

III. EFFECTS ON THE ECONOMY

1. Effects on General Economic Development

It should be noted at the outset that the influence of the recent natural disasters on El Salvador's overall economic situation represents, above all, a retrogression that has had negative repercussions on an economy heavily damaged by the internal conflict that has paralyzed investment, destroyed physical assets and reduced per capita income by more than one third over that of 1978. The growth rate of the gross domestic product estimated for 1982, taking into account these effects, is -4.5 per cent (see Table 8), as compared with a contraction of close to 10 per cent both in 1981 and 1980.

It may be deduced from this - and the original forecasts so demonstrate - that the negative tendencies of the overall economic situation would diminish in 1982, since the contraction already experienced had arrived at such a point that it would be unlikely for it to continue descending at this rate. That is to say, the productive sectors appeared to have started to adapt themselves in some way or another to the unstable situation and even gave rise to hopes for investment in certain areas. The natural disasters, however, dashed such hopes. Their effects at the macro-economic level have had repercussions on the growth rate of the gross domestic product, the balance of payments, and in the revenue and expenditures of the Salvadorean Government. They will also be reflected, although to a lesser degree, in the country's external indebtedness.

2. Effects on the Gross Domestic Product

It has already been pointed out that the disasters increased the negative overall growth rate from 2.7 per cent to 4.5 per cent, which meant, in rough terms, that the country will fail to produce goods and services for a value of some 70 million dollars at current prices.

Within this panorama, agriculture, which has been the most affected sector, will suffer a contraction of more than 7 per cent, as compared with the mid-year estimated reduction of 1.5 per cent.

Table 8

EL SALVADOR: GROSS DOMESTIC PRODUCT BY ECONOMIC ACTIVITY, 1981,
AND FORECASTS FOR 1982

(Growth rates)

Item	1981	1982		
		Forecasted before the disaster	Probable after the disaster	
<u>Gross domestic product</u>	<u>-9.5</u>	<u>-2.7</u>	<u>-4.5</u>	
<u>Goods</u>	<u>-11.7</u>	<u>-3.4</u>	<u>-6.5</u>	
Agriculture	-10.1	-1.5	-7.4	
Mining	-2.1	-1.3	-1.3	
Manufacturing industry	-15.8	-5.9	-6.5	
Construction	-1.3	-5.1	0.0	
<u>Services</u>	<u>-7.7</u>	<u>-2.2</u>	<u>-3.0</u>	
Electricity, gas and water	-3.2	2.0	-4.0	
Transportation, warehousing and communications	-11.8	-0.5	-6.5	
Commerce and finances	-12.6	-5.1	-6.0	
Home ownership	1.5	2.0	-0.1	
Community, social and personal services	-4.6	-2.4	-1.9	-3.7
Public administration	2.4			

Source: For 1981, the Central Reserve Bank. The year 1982 has been estimated by CEPAL on the basis of information provided by the Economic Studies Department of the Central Reserve Bank.

Losses in this sector, as indicated in the chapter on agriculture, refer both to production for the domestic market - in which losses were greater - and for exports, particularly of cotton. Their effects will influence the balance of payments, as will be seen later on, because of the need to import grains - in addition to the imports already required to cover the deficit predicted - and because of reduced sales abroad.

Following, by order of relative importance, are the losses forecasted in transportation activities and home ownership, owing to the total or partial destruction of approximately 3 500 urban and rural dwellings. The gross domestic product of these sectors will consequently show a decline as will, to a lesser degree, also be experienced in commerce and personal services. Industry will show a slightly greater decline, essentially attributable to suspensions in the supply of electricity. In any case, the year's negative performance of this sector will have been influenced mainly by the decrease in internal Central American demand and by the difficulties in obtaining foreign exchange for importing inputs. The decline in the overall gross product would have been even greater without the reactivation expected for the construction sector between now and the end of the year, in addition to that of the public sector as a result of the inevitable increase in its operating expenses due to face the emergency situation.

