

SUPPORTING REPORT

C : SOCIO-ECONOMY

Supporting Report C: Socio-Economy

Table of Contents

C: SOCIO-ECONOMY	C.1
1. INTRODUCTION	C.1
2. POPULATION	C.1
2.1 Census Population	C.1
2.2 Population Projection	C.4
3. GROSS DOMESTIC PRODUCT (GDP)	C.9
3.1 Past Trend of GDP	C.9
3.2 Future Trend of GDP	C.9
3.3 Agriculture GDP	C.11
4. EXTERNAL TRADE AND PAYMENTS	C.12
4.1 Export and Import	C.12
4.2 Balance of External Payments	C.13
5. BUDGET OF THE CENTRAL GOVERNMENT	C.13
5.1 Revenue and Expenditures	C.13
5.2 Sectorial Distribution of Public Investment	C.14
6. EXTERNAL DEBT AND AID	C.14
6.1 External Debt	C.14
6.2 External Aid	C.15
7. EMPLOYMENT STRUCTURE AND WAGE LEVEL	C.17
7.1 Employment Structure	C.17
7.2 Wage Level	C.18
8. OTHER ECONOMIC INDICATORS	C.18

List of Tables and Figures in Supporting Report C

Table C.2.1	Census Population of El Salvador, Region and Department	C.T.1
Table C.2.2	Average Annual Growth Rate of Population for intercensal Periods of El Salvador, Region and Department	C.T.2
Table C.2.3	Area, Population and Number of Households in the Study Area by Department	C.T.3
Table C.2.4	Population by Municipality in the Study Area.....	C.T.4
Table C.2.5	Population of Municipalities in the Flood Prone Area	C.T.6
Table C.2.6	Population Projection of El Salvador and Departments.....	C.T.7
Table C.2.7	Population Projection of Departments and Municipalities in the Study Area	C.T.8
Table C.2.8	Population Projection of Cantons in Flood Prone Area.....	C.T.10
Table C.2.9	Gross Domestic Product (GDP), 1990 - 1995.....	C.T.11
Table C.2.10	Gross Domestic Product by Economic Activity (at Current Prices).....	C.T.12
Table C.2.11	Gross Domestic Product by Economic Activity (at 1990 Constant Prices)	C.T.13
Table C.2.12	Export Structure (FOB) of El Salvador, 1993 - 1995	C.T.14
Table C.2.13	Import Structure (CIF) of El Salvador, 1993 - 1995	C.T.15
Table C.2.14	Balance of International Payments of El Salvador, 1990 - 1994.....	C.T.16
Table C.2.15	Annual Budgets of the Central Government	C.T.17
Table C.2.16	Breakdown of Revenue of the Central Government.....	C.T.17
Table C.2.17	Sectorial Distribution of Public Investment	C.T.18
Table C.2.18	Foreign-exchange Reserves and External Debt of El Salvador.....	C.T.19

Table C.2.19	Net Receipts of International Financial Assistance for El Salvador -----	C.T.20
Table C.2.20	Bilateral Assistance of ODA for El Salvador -----	C.T.20
Table C.2.21	Employment Structures of El Salvador, Region IV and the Study Area -----	C.T.21
Table C.2.22	Other Economic Indicators -----	C.T.22





SUPPORTING REPORT - C. SOCIO-ECONOMY

1. INTRODUCTION

The Republic of El Salvador is located between 87° 43' and 90° 08' of east longitude and 13°09' and 14°26' of north latitude in the centre of the Central America. It borders the Republics of Guatemala on the north and east, Honduras on the north and west, and faces the Pacific Ocean on the south. The country occupies a land of 21,040 km² and has a population of 5,118,599 in 1992.

The Central Government consists of 14 ministries; (1) Presidencia, (2) Relaciones Exteriores, (3) Coordinacion del Desarrollo Economico y Social, (4) Interior y Seguridad Publica, (5) Justicia, (6) Hacienda, (7) Economia, (8) Educacion, (9) Defensa Nacional, (10) Trabajo y Prevision Social, (11) Agricultura y Ganaderia, (12) Salud Publica y Asistencia Social, (13) Seguridad Publica, (14) Obras Publicas, Transporte, Vivienda y Desarrollo Urbano. It is located in the capital city, San Salvador.

The country is broadly divided into four regions; Regions I, II, III and IV, composed of 14 departments under the jurisdiction of the Central Government. Further, the respective departments have administrative units of municipalities (municipios), villages (cantons) and settlements (caserios).

The Study Area belongs the Region IV in the eastern part of the country, and spreads over the four Departments; San Miguel, Usulután, Morazan and La Union. In the Departments, the Study Area could be divided into 41 units of Municipalities, consisting of 15 units in the Department of San Miguel, 9 units in the Department of Usulután, 13 units in the Department of Morazan and 4 units in the Department of La Union. The Study Area, covering almost all of these Municipalities, has an area of 2,247 km² and a population of 473,956 in 1992.

2. POPULATION

2.1 Census Population

2.1.1 National Population

During the period from 1950 to 1992, the national population census of the Republic of El Salvador was conducted four times; June 13 of 1950, May 2 of 1961, June 28 of 1971, and

September 27 of 1992. According to these censuses, the Salvadorian population reached 5,118,599 in 1992 increasing from 1,855,917 in 1950, accordingly the population density also increased from 88 persons/km² in 1950 to 243 persons/km² in 1992 (Table C.2.1).

The average annual growth rate of national population was 2.82 % for the period 1950-1961, 3.48 % for the period 1961-1971, and 1.73 % for the period 1971-1992. Among them, the urban population grew at the average annual rate of 3.33 %, 3.75 % and 2.90 % for the respective periods, and 2.51 %, 3.31 % and 0.78 % for the rural population (Table C.2.2.).

A relatively slow growth rate of the national population for the period 1971-1992 was mainly caused by a strong international emigration of population, and further a large number of emigrants from the rural areas to the urban areas brought a considerable slow growth in the rural population for the same period.

2.1.2 Population of Region IV

In 1992, Region IV which contains the Study Area had the population of 1,129,484, corresponding to 22 % of the whole population of the country. The population density of Region IV in the same year indicated 146 persons/km², which correspond to 60 % of the average density of the whole country (Table C.2.1).

The average annual growth rate of population was 2.50 % for the period 1950-1961, 3.40 % for the period 1961-1971, and 0.61 % for the period 1971-1992. As shown in Table C.2.2, the population growth rate in Region IV was slower than the average growth rate of the whole country, and the population growth rate for the period 1971-1992 was very low compared with these for two periods 1950-1961 and 1961-1971, due to an increase in the international emigrants to take refuge from civil conflict in El Salvador.

2.1.3 Population of Departments

Region IV is administratively composed of 4 departments; Usulután, San Miguel, Morazan and La Unión, which had a population of 310,362, 403,411, 160,146 and 255,565 in 1992, respectively (Table C.2.1). The population densities of the four Departments were 146 persons/km² for Usulután, 194 persons/km² for San Miguel, 111 persons/km² for Morazan and 123 persons/km² for La Unión. Among them, the Departments of Morazan and La Unión are a comparatively depopulated area, which have a half density approximately of an average of the whole country.

The average annual growth rate of the population for the intercensal period from 1971 to 1992 was 0.25 %, 1.09 %, 0.12 % and 0.69 % for each department (Table C.2.2). As shown in Table C.2.2, compared with the urban population, the rural population was very slow in the growth, particularly the growth rate of the Departments of Usulután and Morazán recorded a negative, due to an international emigration and/or a movement to big city in the country.

2.1.4 Population in the Study Area

Tables C.2.3 and C.2.4 give a population in the Study Area by Department and Municipality, respectively. Population in the Study Area has been estimated at 376,623 in 1971 and 473,956 in 1992, based on the census populations in 1971 and 1992 and the territorial boundary of the Study Area. During the intercensal period 1971-1992, the annual growth rate of the population indicated 1.09 % on average, comprised of 2.54 % in the urban area and 0.12 % in the rural area.

Based on the 1992 census of population and housing, the Study Area has been estimated to have 110,287 households in 1992, consisting of 74,463 households in the Department of San Miguel, 15,140 households in the Department of Usulután, 16,977 households in the Department of Morazán, and 3,707 households in the Department of La Unión.

Using the figures of population and households, the average family size in the Study Area in 1992 has been estimated to be 4.3 persons/household, composed of 4.0 persons/household in the urban area and 4.6 persons/household in the rural area.

2.1.5 Population in the Flood Prone Area

Table C.2.5 gives figures of population and households in the Municipalities prone to flood by the San Miguel River (hereinafter called the "flood prone area"). According to the flood records in the past, the flood prone area spreads over six Municipalities; San Miguel, Chirilagua, El Tránsito in the San Miguel Department, Usulután and Concepción Batres in the Usulután Department, and El Carmen in La Unión Department. It is composed of 56 Cantons in total.

According to our survey, the flood prone area would have an area of 181.8 km² and a population of 250,000 in 1992, consisting of 149,000 in the urban area and 101,000 in the rural area. The population growth for the period 1971-1992 would be estimated at an annual

rate of 1.73 % for the flood prone area as the whole, 3.14 % for the urban area and 0.23 % for the rural area.

Number of households of Municipalities where include the flood prone area in 1992 would estimated at 61,000 in total, consisting of 39,000 in the urban area and 22,000 in the rural area. The family size would become 4.1 persons/household in the whole area, 3.8 persons/household in the urban area, and 4.5 persons/household in the rural area.

2.2 Population Projection

2.2.1 General

In 1992, a population projection of El Salvador was conducted for the period from 1980 to 2020 by the Population Directorate of the Ministry of Planning and Coordination of the Economical and Social Development (MIPLAN), using the results of population censuses in 1950, 1961 and 1971, leaving the result of the 1992 census out of account.

After that time, in December of 1996 a new projection of population was published by La Direccion General de Estadistica y Censos (DIGESTYC). The new population projection was closely carried out through the component method, taking into account each tendency of fecundity of Salvadorian women, life expectancy, infant mortality, and numbers of international and internal migrants, based on the census data since 1950.

This projection was made every year, ranging the period from 1995 to 2025 for the national population and the period 1995-2010 for population by Department and Municipality.

In our Interim Report which was submitted in December 1996, the future population in the Study Area was projected on the basis of the said old projection of national population. The old projection of population in the Study Area should therefore be revised by using the new national population projection. A new population projection in the Study Area would be discussed in the present report.

The population projection in the Study Area focuses on the years 2010 and 2020, taken into consideration that the construction works of the Project are scheduled to finish in 2010, and the target year of the Project is set in 2020. In addition, a projection of population in the flood prone area also would be made on the same years herein, for the purpose of making the basic data for estimating the economic benefit of the Project.

2.2.2 Projection of National Population

Table C.2.6 gives the expected future population in the years 2000, 2010 and 2020 for El Salvador by Region and Department. According to the population projection by DIGESTYC, the population of El Salvador (the national population) is expected to reach 8.354 Million in 2020 through 7.441 Million in 2010 and 6.276 Million 2000 from 5.119 Million in 1992, that is, the 2020 population would be expected to reach 1.63 times of the 1992 population.

An average annual growth rate of the national population mentioned above would become 2.58 % for the period 1972-2000, 1.72 % for 2000-2010 and 1.38 % for 2010-2020 (Table C.2.6). According to the projection of DIGESTYC, it is expected that the annual growth in the national population will be a slow rate of 1.10 % in the year 2025.

2.2.3 Projections of Populations in Region IV and Its Territorial Departments

The population projection of DIGESTYC was conducted by Department basically, not by Region. Region IV, which contains the Study Area, consists of four Departments; Usulután, San Miguel, Morazan and La Unión. A result of the population projection of Region IV would be therefore given as a assembled figure of the projections of the said four Departments, for example, the total sum as to population and the average value as to the growth rate of population.

(1) Projection of Population in 2010

In 2010 the population of Region IV is expected to have a population of 1.459 Million, consisting of 0.358 Million in the Department of Usulután, 0.599 Million in the Department of San Miguel, 0.185 Million in the Department of Morazan and 0.317 Million in the Department of La Unión (Table C.2.6). Compared with the 1992 population, the 2010 population would come to 1.29 times in Region IV, composed of 1.15 times in the Usulután Department, 1.49 times in the San Miguel Department, 1.15 times in the Morazan Department and 1.24 times in the La Unión Department.

The average annual growth rate of population for the period 1992-2010 in Region IV would become 1.43 %, consisting of 0.80 % in the Usulután Department, 2.22 % in San Miguel Department, 0.80 % in the Morazan Department and 1.20 % in the La Unión Department. Compared with the growth rate (2.10 % per annum) of the national population, these growth

rates, except that in the San Miguel Department, show very slow figures (Table C.2.6).

As a result of the population projection above, the population density in Region IV in 2010 would become 189 persons/km², composed in 168 persons/km² in the Usulután Department, 288 persons/km² in the San Miguel Department, 128 persons/km² in the Morazan Department, 153 persons/km² in the La Unión Department. These population densities indicate very low compared with the average population density of 354 persons/km² in the country as a whole.

(2) Projection of Population in 2020

The population projection of DIGESTYC was carried out until the year 2010 concerning Departments and Municipalities. Therefore in the present study, the 2020 populations in respective Departments have been estimated as follows:

First an average annual growth rate of population for the period 2010-2020 is estimated using the equation; $r_{d2} = r_{d1} (r_{n2}/r_{n1})$, where r_{d2} and r_{d1} are the population growth rates of Department for the periods 2010-2020 and 2000-2010, r_{n2} and r_{n1} are the growth rate of the national population for the periods 2010-2020 and 2000-2010, and the ratio (r_{n2}/r_{n1}) is estimated at approximately 0.80. Next, the 2020 population of each Department is estimated using the 2010 population of each Department and the population growth rate (r_{d2}) above for the period 2010-2020.

In accordance with the methodology above, the average annual growth rate of population in Region IV for the period 2010-2020 is estimated at 1.09 %, consisting of 0.45 % in the Usulután Department, 1.79 % in San Miguel Department, 0.50 % in the Morazan Department and 0.74 % in the La Unión Department (Table C.2.6).

The 2020 population is calculated by using the population growth rate mentioned above and the 2010 population projected by DIGESTYC. As a result, the 2020 population of Region IV would be estimated at 1.625 Million, consisting of 0.375 Million in the Department of Usulután, 0.715 Million in the Department of San Miguel, 0.194 Million in the Department of Morazan and 0.341 Million in the Department of La Unión (Table C.2.6).

Compared with the 1992 population, the 2020 population would come to 1.44 times in Region IV, comprised of 1.21 times in the Usulután Department, 1.77 times in the San Miguel Department, 1.21 times in the Morazan Department and 1.33 times in the La Unión Department.

Accordingly, the population density in 2020 would become 210 persons/km² in Region IV, 176 persons/km² in the Usulután Department, 344 persons/km² in the San Miguel Department, 134 persons/km² in the Morazan Department, 164 persons/km² in the La Unión Department (Table C.2.6).

2.2.4 Projection of Population in the Study Area

(1) General

The Study Area has an area of 2,247 km², ranging four (4) Departments of San Miguel, Usulután, Morazan and La Unión. Table C.2.7 gives the projected population in the Study Area by Department and Municipality in 2000, 2010 and 2020, together with the census population in 1971 and 1992 for the purpose of a comparison. The projection of population in 2020 has been estimated in the same methodology as the population projection in the Department, described in (2) of previous Section 2.2.3.

(2) Projection of Population in 2010

Based on the population projected by DIGESTYC, the 2010 population in the Study Area is estimated to amount to 0.909 Million, composed of 0.561 Million in the San Miguel Department, 0.174 Million in the Usulután Department, 0.112 Million in the Morazan Department and 0.062 Million in the La Unión Department (Table C.2.7).

Using the census population in 1992 and the DIGESTYC's population projection, the average annual growth rate of population for the period from 1992 to 2000 is estimated at 6.36 % in the Study Area as a whole, consisting of 4.49 % in the San Miguel Department, 12.28 % in the Usulután Department, 3.83 % in the Morazan Department and 17.51 % in the La Unión Department (Table C.2.7). These rates show very rapid growth in population. It may be due to that number of the census population in 1992 was a low estimate being caused by the domestic warfare, judging from a description of the new population projection by DIGESTYC.

For the period 2000-2010, it is expected that the population growth in the Study Area will become a comparatively slow, to be the annual rate of 1.60 % in the whole Study Area, 2.31 % in the San Miguel Department, 0.54 % in the Usulután Department, 0.54 % in the Morazan Department and 0.63 % in the La Unión Department (Table C.2.7).

Accordingly, the population density in the Study Area in 2010 would come to 405 persons/km² on average, comprised of 444 persons/km² in the San Miguel Department, 531 persons/km² in the Usulután Department, 213 persons/km² in the Morazan Department and 479 persons/km² in the La Unión Department (Table C.2.7).

(3) Projection of Population in 2020

In accordance with the methodology shown in (2) of Section 2.2.3, the average annual growth rate of population in the Study Area for the period 2010-2020 is estimated at 1.28 %, consisting of 1.84 % in the San Miguel Department, 0.43 % in the Usulután Department, 0.43 % in the Morazan Department and 0.50 % in the La Unión Department (Table C.2.7).

By using the 2010 population in the Study Area and the growth rate above, the 2020 population in the Study Area would be estimated to be 1.041 Million, composed of 0.677 Million in the San Miguel Department, 0.182 Million in the Usulután Department, 0.117 Million in the Morazan Department and 0.065 Million in the La Unión Department.

The population density in the Study Area in 2020 would come to 464 persons/km² on average, comprised of 535 persons/km² in the San Miguel Department, 555 persons/km² in the Usulután Department, 223 persons/km² in the Morazan Department and 504 persons/km² in the La Unión Department (Table C.2.7).

2.2.5 Projection of Population in the Flood Prone Area

According to our study, it is expected that the area prone to flood caused by the Río Grande de San Miguel will spread over six Municipalities; San Miguel, Chirilagua and El Tránsito in the San Miguel Department, Usulután and Concepción Batres in the Usulután Department, and Carmen in the La Unión Department. Out of Cantons included in these Municipalities, serious areas prone to the flood would be estimated at 15 Cantons shown in Table C.2.8.

Official report of the population projection by Canton is not published yet by DIGESTYC at present. Accordingly, the projection of population in the flood prone area by Canton would be made using the 1992 population of each Canton and the average growth rate of population in the Municipality where includes Canton concerned.

Under the assumption above, the population in the flood prone area would be estimated to the amount of 81,000 in 2020, through 68,600 in 2010 and 57,400 in 2000, increasing from

32,700 in 1992, an annual growth rate of 7.27 % for the period 1992-2000, 1.80 % for 2000-2010, and 1.67 % for 2010-2020.

3. GROSS DOMESTIC PRODUCT (GDP)

3.1 Past Trend of GDP

GDP at current prices of El Salvador amounted to Cols. 83,688 Million in 1995, increasing by 2.3 times from Cols. 36,487 million in 1990. An average annual growth in the GDP for this period indicated 18.1 % at the nominal rate and 6.1 % at the real rate. (Table C.2.9).

In 1995, the per capita GDP reached Cols. 14,081, corresponding to 2.0 times in the nominal growth, compared with that in 1990. During the period 1990-1995, an annual growth in the per capita GDP was 15.2 % at the nominal rate and 3.6 % at the real rate.

Table C.2.10 shows the GDP at current prices by economic activity for the period from 1990 to 1994. Out of the total GDP in 1994, each sectorial GDP of agriculture, manufacturing industries and commerce amounted to Cols. 9,880 Million, Cols. 15,681 Million and Cols. 13,570 Million, respectively. The share of these sectors to the GDP accounted for 52 % in total, consisting of 14 % for the agricultural sector, 22 % for the manufacturing industrial sector, and 16 % for the commercial sector.

The agricultural sector was reducing gradually the share at an average annual rate of 0.8 %, due to a relatively slow growth during the period 1990-1994, especially the share of coffee, one of the traditional products of El Salvador, was trending toward a decline from 4.5% in 1990 to 3.4 % in 1994.

In contrast, the manufacturing industrial and commercial sectors were maintaining the high share in the GDP during the same period, owing to the rapid growth rates of 5.4 % and 8.3 % per annum on average, respectively.

3.2 Future Trend of GDP

According to "Economic and Social Development Plan, 1994-1999" by the Government, the GDP of El Salvador is expected to grow at the comparatively high rate as follows:

Expected Growth Rate of GDP for 1994-1999 (%)

Year	1994	1995	1996	1997	1998	1999	Average
GDP	5.5	5.5	6.0	6.0	6.5	7.0	6.1

However, it seems that it is difficult to maintain continuously such high growth until the year 2020, judging from the growth in GDP since 1980. So, the GDP projection in the present study, taking into account the past trend and the said projection by the Government, has been made by assuming the three Scenarios so as to be the average annual growth rate of 6.5 % for the Scenario A (High variant), 5.5% for the Scenario B (Medium variant) and 4.5 % for the Scenario C (Low variant) during the period 1995-2020.

As a result, the GDP in 2010 and 2020, based on the GDP of US\$ 9,548 Million in 1995 shown in Table 2.18, has been estimated as follows:

Estimates of GDP in 2010 and 2020 (US\$ Million)

	<u>A (High)</u>	<u>B (Medium)</u>	<u>C (Low)</u>
2010	24,556	21,316	18,478
2020	46,095	36,410	28,696

Compared with the GDP in 1995, it is expected that the future GDP projected by the Scenario B will amount to 2.2 times in 2010 and 3.8 times in 2020.

Further, the Government projected a growth rate of the GDP per capita in the "Economic and Social Development Plan for 1994-1999", as follows:

Expected Growth Rate of the per capita GDP (%) for the period 1994-1999

Year	1994	1995	1996	1997	1998	1999	Average
GDP	3.1	3.2	3.7	3.7	4.2	4.7	3.8

On the other hand, the real growth rate of the per capita for the period 1991-1995 indicated 3.6 % on average, ranging from 1.2 % to 4.7 %, as shown in Table C.2.9.

For the purpose of the GDP per capita in the years 2010 and 2020, the future trend of the average annual growth rate for the period 1995-2020, taking the growth rates above into account, is assumed to be 5.0 % for the Scenario A (High Variant), 4.0 % for the Scenario B (Medium Variant) and 3.0 % for the Scenario C (Low Variant).

Using these annual growth rates and the per capita GDP of US\$ 1,609 (equivalent to Col. 14,081) in 1995, the per capita GDP in 2010 and 2020 is estimated as follows:

Estimates of the per Capita GDP in 2010 and 2020 (US\$)

	<u>A (High)</u>	<u>B (Medium)</u>	<u>C (Low)</u>
2010	3,346	2,898	2,507
2020	5,450	4,290	3,369

Compared with the per capita GDP in 1995, the per capita GDP in 2010 and 2020 would be estimated to be 1.8 times and 2.7 times respectively, under the condition of the Scenario B (Medium Variant).

According to the population projection described in Section 2.2.2, it is expected that the population of El Salvador will amount to 7.441 Million in 2010 and 8.534 Million in 2020. A product of this population and the per capita GDP above would give another projection of the GDP so as to become US\$ 21,564 Million in 2010 and US\$ 36,610 Million in 2020. These values of GDP, which is estimated indirectly, is close to the foregoing direct estimate of GDP.

3.3 Agriculture GDP

Existing and future agricultural GDP of the Study Area is evaluated as follows because data of GDP by region or province is not available.

CROP GDP per MZ is calculated by agricultural GDP, area of existing land use and crop cultivation area, as shown in the following table:

Item	Whole Country		San Miguel	
	GDP	GDP/MZ	GDP/MZ	GDP/MZ
	in 1993	in 1993	in 1993	in 2020
	Unit Million Col.	Col.	Col.	Col.
Coffee	1,382	5,890	2,356	7,068
Forest	573	2,203	441	2,203
Sugar cane	358	5,571	3,818	6,140
Basic Grain	2,454	5,463	4,909	6,556
Livestock	1,167	1,358	679	1,956
Others	1,324	-	-	-
Total	7,258			

Source: Banco Central de Reservd, MAG

Adjusting of the data to crop productivity of the area, agricultural GDP of the Department in 1993 is calculated. GDP in 2020 is targeted at higher productivity (about 20% higher than that of existing national average) in South America.

As a result of the evaluation, agricultural GDP in San Miguel will increase from 346 million collon to 920 million collon ; average annual growth rate is 3.7% per annum.

Average agricultural GDP per capita in 1993 was estimated at 2,766 Col. in national and 2,340 Col. in the Department of San Miguel. The GDP in the area is much less than that of the national average. This in due to low productivity by inappropriate land use and flood of the area.

Agricultural GDP per capita in the target year, evaluating based on the land use plan and the population projection in the Department, will be increased from 2,340 Col. to 3,987 Col. in spite of growth of the rural population in the area. As a result of the evaluation, the growth can sustain the rural population increase and alleviate income disparity between regions.

To achieve it, flood control and appropriate land use are necessary and it will contribute to economic development in the area.

4. EXTERNAL TRADE AND PAYMENTS

4.1 Export and Import

In 1995, the exports (f.o.b.) of El Salvador amounted to Cols. 14,537 Million, increasing by more 64 % than the value(Cols. 8,890 Million) in1993, i.e. the annual growth rate showed 28.0 % on average. On the other hand, the imports (c.i.f.) amounted to Cols. 29,334 Million in 1995, an average annual growth rate of 25.8 % during the period 1993-1995.

During the period 1993-1995, despite the exports showed a rapider growth than the imports, the export amount was less than half of the import amount every year, and the trade deficit was being increased, as shown below:

Year	Exports	Imports	Balance
1993	8,890	18,550	-9,660
1994	10,932	22,522	-11,590
1995	14,537	29,334	-14,793

Unit : Million Colones

The major exports were Cols.3,368 Million (share of 23.2 %) of vegetable products, Cols. 1,026 Million (share of 7.1 %) of textiles, Cols. 1,009 Million (share of 6.9 %) of food and beverage products. The exports of Coffee, one of the important traditional products, increased from Cols. 1,982 Million in 1993 to Cols. 3,183 Million in 1995 (Table C.2.12).

