

IV. NEW INTERNATIONAL COOPERATION REQUIREMENTS

1. General

As noted earlier, the floods inflicted severe material damage to physical and social infrastructure and considerably undermined Nicaragua's production capacity, affecting more intensively those areas in which the main country's economic activities are concentrated and, particularly, those which generate most of the foreign exchange and fiscal income.

In addition to the prevailing situation which the Nicaraguan Government was facing -that is, the recovery from the 1972 earthquake damages which had not been completed by the previous regime, and from the 1978-1979 civil war- there is now the need for repairing damages brought about by this natural disaster. Furthermore, the Government had imposed itself the task of improving the standards of living of the population and bringing about a more equitable distribution of income, both of which required a very large scale economic effort and the mobilization of the people. The fact that the enormous debt inherited -in spite of having been recently renegotiated under more favourable terms- imposed high expenditure of the country's foreign exchange, must also be recognized.

It is undeniable that the international financial community has made a substantial contribution towards the reconstruction efforts of the Nicaraguan Government by lending and donating a sum of about 1 300 million Dollars as of July 1979. That contribution, however, is not sufficient for the country to recover from the damage caused by the two disasters that affected it in the 1970s, in addition to confronting the many obstacles to its development.

The May 1982 disaster has aggravated the situation already prevailing before that date and will bring many and more serious adverse effects. On the one hand, it will be necessary to incur unforeseen expenditures for rehabilitation or repair instead of increasing the existing stock of capital, at much higher replacement costs than the

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original value of the existing resources. On the other hand, the capacity of the national economy to finance that expenditure -in terms of both saving and the external sector- will undoubtedly be affected for a period of two or three years.

Also there is a sense of urgency in undertaking some of the rehabilitation and reconstruction works, especially in connection with the reconstruction of access roads and the rehabilitation of agricultural infrastructure, since these tasks must be done in time to ensure the sowing of some crops such as cotton and basic grains, which cannot be prolonged beyond the middle of August.

Notable in the first place, therefore, is the urgent need to provide Nicaragua, apart from emergency aid, with significant support for its balance of payments and public sector financing. This is the only way to avoid a considerable deterioration in the living conditions of the population and a shortage of liquidity which could prevent Nicaragua from meeting its international commitments.

In the second place, it is considered necessary that, with the assistance of the international community, Nicaragua should face this new disaster in such a manner as to reduce or eliminate to its utmost any negative effect on the economic and social development efforts made so far. In other words, it is imperative to combine its rehabilitation and reconstruction efforts with the development plans being implemented before the disaster, endeavouring, in essence, not to alter the goals and objectives set by the National Reconstruction Government. In other words, international aid to cope with the damages caused by the disaster should be of an additional and not of a substitutive nature to that originally contemplated in support of its development plans. As a result of the disaster, the Government will not only have the difficult task of obtaining the external resources required in its financial programming due to the growing shortage of resources, but it will now require additional financing for unforeseen needs.

In the third place, the assistance required for the three phases which follow a process of this nature -emergency, rehabilitation and reconstruction- should be determined. This does not mean that a strict

chronological order must be observed, since in some cases they could even be dealt with simultaneously or on a complementary basis. By way of example, it should be noted that the aid in terms of foodstuffs will be required until the new harvests are brought in, while rehabilitation and reconstruction works -already initiated- may well require a longer period, probably not less than 18 months.

Finally, there is no doubt that the efficiency, speed and earnestness with which the Nicaraguan authorities and the popular organizations -at both national and provincial levels- have responded to the emergency imposed by the disaster, are a guarantee that the proper organizational capacity is available to mobilize and channel a considerable flow of international assistance aimed at undertaking the reconstruction and development projects. This capacity could be strengthened through external technical co-operation, for which a number of guidelines are suggested later in this study.

2. Characteristics of the International Assistance Required

Although it is still too early to estimate the full extent of the international assistance required to repair the damage caused by the floods, the estimates presented earlier in this study indicate a figure of approximately 220 million Dollars in direct losses of physical assets alone. On the other hand, it is feasible to indicate some of the characteristics of this assistance.