3. Effects on the Balance of Payments

The balance of payments was affected in 1982 by a drop of close to 28 million Dollars in exports that could largely be ascribed to the effects of the drought and the floods. This decline accentuated the already depressed conditions of the export market prior to the disaster, and was felt with regard to traditional products (11 million Dollars less for coffee, 6 million less for cotton and 3 million less for sugar) and to a much lesser extent with regard to manufactured products destined for the Central American market, due to the transportation problems and production irregularities linked to the disasters some exporters will face. (See Table 9.) Furthermore, imports will have to be increased

Table 9

EL SALVADOR: BALANCE OF PAYMENTS

(Millions of dollars)

	1980	1981	1982 Forecasts	
			Before the disaster	After the disaster
Exports fob	1 072.1	793.1	795.1	767.1
Coffee	615.2	452.6	409.4	398.2
Cotton	82.8	52.6	58.6	52.1
Sugar	13.2	13.4	18.5	13.4
Shrimp	13.4	18.7	23.4	23.4
Others	347.5	255.8	285.2	280.0
Imports	-906.7	-915.1	-933.0	-963.0 ^{a/}
Balance of services	-196.7	-193.4	-196.2	-193.5
Income	195.4	197.8	190.0	190.0
Expenditures	392.1	391.2	386.2	383.5
Donations (net)	48.9	28.2	140.0	160.0
Balance in current account	17.6	-287.2	-194.1	-229.4
Capital movement (net)	-213.8	208.1	234.6	234.6
Official and bank capital	181.5	250.4	272.2	272.2
Withdrawals	231.7	328.9	358.4	358.4
Amortizations	50.2	78.5	86.2	86.2
Undetermined capital	-400.4	-45.0	-37.6	-37.6
Special drawing rights	5.1	2.7	-	-
Exchange of net reserves	-196.2	-79.1	40.5	5.2

Source: Central Reserve Bank of El Salvador.

a/ The greatest impact of the 1982 meteorologic phenomena on imports will be felt in 1983.

/to cope

to cope with reconstruction requirements and with additional needs for fuel, as referred to in the preceding section. The balance in current account will therefore be increased by some 35 million Dollars to reach a figure close to 230 million Dollars. It may be pointed out, however, that this imbalance is less than the one experienced in 1981, which amounted to 287 million Dollars.

Two factors explain why the effects of the disasters on the 1982 balance of payments are rather moderate. The first is the expectation of a substantial increase in donations (from 28 to 160 million Dollars between 1981 and 1982), which cannot be explained as a consequence of the sending of international aid in response to the disasters but rather by the fact that a substantial loan from the North American Aid Programme to Central America and the Caribbean arrived as a donation. The second derives from the fact that the supply deficit in basic grains - corn, beans, rice, sorghum and vegetable oil - which will necessarily have to be filled with imports amounting to 50 million Dollars, will be reflected in purchases abroad in 1983, since most of these products will be harvested in the last quarter of 1982 and the shortages attributable to the disasters will only become evident in the middle of next year.

It is expected that the climatic phenomena under discussion will have little bearing on future external indebtedness. During 1982 the country counted with a greater fluency of foreign financing facility, by the end of 1982, the medium and long-term external public debt will have reached 987 million Dollars. (See Table 10.) Its share in the gross domestic product, which had risen to 23 per cent in 1978, reached 68 per cent in 1981. Table 10 also shows that the rate of indebtedness accelerated as of 1979, shifting its composition in favour of bilateral official sources and away from multilateral agencies and private banks, which showed negative figures. The Salvadorean Government came to absorb a substantial portion of the external debt, from 4.6 per cent in 1976 to 82.4 per cent in 1982.

Finally, although the debt service increased less rapidly than the cumulative balance, inasmuch as exports decreased drastically in the last four years, its burden on the availability of foreign exchange rose from 3.1 per cent in 1979 to 14.5 per cent in 1982.