The main import products were Cols. 4,419 Million (share of 15.1 %) of machines and apparatus, Cols.3,331 Million (share of 11.4 %) of industrial chemicals, Cols. 3,194 Million (share of 10.9 %) of transportation equipment, Cols. 2,600 Million (share of 8.9 %) of mineral products, Cols. 2,024 Million (share of 6.9 %) of metal products, and Cols. 1,518 Million (share of 5.2 %) of livestock and vegetal products (Table C.2.13).

4.2 Balance of External Payments

Table C.2.14 gives balance of external payments of El Salvador for the period from 1991 to 1995. The current account indicated unfavorable balance every year, at the average annual balance of US\$ -129.0 Million for the said period, due mainly to an imbalance of the external trade.

The capital account was always in the black during the said period and has covered deficit in the current account, owing to an increase in the long term loans. An average balance of the capital account was US\$ 241.2 Million during the period 1991-1995.

As a result, the external payments of El Salvador have maintained a favorable balance every year, and its average value showed US\$ 112.2 Million for the period 1991-1995. However, it was inevitable that the cumulative debt increased due to obtaining the long term loans

5. BUDGET OF THE CENTRAL GOVERNMENT

5.1 Revenue and Expenditures

In 1996, the annual revenue of the Central Government amounted to US\$ 1,693.2 Million, consisting of US\$ 1,465.9 Million of the current revenue, US\$ 87.1 Million of the capital revenue and US\$ 140.1 Million of the financial sources. On the other hand, the annual expenditures were composed of US\$ 1,304.9 Million of the current expenditure, US\$ 252.0 Million of the capital expenditure and US\$ 136.3 Million of the financial applications (Table C.2.15).

Out of the revenue of the Central Government, the tax revenue amounted to US\$ 1,247.5 Million (74 % of the total revenue) in 1996, increasing at an average annual rate of 26.7 % from US\$ 400.7 Million in 1991. The value-added tax (VAT) accounted for 61 % of the total tax revenue in 1996, and its annual rise rate was 34.0 % on average since 1991 (Table C.2.16).

During the period 1991-1996, the budget increased at the average rate of 22.4 % per annum. In the meantime, the GDP at current prices grew at the average rate of 15.5 % a year during the same period. Accordingly, a ratio of budget of the Central Government to the GDP would become 15.5 in 1996 from 11.6 in 1991.

5.2 Sectorial Distribution of Public Investment

Table C.2.17 gives past and future trends of the public investment in the Government budget, which have been formulated in the "Plan de Desarrollo Economico y Social (Social and Economic Development Plan), 1994-1999". In 1996, the public investment amounted to Cols. 5,813 Million, corresponding to 39 % of the total budget expenditure of the Central Government.

According to the said Development Plan, it is estimated that the public investment will achieve Cols. 5,946 Million in 1999, with an average growth rate of 0.9 % per annum for the period 1996-1999. However, ratio of the public investment to the GDP will decrease from 5.9 % in 1996 to 3.9 % in 1999, due to more rapid growth in the GDP.

6. EXTERNAL DEBT AND AID

6.1 External Debt

According to the "World Debt Tables 1994-1995, World Bank", the cumulative external debt of El Salvador amounted to US\$ 2,264 Million at the end of 1995, consisting of US\$ 2,065 Million of the long-term debt and US\$ 199 Million of the short-term debt. The balances of these debts have been maintained in a little fluctuation every year since 1990 (Table C.2.18).

However, ratio of the total external debt to the GDP was showing toward decrease favorably, due to a rapid growth in the GDP, that is, it was reduced from 44.7 % in 1990 to 23.7 % in 1995. The debt in 1995 corresponded to 1.69 times of the budget of the Central Government in the same year.

During the period from 1990 to 1995, the annual debt service of the Central Government increased at an average annual rate of 6.3 %, and amounted to US\$ 341 Million in 1994 and US\$ 260 Million in 1995. The 1994 debt service was comprised of US\$ 242 Million for the principal and US\$ 99 Million for the interest.

While, ratios of the debt service were being decreased gradually owing to a rapid growth in the GDP and the Government Budget. The debt-service ratio in 1995 indicated a low rate of 2.7 % to the GDP and 19.4 % to the Government budget. The ratio every year is given in Table C.2.18.

The foreign-exchange reserves of El Salvador, which might be significant factors for deciding the external loan conditions, increased from US\$ 550 Million in 1990 to US\$ 857 Million in 1995, including gold reserve. An average rise rate of the foreign reserves showed 11.3 % per annum for the period 1990-1995.

Based on "World Debt Tables" of the World Bank, the external loan conditions to El Salvador are estimated to be an average loan term of 22.8 years, including the grace period of 5.8 years, with an average interest rate of 5.7 % per annum (Table C.2.18).

6.2 External Aid

6.2.1 Financial Aid to El Salvador

Table C.2.19 shows the financial aid situation from foreign countries and international agencies to El Salvador for the period 1989-1993. The average annual aid for this period amounted to US\$ 404.2 Million, consisting of US\$ 327.4 Million (81 % share) of the bilateral aid and US\$ 76.8 Million (19 %) of the multilateral aid.

During the said period, the annual bilateral aid ranged from US\$ 270 Million to US\$ 380 Million. The USA's aid accounted for more than 80 % of the total amount of the bilateral aid. Besides, the USA Government forgave over US\$ 400 Million in the Salvadorean debt in December 1992 to ease the external debt position of El Salvador after the end of civil war.

The multilateral aid hovered a low level before 1992, and it increased rapidly after the end of civil war, i.e. from US\$ 76.6 Million in 1992 to US\$ 184.2 Million in 1993. The IDB's aid amounted to US\$ 30 Million per annum on average for the period 1989-1993, accounting for the highest share of 38 % of the total amount of the multilateral aid. This amount would correspond approximately to 7 % of the total amount of the external aid to El Salvador.

Table C.2.20 shows the bilateral assistance by country for the period 1988-1991. In 1991, it amounted to US\$ 240.7 Million, consisting of US\$ 34.5 Million (14 %) of the loan, US\$ 206.2 Million (86 %) of the grant. Besides, there was the technical assistance which corresponded to US\$ 111.3 Million in amount. The USA's aid took a share of nearly 80 % in the assistance fund during the period 1988-1991. Following the USA, Germany accounted for 9 % in the assistance fund.

Besides, during the period from 1993 to 1996, the OECF of Japan in cooperation with the IDB concluded loan agreement (US\$ 254 Million in amount) with the Salvadorean Government, concerning three projects of electric power, water supply and transport.

6.2.2 Financial Aid to MAG

The following table shows a financial summary of the external aid projects which were being executed by MAG during the period 1993-1996, under the aid agreements between the Salvadorean Government and the external aid agencies:

Financial Summary of External Aid Projects of MAG
(in Colones Million)

Loan/ Grant	Number of Project	Cost of Projects	Amount of Loan/Grant	<u>Annual Disbursement of Aid Fund</u>				
				1993	1994	1995	1996	Average
Loan	6	1,396.6	948.1	92.1	178.6	71.7	91.4	108.5
Grant	40	983.0	765.8	100.5	104.3	111.3	132.7	112.2
Total	46	2,379.6	1,713.9	192.6	282.9	183.0	224.1	220.7

Source : Information from MAG

The projects amounted to 46 in number, consisting of 6 projects of the loan-basis and 40 projects of the grant-basis. According to the agreements, the disbursement period of fund ranged from 5 years to 10 years for the loan-basis projects, and from 1 year to 7 years for the grant-basis projects.

The total loan/grant amount of 46 projects, Cols. 1,713.9 Million, corresponds to 72 % of the total cost of projects, and it is composed of Cols. 948.1 Million of 6 project on a loan-basis and Cols. 765.8 Million of 40 project on a grant-basis.

The loan amount averaged Cols. 158 Million a project, corresponding to 68 % of a project cost. On the other hand, the grant amounted to Cols. 19 Million per project, corresponding to 78 % of a project cost.

During the period from 1993 to 1996, the annual disbursement of the aid fund averaged Cols. 220.7 Million, comprised of Cols. 108.5 Million of the loan amount and Cols. 112.2 Million of the grant amount.

7. EMPLOYMENT STRUCTURE AND WAGE LEVEL

7.1 Employment Structure

Table C.2.21 gives employment structures in El Salvador, Region IV and the Study Area, according to the 1992 census. Number of employees in the whole country amounted to 1.659 Million, consisting of 35.5 % for agricultural sector, 15.0 % for commercial sector, 14.8 % for manufacturing industrial sector, and 34.7 % for other sectors. It indicates that El Salvador is an agricultural country from a viewpoint of the employment structure, though a share of the agricultural sector in the GDP ranks third, among all sectors (Table C.2.10).

Employees in Region IV numbered 0.342 Million in the same year, of which the agricultural sector accounted for 57.5 %. Following the agricultural sector, the commercial and manufacturing industrial sectors had 10.9 % and 8.3 % of the total number of employees, respectively.

In Region IV, despite the total employee number was a low rate of 20.6 % of that in the whole country, the number of agricultural employee accounted for 33 % of that in the whole country, i.e. Region IV is placed as the highest agricultural region in the country. Further it is noted that employees of the sector of fishery had a share of 60 % in number in El Salvador.

In 1992, the Study Area had employees of 0.141 Million, of which 46.8 % was occupied by the agricultural sector. Following the agricultural sector, the commercial and manufacturing industrial sectors were 14.5 % and 10.2 %, respectively. The total number of employees in the Study Area accounted for a share of 41.3 % in Region IV.

However, as for the number of employees, the Study Area had more than 50 % in almost sector in Region IV, except 33.5 % in the agricultural sector and 7.0 % in the fishery sector, because of including the San Miguel city in the territory.

7.2 Wage Level

The following table gives an average monthly wage according to economic activity in El Salvador in 1992.

Item	Monthly Wage (Colones)	Index (Average=100)
Agriculture, Fishery & Hunting	552.5	55
Mining	1,427.6	143
Manufacturing Industry	987.6	99
Electricity, Gas & Water	1,816.1	181
Construction	1,057.4	106
Commerce, Hotel & Restaurant	1,080.9	108
Transportation & Communications	1,652.0	165
Finance	1,938.6	194
Others	1,101.1	110
Average	1,001.5	100

The average wage of employees for the entire sector showed Cols. 1,002/month in 1992. The high wage is recognized in financial sector and electricity, gas and water sector, as Cols. 1,939/month and Cols. 1,816/month, respectively. In contrast, the sector of agriculture, fishery and hunting was the lowest wage of Cols. 553/month.

8. OTHER ECONOMIC INDICATORS

Table C.2.22 gives economic indicators as to foreign exchange rate, prices, inflation rate, banking interest rate, etc.

(1) Foreign Exchange Rate

Salvadorean Colones have maintained a comparatively stable rate of exchange in 1990's, though the average rate varied from Cols. 8.03/US\$ in 1990 to Cols. 8.75/US\$ in 1996, an average depreciation rate of 1.60 % per annum of Colones to US\$ during the period 1990-1996. It is noted that since 1994 the exchange rate of Colones has maintained a constant value (= Cols. 8.75/US\$).

(2) Prices and Inflation Rate

As shown in Table C.2.22, the general price index of El Salvador in 1996 rose to 146.1 in the wholesale prices and 200.1 in the consumer prices, as the 1990 index = 100.. An average annual inflation rate, based on annual variations in the said price indices, is estimated at 6.6 % in the wholesale prices and 12.3 % in the consumer prices, during the period 1990-1996.

(3) Banking Interest Rate

According to "International Financial Statistics", January 1997, IMF, an average annual banking interest in El Salvador for the period 1990-1996 was a comparatively high rate of 14.8 % for deposit and 19.1 % for lending, being influenced by the high inflation rate as mentioned above.

An average difference between the lending interest rate of bank and the inflation rate would become a rate of 12.2 % for the wholesales prices and 6.5 % for the consumer prices, for the period 1990-1996. Between them, the former (the rate of 12.2 %) would seem to show an approximation of the "opportunity cost of capital" in El Salvador for the same period.



Table C.2.1 CENSUS POPULATION OF EL SALVADOR, REGION AND DEPARTMENT
(1950, 1961, 1971 AND 1992)

Department	Area (km ²)	1950 (June 13)			1961 (May 2)			1971 (June 28)			1992 (September 27)			Population Density (Persons/km ²)			
		Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total	1950	1961	1971	1992
El Salvador	21,040.2	677,167	1,78,750	1,855,917	966,899	1,544,085	2,510,984	405,532	2,149,116	3,554,648	2,581,834	2,536,765	5,118,599	88	119	169	243
Region I	4,488.0	148,680	268,748	417,428	197,509	359,288	556,797	271,428	479,956	751,384	404,826	675,132	1,079,958	93	124	167	241
1 Ahuachapan	1,239.6	28,107	66,539	94,646	34,135	96,575	130,710	41,009	137,463	178,472	58,983	202,205	261,188	76	105	144	211
2 Santa Ana	2,023.2	74,181	128,274	202,455	103,178	155,977	259,155	143,865	191,988	335,853	205,214	253,373	458,587	100	128	166	227
3 Sonsonate	1,225.2	46,392	73,935	120,327	60,196	106,736	166,932	86,554	150,505	237,059	140,629	219,554	360,183	98	136	193	294
Region II	5,311.9	311,824	324,590	636,414	482,615	427,032	909,647	748,444	596,246	1,344,690	1,571,100	810,713	2,381,813	120	171	253	448
4 Chalatenango	2,016.6	27,152	78,707	105,859	35,501	94,596	129,897	47,516	125,329	172,845	60,233	117,087	177,320	52	64	86	88
5 La Libertad	1,652.9	49,560	94,444	144,004	70,974	132,506	203,480	98,522	187,053	285,575	220,065	293,801	513,866	87	123	173	311
6 San Salvador	886.2	212,933	83,519	296,452	349,374	113,854	463,228	561,521	171,924	733,445	223,472	288,653	1,512,125	335	523	828	1706
7 Cuscatlan	736.2	22,179	67,920	90,099	26,766	86,276	113,042	40,885	111,940	152,825	67,330	111,172	178,502	119	149	202	236
Region III	3,511.1	72,601	189,447	262,048	91,896	246,273	338,169	119,146	347,262	466,408	194,433	332,911	527,344	75	96	133	150
8 La Paz	1,223.6	34,430	62,413	96,843	41,906	88,753	130,659	53,041	128,888	181,929	91,693	154,222	245,915	79	107	149	201
9 Cabanas	1,103.5	11,403	66,225	77,628	15,171	79,419	94,590	22,309	108,772	131,081	42,550	95,876	138,426	70	86	119	125
10 San Vicente	1,184.0	26,768	60,809	87,577	34,819	78,101	112,920	43,796	109,602	153,398	60,190	82,813	143,003	74	95	130	121
Region IV	7,729.2	144,062	395,965	540,027	194,879	511,492	706,371	266,514	725,652	992,166	411,475	718,009	1,129,484	70	91	128	146
11 Usulután	2,130.4	48,631	113,718	162,349	58,428	148,633	207,061	79,686	214,811	294,497	123,397	186,965	310,362	76	97	138	146
12 San Miguel	2,077.1	54,131	117,103	171,234	77,654	154,167	231,821	108,754	211,848	320,602	186,207	217,204	403,411	82	112	154	194
13 Morazan	1,447.4	16,495	80,234	96,729	23,560	95,821	119,381	29,011	127,041	156,052	42,664	117,482	160,146	67	82	108	111
14 La Unión	2,074.3	24,805	84,910	109,715	35,237	112,871	148,108	49,063	171,952	221,015	59,207	196,358	255,565	53	71	107	123

Source : Censos Nacionales de Población y Vivienda, 1961, 1971 y 1992

TABLE C.2.2 AVERAGE ANNUAL GROWTH RATE OF POPULATION FOR INTERCENSAL PERIODS OF EL SALVADOR, REGION AND DEPARTMENT

Department	Average Annual Growth Rate of Population (%)											
	Urban					Rural					Total	
	1950-61	1961-71	1971-92	1950-61	1961-71	1971-92	1950-61	1961-71	1971-92	1961-71	1971-92	
El Salvador	3.33	3.75	2.90	2.51	3.31	0.78	2.82	3.48	1.73			
Region I	2.64	3.18	1.90	2.70	2.89	1.62	2.68	2.99	1.72			
1 Ahuehapan	1.80	1.82	1.75	3.48	3.54	1.83	3.01	3.11	1.81			
2 Santa Ana	3.08	3.33	1.69	1.81	2.07	1.31	2.30	2.58	1.48			
3 Sonsonate	2.42	3.64	2.31	3.43	3.44	1.79	3.05	3.51	1.99			
Region II	4.10	4.41	3.55	2.55	3.34	1.46	3.34	3.92	2.73			
4 Chalatenango	2.49	2.91	1.12	1.68	2.83	-0.32	1.90	2.85	0.12			
5 La Libertad	3.36	3.28	3.85	3.16	3.45	2.15	3.23	3.39	2.80			
6 San Salvador	4.66	4.78	3.73	2.89	4.14	2.47	4.19	4.63	3.46			
7 Cuscatlan	1.74	4.26	2.38	2.22	2.60	-0.03	2.11	3.01	0.73			
Region III	2.19	2.59	2.33	2.44	3.44	-0.20	2.37	3.22	0.58			
8 La Paz	1.82	2.35	2.61	3.29	3.74	0.85	2.79	3.31	1.43			
9 Cabanas	2.66	3.87	3.09	1.68	3.14	-0.59	1.83	3.26	0.26			
10 San Vicente	2.45	2.28	1.51	2.33	3.39	-1.31	2.36	3.06	-0.33			
Region IV	2.82	3.13	2.06	2.38	3.50	-0.05	2.50	3.40	0.61			
11 Usulután	1.70	3.10	2.08	2.49	3.69	-0.65	2.26	3.53	0.25			
12 San Miguel	3.37	3.37	2.56	2.56	3.18	0.12	2.82	3.24	1.09			
13 Morazan	3.33	2.07	1.83	1.65	2.81	-0.37	1.95	2.67	0.12			
14 La Unión	3.28	3.31	0.89	2.65	4.23	0.63	2.80	4.02	0.69			

Source : Censos Nacionales de Población y Vivienda, 1961, 1971 y 1992

TABLE C.2.3 AREA, POPULATION AND NUMBER OF HOUSEHOLDS IN THE STUDY AREA BY DEPARTMENT

1) Area and Population		Area (km ²)			No. of Administration Unit			1971 Population			1992 Population			Average Annual Growth			
Department	Dep. (A)	S. Area (B)	Area Ratio (B)/(A)	Municipios	Cantons	Caseríos	Urban	Rural	Total	Density (P/km ²)	Urban	Rural	Total	Density (P/km ²)	Urban	Rural	Total
San Miguel	2,077.1	1,265.5	60.9	15	99	302	92,039	139,474	231,513	182.9	165,509	148,986	314,495	248.5	280	0.31	1.45
Usulután	2,130.4	328.4	15.4	9	33	98	16,014	44,891	60,905	185.5	24,047	41,317	65,364	199.0	1.93	-0.39	0.33
Morazan	1,447.4	523.8	36.2	13	49	146	18,144	52,165	70,309	134.2	27,793	50,334	78,127	149.2	2.03	-0.17	0.50
La Unión	2,074.3	129.1	6.2	4	11	32	2,857	11,040	13,897	107.6	2,643	13,326	15,969	123.7	-0.37	0.89	0.66
Total	7,729.2	2,246.8	29.1	41	192	578	129,054	247,569	376,623	167.6	219,992	253,964	473,956	210.9	2.54	0.12	1.09

2) Households

Department	No. of Households			Family Size in 1992 (Persons/hh)		
	Urban	Rural	Total	Urban	Rural	Total
San Miguel	42,232	32,231	74,463	3.9	4.6	4.2
Usulután	6,016	9,124	15,140	4.0	4.5	4.3
Morazan	5,999	10,978	16,977	4.6	4.6	4.6
La Unión	646	3,061	3,707	4.1	4.4	4.3
Total	54,893	55,394	110,287	4.0	4.6	4.3

Source: Censos Nacionales de Población y Vivienda 1971 and 1992

TABLE C.2.4 (1/2) POPULATION BY MUNICIPALITY IN THE STUDY AREA

1) DEPARTMENT OF SAN MIGUEL

No.	Municipality (Municipio)	Study Area		Number of Administration Units		1971 Population			1992 Population			Average Annual Growth Rate (%) 1971-1992			Number of Households in 1992			Family Size (Persons) in 1992					
		Area (km ²)	Area (%)	Cantons	Caseros	Total		Density (Pop/km ²)		Total		Density (Pop/km ²)		Urban		Rural		Total		Urban		Rural	
						Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
1	San Miguel	100	594.0	32	111	61,940	58,700	120,640	203.1	127,696	63,420	191,116	321.7	3.46	0.36	2.19	33,495	14,382	47,877	3.8	4.4	4.0	
2	Ciudad Barrios	20	13.6	2	10	497	2,477	2,974	218.7	1,344	3,617	4,961	364.8	4.79	1.80	2.44	92	423	515	14.6	8.6	9.6	
3	Comacaran	100	34.6	5	18	652	3,411	4,063	117.4	760	2,763	3,523	101.8	0.72	-0.99	-0.67	169	689	858	4.5	4.0	4.1	
4	Chapattique	80	82.8	4	14	1,284	6,745	8,029	97.0	2,244	6,112	8,356	100.9	0.66	-0.46	0.19	494	1,318	1,812	4.5	4.6	4.6	
5	Chinameca	80	61.9	16	23	5,050	13,791	18,841	304.4	5,474	11,146	16,620	268.5	0.38	-1.00	-0.59	1,476	2,602	4,078	3.7	4.3	4.1	
6	Chirilagua	60	124.1	5	31	3,538	9,141	12,679	102.2	3,035	9,998	13,033	105.0	-0.72	0.42	0.13	637	2,137	2,774	4.8	4.7	4.7	
7	El Tránsito	100	43.7	4	7	5,815	9,417	15,232	348.6	7,506	8,949	16,455	376.5	1.21	-0.24	0.36	1,845	1,862	3,707	4.1	4.8	4.4	
8	Loloboque	20	18.9	2	5	529	1,959	2,488	131.6	534	2,243	2,777	146.9	0.04	0.64	0.52	113	172	285	4.7	13.0	9.7	
9	Moncagua	100	103.1	11	17	1,210	13,004	14,214	137.9	1,925	19,006	20,931	203.0	2.21	1.80	1.84	449	4,264	4,713	4.3	4.5	4.4	
10	Nueva Guadalupe	30	6.8	1	2	996	542	1,538	226.2	1,376	594	1,970	289.7	1.53	0.43	1.17	351	127	478	3.9	4.7	4.1	
11	Quelepa	100	22.2	3	6	678	2,974	3,652	164.5	750	4,109	4,859	218.9	0.48	1.53	1.35	192	897	1,089	3.9	4.6	4.5	
12	San Jorge	100	37.7	5	10	3,754	5,145	8,899	236.0	3,948	4,955	8,903	236.2	0.24	-0.18	0.00	1,023	1,227	2,250	3.9	4.0	4.0	
13	San Rafael Oriente	100	45.0	4	12	4,579	6,746	11,325	251.7	7,384	7,726	15,110	335.8	2.27	0.64	1.37	1,523	1,588	3,111	4.8	4.9	4.9	
14	Sesori	20	40.7	2	20	257	2,909	3,166	77.8	264	1,964	2,228	54.7	0.13	-1.83	-1.64	58	157	215	4.6	12.5	10.4	
15	Uluazapa	100	36.4	3	16	1,260	2,513	3,773	103.7	1,269	2,384	3,653	100.4	0.03	-0.25	-0.15	315	540	855	4.0	4.4	4.3	
	Total	61	1,265.5	99	302	92,039	139,474	231,513	182.9	165,509	148,986	314,495	248.5	2.80	0.31	1.45	42,232	32,231	74,463	3.9	4.6	4.2	

2) DEPARTMENT OF USULUTAN

No.	Municipality (Municipio)	Study Area		Number of Administration Units		1971 Population			1992 Population			Average Annual Growth Rate (%) 1971-1992			Number of Households in 1992			Family Size (Persons) in 1992					
		Area (km ²)	Area (%)	Cantons	Caseros	Total		Density (Pop/km ²)		Total		Density (Pop/km ²)		Urban		Rural		Total		Urban		Rural	
						Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
16	Usulután	20	28.0	3	11	3,957	5,327	9,284	331.6	8,194	4,671	12,865	459.5	3.48	-0.62	1.55	2,194	1,042	3,236	3.7	4.5	4.0	
17	Califonia	30	7.3	1	1	419	229	648	88.8	463	227	690	94.5	0.47	-0.04	0.30	124	56	180	3.7	4.1	3.8	
18	Concepción Batres	90	107.2	8	17	1,462	9,342	10,804	100.8	2,013	8,569	10,582	98.7	1.52	-0.41	-0.10	462	1,862	2,324	4.4	4.6	4.6	
19	Ereguaquín	100	29.0	4	8	1,202	4,686	5,888	203.0	1,732	5,337	7,069	243.8	1.73	0.61	0.96	435	1,271	1,706	4.0	4.2	4.1	
20	Jucuaipa	40	14.4	4	4	2,483	5,099	7,582	526.5	3,355	2,871	6,226	432.4	1.43	-2.67	-0.92	803	619	1,422	4.2	4.6	4.4	
21	Jucuarán	30	71.9	2	23	434	5,295	5,729	79.7	429	2,930	3,359	46.7	-0.05	-2.75	-2.48	101	550	651	4.2	5.3	5.2	
22	Santa María	100	11.9	2	3	928	3,455	4,383	368.3	2,014	6,029	8,043	675.9	3.71	2.65	2.90	435	1,421	1,856	4.6	4.2	4.3	
23	Santa Elena	100	54.9	8	29	4,275	10,858	15,133	275.6	4,658	10,143	14,801	269.6	0.40	-0.32	-0.10	1,154	2,181	3,335	4.0	4.7	4.4	
24	Santiago de María	10	3.8	1	2	854	600	1,454	382.6	1,189	540	1,729	455.0	1.57	-0.49	0.82	308	122	430	3.9	4.4	4.0	
	Total	15	328.4	33	98	16,014	44,891	60,905	185.5	24,047	41,317	65,364	199.0	1.93	-0.39	0.33	6,016	9,124	15,140	4.0	4.5	4.3	

