manufactured products (of the kind with which El Salvador could compete on the international market) but also the expansion of the Central American markets by means of suitable trade treaties.