/Table 10

Table 10

EL SALVADOR: MEDIUM AND LONG-TERM FOREIGN INDEBTEDNESS

(Millions of dollars)

	As of 31 December						
	1976	1977	1978	1979	1980	1981	1982
<u>Balance</u>	<u>282.9</u>	<u>280.4</u>	<u>339.1</u>	<u>398.6</u>	<u>447.6</u>	<u>651.9</u>	<u>986.9</u>
Disbursed		51.0	74.5	75.1	99.6	189.0	359.0
Service		63.9	32.0	30.7	39.1	39.3	64.2
Amortization		53.5	15.8	15.7	20.6	14.7	24.0
Interest		10.4	16.2	15.0	18.5	24.6	40.2
<u>By debtor</u>	<u>282.9</u>	<u>280.4</u>	<u>339.1</u>	<u>398.6</u>	<u>477.6</u>	<u>651.9</u>	<u>986.9</u>
Central Government	172.0	152.7	204.7	260.6	141.1	502.0	813.5
Remainder of Government	6.3	6.3	5.9	5.4	4.5	4.5	4.1
State-owned corporations	97.7	82.9	95.7	104.4	114.1	125.7	129.1
Intermediate public financing corporations	46.9	38.3	32.7	28.0	17.7	19.5	40.0
<u>By creditor</u>	<u>282.9</u>	<u>280.4</u>	<u>339.1</u>	<u>398.6</u>	<u>477.6</u>	<u>651.9</u>	<u>986.9</u>
Agencies							
International	173.9	198.3	252.4	306.2	343.9	415.3	510.8
Governmental	46.7	64.3	72.6	82.0	129.6	232.8	462.6
AID	38.8	41.3	42.4	43.1	57.6	141.5	351.2
Eximbank	5.0	4.7	13.7	18.2	18.2	18.2	16.8
France	-	-	-	4.7	29.3	40.7	40.2
Venezuela (FIVE)	1.3	16.8	15.2	14.3	17.5	25.5	40.0
Others	1.6	1.5	1.3	1.7	7.0	6.9	13.4
Private banks	62.2	17.0	14.0	10.4	4.2	1.9	3.6

Source: Central Reserve Bank of El Salvador.

4. The Public Sector and the Plan for Economic Reactivation

The effects of the meteorological phenomena of 1982 will necessarily be reflected in a contraction of current revenue and in an increase in the Government's operating expenses, thus the negative balance in current savings will double the amount programmed prior to the disaster to a figure close to 270 million Colons.^{10/} (See Table 11.) The changes in receipts and expenditures appearing in this table under After the disaster should not strictly be attributed to it, since they also include adjustments - particularly with respect to expenditures - derived from the revision of investment programmes in face of the inflation process. In any case, with respect to current revenue, tax receipts - which were expected to exceed those of the previous year by 50 million Colons - will not even reach the value of those of 1981. This was due to a decline in indirect taxation and an even greater decline in taxes to the foreign trade (more than 35 million Colons) as a consequence of the reduced revenue obtained from exports and because many imports of consumer goods will not be subject to custom duties since they consist of official donations.

At first a slight increase in operating expenses was envisioned; however, that expectation was modified in view of the greater disbursements required for urgent repairs and direct assistance to the population because of the storm. An increase of 40 million Colons is expected for such expenses. A significant variation is also expected with regard to forecasts concerning real investment. For the same reasons, this item will increase from 230 in 1981 to almost 410 million Colons.

In summary, the significant increase in the Government's total expenditures - both operating and investment expenditures - combined with the contraction of income already mentioned, could result in an increase in the fiscal deficit to more than 860 million Colons, equivalent to more than 80 per cent of current revenue and 9 per cent of the gross domestic product. It appears unlikely that this deficit will be covered if sufficient external financing is not obtained.

(See Table 11.)

/Table 11

Table 11

EL SALVADOR: CENTRAL GOVERNMENT INCOME AND EXPENDITURES

(Millions of colons)