Source: Censos Nacionales de Población y Vivienda, 1971 y 1992

TABLE C.2.4 (2/2) POPULATION BY MUNICIPALITY IN THE STUDY AREA

No.	Municipality (Municipio)	Study Area		Number of Administration Units	1971 Population			1992 Population			Average Annual Growth Rate (%), 1971-1992			Number of Households in 1992			Family Size (Persons) in 1992					
		Area (km ²)	Area (km ²)		Urban	Rural	Total	Density (Pop/km ²)	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total		
25	San Francisco	100	59.8	6	19	6,683	7,525	14,208	237.8	12,659	7,228	19,887	332.8	3.05	-0.19	1.59	2,375	1,459	3,834	5.3	5.0	5.2
26	Cacuapera	20	27.1	1	10	227	2,641	2,869	105.7	318	1,552	1,870	13.8	1.59	-2.47	-1.99	84	323	408	3.8	4.8	4.6
27	Chilanga	100	34.3	5	15	1,198	6,351	7,549	219.9	1,750	6,608	8,358	243.5	1.80	0.19	0.48	409	1,383	1,792	4.3	4.8	4.7
28	Delicias de Concepcion	60	12.1	1	9	563	1,913	2,476	204.1	1,191	1,658	2,849	140.9	3.59	-0.67	0.66	299	442	740	4.0	3.8	3.8
29	El Divisadero	100	61.4	7	13	1,235	6,040	7,275	118.6	1,271	6,209	7,480	121.9	0.14	0.13	0.13	320	1,484	1,804	4.0	4.2	4.1
30	Guatajagua	100	70.8	6	9	3,368	6,012	9,380	132.5	4,171	6,107	10,278	145.2	1.01	0.07	0.43	959	1,299	2,258	4.3	4.7	4.6
31	Jocoro	50	31.8	4	13	1,375	3,759	5,134	161.5	1,624	3,229	4,853	76.4	0.79	-0.71	-0.26	440	811	1,250	3.7	4.0	3.9
32	Lolotiquillo	100	22.6	2	5	840	3,110	3,950	174.6	1,280	3,329	4,609	203.8	2.00	0.32	0.73	309	652	961	4.1	5.1	4.8
33	San Carlos	100	36.9	4	8	560	1,577	2,137	57.9	755	2,465	3,220	87.2	1.42	2.12	1.95	201	537	738	3.8	4.6	4.4
34	Sensembra	100	22.0	2	6	697	2,343	3,040	138.1	889	2,238	3,127	142.0	1.15	-0.22	0.13	182	439	621	4.9	5.1	5.0
35	Sociedad	40	47.3	3	13	460	4,812	5,271	111.4	550	3,652	4,202	35.5	0.85	-1.29	-1.06	133	763	896	4.1	4.3	4.7
36	Yamaabal	100	84.1	4	14	455	3,303	3,758	44.7	465	3,158	3,623	43.1	0.10	-0.21	-0.17	115	738	853	4.0	4.3	4.2
37	Yoloaiquin	100	13.5	3	12	483	2,779	3,262	241.5	870	2,901	3,771	279.1	2.81	0.20	0.68	173	649	822	5.0	4.5	4.6
	Total	36	523.8	49	146	18,144	52,165	70,309	134.2	27,793	50,334	78,127	149.2	2.03	-0.17	0.50	5,999	10,978	16,977	4.6	4.6	4.6

4) DEPARTMENT OF LA UNION

No.	Municipality (Municipio)	Study Area		Number of Administration Units	1971 Population			1992 Population			Average Annual Growth Rate (%), 1971-1992			Number of Households in 1992			Family Size (Persons) in 1992					
		Area (km ²)	Area (km ²)		Urban	Rural	Total	Density (Pop/km ²)	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total		
38	San Aiejo	20	30.3	3	11	782	3,552	4,333	86.1	815	3,744	4,559	18.1	0.19	0.25	0.24	208	914	1,122	3.9	4.1	4.1
39	Yucuaquim	30	16.6	2	5	869	1,289	2,157	130.3	420	2,188	2,608	47.3	-3.36	2.52	0.90	111	521	632	3.8	4.2	4.1
40	El Carmen	40	42.2	4	10	634	4,378	5,012	118.9	738	5,467	6,205	58.9	0.72	1.05	1.01	185	1,214	1,399	4.0	4.5	4.4
41	Yayantique	48	20.1	2	5	574	1,821	2,394	119.2	671	1,927	2,598	62.1	0.74	0.27	0.38	143	412	554	4.7	4.7	4.7
	Total	6	129.1	11	32	2,857	11,040	13,897	107.6	2,643	13,326	15,969	123.7	-0.37	0.89	0.66	646	3,061	3,707	4.1	4.4	4.3
	Grand Total	29	2,247	192	578	129,054	247,569	376,623	168	219,992	253,964	473,956	211	2.54	0.12	1.09	54,893	55,548	110,441	4.0	4.6	4.3

TABLE C.2.5 POPULATION OF MUNICIPALITIES IN FLOOD PRONE AREA

1) Population		No. Department	Municipality	Area (km ²)	Number of Administration Units			1971 Population			1992 Population			Average Annual Growth Rate (%), 1971-1992		
					Cantons	Caseros	Units	Urban	Rural	Total	Density (Pop/km ²)	Urban	Rural	Total	Density (Pop/km ²)	Urban
1	San Miguel	San Miguel	594.0	32	111	61,940	58,700	120,640	203.1	127,696	63,420	191,116	321.7	3.46	0.36	2.19
2	San Miguel	Chirilagua	124.1	5	31	3,538	9,141	12,679	102.2	3,035	9,998	13,033	105.0	-0.72	0.42	0.13
3	San Miguel	El Transito	43.7	4	7	5,815	9,417	15,232	348.6	7,506	8,949	16,455	376.5	1.21	-0.24	0.36
4	Usulután	Usulután	28.0	3	11	3,957	5,327	9,284	331.6	8,194	4,671	12,865	459.5	3.48	-0.62	1.55
5	Usulután	Concepción Batres	107.2	8	17	1,462	9,342	10,804	100.8	2,013	8,569	10,582	98.7	1.52	-0.41	-0.10
6	Unión	El Carmen	42.2	4	10	634	4,378	5,012	118.9	738	5,467	6,205	147.2	0.72	1.05	1.01
Total			939.2	56	187	77,346	96,305	173,651	184.9	149,182	101,074	250,256	266.5	3.14	0.23	1.73

2) Households

No. Department	Municipality	Number of Households in 1992			Family Size (persons) in 1992		
		Urban	Rural	Total	Urban	Rural	Total
1	San Miguel	33,495	14,382	47,877	3.8	4.4	4.0
2	San Miguel	637	2,137	2,774	4.8	4.7	4.7
3	San Miguel	1,845	1,862	3,707	4.1	4.8	4.4
4	Usulután	2,194	1,042	3,236	3.7	4.5	4.0
5	Usulután	462	1,862	2,324	4.4	4.6	4.6
6	Unión	185	1,214	1,399	4.0	4.5	4.4
Total		38,818	22,499	61,317	3.8	4.5	4.1

Source: Censos Nacionales de Población y Vivienda 1971 y 1992

TABLE C.2.6 POPULATION PROJECTION OF EL SALVADOR AND DEPARTMENTS

Department	Area (km ²)	Census Population('000)			Projected Population('000)			Density (Persons/km ²)			Average Annual Growth Rate (%)					
		1971	1992	2000	2000	2010	2020	1992	2000	2010	1971-1992	1992-2000	2000-2010	2010-2020	1992-2010	1992-2020
El Salvador	21,040.2	3,554.6	5,118.6	6,276.0	7,440.7	8,533.7	243	298	354	406	1.73	2.58	1.72	1.38	2.10	1.84
Region I	4,488.0	751.4	1,080.0	1,321.2	1,628.6	1,926.4	241	294	363	429	1.72	2.55	2.11	1.69	2.31	2.09
1 Ahuachapan	1,239.6	178.5	261.2	319.8	392.4	462.5	211	258	317	373	1.81	2.56	2.07	1.66	2.29	2.06
2 Santa Ana	2,023.2	335.9	458.6	551.3	667.4	777.9	227	272	330	384	1.48	2.33	1.93	1.54	2.11	1.91
3 Sonsonate	1,225.2	237.1	360.2	450.1	568.7	686.0	294	367	464	560	1.99	2.83	2.37	1.89	2.57	2.33
Region II	5,311.9	1,344.7	2,381.8	3,066.9	3,667.0	4,240.4	448	577	690	798	2.73	3.21	1.80	1.46	2.43	2.08
4 Chalatenango	2,016.6	172.8	177.3	196.6	206.9	215.5	88	97	103	107	0.12	1.30	0.51	0.41	0.86	0.70
5 La Libertad	1,652.9	285.6	513.9	682.1	880.1	1,079.7	311	413	532	653	2.80	3.60	2.58	2.07	3.03	2.69
6 San Salvador	886.2	733.4	1,512.1	1,985.3	2,357.8	2,706.1	1,706	2,240	2,661	3,054	3.46	3.46	1.73	1.39	2.50	2.10
7 Cuscatlan	756.2	152.8	178.5	203.0	222.3	239.1	236	268	294	316	0.73	1.62	0.91	0.73	1.23	1.05
Region III	3,511.1	466.4	527.3	606.8	686.5	758.9	150	173	196	216	0.58	1.77	1.24	1.01	1.48	1.31
8 La Paz	1,223.6	181.9	245.9	292.9	344.8	393.0	201	239	282	321	1.43	2.21	1.65	1.32	1.90	1.69
9 Cabanas	1,103.5	131.1	138.4	152.8	160.9	167.6	125	139	146	152	0.26	1.25	0.51	0.41	0.84	0.68
10 San Vicente	1,184.0	153.4	143.0	161.1	180.8	198.3	121	136	153	167	-0.33	1.50	1.16	0.93	1.31	1.17
Region IV	7,729.2	992.2	1,129.5	1,281.1	1,458.6	1,625.0	146	166	189	210	0.61	1.59	1.31	1.09	1.43	1.31
11 Usulután	2,130.4	294.5	310.4	338.3	357.9	374.5	146	159	168	176	0.25	1.08	0.57	0.45	0.80	0.67
12 San Miguel	2,077.1	320.6	403.4	480.3	599.2	715.4	194	231	288	344	1.09	2.20	2.24	1.79	2.22	2.07
13 Morazan	1,447.4	156.1	160.1	173.5	184.8	194.3	111	120	128	134	0.12	1.01	0.63	0.50	0.80	0.69
14 La Unión	2,074.3	221.0	255.6	289.0	316.7	340.8	123	139	153	164	0.69	1.55	0.92	0.74	1.20	1.03

Source : Censos Nacionales de Poblacion y Vivienda, 1971 y 1992
Proyeccion de la Poblacion de El Salvador 1995-2025, DIGESTYC

TABLE C.2.7(1/2) POPULATION PROJECTION OF DEPARTMENTS AND MUNICIPALITIES IN THE STUDY AREA

1) DEPARTMENT OF SAN MIGUEL														
Municipality (Municipio)	Study Area Ratio to Area Dept. (%) (km2)	Census Population			Projected Population			Population Density (Persons/km ²)			Average Annual Growth Rate (%)			
		1971	1992	2020	2000	2010	2020	1992	2000	2010	1971-	1992-	2000-	2010-
I Department of San Miguel	100	320,602	403,411	480,276	599,173	715,436	194	231	288	344	1.09	2.20	2.24	1.79
II Study Area in the Department	61	1,266	231,513	314,495	446,901	561,314	677,313	249	353	444	1.45	4.49	2.31	1.84
1 San Miguel	100	594	120,640	191,116	239,038	317,190	397,995	322	402	534	2.19	2.84	2.87	2.30
2 Ciudad Barrios	20	14	2,974	4,961	31,610	42,974	54,984	365	2,324	3,160	2.44	26.05	3.12	2.50
3 Comacaran	100	35	4,063	3,523	3,852	4,148	4,420	102	111	120	-0.67	1.06	0.80	0.64
4 Chapelique	80	83	8,029	8,356	11,208	13,067	101	135	147	158	0.19	3.74	0.86	0.68
5 Chinameca	80	62	18,841	16,620	22,554	24,416	26,017	268	364	394	-0.59	3.89	0.80	0.64
6 Chirilagua	60	124	12,679	13,033	23,202	25,118	26,765	105	187	202	0.13	7.48	0.80	0.64
7 El Transito	100	44	15,232	16,455	17,899	19,836	21,537	377	410	454	0.36	1.06	1.03	0.83
8 Lolotique	20	19	2,488	2,777	15,280	17,194	18,899	147	808	910	0.52	23.76	1.19	0.95
9 Moncagua	100	103	14,214	20,931	25,491	32,682	36,890	203	247	317	1.84	2.49	2.52	2.01
10 Nueva Guadalupe	30	7	1,538	1,970	7,600	9,125	10,565	290	1,118	1,342	1.17	18.38	1.85	1.48
11 Quelepa	100	22	3,652	4,859	5,703	6,971	8,188	219	257	314	1.35	2.02	2.03	1.62
12 San Jorge	100	38	8,899	8,903	9,417	10,065	10,616	236	250	267	0.00	0.70	0.67	0.53
13 San Rafael Oriente	100	45	11,325	15,110	17,751	21,727	25,548	336	394	483	1.37	2.03	2.04	1.63
14 Sexoni	20	41	3,166	2,228	12,389	13,412	14,292	55	304	330	-1.64	23.92	0.80	0.64
15 Uluazapa	100	36	3,773	3,653	3,927	4,251	4,530	100	108	117	-0.15	0.91	0.80	0.64

2) DEPARTMENT OF USulután														
Municipality (Municipio)	Study Area Ratio to Area Dept. (%) (km2)	Census Population			Projected Population			Population Density (Persons/km ²)			Average Annual Growth Rate (%)			
		1971	1992	2020	2000	2010	2020	1992	2000	2010	1971-	1992-	2000-	2010-
I Department of Usulután	100	2,130	294,497	310,362	338,332	357,942	374,455	146	159	168	0.25	1.08	0.57	0.45
II Study Area in the Department	15	328	60,905	65,364	165,110	174,220	182,248	199	503	531	0.33	12.28	0.54	0.43
16 Usulután	20	28	9,284	12,865	69,099	73,341	76,924	459	2,468	2,619	1.55	23.38	0.60	0.48
17 California	30	7	648	690	2,544	2,703	2,837	95	348	370	0.30	17.72	0.61	0.49
18 Concepcion Barres	90	107	10,804	10,582	12,376	12,408	12,434	99	115	116	-0.10	1.98	0.03	0.02
19 Eregruaquin	100	29	5,888	7,069	7,521	7,788	8,008	244	259	269	0.86	0.78	0.35	0.28
20 Jucupa	40	14	7,582	6,226	16,498	16,881	17,194	432	1,146	1,172	-0.92	12.95	0.23	0.18
21 Jucuaran	30	72	5,729	3,359	12,743	13,085	13,365	47	177	182	-2.48	18.14	0.27	0.21
22 Santa Maria	100	12	4,383	8,043	9,989	12,629	15,242	676	839	1,061	2.90	2.75	2.37	1.90
23 Santa Elena	100	55	15,133	14,801	16,007	16,487	16,881	270	292	300	-0.10	0.98	0.30	0.24
24 Santiago de Maria	10	4	1,454	1,729	18,333	18,898	19,363	455	4,824	4,973	0.82	34.33	0.30	0.24

Source : Censos Nacionales de Poblacion y Vivienda, 1971 y 1992
Proyección de la Poblacion de El Salvador 2025, DIGESTYC

TABLE C.2.7(2Z) POPULATION PROJECTION OF DEPARTMENTS AND MUNICIPALITIES IN THE STUDY AREA

Municipality (Municipio)	No	Study Area Ratio to Dept. (%)	Census Population			Projected Population			Population Density (Persons/km ²)			Average Annual Growth Rate (%)				
			Area (km ²)	1971	1992	2000	2010	2020	1992	2000	2010	1971- 1992	1992- 2000	2000- 2010	2010- 2020	
3) DEPARTMENT OF MORAZAN																
I Department of Morazan		100	1,447	156,052	160,146	173,499	184,757	194,293	111	120	128	134	0.12	1.01	0.63	0.50
II Study Area in the Department		36	524	70,309	78,127	105,886	111,784	116,847	149	202	213	223	0.50	3.87	0.54	0.43
25 San Francisco (Gotera)		100	60	14,208	19,887	21,181	23,558	25,653	333	354	394	429	1.59	0.79	1.07	0.86
26 Cacaopera		20	27	2,869	1,870	10,452	11,153	69	385	399	411	287	-1.99	24.00	0.36	0.29
27 Chilanga		100	34	7,549	8,358	8,972	9,448	9,847	243	261	275	287	0.48	0.89	0.52	0.41
28 Delicias de Concepcion		60	12	2,476	2,849	4,946	5,074	5,179	235	408	418	427	0.66	7.14	0.26	0.20
29 El Divisadero		100	61	7,275	7,480	7,974	8,276	8,526	122	130	135	139	0.13	0.80	0.37	0.30
30 Guatajagua		100	71	9,380	10,278	10,815	11,152	11,429	145	153	158	161	0.43	0.64	0.31	0.25
31 Jocoro		50	32	5,134	4,853	10,435	10,825	11,148	153	328	341	351	-0.26	10.04	0.37	0.29
32 Lotoliquillo		100	23	3,950	4,609	4,824	4,982	5,112	204	213	220	226	0.73	0.57	0.32	0.26
33 San Carlos		100	37	2,137	3,220	3,700	4,309	4,869	87	100	117	132	1.95	1.75	1.54	1.23
34 Sensembra		100	22	3,040	3,127	3,325	3,442	3,539	142	151	156	161	0.13	0.77	0.35	0.28
35 Sociedad		40	47	5,271	4,202	11,483	11,894	12,233	89	243	251	258	-1.06	13.39	0.35	0.28
36 Yamabal		100	84	3,758	3,623	3,845	3,944	4,025	43	46	47	48	-0.17	0.75	0.25	0.20
37 Yoloiquin		100	14	3,262	3,771	3,934	4,044	4,134	279	291	299	306	0.68	0.53	0.28	0.22
4) DEPARTMENT OF LA UNION																
I Department of La Union		100	2,074	221,015	255,565	289,021	316,715	340,792	123	139	153	164	0.69	1.55	0.92	0.71
II Study Area in the Department		6	129	13,897	15,969	58,051	61,819	65,070	124	450	479	504	0.66	17.51	0.63	0.50
38 San Alejo		20	50	4,333	4,559	24,560	25,214	25,750	91	488	501	512	0.24	23.43	0.26	0.21
39 Yucuaiquin		30	17	2,157	2,608	9,856	10,803	11,626	158	595	653	702	0.90	18.08	0.92	0.74
40 El Carmen		40	42	5,012	6,205	17,737	19,659	21,347	147	421	466	506	1.01	14.03	1.03	0.83
41 Yayantique		48	20	2,394	2,598	5,898	6,143	6,346	129	294	306	316	0.38	10.79	0.41	0.33
Grand Total		29	2,247	376,623	473,956	775,948	909,137	#####	211	345	405	464	1.09	6.36	1.60	1.28

Source : Censos Nacionales de Poblacion y Vivienda, 1971 y 1992
Proyeccion de la Poblacion de El Salvador 2025, DIGESTYC

TABLE C.2.8 POPULATION PROJECTION OF CANTONS IN FLOOD PRONE AREA

No	Municipality	Canton	Census Population in 1992		Projected Annual Growth Rate of Population (%)		Projected Population		
			1992-	2000	2000-	2010	2000	2010	2020
1	San Miguel	San Miguel (a part)	320	2.84	2.87	2.52	400	531	681
2	San Miguel	El Papalon	5,456	2.84	2.87	2.52	6,826	9,059	11,618
3	San Miguel	El Tecomatal	4,280	2.84	2.87	2.52	5,355	7,106	9,114
4	San Miguel	El Zamorano	2,919	2.84	2.87	2.52	3,652	4,846	6,216
5	San Miguel	Miraflores	5,443	2.84	2.87	2.52	6,810	9,037	11,591
6	San Miguel	El Progreso	1,104	2.84	2.87	2.52	1,381	1,833	2,351
7	San Miguel	El Brazo	1,777	2.84	2.87	2.52	2,223	2,950	3,784
8	Chirilagua	Chirilagua	2,040	7.48	0.80	0.70	3,633	3,934	4,218
9	El Transito	Moropala	598	1.06	1.03	0.91	651	721	789
10	Usulután	Las Salinas	1,973	23.38	0.60	0.53	10,595	11,248	11,858
11	Concepcion Barres	La Anchila	1,317	1.98	0.03	0.02	1,541	1,545	1,548
12	Concepcion Barres	San Felipe	534	1.98	0.03	0.02	625	627	628
13	Concepcion Barres	San Antonio	304	1.98	0.03	0.02	356	357	357
14	El Carmen	El Zapotal	1,735	14.03	1.03	0.91	4,960	5,495	6,016
15	El Carmen	Olomega	2,946	14.03	1.03	0.91	8,421	9,330	10,215
Total (or Average)			32,746	7.27	1.80	1.67	57,428	68,619	80,986

Source : Censos Nacionales de Poblacion y Vivienda 1992
Proyeccion de la Poblacion de El Salvador 2025. DIGESTIYC

TABLE C.2.9 GROSS DOMESTIC PRODUCT (GDP), 1990 - 1995

Item	1990	1991	1992	1993	1994	1995	Average Annual Growth Rate (%)
(1) At Current Prices							
1) GDP (Million Colones)	36,487	42,594	49,841	60,522	70,612	83,688	-
Annual Growth Rate (%)	-	16.7	17.0	21.4	16.7	18.5	18.1
2) Per Capita GDP (Colon)	6,948	7,925	9,048	10,714	12,185	14,081	-
Annual Growth Rate (%)	-	14.1	14.2	18.4	13.7	15.6	15.2
(2) At 1990 Constant Prices							
1) GDP (Million Colones)	36,487	37,791	40,643	43,643	46,251	49,145	-
Annual Growth Rate (%)	-	3.6	7.5	7.4	6.0	6.3	6.1
2) Per Capita GDP (Colon)	6,948	7,031	7,378	7,726	7,981	8,269	-
Annual Growth Rate (%)	-	1.2	4.9	4.7	3.3	3.6	3.6

Source : Revista Trimestral, Oct./Dic., 1995, & Jul./Sep., 1996, Banco Central de Reserva