Because of the type of damage caused, which largely affected the country's export capacity, and the balance-of-payments position, in the next 18 months Nicaragua will obviously require additional international financing -both public and private- to prevent the complete breakdown of its external sector. In view of the considerable burden which the country must bear in covering the servicing of the already renegotiated external debt, that additional amount of net capital inflows would undoubtedly raise very serious problems with respect to Nicaragua's indebtedness capacity, unless very favourable terms as regards maturity, grace period and interest, and donations could be granted.

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It seems justifiable, moreover, that -taking into account the difficulties which the Government will have to face as a result of the disaster- a system of direct support, flexible as far as local counterpart contributions are concerned, should be designed and put into practice. In other words, it is essential that the new loans, in addition to being granted on highly favourable terms, cover almost the entire cost of the programmes and projects.

In view of the extreme urgency with which Nicaragua needs increased foreign financial assistance to deal with the emergency, rehabilitation and reconstruction, in order to prevent the external sector from reaching a critical position in the immediate future, it seems in order to put forward some suggestions to the international financing agencies.

In the first place unutilized resources of some of the loans already granted could be immediately reoriented and those which are "frozen" could be renewed. In the second, it would be desirable to grant preferential treatment consistent with the magnitude of the disaster and the conditions which prevailed before by making more flexible the procedures, mechanisms and conditions which are normally applicable in the evaluation and approval of loan requests, following the same procedure utilized for some projects initiated after the war. Finally, it would be highly desirable that financing should be provided for programmes -not for projects- in order to avoid the delays involved in the formulation and approval of specific projects.

Fortunately, as a result of the reconstruction work initiated after the war, Nicaragua established an ad hoc agency responsible for analysing and directing the mobilization and absorption of its external resources; the International Reconstruction Fund (FIR).

As regards balance of payments support, the country has already made full use of the procedures available in the Central American Integration process (especially the Central American Monetary Stabilization Fund) and it would not seem practical to reach agreements, within a short time period, with the International Monetary Fund. This support therefore should come from credit lines, inter-bank deposits from the central banks of friendly nations, and official loans from bilateral sources.

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Finally, the United Nations Special Programme to provide emergency aid and development assistance, established by the General Assembly in resolution 3202 (S-VI) could be approached, since the disaster at the end of May 1982 clearly fulfils the requirements established for the purpose.

3. Specific Fields Requiring Priority International Assistance

It does not seem necessary to await the completion of a detailed reconstruction plan in order to point out the projects, programmes, sectors or geographical areas requiring urgent attention from the Government and the international community. On the basis of the analysis of the damages presented in this document it is possible to identify the areas or sectors which should undoubtedly be given priority. These activities, which are summarized below and are presented in detail in Table 20, refer to the three aforementioned post-disaster phases; that is, emergency, rehabilitation and reconstruction. It is once again stressed, however, that this classification or subdivision does not necessarily mean a chronological order of execution, or that they should be programmed in the future as part of the Government's economic and social development plans.

Without underrating the damage in other sectors and activities, those which demand preferential attention are agricultural infrastructure and production, the road transport system, housing, food and health.

a) Emergency Phase

The floods affected the crops of basic grains ready for harvest and the soil ready for sowing, which brought about a shortage of the former and has imposed a considerable delay in the sowing and possible harvest of cereals, especially maize. As a result, food contributions will have to be extended to at least August or September.

Furthermore, it is urgent that more permanent and safe housing be provided for about 12 000 families who lost their homes and household effects, by strengthening and supporting the programme which the Government has initiated in this respect.