	1982	1981	1982 ^{a/}		1983 ^{c/}
			Before the disaster	After the disaster ^{b/}	
1. <u>Current revenue</u>	<u>1 040.6</u>	<u>1 107.1</u>	<u>1 128.0</u>	<u>1 073.4</u>	<u>1 360.3^{d/}</u>
Tax revenue	989.3	990.3	1 041.0	986.4	...
Direct	312.0	297.2	299.1	299.1	...
Indirect	302.3	370.6	387.0	369.4	...
On foreign trade	375.0	322.5	354.9	317.9	...
2. <u>Operating expenses</u>	<u>1 077.3</u>	<u>1 233.5</u>	<u>1 253.2</u>	<u>1 342.2</u>	<u>1 378.9</u>
Wages	617.7	657.5	726.0	726.0	...
Other operating expenses	459.6	576.0	527.2	616.2	...
3. <u>Current savings (1-2)</u>	<u>-36.7</u>	<u>-126.4</u>	<u>-125.2</u>	<u>-268.8</u>	<u>-18.6</u>
4. <u>Capital expenditures</u>	<u>483.8</u>	<u>539.7</u>	<u>453.6</u>	<u>593.6</u>	<u>491.4</u>
Real investment	380.2	381.1	231.6	409.0	...
Debt amortization	23.3	56.9	94.6	94.6	...
Other capital expenditures	80.3	101.7	127.4	90.0	...
5. <u>Total expenditures (2+4)</u>	<u>1 561.1</u>	<u>1 773.2</u>	<u>1 706.8</u>	<u>1 935.8</u>	<u>1 870.3</u>
6. <u>Deficit</u>	<u>-520.5</u>	<u>-666.1</u>	<u>-578.8</u>	<u>-862.4</u>	<u>-540.0</u>
7. <u>Deficit financing</u>	<u>520.5</u>	<u>666.1</u>	<u>578.8</u>	<u>862.4</u>	<u>540.0</u>
Internal financing	394.5	475.0	239.6
External financing	125.9	191.1	339.2

Source: Ministry of Finance.

Note: 1 colon = US\$ 0.40

a/ Forecasts based on real data until September.

b/ To a certain extent these also include revisions of revenue and expenditures not directly linked to the natural disasters.

c/ Estimates that include the revenue from the tax reform under discussion when this report was being prepared.

d/ Includes 1 208.3 million colons in normal revenue and 152 million colons as a result of the reforms.

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The unparalleled depression afflicting the country as a result of non-economic factors, which has been accentuated by the natural disasters discussed in this report and added to the growing external and public finance imbalances, has prompted the Salvadorean authorities to formulate a National Reactivation Plan. Considerable progress in the definition and structuring of such Plan had been achieved when the present report was being prepared, giving rise to hopes that it would be in full effect by 1983. Its basic goals may be summarized as:

- a) reconstruction of damaged infrastructure; b) adoption of sound decisions to reduce the budgetary deficit; c) increase of exports;
- d) improvement of foreign exchange reserves and the balance of payments;
- e) maximum utilization of installed industrial capacity; f) fostering of existing irrigation and agro-industry projects; g) putting public corporations on a sound basis to enable them to finance their own reconstruction, operating, and investment programmes without drawing on the General Fund, and h) making credit more easily accessible to agriculture and industry, particularly with regard to export activities.

IV. REQUIREMENTS FOR NEW INTERNATIONAL CO-OPERATION

1. General

As explained in the preceding chapters, the natural disasters caused extensive material damages to social and physical infrastructure and dealt a severe blow to agricultural production. The latter is the country's main source of foreign exchange and fiscal revenues and has also traditionally generated the largest number of jobs.

As emphasized before, in 1982 the natural phenomena accelerated the country's rapid economic and social deterioration over the last three years caused by well-known non-economic factors and by the problems associated with the recently effected banking, foreign trade and land tenure reforms. Family and national income has decreased sharply and it is expected that, as long as the internal conflict persists, it will continue to decline. It must be emphasized that the natural disasters will aggravate all these problems. On the one hand, unforeseen expenditures will have to be made to rehabilitate or replace existing capital assets instead of increasing them, and at a cost much higher than their original value; and, on the other, imports of basic grains will have to be made in order to feed the population. The country's present economic capacity, both with respect to savings and the external sector, will thus be affected in the immediate future.

Some rehabilitation and reconstruction efforts, such as the provision of food, should be undertaken on an urgent basis. In order to prevent new and greater disasters, immediate measures must be taken to replace and repair destroyed or damaged dwellings and those which are in danger of destruction from new floods. The same is true of soil conservation measures in the upland areas located around San Salvador and on the volcanic ranges located in the Sonsonate, Ahuachapán and Santa Ana Provinces, and to the rehabilitation and reconstruction of lost and damaged infrastructure and the import of basic grains.