**TABLE C.2.10 GROSS DOMESTIC PRODUCT BY ECONOMIC ACTIVITY
(AT CURRENT PRICES)**

Unit: Million Colones

No	Economic Activity	1990		1991		1992		1993		1994	
		Value	%	Value	%	Value	%	Value	%	Value	%
I	Agriculture, Forestry and Fishery	6,240.0	17.1	7,292.2	17.1	7,089.5	14.2	8,430.7	13.9	9,880.5	14.0
1	Coffee	1,656.9	4.5	1,720.2	4.0	1,283.4	2.6	1,382.3	2.3	2,392.3	3.4
2	Cotton	82.6	0.2	68.5	0.2	46.2	0.1	51.5	0.1	31.8	0.0
3	Basic grains	1,219.1	3.3	1,522.9	3.6	1,595.5	3.2	2,454.0	4.1	2,434.5	3.4
4	Sugar cane	222.6	0.6	320.1	0.8	339.7	0.7	358.2	0.6	338.1	0.5
5	Other agriculture products	882.7	2.4	1,030.0	2.4	1,057.2	2.1	1,272.1	2.1	1,576.4	2.2
6	Stock breeding	1,065.1	2.9	1,184.7	2.8	1,208.8	2.4	1,166.7	1.9	1,251.1	1.8
7	Poultry breeding	555.5	1.5	723.1	1.7	769.9	1.5	909.0	1.5	902.7	1.3
8	Forestry	377.4	1.0	516.9	1.2	573.9	1.2	572.9	0.9	632.6	0.9
9	Hunting and Fishing	178.1	0.5	205.7	0.5	214.9	0.4	264.1	0.4	321.0	0.5
II	Mining and quarrying	137.8	0.4	166.9	0.4	198.0	0.4	246.6	0.4	299.2	0.4
III	Manufacturing industries	7,923.1	21.7	9,409.6	22.1	11,875.7	23.8	13,548.5	22.4	15,680.8	22.2
1	Meat and its products	303.1	0.8	432.4	1.0	562.9	1.1	684.5	1.1	730.1	1.0
2	Milk products	187.7	0.5	143.2	0.3	264.3	0.5	335.8	0.6	361.8	0.5
3	Fish products	0.6	0.0	0.8	0.0	1.3	0.0	1.6	0.0	1.8	0.0
4	Milling and bakery	734.2	2.0	743.8	1.7	1,007.4	2.0	1,249.8	2.1	1,482.4	2.1
5	Sugar	291.6	0.8	275.6	0.6	192.9	0.4	266.6	0.4	285.9	0.4
6	Other food industries	543.7	1.5	564.3	1.3	752.7	1.5	775.1	1.3	937.8	1.3
7	Beverages	844.1	2.3	900.2	2.1	1,079.4	2.2	1,115.4	1.8	1,392.1	2.0
8	Tobacco	280.4	0.8	334.6	0.8	377.9	0.8	373.9	0.6	452.0	0.6
9	Textiles and their products	633.2	1.7	753.4	1.8	948.9	1.9	1,027.2	1.7	1,166.8	1.7
10	Clothes	261.5	0.7	344.6	0.8	471.7	0.9	471.3	0.8	529.5	0.7
11	Skin, leather and their products	393.4	1.1	414.1	1.0	507.6	1.0	602.1	1.0	682.7	1.0
12	Woods and its products	108.6	0.3	139.2	0.3	160.9	0.3	213.2	0.4	267.2	0.4
13	Paper and its products	217.8	0.6	279.8	0.7	363.9	0.7	425.3	0.7	465.4	0.7
14	Printing	346.1	0.9	482.7	1.1	559.4	1.1	690.6	1.1	805.6	1.1
15	Chemical products	660.4	1.8	758.3	1.8	926.1	1.9	1,007.2	1.7	1,114.3	1.6
16	Refined petroleum	455.9	1.2	773.0	1.8	1,111.5	2.2	1,237.9	2.0	1,157.5	1.6
17	Rubber and plastic products	302.2	0.8	341.1	0.8	419.1	0.8	329.3	0.5	358.7	0.5
18	Metal products except elaborated metals	356.0	1.0	436.3	1.0	517.8	1.0	657.1	1.1	819.8	1.2
19	Mineral products and elaborated metals	358.3	1.0	411.3	1.0	508.0	1.0	556.4	0.9	627.5	0.9
20	Machines and apparatus	272.2	0.7	382.7	0.9	454.8	0.9	517.0	0.9	625.0	0.9
21	Transport materials	241.1	0.7	314.1	0.7	375.8	0.8	456.5	0.8	553.9	0.8
22	Industrial services of maquila	131.1	0.4	179.2	0.4	311.5	0.6	554.5	0.9	863.0	1.2
IV	Electricity, gas and water	425.6	1.2	306.7	0.7	464.4	0.9	604.1	1.0	738.8	1.0
1	Electricity	303.4	0.8	186.7	0.4	328.3	0.7	421.6	0.7	599.3	0.8
2	Water and Sewage	122.2	0.3	119.9	0.3	136.1	0.3	182.5	0.3	139.5	0.2
V	Construction	1,268.0	3.5	1,476.0	3.5	2,199.4	4.4	2,642.0	4.4	3,266.4	4.6
VI	Commerce, restaurants and hotels	6,620.8	18.1	8,032.3	18.9	9,429.0	18.9	11,303.7	18.7	13,570.5	19.2
1	Commerce	5,550.8	15.2	6,571.7	15.4	7,538.3	15.1	8,854.7	14.6	10,629.1	15.1
2	Restaurants and hotels	1,070.0	2.9	1,460.5	3.4	1,890.6	3.8	2,449.0	4.0	2,941.4	4.2
VII	Transportation and Communications	2,677.6	7.3	2,839.3	6.7	3,821.5	7.7	4,539.2	7.5	5,137.1	7.3
1	Transportation	1,937.7	5.3	2,056.2	4.8	2,849.8	5.7	3,523.9	5.8	4,004.6	5.7
2	Communications	739.9	2.0	783.1	1.8	971.7	1.9	1,015.3	1.7	1,132.5	1.6
III	Finances and insurance	793.3	2.2	893.9	2.1	1,184.3	2.4	1,504.7	2.5	1,930.4	2.7
IX	Realstate and rental services	1,278.6	3.5	1,584.9	3.7	2,084.9	4.0	2,372.7	3.9	2,811.8	4.0
X	Acquisitions of housing	4,125.1	11.3	4,595.5	10.8	4,928.0	9.9	5,450.3	9.0	5,887.6	8.3
XI	Private and domestic services	2,240.6	6.1	2,710.9	6.4	3,244.8	6.5	3,685.2	6.1	4,195.0	5.9
1	Personal and Communal and social servi	1,457.6	4.0	1,818.1	4.3	2,294.1	4.6	2,642.6	4.4	2,913.6	4.1
2	Domestic services	783.0	2.1	892.8	2.1	950.8	1.9	1,042.6	1.7	1,281.4	1.8
XII	Governmental services	2,693.0	7.4	3,093.9	7.3	3,311.4	6.6	3,776.9	6.2	4,185.1	5.9
	Minus: Transferred bank services	-608.8	-1.7	-779.7	-1.8	-1,073.3	-2.2	-1,446.0	-2.4	-1,694.0	-2.4
	Plus: Custom duties and added value tax	672.2	1.8	971.8	2.3	1,163.0	2.3	3,863.9	6.4	4,725.5	6.7
	GDP (at market prices)	36,486.9	100.0	42,594.2	100.0	49,840.5	###	60,522.1	100.0	70,612.7	###

Source: Revista Trimestral, Oct/Dic. 1995 & Jul/Sep. 1996, Banco Central de Reserva

**TABLE C.2.11 GROSS DOMESTIC PRODUCT BY ECONOMIC ACTIVITY
(AT 1990 CONSTANT PRICES)**

Unit: Million Colones

No.	Economic Activity	1990		1991		1992		1993		1994		1995	
		Value	%	Value	%	Value	%	Value	%	Value	%	Value	%
I	Agriculture, Forestry and Fishery	6,240.0	17.1	6,222.7	16.5	6,722.8	16.5	6,549.6	15.0	6,394.0	13.8	6,753.0	13.7
1	Coffee	1,656.9	4.5	1,665.6	4.4	1,848.3	4.5	1,670.1	3.8	1,538.2	3.3	1,520.5	3.1
2	Cotton	82.6	0.2	51.2	0.1	55.7	0.1	49.4	0.1	28.0	0.1	0.0	0.0
3	Basic grains	1,219.1	3.3	1,172.4	3.1	1,496.6	3.7	1,504.4	3.4	1,287.8	2.8	1,555.1	3.2
4	Sugar cane	222.6	0.6	276.3	0.7	297.9	0.7	304.7	0.7	288.6	0.6	284.6	0.6
5	Other agriculture products	382.7	2.4	924.2	2.4	867.4	2.1	939.0	2.2	1,039.3	2.2	1,091.3	2.2
6	Stock breeding	1,065.1	2.9	1,000.8	2.6	970.4	2.4	894.8	2.1	929.7	2.0	962.2	2.0
7	Poultry breeding	555.5	1.5	588.7	1.6	639.7	1.6	609.0	1.4	674.8	1.5	720.7	1.5
8	Forestry	377.4	1.0	374.9	1.0	372.2	0.9	355.1	0.9	382.4	0.8	359.3	0.8
9	Hunting and Fishing	178.1	0.5	168.6	0.4	174.5	0.4	193.0	0.4	225.2	0.5	229.3	0.5
II	Mining and quarrying	137.8	0.4	151.0	0.4	158.9	0.4	175.7	0.4	195.0	0.4	209.1	0.4
III	Manufacturing industries	7,923.1	21.7	8,391.5	22.2	9,219.4	22.7	9,078.8	20.8	9,739.6	21.1	10,421.3	21.2
1	Meat and its products	303.1	0.8	279.8	0.7	271.2	0.7	241.0	0.6	244.0	0.5	248.0	0.5
2	Milk products	187.7	0.5	170.7	0.5	259.5	0.6	285.8	0.7	280.1	0.6	292.4	0.6
3	Fish products	0.6	0.0	0.9	0.0	1.2	0.0	1.3	0.0	1.4	0.0	1.5	0.0
4	Milling and bakery	734.2	2.0	765.2	2.0	772.4	1.9	849.3	1.9	910.1	2.0	943.5	1.9
5	Sugar	291.6	0.8	359.4	1.0	463.5	1.1	590.2	1.4	578.4	1.3	586.6	1.2
6	Other food industries	543.7	1.5	556.6	1.5	574.5	1.4	531.9	1.2	594.9	1.3	608.6	1.2
7	Beverages	844.1	2.3	858.8	2.3	899.2	2.2	847.0	1.9	912.4	2.0	968.6	2.0
8	Tobacco	280.4	0.8	291.9	0.8	291.9	0.7	248.5	0.6	258.6	0.6	264.7	0.5
9	Textiles and their products	633.2	1.7	659.4	1.7	713.7	1.8	638.6	1.5	677.1	1.5	713.8	1.5
10	Clothes	261.5	0.7	277.6	0.7	296.2	0.7	216.2	0.5	226.4	0.5	242.5	0.5
11	Skin, leather and their products	393.4	1.1	415.6	1.1	434.7	1.1	434.7	1.0	475.1	1.0	495.0	1.0
12	Woods and its products	103.6	0.3	112.3	0.3	115.9	0.3	132.7	0.3	153.8	0.3	153.4	0.3
13	Paper and its products	217.8	0.6	226.9	0.6	240.9	0.6	241.2	0.6	260.8	0.6	270.6	0.6
14	Printing	346.1	0.9	360.2	1.0	386.7	1.0	408.4	0.9	441.9	1.0	463.1	0.9
15	Chemical products	660.4	1.8	706.4	1.9	769.7	1.9	722.3	1.7	792.2	1.7	859.0	1.7
16	Refined petroleum	455.9	1.2	584.0	1.5	760.8	1.9	642.2	1.5	594.6	1.3	610.3	1.2
17	Rubber and plastic products	302.2	0.8	317.6	0.8	339.7	0.8	226.2	0.5	234.3	0.5	246.1	0.5
18	Metal products except elaborated met	356.0	1.0	378.9	1.0	407.7	1.0	453.9	1.0	478.8	1.0	456.0	1.0
19	Mineral products and elaborated meta	358.3	1.0	370.1	1.0	391.8	1.0	350.5	0.9	350.5	0.8	423.5	0.9
20	Machines and apparatus	272.2	0.7	280.2	0.7	297.4	0.7	276.8	0.6	305.5	0.7	349.0	0.7
21	Transport materials	241.1	0.7	254.2	0.7	268.7	0.7	289.1	0.7	332.5	0.7	363.6	0.7
22	Industrial services of maquila	131.1	0.4	164.6	0.4	262.2	0.6	420.8	1.0	606.2	1.3	831.5	1.7
IV	Electricity, gas and water	425.6	1.2	210.1	0.6	221.0	0.5	241.8	0.6	258.1	0.6	271.5	0.6
1	Electricity	303.4	0.8	86.8	0.2	86.1	0.2	96.0	0.2	106.0	0.2	112.7	0.2
2	Water and Sewage	122.2	0.3	123.3	0.3	134.9	0.3	145.8	0.3	152.1	0.3	158.8	0.3
V	Construction	1,268.0	3.5	1,398.4	3.7	1,458.5	3.7	1,511.6	3.5	1,718.9	3.7	1,822.0	3.7
VI	Commerce, restaurants and hotels	6,620.8	18.1	7,086.7	18.8	7,900.1	19.4	8,409.1	19.3	9,128.9	19.7	9,859.2	20.1
1	Commerce	5,550.8	15.2	5,903.9	15.6	6,588.8	16.2	7,042.7	16.1	7,633.5	16.6	8,311.3	16.9
2	Restaurants and hotels	1,070.0	2.9	1,182.8	3.1	1,311.3	3.2	1,366.4	3.1	1,494.4	3.1	1,547.9	3.1
VII	Transportation and Communications	2,677.6	7.3	2,804.1	7.4	3,068.1	7.5	3,271.6	7.5	3,438.5	7.4	3,631.2	7.4
1	Transportation	1,937.7	5.3	2,060.8	5.5	2,257.2	5.6	2,442.6	5.6	2,540.7	5.5	2,690.6	5.5
2	Communications	739.9	2.0	743.3	2.0	810.9	2.0	829.0	1.9	897.8	1.9	940.6	1.9
VIII	Finances and insurance	793.3	2.2	764.0	2.0	927.5	2.3	1,027.2	2.4	1,191.6	2.6	1,396.5	2.8
IX	Realstate and rental services	1,278.6	3.5	1,385.3	3.7	1,436.1	3.5	1,448.7	3.3	1,532.0	3.3	1,623.1	3.3
X	Acquisitions of housing	4,125.1	11.3	4,165.5	11.0	4,228.3	10.4	4,292.2	9.8	4,369.4	9.4	4,448.1	9.1
XI	Private and domestic services	2,240.6	6.1	2,305.9	6.1	2,378.8	5.9	2,415.6	5.6	2,575.2	5.6	2,727.2	5.5
1	Personal and Communal and social se	1,457.6	4.0	1,496.6	4.0	1,546.1	3.8	1,589.6	3.6	1,696.9	3.7	1,823.4	3.7
2	Domestic services	783.0	2.1	2,909.3	2.1	832.7	2.0	856.0	2.0	878.3	1.9	903.8	1.8
XII	Governmental services	2,693.0	7.4	2,709.6	7.2	2,615.1	6.4	2,624.4	6.0	2,692.6	5.8	2,786.8	5.7
	Minus Transferred bank services	-608.8	-1.7	-596.7	-1.6	-735.7	-1.8	-939.8	-2.2	-995.3	-2.2	-1,166.5	-2.4
	Plus: Custom duties and added value tax	672.2	1.8	793.3	2.1	1,013.8	2.5	3,476.2	8.0	4,012.8	8.7	4,362.4	8.9
	GDP (at market prices)	36,486.9	100.0	37,791.4	100.0	40,642.7	100.0	43,642.7	100.0	46,251.3	100.0	49,144.9	100.0

Source: Revista Trimestral, Oct./Dic. 1995 & Jul./Sep. 1996, Banco Central de Reserva

TABLE C.2.12 EXPORT STRUCTURE (FOB) OF EL SALVADOR, 1993-1995

Unit : Thousand Colones

No.	Products	1993		1994		1,995		Growth Rate (%) 1993-1995
		Value	%	Value	%	Value	%	
I	Live animal and livestock product	322,709	3.6	357,052	3.3	392,989	2.7	10.4
	1 Beef	418	0.0	61	0.0	9	0.0	-85.3
	2 Shrimp	231,933	2.6	217,927	2.0	244,134	1.7	3.0
	3 Bees honey	17,922	0.2	16,669	0.2	27,195	0.2	28.1
	4 Others	72,436	0.8	122,395	1.1	121,651	0.8	34.2
II	Vegetable products	2,144,419	24.1	2,551,588	23.3	3,368,155	23.2	25.5
	1 Fresh and dried fruits	22,350	0.3	18,261	0.2	31,413	0.2	26.9
	2 Coffee	1,982,138	22.3	2,408,919	22.0	3,183,215	21.9	26.8
	3 Sesame seeds	63,797	0.7	41,353	0.4	40,031	0.3	-19.2
	4 Natural balsam	7,004	0.1	9,704	0.1	11,121	0.1	26.6
	5 Others	69,130	0.8	73,351	0.7	102,375	0.7	22.8
III	Food, beverage and tobacco	784,558	8.8	844,024	7.7	1,008,683	6.9	13.5
	1 Sugar(not refined)	270,553	3.0	241,237	2.2	330,785	2.3	13.1
	2 Bread and confectionery	34,635	0.4	46,165	0.4	44,249	0.3	14.6
	3 Others	479,370	5.4	556,622	5.1	633,649	4.4	15.0
IV	Mineral products	66,328	0.7	42,333	0.4	120,917	0.8	74.7
	1 Fuel oil	0	0.0	0	0.0	0	0.0	-
	2 Greases and lubricants	5,768	0.1	0	0.0	0	0.0	-
	3 Asphalt	3,149	0.0	490	0.0	438	0.0	-47.5
	4 Others	57,411	0.6	41,843	0.4	120,479	0.8	80.4
V	Industrial chemicals	647,367	7.3	706,895	6.5	905,583	6.2	18.7
	1 Medicines	291,093	3.3	283,745	2.6	353,754	2.4	11.1
	2 Perfumery & cosmetics	40,046	0.5	50,470	0.5	109,244	0.8	71.2
	3 Soap	58,925	0.7	79,380	0.7	115,693	0.8	40.2
	4 Cleansers and detergents	76,760	0.9	109,865	1.0	110,206	0.8	21.7
	5 Insecticides	46,902	0.5	38,754	0.4	42,823	0.3	-3.4
	6 Others	133,641	1.5	144,681	1.3	173,863	1.2	14.2
VI	Paper and cartons	500,233	5.6	535,824	4.9	571,366	3.9	6.9
	1 Toilet paper	62,875	0.7	54,871	0.5	62,904	0.4	1.0
	2 Cartons	256,067	2.9	256,078	2.3	238,061	1.6	-3.5
	3 Others	181,291	2.0	224,875	2.1	270,401	1.9	22.1
VII	Textile and its products	853,549	9.6	897,076	8.2	1,025,501	7.1	9.7
	1 Cotton	15,095	0.2	30,896	0.3	75,504	0.5	124.5
	2 Yarns of cotton	120,582	1.4	121,249	1.1	122,964	0.8	1.0
	3 Textiles of cotton	30,076	0.3	32,655	0.3	57,120	0.4	41.7
	4 Synthetic textiles	0	0.0	0	0.0	0	0.0	-
	5 Apparels	300,559	3.4	324,966	3.0	347,174	2.4	7.5
	6 Towel, bedclothes, kitchencloth	117,520	1.3	136,946	1.3	145,416	1.0	11.4
	7 Others	269,717	3.0	250,364	2.3	277,323	1.9	1.8
VIII	Footwear and similar goods	127,533	1.4	158,944	1.5	148,882	1.0	9.1
	1 Footware	62,866	0.7	89,583	0.8	90,913	0.6	22.0
	2 Others	64,667	0.7	69,361	0.6	57,969	0.4	-4.6
IX	Base metals and products	376,292	4.2	415,800	3.8	500,666	3.4	15.5
	1 Aluminium products	111,952	1.3	156,643	1.4	192,036	1.3	31.3
	2 Agricultural and forestry tools	33,338	0.4	35,586	0.3	34,265	0.2	1.5
	3 Others	231,002	2.6	223,571	2.0	274,365	1.9	9.8
X	Electric machines and apparatus	184,318	2.1	207,759	1.9	251,764	1.7	16.9
	1 Refrigerators	55,323	0.6	71,479	0.7	88,034	0.6	26.2
	2 Electric-light bulbs	21,341	0.2	19,478	0.2	26,250	0.2	13.0
	3 Others	107,654	1.2	116,802	1.1	137,480	0.9	13.1
XI	Other products	358,388	4.0	449,033	4.1	496,204	3.4	17.9
XII	Maquila	2,523,974	28.4	3,765,799	34.4	5,745,933	39.5	50.9
	Total	8,859,668	100.0	9,932,127	100.0	14,536,643	100.0	28.0

Source : Revista Trimestral, Oct/Dic. 1995 & Jul/Sep. 1996, Banco Central de Reserva

TABLE C.2.13 IMPORT STRUCTURE (CIF) OF EL SALVADOR, 1993-1995

Unit: Thousand Colones

No.	Products	1993		1994		1995		rowth Rate (% 1993-1995)
		Value	%	Value	%	Value	%	
I	Livestock and vegetal products	974,809	5.3	1,352,172	6.4	1,518,061	5.2	26.8
1	Alive cattle	748	0.0	12,007	0.1	14,993	0.1	765.0
2	Meats and edible intestines	244	0.0	94,903	0.4	151,466	0.5	19427.1
3	Milk	222,755	1.2	223,787	1.0	275,310	0.9	11.7
4	Legumes and Vegetables	48,616	0.3	116,088	0.5	49,934	0.1	37.0
5	Fruits	9,935	0.1	53,980	0.2	84,388	0.3	249.8
6	Wheat	224,182	1.2	375,710	1.7	286,042	1.0	21.9
7	Maize	82,554	0.4	196,567	0.9	253,229	0.9	83.5
8	Rice	64,754	0.3	72,199	0.3	64,068	0.2	0.1
9	Flours, cereals and starches	37,288	0.2	36,755	0.2	64,604	0.2	37.2
10	Others	283,733	1.5	270,176	1.2	283,027	1.0	0.0
II	Greases and oils	398,686	2.1	541,519	2.4	641,372	2.2	27.1
1	Fats	116,084	0.6	200,815	0.9	188,219	0.6	33.4
2	Vegetal oils	89,488	0.5	283,662	1.3	390,098	1.3	127.3
3	Others	193,114		57,042		63,055		-30.0
III	Foods, beverages & tobacco	821,664	4.4	1,033,477	4.6	1,262,476	4.3	24.0
1	Fish, canned fishes	25,378	0.1	38,482	0.2	48,500	0.2	38.8
2	Confectionary	41,212	0.2	47,236	0.2	63,284	0.2	24.3
3	Sauces	35,957	0.2	42,653	0.2	70,226	0.2	41.6
4	Soup, pottage & broth	53,314	0.3	58,257	0.3	60,887	0.2	6.9
5	Milk	15,060	0.1	38,395	0.2	51,028	0.2	93.9
6	Beverages	12,476	0.1	138,863	0.6	156,810	0.5	513.0
7	Alcohol beverages	15,121	0.1	43,647	0.2	67,235	0.2	121.3
8	Soybean flour & dreges of vegetal o	125,071	0.7	138,886	0.6	155,025	0.5	11.3
9	Others	498,075	2.7	487,058	2.2	589,481	2.0	9.4
IV	Mineral products	1,786,825	9.6	1,960,115	8.7	2,599,790	8.9	21.2
1	Distilled oils from coal	1,601	0.0	348	0.0	187	0.0	-62.3
2	Crude petroleum	1,069,909	5.8	976,275	4.3	970,386	3.3	-4.7
3	Light oils	5,612	0.0	121,362	0.5	229,423	0.8	1075.8
4	Lubricating oils	0	0.0	107,214	0.5	202,648	0.7	-
5	Others	709,703	3.8	754,916	3.4	1,197,146	4.1	32.5
V	Industrial chemicals	2,373,768	12.8	2,674,354	11.9	3,330,862	11.4	18.6
VI	Plastics, artificial resins & rubbers	992,018	5.3	1,153,175	5.1	1,473,802	5.0	22.0
VII	Skin, hide & leather	86,609	0.5	86,344	0.4	103,179	0.4	9.6
VIII	Wood and its products	157,844	0.9	176,521	0.8	203,731	0.7	13.6
IX	Paper and its materials	808,047	4.4	868,282	3.9	1,265,304	4.3	26.6
X	Textile and its materials	964,516	5.2	963,244	4.3	1,291,515	4.4	17.0
XI	Footwares and those components	113,126	0.6	134,409	0.6	193,639	0.7	31.4
XII	Ceramics, Glass & those products	287,518	1.5	321,684	1.4	347,847	1.2	10.0
XIII	Base metal and its products	1,330,023	7.2	1,536,230	6.8	2,023,894	6.9	23.6
XIV	Machines and apparatus	2,960,506	16.0	3,424,463	15.2	4,419,041	15.1	22.4
XV	Transportation equipment	2,096,160	11.3	2,508,043	11.1	3,193,747	10.9	23.5
XVI	Medical instruments and apparatus	234,430	1.3	375,327	1.7	407,750	1.4	34.4
XVII	Toys, games & sport instruments	68,356	0.4	76,722	0.3	124,101	0.4	37.0
VII	Other products	181,499	1.0	422,050	1.9	619,470	2.1	89.7
XIX	Maquila	1,913,739	10.3	2,817,194	12.5	4,314,273	14.7	50.2
	Total	18,550,143	100.0	22,522,325	100.0	29,333,824	100.0	25.8

Source: Revista Trimestral, Oct./Dic.1995 & Jul./Sep.1996, Banco Central de Reserva