/Table 20

Table 20

POSSIBLE INTERNATIONAL ASSISTANCE REQUIREMENTS AS A RESULT OF THE MAY 1982 FLOODS IN NICARAGUA

Stage and sector	Financial Cooperation		Technical Cooperation	
	Programme or Project Description	Possible Sources of Cooperation	Programme or Project Description	Possible Sources of Cooperation
(a) Emergency Phase				
Social Sectors				
	31 550 tons of maize to meet food requirements through September	Governments PIA/FAO UNICEF		
	Construction material and tools for building 12 000 dwellings	Governments IDB CARE OAS Private Organizations	Assistance in urban planning for small-size towns	Governments United Nations
	Emergency health assistance, including personnel, medical supplies and field hospitals	Governments Red Cross PAHO/WHO		
	Repair of drinking water and waste disposal systems	Governments IDB	Assistance for the reorientation of existing loans	PAHO/WHO IDB
Agricultural Sector	400 tons of maize seed, 20 tons of sesame seed and 20 tons of fertilizer	Governments PIA/FAO		
Public Sector	Refinancing of loans to farmers who lost crops or land prepared for sowing	CARE IDB IDB Governments		

Table 20 (Continued)

Stage and sector	Financial Cooperation		Technical Cooperation	
	Programme or Project Description	Possible Sources of Cooperation	Programme or Project Description	Possible Source of Cooperation
(b) Rehabilitation Phase				
Infrastructure	Acquisition of heavy equipment for the removal of sediments and the reconstruction of roads and drainage canals	Governments CABEI IDB IBRD		
	Acquisition of "Bailey" - bridges for rehabilitation of the road system	Governments CABEI IDB IBRD		
	Temporary repairs of highways, roads, bridges and airstrips, to restore access through the affected area	Governments CABEI	Hydrological studies to determine design floods for bridges and culverts	Governments WHO UNDP
	Establishing of a factory of pre-stressed concrete components for the construction of bridges	Governments	Techno-economical study to determine the best way of reconstructing the railway system; analysis of the tariffs structure	CABEI Governments United Nations UNDP
	Acquisition of agricultural machinery and implements for the repair of terraces and preparation of land for sowing	Governments CABEI		
Public Sector	Loans to Central Bank of Nicaragua to support the balance of payments	Central Banks CAHC Governments		
	Channelling of special resources to the public sector through lines of credit and budgetary support	Governments	Assistance in the formulation of development programmes and projects	FAO UNIDC United Nations UNDP

/(Continuation)

Table 20 (Continued)

Stage and sector	Financial Cooperation		Technical Cooperation	
	Programme or Project Description	Possible Sources of Cooperation	Programme or Project Description	Possible Source of Cooperation
Public Sector (Concluded)				
Health Sector	Campan for the prevention of malaria, dengue, yellow fever, etc.	Governments PAHO/WHO	Inclusion of programmes of damage rehabilitation and reconstruction in the economic development plans	CEPAL/ILPES UNDP IDB
Housing Sector	Financing for housing construction programme	CAREI IDB IDRD Governments	Assistance in the formulation of prevention campaigns	Governments PAHO/WHO
(c) Reconstruction Phase				
Infrastructure Sector	Permanent repairs to the road and railway systems, including bridges, culverts and storm drainage systems in urban areas	CAREI IDB IDRD Governments		
	Repair and protection of river banks which were eroded or obstructed	CAREI IDB IDRD IFAD		
	Repair and extension of breakwaters in Corinto	CAREI ICE IDRD Governments		
	Establishment of meteorological and hydrological system for flood and hurricane forecasting	Governments WHO UNDP		

/(Continuation)

Table 20 (Concluded)

Stage and sector	Financial Cooperation		Technical Cooperation	
	Programme or Project Description	Possible Sources of Cooperation	Programme or Project Description	Possible Source of Cooperation
Agricultural Sector	Increase and improvement of the national stock of cattle	IDB IMRO FAO		
	Erosion and reforestation control programme in the uplands	IFAD	Design of the programme	FAO Governments
	Rehabilitations of land covered by deposit in low-lying areas	IDB	Research of the effects of sedimentation in estuaries and coastal lakes for the protection of marine fauna, and the ecological modifications which occurred in Lake Managua	FAO UNDP UNEP
Public Sector			Study on changes in the general environment as a result of the disaster	UNDP UNEP Governments
	Creation of a special fund to attend immediate needs and a minimum stock of emergency materials in case of future disasters, preferably at the regional level	CARE Red Cross Governments	Inclusion of disaster vulnerability analysis in all development projects	UNDP UNDRP CEPAL/ILPES
			Identification of areas prone to difficult types of disasters, and establishment of disaster-resistant construction standards	UNDP UNDRP OAS WHO UNESCO CEPAL/ILPES
			Inclusion of projects and programmes for natural disaster prevention and forecasting in the national development plans	UNDP UNDRP CEPAL/ILPES