El Salvador can be successful in these endeavours only if it receives additional international assistance, above and beyond that already provided to support development plans. The country still has

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some foreign indebtedness capacity since its present debt service represents a reasonable fraction of its exports. Nevertheless new international sources of financing must be found in a world in which such financing is currently limited.

In this context, it is necessary to determine the aid that will be required for the phases of emergency and of rehabilitation and reconstruction of damaged property. This does not mean, however, that these phases must follow a rigorous chronological order; quite the contrary, in some cases they may and should be approached simultaneously and complementarily.

2. Characteristics of the Required International Assistance

It is possible at this stage to point out the needs which the international assistance should fill, even though neither the exact amount of Government expenditure nor the amount of international aid that must be requested can be determined with accuracy at the present time.

In the first place, it would be desirable - in view of the difficulties that the Government will face after the disasters which worsen the situation imposed by the aroused confrontation - to set up a programme of direct support, flexible enough in regard to counterpart contributions. In other words, loans are to be obtained under very soft terms and should be able to cover up to the total cost of each project.

In the second place, to facilitate emergency and rehabilitation tasks, unused funds of existing loans could be re-allocated to activities which are at present of higher priority than those originally envisaged.

It might also be advisable to grant financing by programmes, and not by projects, in order to avoid delays in reconstruction or rehabilitation and to simplify procedures and conditions normally required for evaluating loan requests.

As far as support for the balance of payments is concerned, El Salvador could resort not only to its traditional sources of financing, such as the Central American Monetary Council, the Central American Bank for Economic Integration, the International Monetary Fund and bilateral sources, but it should also attempt to sell its coffee surpluses on non-traditional markets.

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Finally, as far as technical co-operation is concerned, the country could request more assistance than it is presently receiving from the Reserve Fund of the United Nations Development Programme and from the United Nations Special Programme for Emergency Relief and Development Assistance, established by General Assembly resolution 3202 (S-VI).

3. Prioritary Fields for International Financial Assistance

It is not necessary to complete a detailed reconstruction plan in order to identify projects, programmes or sectors requiring immediate attention on the part of the Government and the international community. The damages specified in this report clearly identify the sectors that should receive highest priority. Such activities, which are summarized below and listed in Table 12, refer to the phases which occur after a disaster has struck: emergency, rehabilitation and reconstruction. It should be borne in mind, however, that this does not mean that a chronological order must be followed in carrying out the tasks at hand nor that they should be included as an integral part of national development plans.

Priority attention should definitely be accorded to housing, food, health, soil erosion control and the refinancing of agricultural and livestock production, in addition to the important areas.

a) Emergency

As a result of the floods, some 1 000 families lost their means of subsistence, either because they lost their work implements or because of the death of family members who contributed to household income. It is therefore urgent to provide food for some 50 000 people over a period of three months, the time in which it is expected they can reorganize their lives and again enter the labour force.

Construction materials and tools are also required in order for approximately half the number of the families indicated above to reconstruct their homes - at least temporarily - on lots already made available by the Government.^{11/}

/Table 12

Table 12

SUGGESTIONS ON POSSIBLE INTERNATIONAL ASSISTANCE TO EL SALVADOR REQUIRED TO REPAIR DAMAGES CAUSED BY THE DISASTERS OF 1982

Phase and Sector	Financial Co-operation		Technical Co-operation	
	Description of Programme or Project	Possible Sources of Co-operation	Description of Programme or Project	Possible Sources of Co-operation
a) <u>Emergency Phase</u>				
Social Sectors	Provision of food to 50 000 for a period of three months	Governments; FAO/WFP	Assistance in human settlements planning	Governments; United Nations, OAS
	Provision or donation of construction materials and tools for 500 dwellings	Governments; Private organizations	Assistance in the design of preventive campaigns	PAHO/WHO; Governments, Red Cross
	Provision or donation of anti-rabies vaccine, insecticides and anti-malaria drugs	Governments; PAHO/WHO, Red Cross	Assistance in reorienting existing loans	PAHO/WHO; IDB, IBRD
	Repair of drinking water supply systems in rural areas and of the hot water and steam system of the Ahuachapán hospital	Governments; IDB, IBRD	Assistance in the formulation and supervision of the programme	FAO, Governments
Agricultural and Livestock Sector	Erosion control and reforestation in upland areas around San Salvador	Governments, IFAD	Assistance in the planning of human settlements	Governments; United Nations, HABITAT
b) <u>Rehabilitation Phase</u>				
Social Sectors	Financing of minimum housing programme to replace dwellings damaged by the mud flows and those located in surrounding areas	Governments; CABEI; IDB, IBRD		