TABLE C.2.14 BALANCE OF INTERNATIONAL PAYMENTS OF EL SALVADOR, 1990-1994

Unit : US\$ Million

Item	1991			1992			1993			1994			Average of			
	Credits	Debits	Balance	Credits	Debits	Balance	Credits	Debits	Balance	Credits	Debits	Balance	Balance	Balance		
I. Current account	1,653.7	1,771.5	-117.8	1,903.0	2,054.6	-151.6	2,444.2	2,526.2	-82.0	2,958.6	2,976.5	-17.9	3,498.0	3,773.6	-275.6	-129.0
A. Merchandise & services	929.9	1,769.0	-839.1	966.1	2,052.1	###	1,398.2	2,523.7	###	1,670.9	2,974.0	1,303.1	2,104.0	3,769.1	-1,665.1	-1,203.8
1 Merchandise (export & import: FOB)	588.0	1,314.3	-726.3	597.5	1,587.8	-990.3	1,032.1	1,994.6	-962.5	1,249.3	2,416.4	1,167.1	1,661.3	3,117.7	-1,456.4	-1,060.5
2 Shipment & insurance of imports	0.0	91.7	-91.7	0.0	110.8	-110.8	0.0	150.1	-150.1	0.0	157.6	-157.6	0.0	234.7	-234.7	-149.0
3 Diverse transportation	74.0	54.0	20.0	79.4	59.0	20.4	80.0	61.7	18.3	94.0	72.0	22.0	96.8	75.0	21.8	20.5
4 International travel	71.0	57.0	14.0	73.4	58.0	15.4	78.5	60.8	17.7	85.2	70.2	15.0	85.5	72.5	13.0	15.0
5 Insurance without merchandise	20.4	25.0	-4.6	21.0	27.0	-6.0	22.5	29.3	-6.8	26.4	32.6	-6.2	26.6	33.1	-6.5	-6.0
6 Prifurs of international investment	22.0	149.0	-127.0	24.7	128.5	-103.8	25.4	142.2	-116.8	30.4	129.7	-99.3	50.8	120.8	-70.0	-103.4
7 Government operation	76.1	15.0	61.1	78.6	16.0	62.6	83.8	16.8	67.0	88.9	20.2	68.7	84.2	22.2	62.0	64.3
8 Other services	78.4	63.0	15.4	91.5	65.0	26.5	75.9	68.2	7.7	96.7	75.3	21.4	98.8	93.1	5.7	16.6
B. Unilateral transfers	723.8	2.5	721.3	936.9	2.5	934.4	1,046.0	2.5	1,043.5	1,287.7	2.5	1,285.2	1,394.0	4.5	1,389.5	1,074.8
1 Private	543.5	0.7	542.8	708.6	0.7	707.9	823.9	0.7	823.2	1,001.8	0.7	1,001.1	1,196.8	1.7	1,195.1	854.0
2 Official	180.3	1.8	178.5	228.3	1.8	226.5	222.1	1.8	220.3	285.9	1.8	284.1	197.2	2.8	194.4	220.8
II. Capital account	448.7	288.9	159.8	492.6	281.1	211.5	435.5	184.0	251.5	422.9	261.9	161.0	582.7	160.5	422.2	241.2
A. Official capital	236.7	119.8	116.9	279.7	118.6	161.1	266.0	125.2	140.8	281.6	104.8	176.8	270.9	147.4	123.5	143.8
1 Long term credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2 Long term debts	236.7	119.8	116.9	279.7	118.6	161.1	266.0	125.2	140.8	281.6	104.8	176.8	270.9	147.4	123.5	143.8
2.1 Central Government's loans	195.9	95.7	100.2	180.6	50.5	130.1	266.0	125.2	140.8	230.0	72.2	157.8	196.7	83.0	113.7	128.5
2.2 Official loans	40.8	24.1	16.7	99.1	68.1	31.0	0.0	0.0	0.0	51.6	32.6	19.0	74.2	64.4	9.8	15.3
3 Short term debts	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B. Bank capital	90.4	169.1	-78.7	111.0	140.9	-29.9	26.7	58.8	-32.1	31.7	148.4	-116.7	76.1	2.9	73.2	-36.8
1 Long term debts	90.4	169.1	-78.7	111.0	140.9	-29.9	26.7	58.8	-32.1	31.7	148.4	-116.7	76.1	2.9	73.2	-36.8
2 Short term debts without reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3 Other credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C. Bank Financial	22.0	0.0	22.0	16.0	21.6	-5.6	18.8	0.0	18.8	94.5	8.7	85.8	220.1	10.2	209.9	66.2
1 Short term credits and debts	22.0	0.0	22.0	16.0	21.6	-5.6	18.8	0.0	18.8	85.9	8.7	77.2	198.9	10.2	188.7	60.2
1.1 Credits	22.0	0.0	22.0	16.0	21.6	-5.6	18.8	0.0	18.8	0.0	8.7	-8.7	0.0	10.2	-10.2	3.3
1.2 Debts	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	85.9	0.0	85.9	198.9	0.0	198.9	57.0
2 Long term debts	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.6	0.0	8.6	21.2	0.0	21.2	6.0
D. Private capital (included errors & omission)	99.6	0.0	99.6	85.9	0.0	85.9	124.0	0.0	124.0	15.1	0.0	15.1	15.6	0.0	15.6	68.0
III. Balance of payments (I+II)	2,102.4	2,060.4	42.0	2,395.6	2,335.7	59.9	2,879.7	2,710.2	169.5	3,381.5	3,238.4	143.1	4,080.7	3,934.1	146.6	112.2
IV. Deferred payments & net international rese	28.0	70.0	-42.0	6.0	65.8	-59.8	0.0	169.5	-169.5	0.0	143.1	-143.1	0.0	146.6	-146.6	-112.2
A. Deferred payments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.2	-25.2	0.0	0.0	0.0	0.0	0.0	0.0	-5.0
B. Net international reserves	28.0	70.0	-42.0	6.0	65.8	-59.8	0.0	144.3	-144.3	0.0	143.1	-143.1	0.0	146.6	-146.6	-107.2

Source : Revista Trimestral, Jul./Sep. 1996, Banco Central de Reserva

TABLE C.2.15 ANNUAL BUDGETS OF THE CENTRAL GOVERNMENT

I. Amount (US\$ Million)							Average Annual
Revenue/Expenditure	1991	1992	1993	1994	1995	1996	Growth Rate (%)
A Revenue	617.1	736.9	880.8	1,095.2	1,343.2	1,693.2	22.4
1. Current revenue	572.1	588.3	741.5	902.9	1,181.7	1,465.9	21.1
2. Capital revenue	12.8	32.1	22.0	13.3	30.9	87.1	79.0
3. Financial sources	32.2	116.5	117.2	179.0	130.6	140.1	59.1
B Expenditures	617.1	736.9	880.8	1,095.2	1,343.2	1,693.2	22.4
1. Current expenditure	519.7	589.6	711.0	862.8	1,032.3	1,304.9	20.3
2. Capital expenditure	97.3	147.3	169.8	232.4	260.8	252.0	22.5
3. Financial applications	-	-	-	-	-	136.3	-
II. Ratio to GDP (%)							
A Revenue	11.6	12.4	12.7	13.5	14.1	15.5	-
1. Current revenue	10.8	9.9	10.7	11.1	12.4	13.4	-
2. Capital revenue	0.2	0.5	0.3	0.2	0.3	0.8	-
3. Financial sources	0.6	2.0	1.7	2.2	1.4	1.3	-
B Expenditures	11.6	12.4	12.7	13.5	14.1	15.5	-
1. Current expenditure	9.8	9.9	10.2	10.6	11.3	11.9	-
2. Capital expenditure	1.8	2.5	2.4	2.9	2.7	2.3	-
3. Financial applications	-	-	-	-	-	1.2	-
III. GDP at Current Prices (US\$ Million)	5,311	5,962	6,957	8,126	9,548	10,932	15.5

Source : Revista Trimestral en 1992,1993, 1994, 1995 and 1996, BCR

Note : *Forecast of Central Bank and EIU

TABLE C.2.16 BREAKDOWN OF REVENUE OF THE CENTRAL GOVERNMENT

Unit : US\$ Million							Average Annual
Revenue	1991	1992	1993	1994	1995	1996	Growth Rate (%)
A. Tax Revenue							
1. Income Tax	45.3	40.3	42.0	64.3	134.8	149.9	33.4
2. Corporation Tax	58.9	64.3	84.3	109.5	183.8	204.6	29.9
3. Import Tax	97.3	91.5	101.8	141.2	203.5	130.0	10.4
4. Value Added Tax (VAT)	199.3	195.2	339.7	390.5	466.6	762.9	34.0
Total of Taxes	400.7	391.3	567.8	705.6	988.6	1,247.5	26.7
B. Other Revenue	216.3	345.6	313.0	389.6	354.5	445.6	18.3
Total	617.1	736.9	880.8	1,095.2	1,343.2	1,693.2	22.4

Source : Information from the "Ministerio de Hacienda"

TABLE C.2.17 **SECTORIAL DISTRIBUTION OF PUBLIC INVESTMENT**

A. Amount (Colones Million)										
Item	Actual					Projection				
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
I. Social Investment	431.1	716.9	1,113.4	1,914.4	2,072.5	2,139.8	2,257.2	2,831.3	2,652.8	2,780.1
1) Education	53.4	114.7	362.0	463.7	562.8	416.7	468.1	556.8	606.9	801.6
2) Health	139.6	210.3	142.6	238.5	416.3	278.4	358.5	273.8	367.8	138.5
3) Water/Sanitation	20.5	9.6	0.0	92.7	511.2	429.2	482.8	595.5	691.6	722.0
4) Housing	188.9	315.4	318.1	324.6	156.4	196.4	205.0	274.5	364.7	364.7
5) Others	28.7	66.9	290.7	794.9	425.8	819.1	742.8	1,130.7	621.8	753.3
II. Other Investment	451.6	903.2	1,612.8	1,006.9	3,143.1	3,382.3	3,556.0	3,422.2	3,267.5	3,165.7
1) Energy	127.3	138.6	800.9	192.1	815.3	1,158.8	1,419.0	1,232.1	938.5	969.1
2) Telecommunication	188.9	382.3	301.7	357.7	821.7	614.4	553.2	544.8	523.0	438.9
3) Transportation	90.2	277.2	384.0	331.2	1,092.1	1,180.1	1,143.3	1,155.3	1,301.3	1,227.6
4) Agriculture, Environme & Land Development	45.2	105.1	126.2	125.9	414.0	429.0	440.5	490.0	504.7	530.1
III. Total	882.7	1,620.1	2,726.2	2,921.3	5,215.6	5,522.1	5,813.2	6,253.5	5,920.3	5,945.8
Variation in Total	-	83.5	68.3	7.2	44.0	5.9	5.3	7.6	-5.3	0.4

B. Percent to GDP										
Item	Actual					Projection				
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
I. Social Investment	1.05	1.50	2.03	2.89	2.73	2.46	2.28	2.57	2.02	1.84
1) Education	0.13	0.24	0.66	0.70	0.74	0.48	0.49	0.49	0.46	0.40
2) Health	0.34	0.44	0.26	0.36	0.55	0.32	0.36	0.53	0.28	0.22
3) Water/Sanitation	0.05	0.02	0.00	0.14	0.68	0.49	0.47	0.52	0.53	0.48
4) Housing	0.46	0.66	0.58	0.49	0.20	0.23	0.21	0.24	0.28	0.24
5) Others	0.07	0.14	0.53	1.20	0.56	0.94	0.75	0.99	0.47	0.50
II. Other Investment	1.10	1.89	2.94	1.52	4.15	3.91	3.61	3.00	2.48	2.10
1) Energy	0.31	0.29	1.46	0.29	1.08	1.35	1.44	1.08	0.71	0.64
2) Telecommunication	0.46	0.80	0.55	0.54	1.08	0.71	0.56	0.48	0.40	0.29
3) Transportation	0.22	0.58	0.70	0.50	1.44	1.34	1.16	1.01	0.99	0.82
4) Agriculture, Environme & Land Development	0.11	0.22	0.23	0.19	0.55	0.51	0.45	0.43	0.38	0.35
III. Total	2.15	3.39	4.97	4.41	6.88	6.37	5.89	5.57	4.50	3.94

Source : Plan de Desarrollo Economico y Social, 1994-1999

TABLE C 2.18 FOREIGN-EXCHANGE RESERVES AND EXTERNAL DEBT OF EL SALVADOR

Unit : US\$ Million

Item	1990	1991	1992	1993	1994	1995	Average Annual Variation Rate (%) (1990-1995)
I. GDP at Current Prices ¹⁾	4,801	5,311	5,962	6,957	8,126	9,548	14.8
II. Total Reserves ²⁾	550	412	539	668	785	857	11.3
1. Foreign Exchange	415	287	422	536	649	721	15.1
2. Gold	135	124	117	132	135	136	0.3
III. Total External Debt ³⁾	2,147	2,180	2,261	2,012	2,187	2,264	1.3
1. Long-term Debt	1,938	2,078	2,159	1,905	2,002	2,065	1.5
2. Short-term Debt	209	102	102	107	185	199	6.8
IV. Conditions of External Debt ³⁾							(Average Value)
1. Interest (%)	4.6	7.1	7.1	6.0	3.8	-	5.7
2. Maturity (Years)	29.8	17.3	21.4	21.4	24.2	-	22.8
3. Grace Period (Years)	7.2	4.8	5.4	4.0	7.6	-	5.8
							(Annual Variation Rate (%))
V. Total Debt Service ³⁾	208	248	233	292	341	260	6.3
1. Principal	124	167	149	170	242	-	20.1
2. Interest	84	81	84	122	99	-	6.6
VI. Ratio of Total Debt Service to Budget Expenditure (%)	-	39.9	28.8	33.3	31.1	19.4	(Average Percent) 30.5
VII. Ratio to GDP (%)							(Average Percent)
1. Total External Debt ³⁾	44.7	41.0	37.9	28.9	26.9	23.7	33.9
2. Total Debt Service ³⁾	4.3	4.7	3.9	4.2	4.2	2.7	4.0

Source : 1) Data of CDR and EIU

2) International Financial Statistics, IMF

3) World Debt Tables, World Bank

TABLE C.2.19 NET RECEIPTS OF INTERNATIONAL FINANCIAL ASSISTANCE FOR EL SALVADOR

Item	1989	1990	1991	1992	1993	Unit : US\$ Million	
						Average for period 1989-1993	Ratio to Total (%)
1. Bilateral Aid	373.5	343.7	319.4	321.5	278.9	327.4	81.0
1.1 USA's Aid	310.0	246.0	230.0	231.0	207.0	244.8	60.6
1.2 Ratio of USA (%)	83.0	71.6	72.0	71.9	74.2	74.8	
2. Multilateral Aid	51.7	-3.1	74.7	76.6	184.2	76.8	19.0
2.1 IDB's Aid	46.1	-6.3	0.8	25.3	81.5	29.5	7.3
2.2 Ratio of IDB (%)	89.2	-	1.1	33.0	44.2	38.4	
3. Total	425.2	340.6	394.1	398.1	463.1	404.2	100.0

Source : Geographical Distribution of Financial Flows to Aid Recipients, OECD

TABLE C.2.20 BILATERAL ASSISTANCE OF ODA FOR EL SALVADOR

Countries	Unit : US\$ Million						
	Loan and Grant				Breakdown in 1991		
	1988	1989	1990	1991	Loan	Grant	Technical Assistance
USA	318.0	310.0	247.0	182.0	32.0	150.0	93.0
Germany	20.6	27.8	27.3	23.8	2.3	21.5	7.4
Netherland	7.7	8.9	9.3	8.1	0.0	8.1	8.1
Japan	2.1	3.5	8.2	7.5	0.0	7.5	0.6
Italy	16.5	5.3	10.5	7.1	0.0	7.1	0.3
Spain	0.8	2.3	3.3	3.3	0.0	3.3	0.0
Sweden	0.4	0.6	1.1	2.4	0.0	2.4	0.1
Norway	0.9	2.6	2.0	1.8	0.0	1.8	0.4
Others	14.7	6.7	3.3	4.7	0.2	4.5	1.4
Total	381.7	367.7	312.0	240.7	34.5	206.2	111.3

Source : Economic Indicators, 1988/1991, OECD

TABLE C.2.21 EMPLOYMENT STRUCTURES OF EL SALVADOR,
REGION IV AND THE STUDY AREA, 1992

No. Economic Activity	El Salvador		Region IV		Study Area	
	Number	%	Number	%	Number	%
1 Agriculture	588,501	35.5	196,436	57.5	65,885	46.8
2 Fishery	10,237	0.6	6,142	1.8	432	0.3
3 Mining	967	0.1	276	0.1	164	0.1
4 Manufacturing industry	245,800	14.8	28,205	8.3	14,358	10.2
5 Electricity, gas & water	9,984	0.6	698	0.2	438	0.3
6 Construction	82,664	5.0	10,508	3.1	5,839	4.1
7 Commerce	248,975	15.0	37,388	10.9	20,362	14.5
8 Hotel & Restraunt	26,543	1.6	2,165	0.6	1,207	0.9
9 Transport & communications	62,209	3.8	8,076	2.4	4,481	3.2
10 Intermediate finance	18,359	1.1	1,356	0.4	831	0.6
11 Real estate	33,185	2.0	3,743	1.1	2,457	1.7
12 Public administration & defenc	100,800	6.1	13,413	3.9	6,912	4.9
13 Education	44,702	2.7	8,524	2.5	5,008	3.6
14 Social health services	28,165	1.7	3,616	1.1	2,202	1.6
15 Other activities	36,184	2.2	6,620	1.9	3,342	2.4
16 Domestic services	86,360	5.2	9,977	2.9	4,767	3.4
17 Organization	1,436	0.1	99	0.0	74	0.1
18 Not specified	33,607	2.0	4,300	1.3	2,142	1.5
Total	1,658,678	100.0	341,542	100.0	140,901	100.0
					20.6	41.3
					Ratio to El Salvador (%)	Ratio to Region IV (%)

Source : Censos Nacionales de Poblacion y Vivienda, 1992, Ministerio de Economia

TABLE C.2.22 OTHER ECONOMIC INDICATORS

Item	1990	1991	1992	1993	1994	1995	1996	Average
I. Exchange Rate (Cols./US\$)	8.03	8.08	9.17	8.67	8.75	8.75	8.75	8.60
Annual Variation of Exchange Rate (%)	-	0.62	13.49	-5.45	0.92	0.00	0.00	1.60
II. Prices (1990=100)								
1. Wholesale Prices	100.0	106.9	109.3	117.5	126.7	140.0	146.1	-
2. Consumer Prices	100.0	114.4	127.2	150.9	166.8	183.6	200.1	-
III. Inflation Rate (%)								
1. Wholesale Prices	-	6.9	2.2	7.5	7.8	10.5	4.3	6.6
2. Consumer Prices	-	14.4	11.2	18.6	10.5	10.1	9.0	12.3
3. Average	-	10.7	6.7	13.1	9.2	10.3	6.7	9.4
IV. Annual Rate of Bank Interest (%)								
1. Deposit	18.0	16.1	11.5	15.3	13.6	14.4	14.5	14.8
2. Lending	21.2	19.7	16.4	19.4	19.0	19.1	19.1	19.1
3. Average	19.6	17.9	14.0	17.3	16.3	16.7	16.8	16.9
V. Diff. between Lending Interest Rate & Inflation Rate (%) (=II-IV)								
1. Wholesale Prices	-	12.8	14.2	11.9	11.2	8.6	14.8	12.2
2. Consumer Prices	-	5.3	5.2	0.8	8.5	9.0	10.1	6.5
3. Average	-	9.0	9.7	6.4	9.8	8.8	12.5	9.4

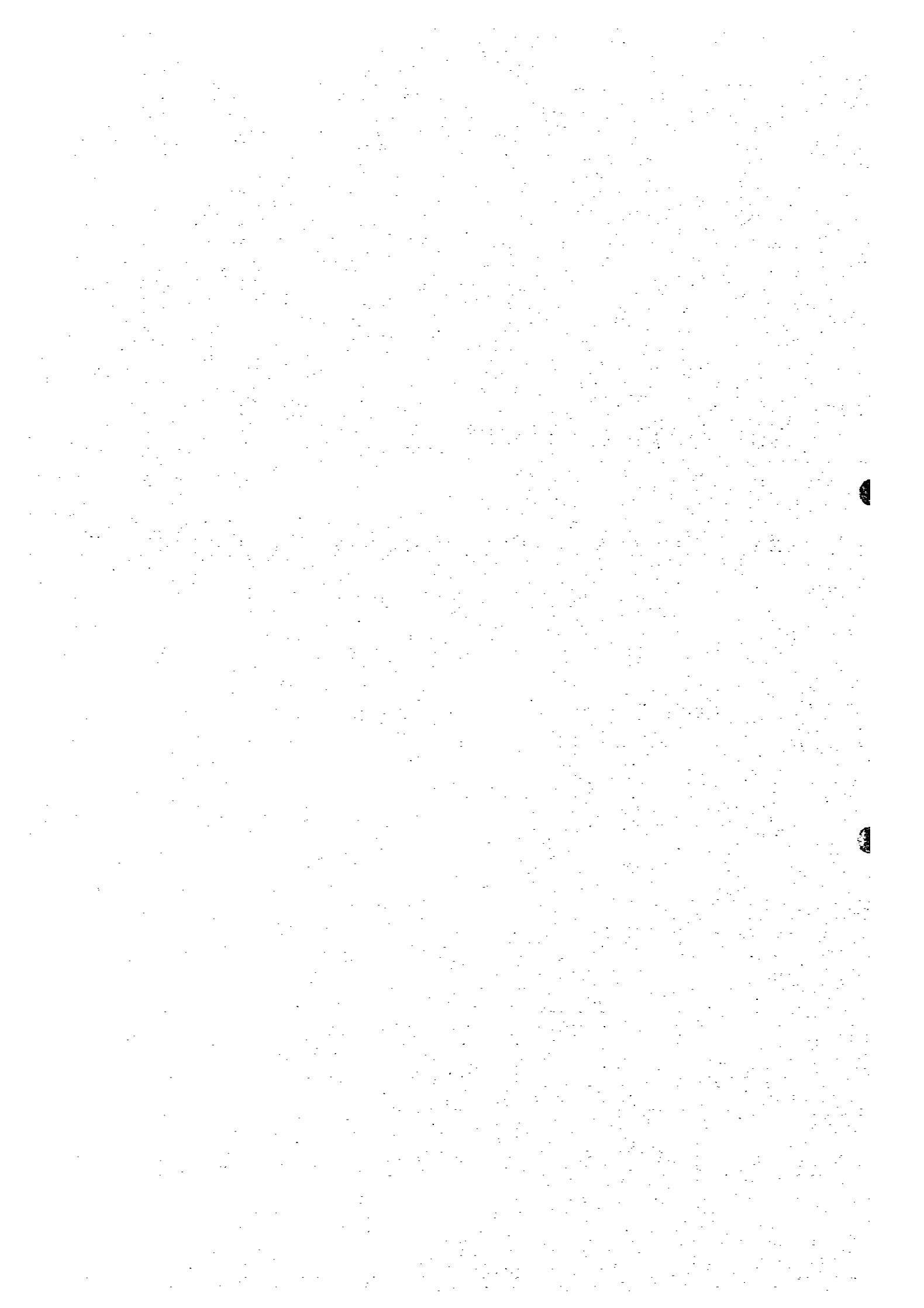
Source : International Financial Statistics, January 1997, IMF

SUPPORTING REPORT



D : REGIONAL DEVELOPMENT AND LAND USE





Supporting Report D: Regional Development Policy

Table of Contents

D :	REGIONAL DEVELOPMENT POLICY-----	D.1
1.	REGIONAL DEVELOPMENT -----	D.1
1.1	National Development Policy-----	D.1
1.1.1	Background of the National Development Plan-----	D.1
1.1.2	New National Development Plan 1994-1999-----	D.2
1.2	Importance of Sustainable Development and Development Policy for the Eastern Region(IV) in the National Physical Development -----	D.3
1.3	Present Situation and Development Orientation of the Region-----	D.4
2.	LAND USE -----	D.8
2.1	Existing Land Use-----	D.8
2.2	Future Land Use-----	D.8

List of Tables and Figures in Supporting Report D

Table D.2.1	Existing Land Use of the Whole Country (1996)-----	D.T.1
Table D.2.2	Existing Land Use of the Study Area (1996)-----	D.T.1
Table D.2.3	Land Classification of the Whole Country and Study Area-----	D.T.1
Table D.2.4	Land Use Plan-----	D.T.2
Figure D.1.1	Development Orientation of the Study Area-----	D.F.1
Figure D.2.1	Land Use in El Salvador -----	D.F.2
Figure D.2.2	Land Use in the Study Area -----	D.F.3
Figure D.2.3	Proposed Future Land Use-----	D.F.4

D: REGIONAL DEVELOPMENT POLICY

1. REGIONAL DEVELOPMENT

1.1 National Development Policy

1.1.1 Background of the National Development Plan

The recent history of El Salvador's economic evolution can be itemized as;

- 1) Dependent on coffee-only exports until the end of the 1950's,
- 2) Industrialization particularly in textile and diversified export-crops(cotton and sugar) in the 1960's-1970's, and
- 3) Civil conflict and economic collapse in the 1980s.

To overcome serious problems in the national socio-economic situation during 1980's, the El Salvador Government formulated the following national development plans aiming at recovering peace and rebuilding the national socio-economic structure.

1) National Socio-economic Development Plan 1989-1994

This Development Plan was made for establishing a market socio-economic system, limit the national role only for norm, opening overseas markets, and achieving stable and sustainable development gradually for the improvement of the life of all the people including the extreme poverty stratum. The national development goals of the plan were;

- a. Arrange the prerequisites to realize a firm and stable economic development,
- b. Upgrade the living and welfare conditions of the people, especially for extreme poor people, and
- c. Establish a basic principle for balanced development considering economic growth and environmental conservation, to produce various benefits for the following generations.

2) National Reconstruction Plan 1993-1997

After the peace accord in 1992, the Government formulated and commenced "National Reconstruction Plan for 1993-1997, aiming at immediate actions to repair the buildings/facilities, vocation/training for ex-fighters, reconstruction of infrastructure facilities in the most affected areas and a land transfer program.

1.1.2 New National Development Plan 1994-1999

1) National Development Goals

At present, the Government has issued the "National Development Plan for 1994-1999. According to the plan, the national goals are listed as follows;

- a. Stabilization of the political situation, democracy, tolerance, strengthening of the constitutional state,
- b. Strengthen policy measures for poverty and human training,
- c. Self-supporting economy, and
- d. Promotion of national unity.

2) Priority of the Government Investment

The government investment strategies on the above national plan, targeting the investment goal at 5.4% of the GDP during this period, also reinforcing investment (non-financial sector) in the following sectors;

- a. Social Sector(education/culture, health/nutrition, water/sewer, housing, etc.)
- b. Economic infrastructure and environment(energy, communication, transportation, agriculture, environment/physical development)

3) Agricultural Development Goals

The development goals for the agricultural sector are stated as;

- a. Within the context of "Rational and Sustainable Use of the Natural Resources",
- b. Crop diversification, strengthen competitiveness and ensuring of land title, and
- c. Upgrading the living environment of rural areas.

4) Importance of Regional Development

The plan also stress the necessity of population dispersion and the importance of regional development. The government takes positive actions for development of socio-economic infrastructure systems of regions and improving the living environment of local cities and villages.

1.2 Importance of Sustainable Development and Development Policy for the Eastern Region(IV) in the National Physical Development

1 The Importance of Sustainable Development

The above national development plans emphasize drastic changes in policy for utilizing natural resources from the past development pattern of {Explosion of Natural Resources} to {Development of Social Sector} and {Conservation of Natural Resources}. The strategic measures on the above new policy to conserve and manage natural resources and realize sustainable development are formulated and positively initiated by the government.

2 Integrated Management and Development of the River Basin of the San Miguel River

Based on the above policy, the central government has designated the river basin of the San Miguel River as an integrated development area requiring various measures such as flood mitigation, reforestation, encouragement of extension service, etc., from the viewpoints of prevention of natural disasters, realization of sustainable development, integrated management of important river basins, effective utilization of land resources, regeneration of forest resources in the country. Lake Jocotal was designated as a protection zone from the aspect of natural conservation in the Region.