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Table 12 (Conclusion)

Phase and Sector	Financial Co-operation		Technical Co-operation	
	Description of Programme or Project	Possible Sources of Co-operation	Description of Programme or Project	Possible Sources of Co-operation
c) <u>Reconstruction Phase (Conclusion)</u>				
Infrastructure	Definitive restoration of the railway network	Governments, CABEL		
	Rectification of river channels in western part of the country	Governments		
	Establishment of meteorological and hydrological forecasting system and strengthening of civil defence organization	Governments; WMO; UNDRO, UNDP	Training of personnel in meteorological and hydrological forecasting and in organization for disasters	WMO; UNDP; UNDRO; UNESCO, Governments
Agricultural and Livestock Sector	Financing to increase agricultural production for domestic consumption and export; re-establishment of livestock population levels	IDB; IBRD; Governments, FAO	Establishment of an efficient system for crop forecasting	FAO, Governments
	Reclaiming of silted soils on the western coastal plain	IDB, IFAD		
Public Sector	Establishment of a special fund for immediate needs, and of a minimum deposit of emergency materials, in the event of future disasters, preferably at the subregional level	CABEL; Red Cross, Governments	Inclusion of disaster vulnerability study in all economic development projects	UNDP; UNDRO; CEPAL/ILPES, DCTD
			Identification of disaster-prone areas, establishment of anti-disaster design and construction standards	UNDP; UNDRO; OAS; WMO, UNESCO
			Inclusion of disaster forecasting and prevention programmes and projects in the national development plan	UNDP; CEPAL/ILPES, DCTD

It is also urgent to repair drinking water supply systems in rural areas to avoid the consumption of polluted water and the occurrence of epidemics among the population.

The campaign for the elimination of stray dogs must be continued, as well as those to prevent malaria and other diseases; the necessary medicines and insecticides should be acquired.

The need to initiate without delay the necessary works to halt progressive erosion of the soils located in the upland areas surrounding San Salvador and on the volcanic ranges of the Sonsonate, Ahuachapán and Santa Ana Provinces is also of great importance.

b) Rehabilitation

This phase will require the establishment of a programme to replace the dwellings destroyed or damaged by the mud flows in Montebello and the surrounding areas which are still in danger of destruction from similar disasters. Since the Government will provide suitable land for this project, financing - on special conditions - will be required for their construction.

In addition to the substantial basic grains deficit forecasted for 1983 at the beginning of the agricultural cycle, the prolonged canícula from July to September and the storm in mid-September destroyed many crops and reduced the productivity expected of others. Consequently, substantial quantities of basic foodstuffs will have to be imported before shortages begin to take effect at the beginning of next year.

The Zapotitán irrigation and drainage systems will have to be rehabilitated so that it may be used during the following dry season and thus reduce the expected food shortages.

It will also be necessary to refinance farmers and co-operatives that lost their crops by providing them with special term financing to enable them to meet their obligations.

Finally, direct financing will be required to support the country's balance of payments in view of the reduction in exports resulting from the disasters.

/c) Reconstruction

c) Reconstruction

Without disregarding the need to encourage the natural overlapping of reconstruction and rehabilitation efforts and of these, in turn, with work carried out during the emergency phase, a minimum housing programme should be undertaken to eradicate marginalization in urban areas in danger of being destroyed by new floods, and school and health centres for the population should be established in the new settlements planned by the Government.

Determined efforts should be made to restore the railroad network and to rectify the channels of rivers located in the western area of the country adjacent to Guatemala. A hydrometeorological early warning system will also have to be set up which, on a real-time and continuous basis, will enable the Government to alert the population against new disasters. Civil defence systems should also be strengthened to evacuate the population in time to reduce damages as much as possible on similar occasions.