1.3 Present Situation and Development Orientation of the Region

1. Delay in Regional Development and Necessity of Urban and Rural Development

- 1) The region is the most backward area in the country**
 - a. The population share of the region was about 22% of the country, while the share of the region's territory is about 37% of the country, thus the population density of the region is less than the national average(national; 243 p/ha, the region; 146p/ha). The region became a depopulated area in the nation. In addition, the share of the urban population in the total population in the region is less than the national average which is only about 16%,**
 - b. The region's share of economic activities in the nation, such as the number of employed and number of companies are also at a lower level among the four regions, and**
 - c. The conditions of the living environment of the region are also at a lower level than the country.**
- 2) The region was the most affected area during the civil conflict**

One of the reasons for the delay in development of the region was caused by the civil conflict, because the region was the most affected area. During the conflict, many socio-economic infrastructures were destroyed, lost of employment and farm lands, escape from the poverty and fire made the people uneasy. According to the Census data, around 150 thousands of people has emigrated from the region(around 520 thousands in the whole nation) during the period of the civil conflict.

- 3) The need for increasing capacity to accommodate repatriates and future increasing population**

One of the regional development roles is to increase the absorption capacity of the population so as to receive people who have refused or emigrated during the civil conflict and still stay outside the country, and also for the future increasing population in the region. The settlement of an adequate number of the population in the region is one of the key issues for balanced allocation of the population in the country, because the San Salvador metropolitan area has a problem with overpopulation.

- 4) To rectify the socio-economic disparity of the region, urban and rural development should be accelerated to improve the living environment and to provide jobs especially in San Miguel, Usultan municipalities and other small towns in the region.
 - a. Expansion of urban areas and improvement the infrastructure systems such as roads, electricity, water supply, sanitation, etc. and also schools, hospitals, cultural and recreational facilities, etc.
 - b. Creation of jobs through promotion of agro-industry such as henequen sac, milk, leather, etc. and other industries
 - c. Development of rural areas is also important to absorb the increasing rural population for balanced population allocation within the region.
- 5) Development of the eastern region as a growth pole of the nation building is necessary to contribute to the following issues.
 - a. Balanced spatial development and appropriate allocation of the national population in the country.
 - b. Rectifying socio-economic disparity among the regions and reducing the number of the poor people
 - c. Provision of the saucer(space and job) for repatriates who lives outside the country.

2 Present Situation and Development Orientation of the Agricultural Land

- 1) Most of the territory of the region is already cultivated, except for a few areas of forest and thus there are serious problems for agriculture and the environment.
 - a. Deforestation and extensive use of mountainous land which are mostly unsuitable for agriculture, make problems on soil erosion and low productivity,
 - b. Floods hit the most suitable agricultural lands, because those lands are mostly located in low areas, and
 - c. Lack of water and drought in the dry season make problems in agricultural production.

- 2) The soil of the Study Area is good for agriculture and it is expected that agricultural production will be increased through conservation and management of water resources and effective and rational use of agricultural lands.
 - a. Area of the good soil(Class I-III) represents 20% of the total land which is higher than the national average(Land Classification, MAG), and
 - b. There are 310 km² of potential areas for irrigation, which is 86% of the existing farm land, excluding grass land.
- 3) The followings are key issues for effective and rational use of the agricultural lands in the Study Area
 - a. Secure the safety of agricultural lands by flood protection measures and drainage improvement of flood-prone areas,
 - b. Reforestation and agro-forestry through encouragement of extension service especially in the mountainous zone to protect soil and water resources, and
 - c. Expand the cultivable lands in the dry season through the development of irrigation facilities using groundwater and river water.
- 4) There are lot of areas with ineffective use of agricultural lands because of drastic decrease of cotton fields, land reform and lack of technology and finance. The agricultural land use plan is required for control and guiding the agricultural development of the region.
 - a. Proper crop on proper land
 - b. Mixed cultivation(crops)
- 5) Other important measures for promotion of agriculture
 - a. Increase production of the non-traditional crops(sesame, natural balsam, copra, olive seed, fruits, vegetables, etc.),
 - b. Increase production of imported vegetables, fruits and crops(wheat, maize, rice, powder milk, vegetable oil, etc.) to decrease the import of such basic foodstuffs, and

- c. Promotion of agro-industry(The sugar mill in La Libertad is planned to be removed to Usultan).

- 6) Another development role of the region will be “to develop the agricultural sector to ensure/expand as a supply center for foodstuffs in the country” through the above development efforts. Fig. D.1.1 shows the preliminary orientation for the regional development of the Study Area.

2. LAND USE

2.1 Existing Land Use

The existing land use in the whole country and the study area in 1996 are shown in Tables D.2.1, D.2.2 and Fig. D.2.1, D.2.2 respectively, and the area by land classification is shown in Table D.2.3.

The land of the Study Area has been fully developed seeing that agricultural land shares 81 %, which is larger than that of the national average (77 %).

According to the data of MAG in 1993, the agricultural area in the country shared about 70 %. It means that the land cultivation is continuing in these three years.

The areas for pasture and grain, dotted in the Study Area, share 65 % of the total area. The second largest area is forest (15 %), which is mainly situated in the southern and eastern mountain areas. The third is coffee, which is distributed in the northern and western mountain areas and the fourth is grain in the lower San Miguel River basin.

The proportions of the area by land classification of the whole country and the Study Area are almost the same (Table D.2.3). According to this table, forest or permanent vegetation area is desirable to cover at least 50 % of the area since more than 50 % of the Study Area is not suitable for cultivation (Class VII and VIII). It means that the area is overdeveloped and needs to be rehabilitated by means of reforestation etc. for sustainable use of land resources .

2.2 Future Land Use

In accordance with the National Development Policy, a future land use plan is proposed by the Study Team and the map is shown in Fig. D.2.3.

The plan is made mainly based on the standard of land classification and existing land use plan. The plan is targeted as follows:

- Sustainable use of land resources by appropriate use of the resources.
- Increase in agricultural productivity by effective use of the resources.
- Recovering of forest resources and natural environment by watershed management.

To achieve the target successfully, following project or program is necessary :

- Flood control.
- Reforestation.
- Improvement of agricultural extension program.

Explanation of legends in the map and the corresponding areas are shown in Table D.2.4 .

1

2

3

Table D.2.1 EXISTING LAND USE OF THE WHOLE COUNTRY (1996)

	Urban	Agriculture					Forest		Others ³⁾	Total		
		Pasture ¹⁾ & Grain	Coffee	Sugar cane	Other ²⁾ Perennial quen	Hene- quen	Veg. total	Sub- total			Natural Mangrove	
Area (km ²)	442	13,080	1,957	668	379	69	90	16,242	3,204	383	683	20,955
Ratio (%)	2.1	62.4	9.3	3.2	1.8	0.3	0.4	77.5	15.3	1.8	3.3	100.0

Source: MAG
 1) Including rice
 2) Including coco, fruits and banana
 3) Including lake, lava and unarable

Table D.2.2 EXISTING LAND USE OF THE STUDY AREA (1996)

	Urban	Agriculture							Forest	Lake & River	Lava	Total	
		Basic Grain	Pasture & Grain	Coffee	Sugar cane	Hene- quen	Fruits	Veg. Sub-total					
Area (km ²)	29	110	1,464	140	39	52	8	10	1,823	331	36	28	3,247
Ratio (%)	1.3	4.9	65.1	6.2	1.7	2.3	0.4	0.5	81.1	14.7	1.6	1.3	100.0

Source: MAG

Table D.2.3 LAND CLASSIFICATION OF THE WHOLE COUNTRY AND STUDY AREA

		I	II	III	IV	V	VI	VII	VIII	Other	Total
		Whole Country ¹⁾	(1,000Ha)	14	106	237	333	36	201	859	254
	(%)	0.7	5.1	11.3	15.9	1.7	9.6	41	12.1	2.7	100.0
Study Area ²⁾	(Ha)	2.1	12.4	29.3	26.4	5.9	20.7	86.3	21.8	19.9	224.7
	(%)	0.9	5.5	13.0	11.7	2.6	9.2	38.4	9.7	8.9	100.0

Source: 1) Agencia de Desarrollo de OEA 2) MAG

Table D.2.4 LAND USE PLAN

Area	Recommended Activity	Remarks	Class	km ²	Ratio %
Intensive Agriculture-(1)	Annual crop, Improved pasture	Area with no or less limitation for crop cultivation and the soil is inherently high in fertility. Can be used for any agricultural activities.	I,IIe,s,es,hs,II IIe,s,es,hs	399	17.8
Intensive Agriculture-(2)	Annual crop, Improved pasture	Area expected to increase land productivity by flood control or drainage. Can be used for any agricultural activities.	IIIh,IIIh,IVh	65	2.9
Intensive Agriculture with Erosion Control	Annual crop, Improved pasture, Permanent crop	Area prone to be eroded because of slope and soil texture conditions. Erosion control is required for annual crop production.	IVe,s,cs,hs	352	15.7
Water Tolerant Crop	Rice etc.	Area with severe limitation due to flooding, impermeability and fine texture. However, the area has potential to grow rice.	Vh,s	59	2.6
Agroforestry	Tree crop	Area difficult to cultivate for annual crops due to relatively steep slope and thin soil layer. However, the area is suitable for agroforestry.	VIe,s,es	207	9.2
Production Forest	Afforestation	Area very difficult to cultivate due to steep slope(56-70%) and thin soil layer. The area is covered by poor vegetation because of deforestation and development of grazing land. The area should be changed from erosion-prone land use to erosion-free use.	VIIe,s,es	862	38.4
Protection Area	Protection	Area should be prohibited from any production activities because of steep slope (70%<) and thin soil layer (15cm>), etc..	VIIIe,s,es	209	9.3
River & Wet Area			VIIIh,VIIIh	17	0.8
Urban				58	2.6
Lake				19	0.8
Total				2,247	100.0

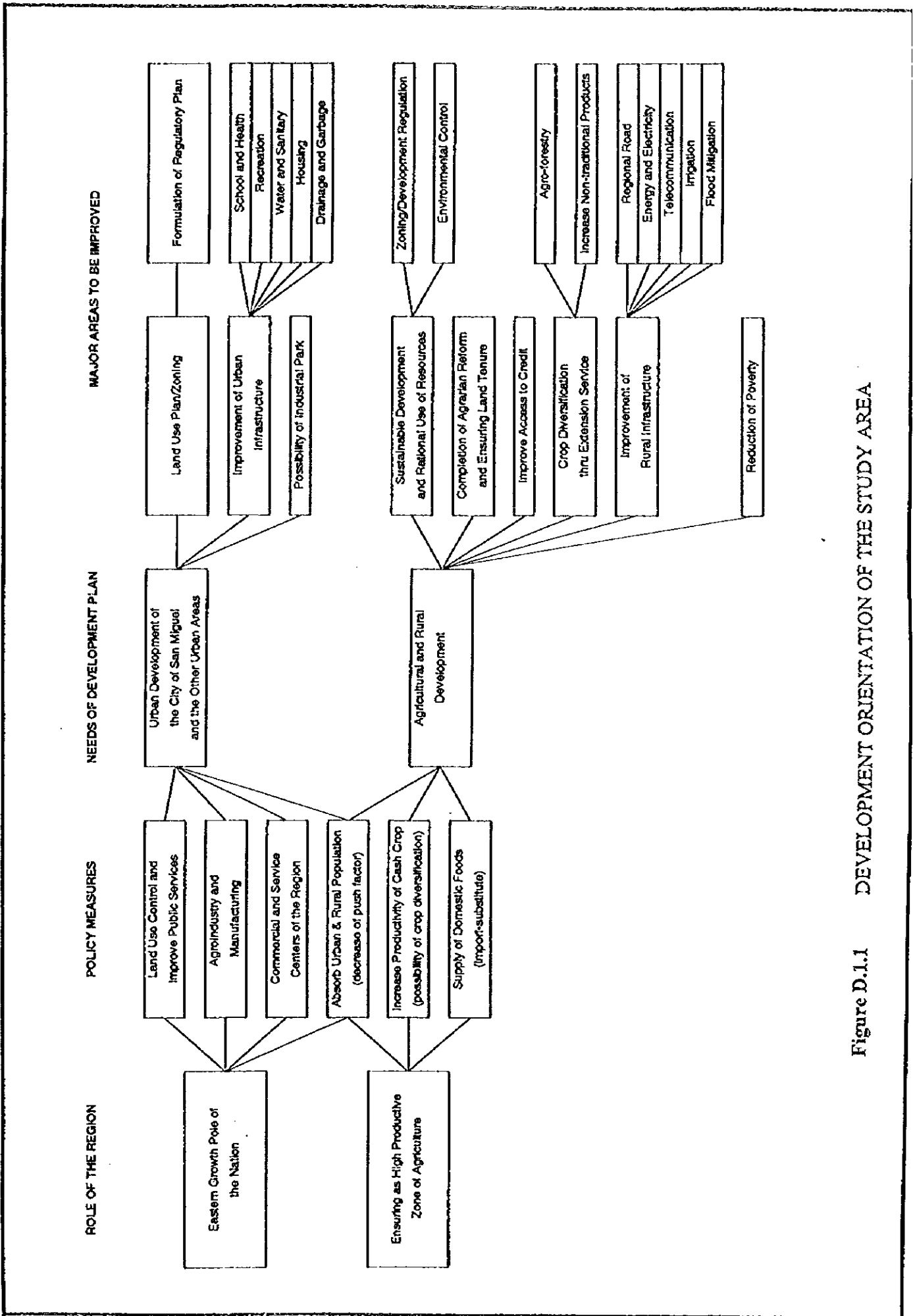
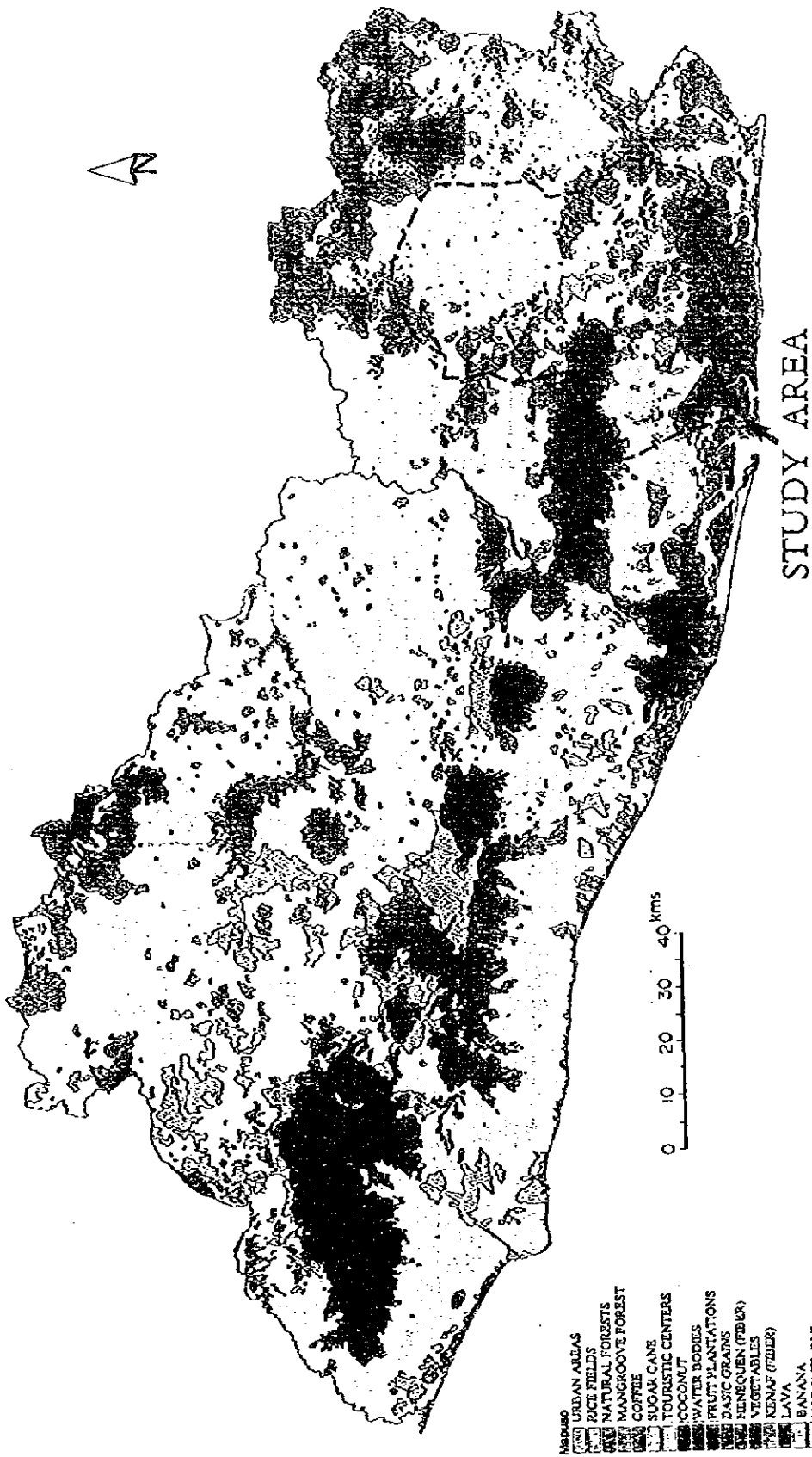


Figure D.1.1 DEVELOPMENT ORIENTATION OF THE STUDY AREA



Source:MAG

Figure D.2.1 LAND USE IN EL SALVADOR

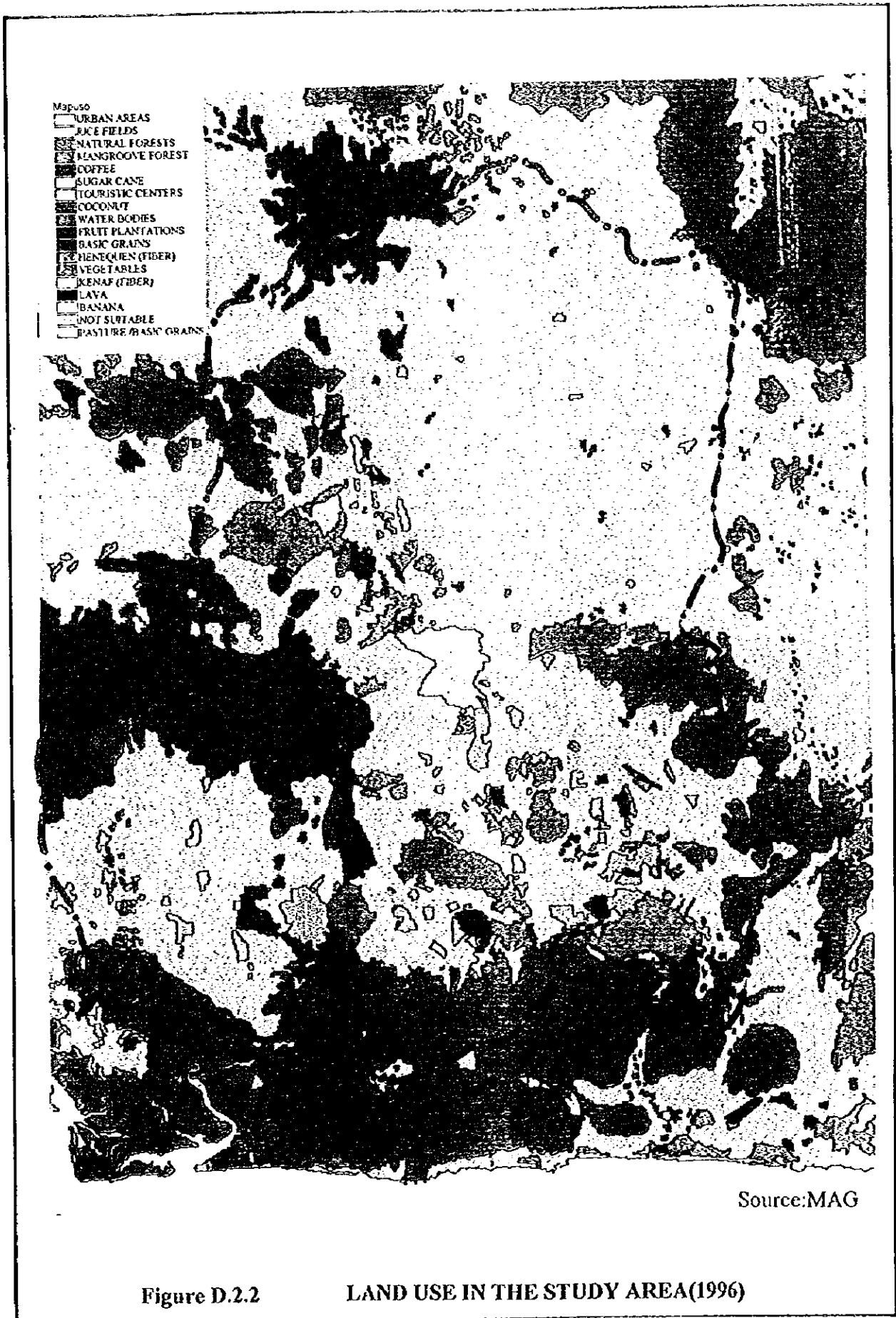


Figure D.2.2

LAND USE IN THE STUDY AREA(1996)

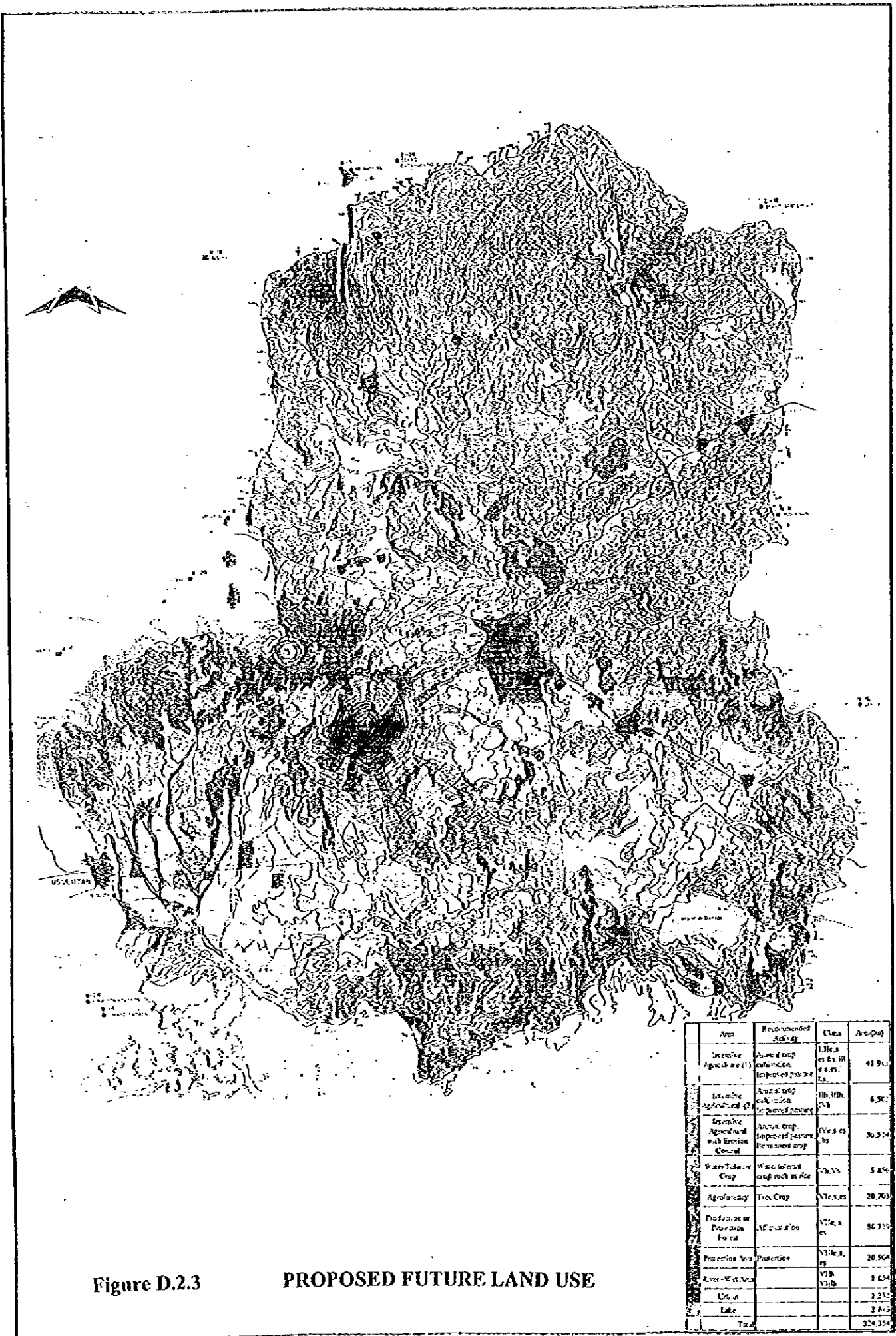
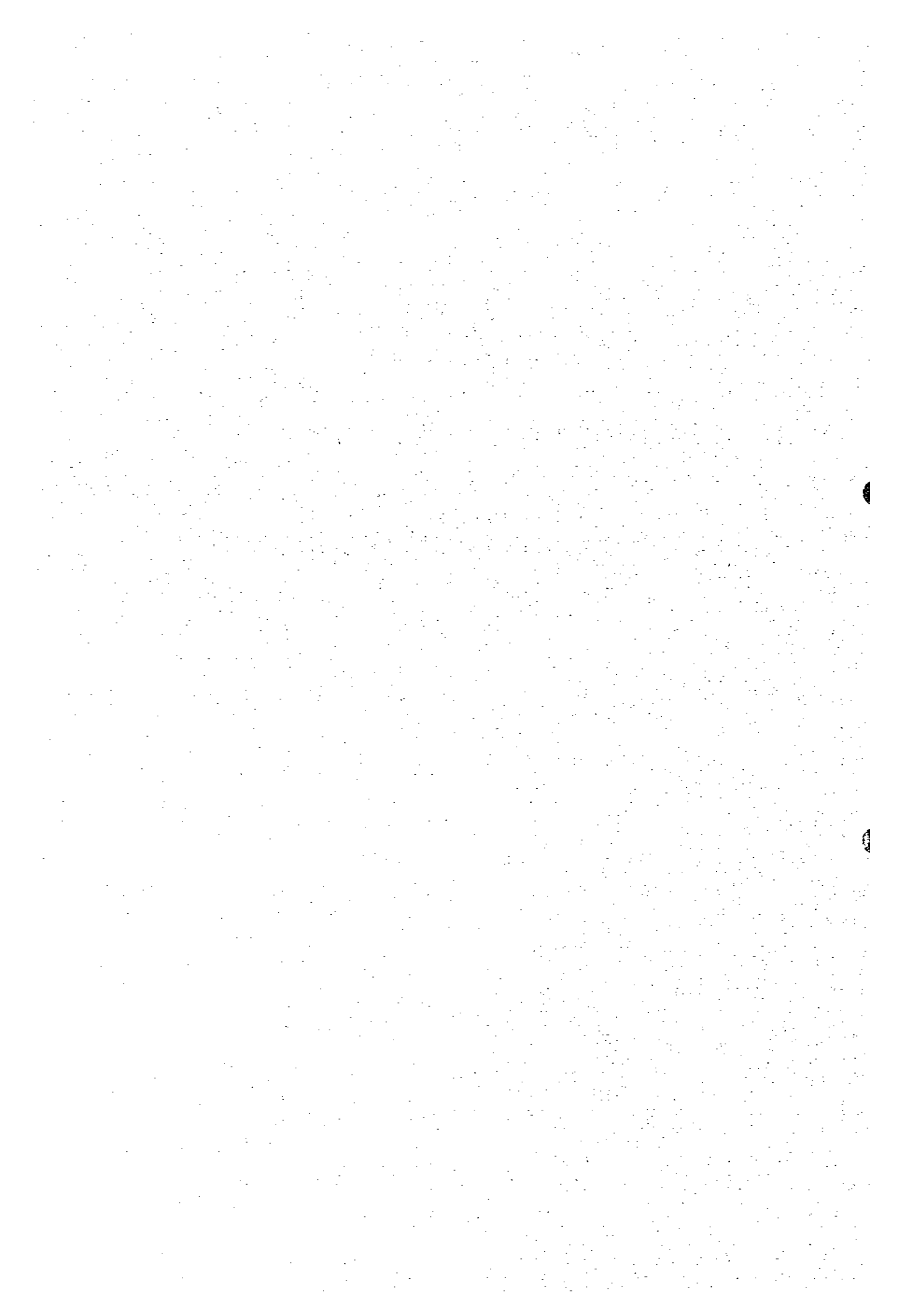


Figure D.2.3

PROPOSED FUTURE LAND USE

SUPPORTING REPORT

E: FLOOD CONDITION AND FLOOD DAMAGE



Supporting Report E: Flood Condition and Flood Damage

Table of Contents

E: FLOOD CONDITION AND FLOOD DAMAGE -----	E.1
1. FLOOD CONDITION -----	E.1
1.1 Flood Data-----	E.1
1.2 Inundation Survey-----	E.1
1.2.1 Objectives-----	E.1
1.2.2 Method of Survey-----	E.2
1.2.3 Results-----	E.2
1.3 Flood Mark Survey-----	E.3
1.4 Flood Mechanism-----	E.4
2. FLOOD DAMAGE -----	E.6
2.1 Physical Features of Inundation Area-----	E.6
2.2 Flood Damage -----	E.6
2.3 Flood Damage Survey-----	E.9
2.4 Farmer's Desire-----	E.10
2.5 Result of the Survey -----	E.10

List of Tables and Figures in Supporting Report E

Table E.1.1	Information about Inundation Related with Study Area-----	E.T.1
Table E.1.2	Results of Inundation Survey-----	E.T.2
Table E.2.1	Land Classification in the Inundation Area -----	E.T.3
Table E.2.2	Existing Land Use in the Inundation Area-----	E.T.3
Table E.2.3	Result of Flood Damage Survey (Flood in 1995)-1,2-----	E.T.4-5
Table E.2.4	Result of Housing Property Survey -----	E.T.6
Figure E.1.1	Flooded Area-----	E.F.1
Figure E.1.2	Flood Stage Profile in 1995 -----	E.F.2
Figure E.1.3	Flood Flow Directions in 1980'S in Usulutun Area -----	E.F.3
Figure E.2.1 (1/2)	Present Land Use of Inundation Area (1)-----	E.F.4
Figure E.2.1 (2/2)	Present Land Use of Inundation Area (2)-----	E.F.5
Figure E.2.2	Relationship Between Flood Depth and Yield-----	E.F.6
Figure E.2.3	Relationship Between Flood Depth and Yield-----	E.F.6

E. FLOOD CONDITION AND FLOOD DAMAGE

1. FLOOD CONDITIONS

1.1 Flood Data

According to "Regiones Criticas De Desastres Naturales De El Salvador (Critical Regions of Natural Disaster in El Salvador)", flood prone areas in the country amount to 2,573 km² in total and about one third of it (870 km²) is located in the Study Area as follows:

(Flood prone Areas in El Salvador and Study Area)

Department	Flood prone area (km ²)	
	Whole country	Study area
San Miguel	773	725
La Union	459	133
Usulután	169	12
La Paz	290	-
San Vicente	495	-
Sonsonate	169	-
Ahuachapán	218	-
(Total)	2,573	870

Information on the past flood damage was collected from various sources and summarized in Table E.1.1.

Floods in the Study Area have been occurred in the years 1961, 66, 69, 74, 88, 89, 91, 92 and 95.

1.2 Inundation Survey

Inundation survey was conducted in March and April, 1996 by the Study Team. The objectives, method and results are as follows:

1.2.1 Objectives

- To know the depths, durations and area boundaries of the past floods including maximum and recent floods
- To know the frequency of flooding
- To use the flooded water volume of a flood for simulation of flood run-off in relation to rainfall in the basin.

1.2.2 Method of Survey

It was conducted by interviewing the residents in the floodplain. Relatively old houses (family) were selected because they have many experiences of flooding. Items to be interviewed are as follows,

1. The year of settlement
2. The number of flooding times since they began to live
3. Depths and durations of the past floods (annual, maximum, 1995 flood)
4. Depth of inundation from the ground level is to be measured by a measuring tape.
5. Locations of the interviewed points were identified by GPS and names of the points were plotted on the topographic map.

Results of survey were presented as follows;

6. Inundated area maps of the representative floods

1.2.3 Results

The number of interviewees is 421 and among them 199 houses had some experiences of inundation.

The inundated areas were classified into the following three cases:

- Inundated areas in 1995 flood
- Maximum inundated areas which have experienced any flooding or inundation in the past (defined as "potential flood area")
- Frequently inundated areas once in 2 years or more (defined as "frequent flood area")

The inundated areas are shown in Fig. E.1.1.

Inundated areas for respective cases and inundation volumes of 1995-flood are shown below:

(Inundation Conditions)					
Inundated area (km ²)	San Miguel	Olomega	Jocotal	Usulután	Total
1995-flood (km ²)	2.8	88.5	35.8	6.6	133.7
(Volume: million m ³)	(3.4)	(57)	(54)	(7.6)	(116)
Max. inundation (km ²)	4.0	98.4	44.4	31.3	181.1
Frequent inundation (km ²)	0.64	44.4	29.6	0.9	75.5

The number of interviewees who suffered from inundation in 1995 and its conditions are summarized in Table E.1.2. In 1995, the months which people remembered as the most serious flood happened are distributed from June to October, especially from August to October. 1995 flood can be characterized by a few flood peaks between August and October. Among them the inundation area extended most widely in September. The Jocotal and Usulután areas suffered from deeper and longer inundation compared with other areas.

The floods which are remembered by the residents as the maximum events are those occurred in 1969, 1988, 1989, 1991 and 1992. The number of interviewees suffered from these floods and its conditions are shown in Table E.1.2. The 1988 flood was, judging from inundated depth and duration, the most disastrous one in the Jocotal and Usulután areas among four floods after 1988. For 1969 flood, little information is available from the residents because it was the event 27 years ago.

The number of houses which have experienced flood is summarized below. 199 houses out of the 421 houses have experienced the inundation. And 31 houses among them have frequent inundation once per 2 years or more.

(Household Number of Inundation Experience)

	San Miguel	Olomega	Jocotal	Usulután	Total
Total interviewee	99	168	76	78	421
Once or more till now	43	71	30	55	199
Once/2 yrs or more	5	9	9	8	31

1.3 Flood Mark Survey

Flood mark survey was conducted to obtain actual flood stage profile of the 1995 flood.

The total number of observed flood marks is 33 and the numbers by area are as follows:

Area	Number of Observed marks
San Miguel	9
Olomega	7
Jocotal	3
Usulután	14
Total	33

The flood stages were obtained by leveling survey between flood marks and wooden pegs surveyed provided at 500 m intervals. Flood stage profile of the 1995 flood, together with the river profile, is shown in Figure E.1.2. It was found that the flood stage between Taisihuat and Urbina Bridge was MSL+90 m in 1995 and that the stage was mainly resulted from backwater effect by the bending upstream reach of Taisihuat river confluence.

1.4 Flood Mechanism

The inundation area in Study Area can be divided into 4 areas, which are San Miguel, Olomega, Jocotal and Usulután areas.

Based on the results of inundation survey, flood mark survey and flood simulation, the flood mechanism for each area can be described as follows.

San Miguel area (Villerias to Aramuaca)

Flood hydrographs from Upper Basin has a very sharp rise of a few hours and also a fall of a few hours, which can be seen in 1995 flood. Riverine areas along the San Miguel River from Urbina Bridge to Lake Aramuaca were inundated. The inundation depth is shallow as approximately 0.5m and the duration is within a few hours.

Especially the upstream reach of Taisihuat river confluence is affected by backwater due to contraction of the channel width. This area can be easily inundated even though this reach has comparatively wide and deep section.

Olomega area (Aramuaca to El Delirio)

Extensive flat land in the north of Lake Olomega have been inundated due to floodwater from the San Miguel River together with its tributaries and rising of the lake water level. The water level of Lake Olomega reaches its peak , approximately MSL+65.5m to 66.0m, in September to October every year. The area under this elevation is submerged for a few weeks.

The inflow from the San Miguel River to Pelota River begins in case that the discharge exceeds 315 m³/s, with a return period of less than 2 years.

The low lying area less than approximately M.S.L.+64 m between San Miguel River and Olomega Drainage is so called floodprone area because of difficult in gravity drainage.

According to the inundation survey, the San Juan Drainage can easily overflow due to the backwater from the San Miguel River. The floodwater from the San Miguel River goes westward to the highway.

Jocotal area (La Canoa to Vado Marin)

The San Miguel River here is so intensively meandering that the bed slope is very gentle. The channel capacity is small ranging from 100 m³/s to 200 m³/s. Extensive depressed flat lands extending around and in the east of Lake Jocotal can be inundated due to small channel capacity. The floodwater spreads over Lake Jocotal and floodplain.

Usulután area (Vado Marin to the river mouth)

The aerial photograph of Usulután area taken in 1980s' shows clear traces of overland flow from the right side bank of the San Miguel River. The ground elevation is lowering westward and southward to the basin boundary. The floodwater diverges from San Miguel River westward and southward with shallow depth.

The area around salt farms is affected by tide because the mean high spring tide is MSL+1.4m. (Ref. Fig. E.1.3)

2. FLOOD DAMAGE

2.1 Physical Features of Inundation Area

Inundation area is distributed in the lower basin of the San Miguel River and shares 14,978 ha, which accounts for 6.7 % of the Study Area (refer to Table E.2.1).

The study area is endowed by nature with fertile soil; class I, II and III, which shares 20 % of the total area. Of the arable land, 13.5 % is distributed in the inundation area, which is accounting for 39 % of the inundation area(Table E.2.1). It can be said that the area is characterized as high productive agricultural land. The area, therefore, is valuable for crop cultivation and the damage by flood could greatly affect the regional economy.

The area has potential to be developed to the arable area; from 39 to 62 percent(from 5,892 ha to 9,239 ha), by flood control. Because class IV h would be improved and would be changed arable (class I,II,III). The area is shown as follows:

(Area of Class IV h unit:ha)

Olomega	Jocotal
2,379	965

Based on aerial photographs taken in 1996 and field survey, existing land use map of the inundation area has been prepared by the Study Team and the data was compiled as shown in Table E.2.2 and Fig. E.2.1. As a result of the survey, grazing land is by far the most widespread land use, which shares about 60 % and is mostly distributed in the area of unarable land. The second is sugar cane, which is characterized as a water tolerant crop. The main annual crop is maize, distributed in less inundated areas.

2.2 Flood Damage

COEN, DGEA and CEPRODE are related to evaluation of flood damage. However, reports and data published by them cover specific areas and items, and they can not be applied to evaluate flood damage of the Study Area.

However, an extent of the damage can be found in agricultural statistics.

Due to its fertile soil , the Study Area enjoys maize production, which is the most dominant crop in the area. The production in region IV shares about 15 % of the whole country.

According to the table below, the production in 1995 and 1992, when severe flood occurred, decreased sharply. Especially the yield in the rainy season of these years showed about half of the previous year, which might be affected by flood. The production loss during the rainy seasons of 1995 and 1992, therefore, could be estimated at 1,695,800 QQ (76,311 ton) and 1,678,500 QQ (76,208 ton) respectively, which account for more than 50 % of the total production of each year.

Maize Production and Yield in Region IV

	95/94	94/93	93/92	92/91	91/90	90/89	89/88	88/87
Yield(QQ/Mz)								
Rainy Season	13	27	34	14	29	27	29	26
Average	18	27	30	17	28	26	27	21
Production								
(1,000QQ)	3,307	4,540	5,553	2,891	3,972	3,226	3,169	2,596

Source : MAG

2.3 Flood Damage Survey

Flood damage survey consists of two kinds of surveys as follows:

- Property survey by height from the ground level such as construction cost of the house, and cost of furniture and clothes etc.
- Flood damage of agricultural production in 1992 and 1995.

Total number of interview survey by area is shown in the following table.

Number of Interview Survey by the Area

	San Miguel	Omega	Jocotal	Total
Housing Property	69	93	65	227
Agricultural Damage	8	124	39	171

2.4 Farmer's Desire

The interview survey also included the farmer's desire after flood control. The content of the question is "What type of agriculture will you want after flood control are done?"

The results are shown in the table below .

The survey shows that land use for crop cultivation in Olomega and Jocotal area shares 50 % and 14 %, respectively. According to the table, farmers want to expand crop cultivation rather than grazing and the results are in accordance with the agricultural development policy of the country.

Farmer's Desire (%)

	Maize	Sorghum	Sesame	Veg.	Sugarcane	Rice
Olomega	30.5	14.5	15.0	13.5	12.5	-
Jocotal	35.5	9.7	24.5	11.3	-	12.9

2.5 Result of the Survey

Results of the survey, consisting of existing conditions of agriculture and housing property are summerized in table E.2.3 and E.2.4.

To estimate flood damage, relationship between yield and flood conditions in the study area, composed of flood depth and duration, are shown in Fig. E.2.2 and E.2.3.

As shown in these figures, damage of maize is more closely related to flood depth than the duration of inundation.

Table E.1.1 INFORMATION ABOUT INUNDATION RELATED WITH STUDY AREA

Date of Flood	Affected Area	Reason of flood	Flood Damage	Source
1961	Acajutla San Miguel San Salvador	No information	No information	CEPRODE ¹
Sep.4, 1969	Rio Lempa South-West Coast	Hurricane "Francelia"	4,600 people affected Death 2 Damage US\$1,600	CRED
1969	Rio Lempa and Paz Jaltepeque Rio Grande de San Miguel	No information	No information	CEPRODE
1966	Rio Lempa Lake Olomega	No information	No information	CEPRODE
1974	Usulután Rio Grande de San Miguel Ahuachapan	No information	No information	CEPRODE
Aug. 24, 1988	La Paz Usulután San Miguel La Union	Flooding due to heavy seasonal rainfall	39,060 people affected. Destroyed homes and up to 95 Km ² of crop. Death 33.	CRED ²
1989	Rio Grande de San Miguel	No information	No information	CEPRODE
Sep. 28, 1992	La Union San Miguel Usulután San Vincente La Paz	Flooding due to rainfall since Sep. 28	Over 8,000 people evacuated. Death 2. 1,500 people isolated.	CRED
Sep. 28, 1995	Usulután	No Information	1,500 people affected, 800 families evacuated, 2500 acres of corn, rice and sesame fields destroyed Death 8.	CRED
Sep. 1995	San Miguel-Olomega-El Jocotal-The Mouth of Rio Grande De San Miguel			JICA Preliminary Study

¹ Centro De Proteccion para Desastres Ceprode

² Information of Centre for Research on the Epidemiology of Disasters(CRED) during Jan. 1, 1965-Dec. 31, 1995

Table E.1.2 RESULTS OF INUNDATION SURVEY

The numbers of the houses which had inundation in 1995 among the interviewed houses

Month in 1995	San Miguel	Olomega	Jocotal	Usulután
June	0	4	0	0
July	0	0	1	0
August	4	6.33	7.5	2
September	4.5	26.33	10.5	9
October	1.5	11.33	7	1
November	1	0	0	0
No Remember	6	6	1	4
Total	17	48	27	16

Inundation depth and duration of 1995 flood

Month in 1995	San Miguel	Olomega	Jocotal	Usulután
June	-	0.15m / 1.7day	-	-
July	-	-	0.05m / 0 day	-
August	0.05m / 4 day	0.17 m / 6.5 day	0.50 m / 8 day	0.20 m / 30 day
September	0.50m / 1.8day	0.09m / 7.3day	0.87m / 9.7 day	0.50 m / 46day
October	0.05m / 0 day	0.10m / 8 day	1.5m / 11.6 day	0.90m / 25day
November	-	-	-	-

The number of houses which had the maximum flood in 1988, 1989, 1991 and 1992 among the interviewed houses.

	San Miguel	Olomega	Jocotal	Usulután	Total
1988	5 (Sep. 14 or 15)	15 (Aug.-Oct.)	4 (Aug.-Sep.)	8	32
1989	4 (Sep. 12)	8 (Aug.-Sep.)	1	13 (Aug.-Sep.)	26
1991	3 (Sep.)	7 (Sep.)	5 (Jul.-Sep.)	4 (Sep.)	19
1992	10 (Sep. 15-Oct.)	16 (Aug.-Sep.)	9 (Sep.-Oct.)	6 (Jun and Sep.)	41

Depth / Duration of the maximum floods

	San Miguel	Olomega	Jocotal	Usulután
1988	1.2m / 0.8 day	1.0m / 22.9 day	2.1m / 19 day	2.7 m / 27.0 day
1989	0.8m / 3 day	0.9m / 28.2 day	- / 90 day(*)	1.1m / 16.7 day
1991	1.5m / 0.7 day	0.8 m / 27 day	1.4m / 75 day	0.9 m / 20 day
1992	1.2m / 5 day	0.7m / 7.6 day	0.93m / 6.2 day	0.4 m / 9.8 day

note: (*) is the data of only 1 sample.

Table E.2.1 LAND CLASSIFICATION IN THE INUNDATION AREA

Class	San Miguel - Olomega		Jocotal	Total
I (ha)	0	0	17	17
(%)	0	0	0	0
II (ha)	0	252	520	772
(%)	0	3	12	5
III (ha)	249	3,889	965	5,103
(%)	36	40	22	34
IV (ha)	304	2,866	965	4,135
(%)	43	29	22	28
V (ha)	147	1,773	948	2,869
(%)	21	18	21	19
VI (ha)	0	96	25	121
(%)	0	1	1	1
VII (ha)	0	539	269	807
(%)	0	5	6	5
VIII (ha)	0	0	25	25
(%)	0	0	1	0
Othe (ha)	0	426	703	1,129
(%)	0	4	16	8
Total	700	9,840	4,438	14,978

Table E.2.2 EXISTING LAND USE IN THE INUNDATION AREA

Land use Area	Annual Crop	Sugar-cane	Grazing	Bush & Forest	Urban	Other	Total
San Miguel (ha)	22.9	169.3	251.6	41.2	164.7	50.4	700.0
(%)	3.3	24.2	35.9	5.9	23.5	7.2	100.0
Olomega (ha)	896.7	1,687.0	6,095.8	109.5	0.0	1,050.9	9,840.0
(%)	9.1	17.1	61.9	1.1	0.0	10.7	100.0
Jocotal (ha)	479.7	701.6	2,446.7	36.0	0.0	774.1	4,438.0
(%)	10.8	15.8	55.1	0.8	0.0	17.4	100.0
Usulután (ha)	465.3	325.6	1,522.7	417.8	0.0	398.6	3,130.0
(%)	14.9	10.4	48.6	13.3	0.0	12.7	100.0
Total (ha)	1,864.6	2,883.4	10,316.8	604.5	164.7	2,274.0	18,108.0
(%)	9.3	17.1	58.7	1.2	1.1	12.5	100.0

Table E.2.3 RESULT OF FLOOD DAMAGE SURVEY(Flood in 1995)-1

Item	Unit	Olomaga		Jocotal	
			(%)		(%)
Total Area	MZ	5,513.0		411.0	
Average Area / Farmer	MZ	88.9		13.7	
Land Tenure					
Own	MZ	3,693.7	67.0	362.9	88.3
Rent	MZ	1,097.1	19.9	5.3	1.3
Cooperation	MZ	551.3	10.0	42.7	10.4
Land Use					
Crop	MZ	1427.8	25.9	340.0	82.7
Perenial Crop	MZ	8.7	0.2	1.0	0.2
Natural Pasture	MZ	1242.9	22.5	17.5	4.3
Improved Pasture	MZ	1582.2	28.8	49.5	23.0
Other	MZ	1252.1	22.7	3.0	0.7
Average Inundation					
Day	Day	11.0		16.2	
Depth	Cm	58.0		77.6	
Crop Cultivation					
Sugarcane					
Area	MZ	1,036.0	80.2	262.0	87.6
Yield	T/MZ	49.3		69.1	
Maize					
Area	MZ	170.8	13.1	37.0	12.4
Yield	QQ/MZ	15.7		8.2	
Maicillo					
Area	MZ	87.0	6.7	-	
Yield	QQ/MZ	34.4		-	

Table E.2.3 RESULT OF FLOOD DAMAGE SURVEY(Flood in 1995)-2

Item	Unit	Olomaga		Jocotal	
			(%)		(%)
Pasture					
Improved	MZ	795.0	56.5	49.5	72.8
Natural	MZ	613.0	43.5	17.5	27.2
Damage Ratio of Pasture					
Improved	MZ	97.0	12.2	0.0	0.0
Natural	MZ	161.8	26.4	8.0	43.2
Cattle Raising					
Total	Head	4,844		377	
Head per Pastureland	Head/M2	3.9		5.5	
Ratio by Spicies					
Meat	Head	3,128	65.3	269	71.4
Milk	Head	1,131	23.6	101	26.8
Both	Head	586	12.2	7	1.9
Head of Death	Head	86	1.8	8	2.1
Milk Production	l	43,330.5		1,359.0	
Damage of Milk	l	18,756.0	43.2	1,302.0	95.8
Other Livestock					
Hog	Number	51		28	
Chicken	Number	996		250	
Number of Death					
Hog	Number	0.0	0.0	4.0	18.2
Chicken	Number	181.0	14.0	48.0	19.2

Table E.2.4 RESULT OF HOUSING PROPERTY SURVEY

Area & Class	No. of House	Ratio Height		Ownership		Area of Floor Cm2	Cons. Cost		Cons. Year		Housing Property by Height								
		%	Cm	%	%		Col	Col	Year	Year	0 cm - 50 cm		50 cm - 100 cm		100 cm - 150 cm		150 cm - 200 cm		Total
											Col	Col	Col	Col	Col	Col	Col	Col	
San Miguel																			
Medium	22	32	29	86	86	83.0	70,075	7.7	8,740	7,173	5,888	6,039	136	27,975					
Low	40	58	27	73	85	70.5	33,568	11.9	3,892	5,558	4,496	1,402	0	15,347					
Poor	7	10	14	71	100	51.3	10,643	13.5	2,162	1,602	961	0	0	4,725					
Sub-Ave. or Total	69	100	26	77	87	72.5	42,469	10.7	5,262	5,671	4,581	2,738	43	18,296					
Olomega																			
Medium	24	26	20	71	79	84.7	39,368	12.2	13,143	8,193	8,702	8,917	0	38,955					
Low	46	49	24	54	85	50.0	22,471	11.6	2,959	3,956	3,200	0	0	10,114					
Poor	23	25	28	61	78	38.7	9,377	10.8	896	2,225	491	0	0	3,612					
Sub-Ave. or Total	93	100	26	60	82	59.5	24,909	11.6	5,077	4,621	3,950	2,301	0	15,949					
Jocotal																			
Medium	5	8	25	40	60	74.0	51,000	4.3	1,851	4,138	1,020	0	0	7,009					
Low	33	51	63	55	73	70.2	26,818	12.7	5,133	6,021	636	0	0	11,790					
Poor	24	37	48	75	79	47.5	10,196	9.9	1,480	2,040	291	0	0	3,811					
Store	3	5	167	100	100	163.7	52,333	26.5	99,167	35,665	4,667	0	0	139,498					
Sub-Ave. or Total	65	100	59	63	75	68.5	24,089	11.6	8,069	5,860	727	0	0	14,655					
Ave. or Total	227		35	66	81	66.1	30,012	11.3	5,990	5,295	3,219	1,775	13	16,292					