Special lines of credit should also be established to promote an increase of domestic and export-oriented agricultural production and for bringing livestock population to pre-disaster levels.

Another task to be undertaken is the reclamation of the lands which became located on the western coastal plain which became heavily sedimented, by removing the material deposited there, so that they can be used again for production.

Finally, a special reserve fund should be set up - preferable in co-operation with other countries in the subregion in order to benefit from economies of scale - for emergency situation, together with a minimum reserve of emergency materials in anticipation of future disasters.

4. International Technical Co-operation

The international financial co-operation programmes and projects referred to above would have to be supplemented with technical assistance over and above that which is presently provided by international organizations and friendly Governments. Such technical co-operation would

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essentially be aimed towards formulating specific projects for the emergency, rehabilitation and reconstruction phases, and also towards facilitating the obtention of the external financing they would require. Such co-operation would also aim at incorporating post-disaster needs into the national development plans.

Technical assistance would be required for planning the new human settlements envisaged to attend to the populations's housing needs, as well as for the design and implementation of preventive health campaigns and the urgent formulation of request to reorient existing loans for rural sanitation.

Technical co-operation might be required for the design and implementation of the reforestation and soil erosion control programme in the upland areas affected by the storm.

The establishment of an efficient crop forecasting system to determine future crop deficits or surpluses might also be a field for international technical co-operation.

External technical assistance is also required to train and specialize Salvadorean personnel in meteorological and hydrological forecasting and in the organization to attend disasters of all kinds. For this purpose certain subregional schemes, that have already been proposed in this context and have taken on new relevance in the light of the disasters, might be utilized.

Studies of the technical and economic feasibility of new projects should also include the variable of disaster provenance. Technical co-operation is also required to prepare a land-zoning map of the country according to vulnerability to different kinds of disasters and to formulate and establish anti-disaster design and construction standards.

Finally, the variable of disasters - including programmes and projects for prevention, forecasting and post-disaster organization - should be incorporated into the national development plans.

NOTES

- 1/ See Guatemala: Repercusiones de los fenómenos meteorológicos ocurridos en 1982 sobre la situación económica del país (E/CEPAL/MEX/1982/R.4)
- 2/ See Ministerio de Agricultura y Ganadería de El Salvador y Centro Agronómico Tropical de Investigación y Enseñanza, Agricultura en zonas afectadas por canícula interestival en El Salvador, 1982.
- 3/ See Ministerio de Agricultura y Ganadería de El Salvador, Instituto Salvadoreño de Recursos Naturales, Boletines Agrometeorológicos de El Salvador, 1982.
- 4/ See Comité Nacional de Emergencias, Informe de daños ocasionados por el temporal de los días 16 al 20 de septiembre de 1982 y requerimientos para acciones de emergencia, San Salvador, 23 September, 1982.
- 5/ In the case of Guatemala the indirect transport costs were much higher and are estimated at around 3.3 million U.S. Dollars in view of the large volume of cargo which was handled through the port of Acajutla and which - as a result of the destruction of Puerto de San José in the neighbouring country - will be increased further in the next six months.
- 6/ On the contrary, because of the damages to Puerto de San José in Guatemala, it is expected that higher than normal income may be produced over the next six to nine months, since at least part of the cargo that formerly entered the Guatemalan port will now be transferred to Acajutla.
- 7/ A third boat, a tuna vessel under Peruvian flag, was also damaged, and repairs will cost approximately 1.4 million U.S. Dollars. As it could not be ascertained whether the boat was fishing for a Salvadorean or Peruvian company, this cost was not included in the total estimates.
- 8/ On 2 November another mud flow occurred in Montebello without, however, taking any victims.
- 9/ The prolonged canícula also affected Nicaragua and Guatemala, whereas the storm only affected El Salvador and Guatemala. Preliminary estimates place the damages in Guatemala at a value of 80 million U.S. Dollars and the number of deaths at 600. Damages due to the drought in Nicaragua are also estimated at 80 million U.S. Dollars.
- 10/ One Salvadorean Colon equals 0.40 U.S. Dollars.
- 11/ It is estimated that the other half of the affected families who lived in urban areas have found lodging with relatives, and that those in rural areas are rebuilding their homes with their own resources.