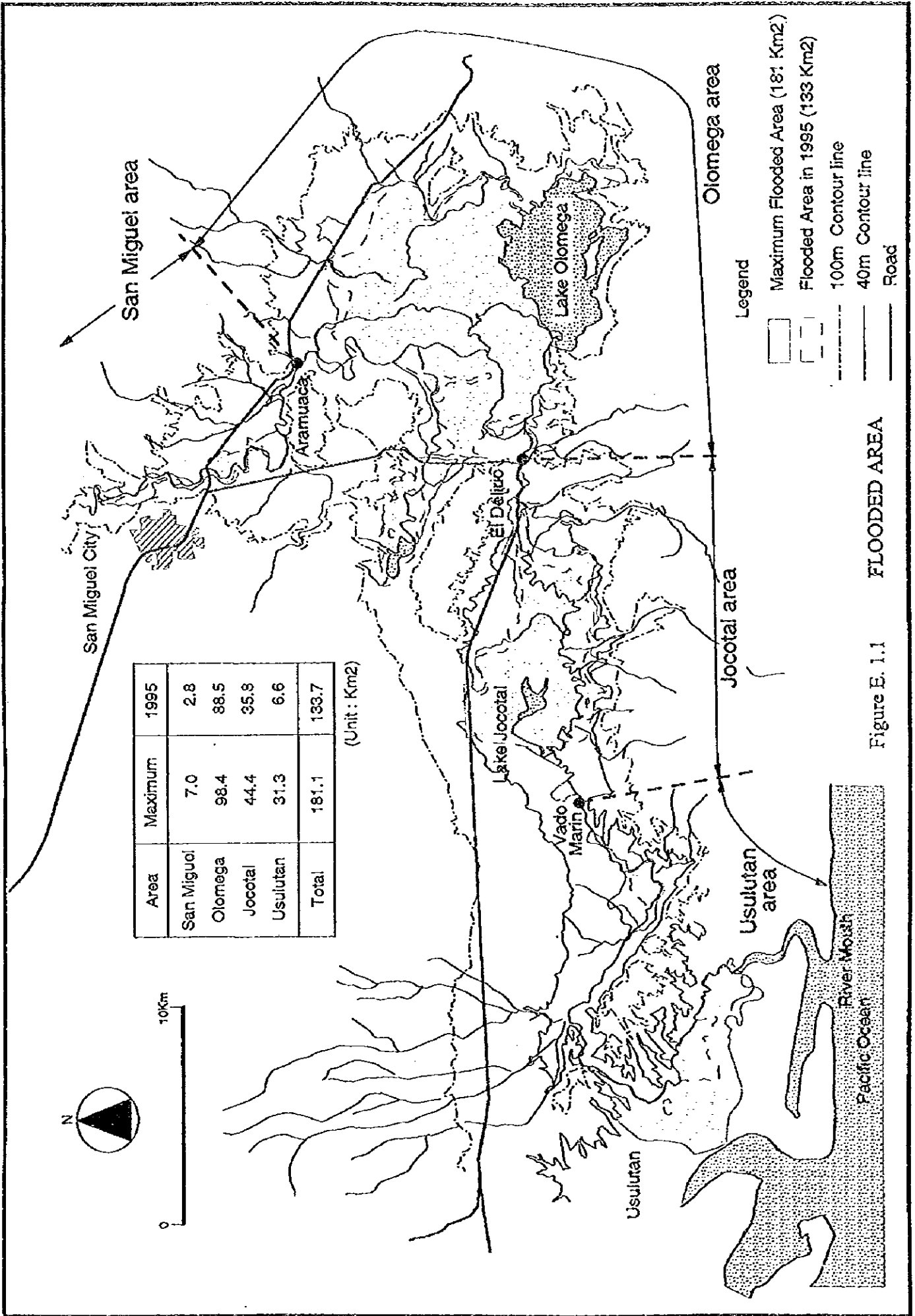
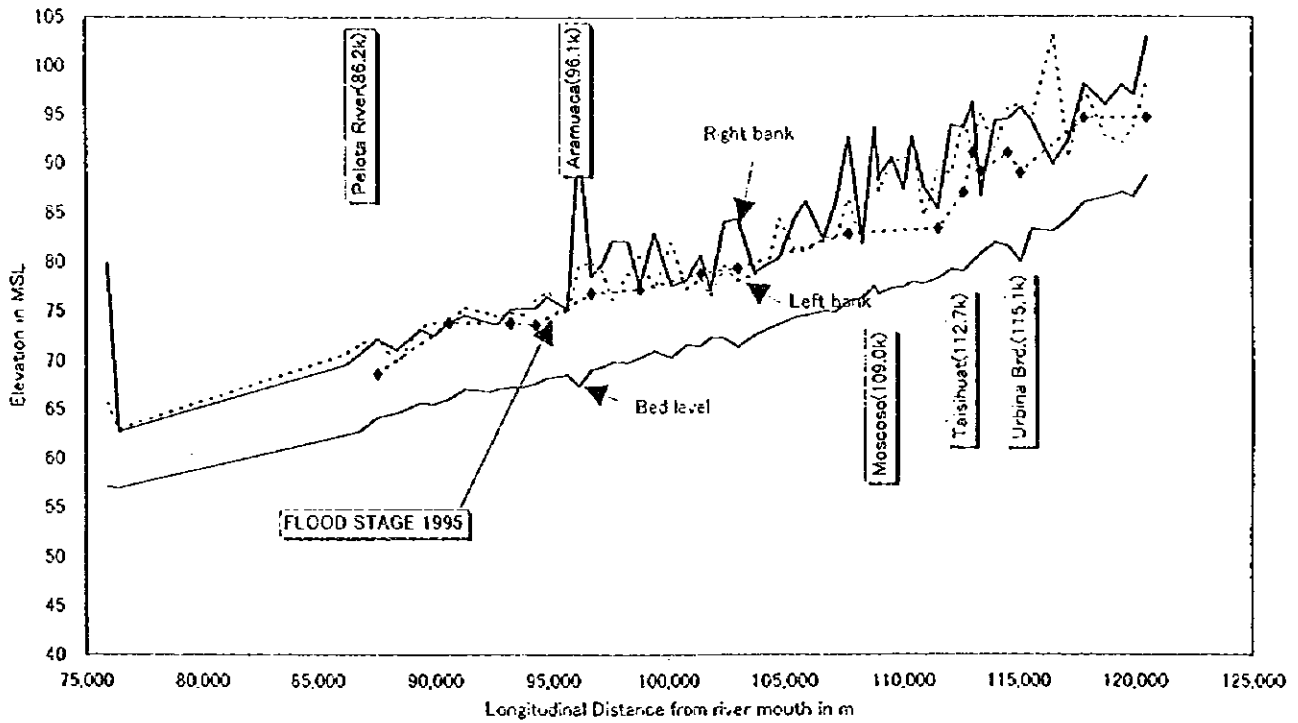


Figure E. 1.1 FLOODED AREA

MIDDLE REACH



Graph1

LOWER REACH

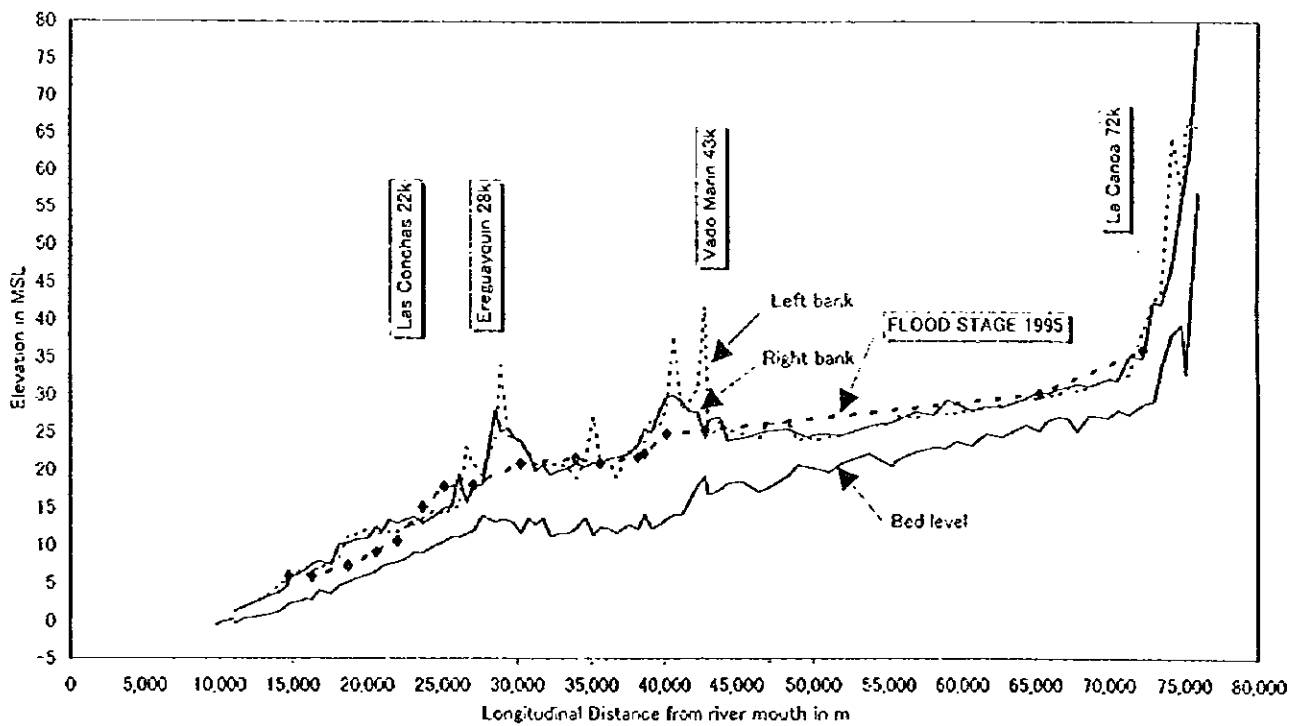


Figure E. 1.2 FLOOD STAGE PROFILE IN 1995

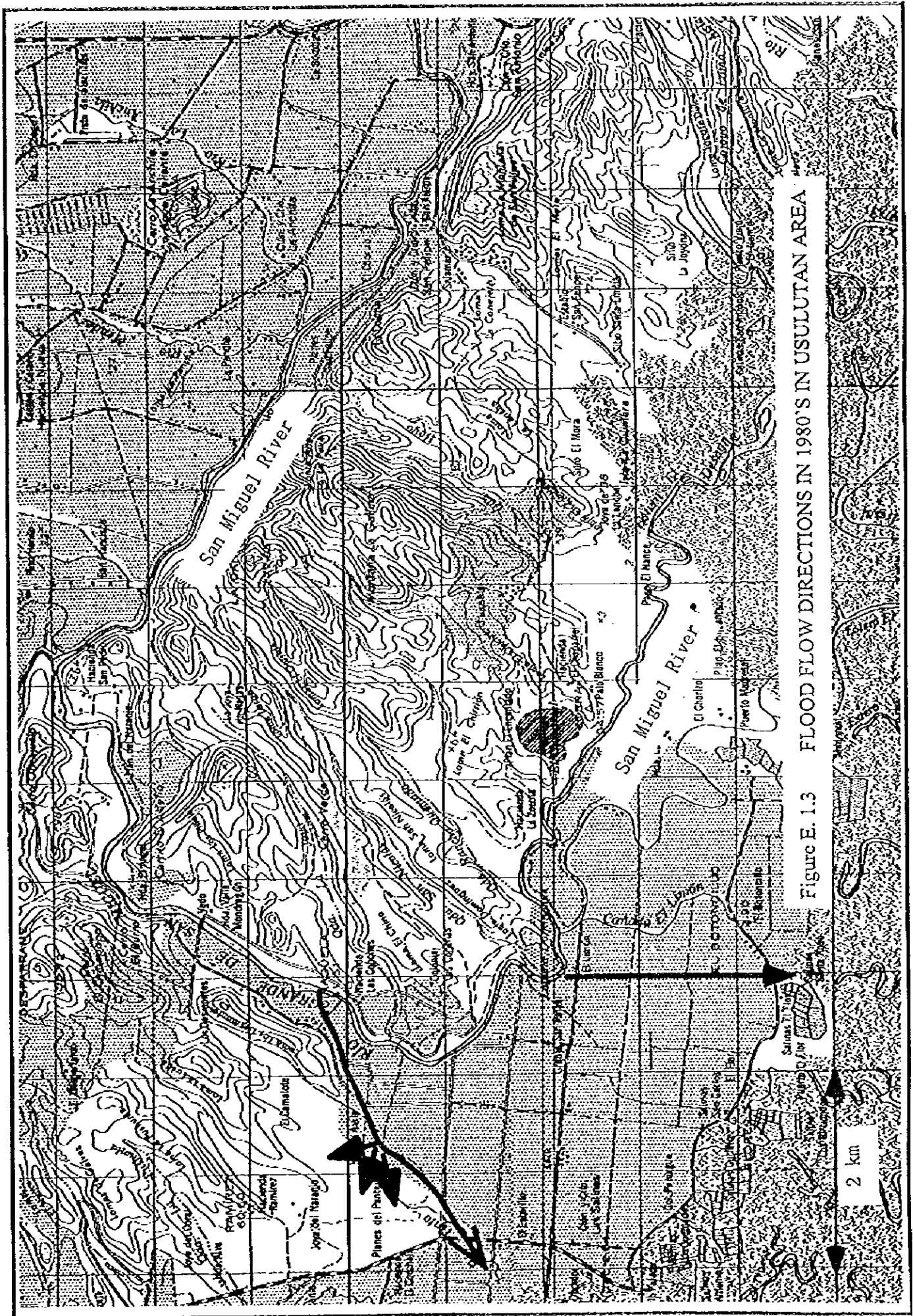
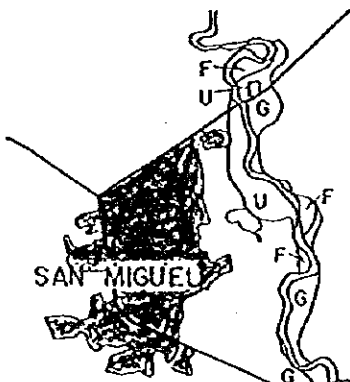
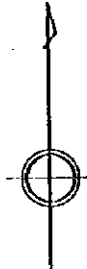


Figure E. 1.3 FLOOD FLOW DIRECTIONS IN 1980'S IN USULUTAN AREA



San Miguel Area (ha)

LEGEND

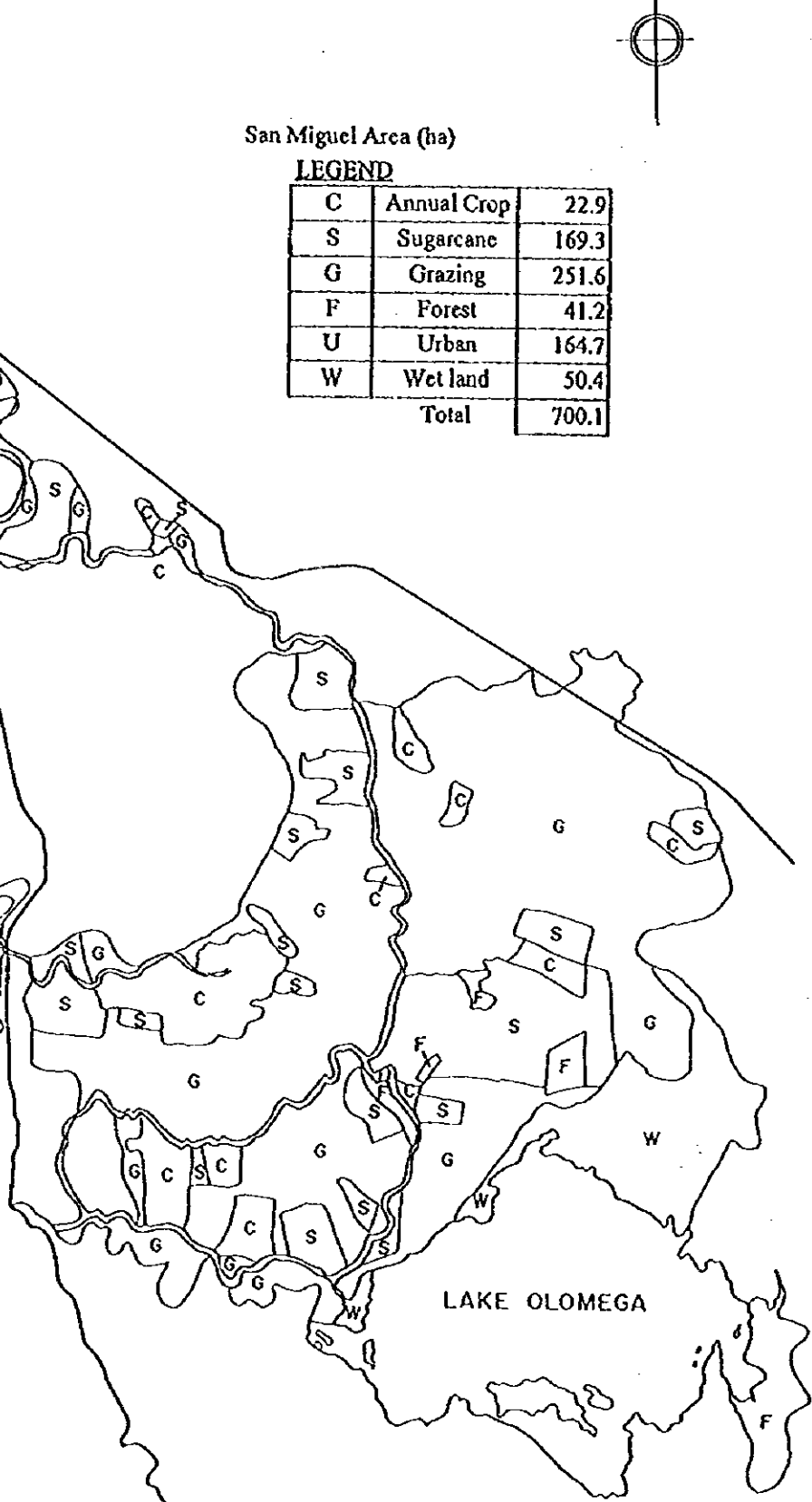
C	Annual Crop	22.9
S	Sugarcane	169.3
G	Grazing	251.6
F	Forest	41.2
U	Urban	164.7
W	Wet land	50.4
Total		700.1

LAKE SAN JUAN

Olomega Area (ha)

LEGEND

C	Annual Crop	896.7
S	Sugarcane	1,687.0
G	Grazing	6,095.8
F	Forest	109.5
U	Urban	0.0
W	Wet land	1,050.9
Total		9,839.9

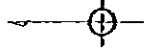


LAKE OLOMEGA

Figure E.2.1(1/2) PRESENT LAND USE OF INUNDATION AREA(1)



USULUTÁN



Usulután Area (ha)

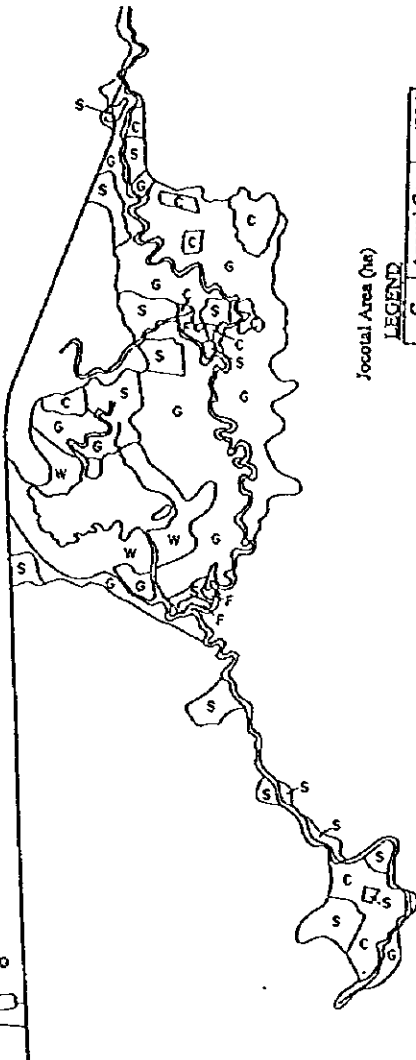
LEGEND

C	Annual Crop	465.3
S	Sugarcane	325.6
G	Grazing	1,522.7
F	Forest	417.8
U	Urban	0.0
W	Wet land	398.6
Total		3,130.0



EL TRÁNSITO

LAGUNA EL JOGOTAL



Jogotal Area (ha)

LEGEND

C	Annual Crop	479.7
S	Sugarcane	701.6
G	Grazing	2,446.7
F	Forest	36.0
U	Urban	0.0
W	Wet land	774.1
Total		4,438.1

Figure E.2.1(2/2) PRESENT LAND USE OF INUNDATION AREA(2)

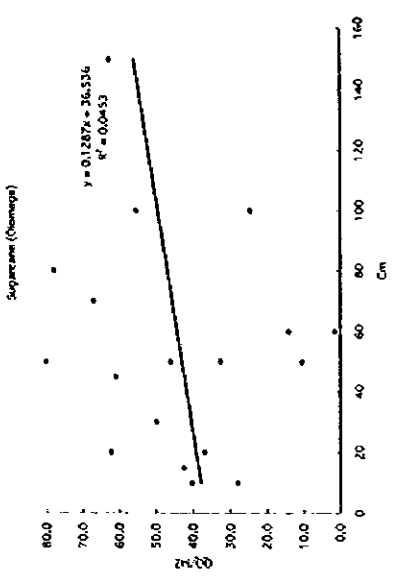
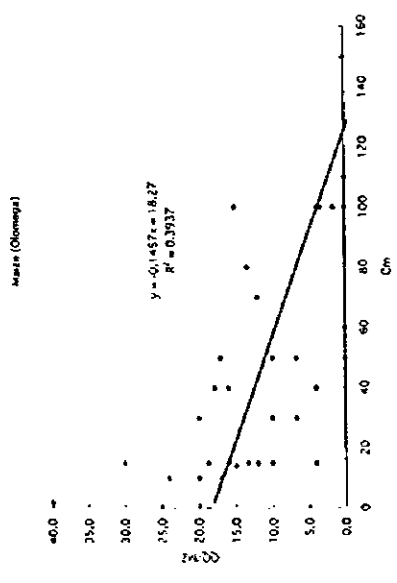
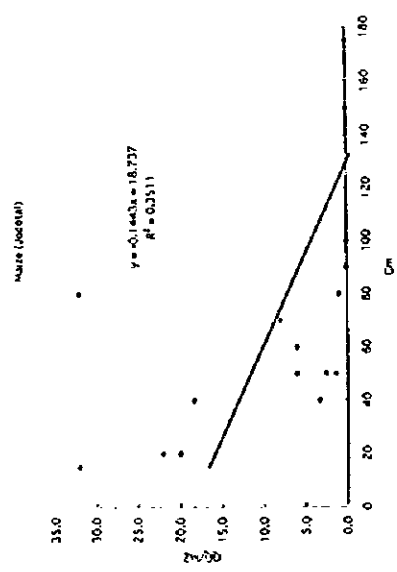


Figure E.2.2 RELATIONSHIP BETWEEN FLOOD DEPTH AND YIELD

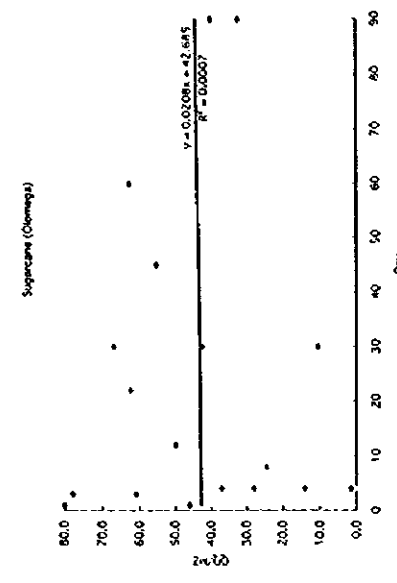
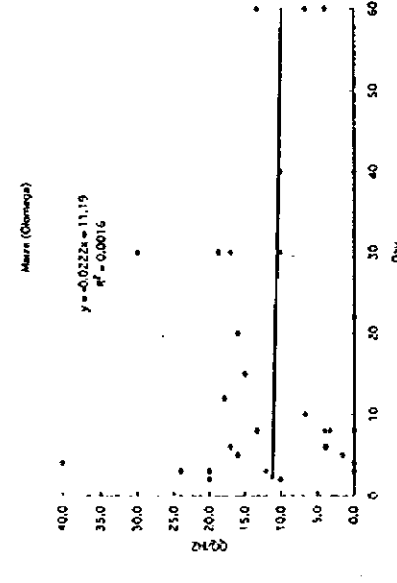
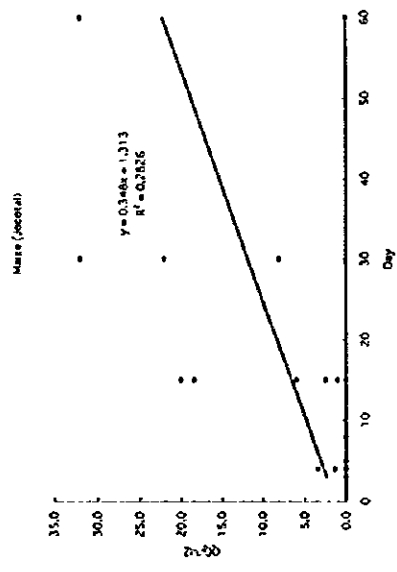


Figure E.2.3 RELATIONSHIP BETWEEN FLOOD DURATION AND YIELD