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In order to prevent an outbreak of epidemics among the flood victims owing to the crowded conditions of the provisional shelters, it is urgent that these be provided with preventive and curative medical services and the necessary medical supplies, and to continue the use of campaign hospitals which recently arrived. Another urgent matter is to repair and re-establish the drinking water and sanitary disposal systems in some towns of the interior.

In order to ensure that sowing is completed in time, it is of the utmost priority to have the necessary fertilizers, seeds and other inputs, and to be able to refinance the farmers who lost their crops and land ready for sowing.

b) Rehabilitation Phase

While recognizing the need for some overlap between the emergency and rehabilitation phases, and between these two and the reconstruction phases, it is important to point out the most urgently needed rehabilitation activities.

In view of the urgency imposed by the climatic conditions, it is pressing to repair the production roads providing access for inputs and machinery in the agricultural areas; to rebuild the terraces on the land used for cotton-growing; to sow all the basic grains and cotton, and to rehabilitate and repair the air fields required for agricultural pest control. These activities should be completed within a very short period in order to ensure a timely ~~summer~~ harvest.

It is also necessary to continue the temporary repair of the damage to the road transport system, filling in the approaches to the bridges, repairing culverts and constructing fords with minimum safety conditions or using Bailey structures in the case of bridges which were completely destroyed or their structure seriously affected. This work has already been initiated by the Government with the cooperation of friendly countries. The same action must be taken in the case of the secondary roads network. For these activities it is necessary to acquire heavy earth-moving machinery to supplement the units available in the country.

/Finally

Finally, another necessary step is to start the aforementioned campaigns for the prevention of malaria, dengue and yellow fever, before the effects of the propagating vectors start.

c) Reconstruction Phase

Taking into account the above-mentioned overlap with the rehabilitation activities, it would be necessary to undertake the final reconstruction of the road and agricultural infrastructure, the renewal of banana plantations, the final rehabilitation of land eroded and silted, and of river channels which overflowed their banks, and the reconstruction of urban, port and airfield infrastructure.

The reconstruction of bridges and culverts which were damaged or destroyed should only be undertaken after a review of the hydrometeorological design criteria in the area has been completed. The same may be said of rain drainage canals and structures in the cities, and of the correction, removal of obstructions and definite protection of river courses in the coastal areas.

The road transport system will also have to be definitely repaired, adequately replacing the surfaces; the railroad track will have to be reconstructed along the lines most compatible to the needs of the country.

Work designed to protect uplands against progressive erosion should be started, by reforestation, constructing soil retention and conservation works and establishing tree or bush wind breakers. Permanent rehabilitation tasks would also be necessary on land upon which large volumes of sediment were deposited, by removing debris, stones and tree trunks. Fences and other minor agricultural and stock-breeding structures should also be rebuilt.

Moreover, it will be essential to strengthen and extend the coastal protection works (breakwaters) in the port of Corinto, so as to prevent the sea from advancing further inland.

The health and education infrastructure, together with educational materials and the stock of medical supplies should also be replaced on a permanent basis, taking into account the location of the new settlements.

/Lastly,

Lastly, and equally important, would be the establishment of a system of surface and altitude meteorological stations -including radar and radiosonde-, the reconstruction of hydrometric stations carried away by the currents, and the undertaking of specialized training in forecasting for Nicaraguan personnel. This would enable the availability of an efficient forecasting system to lessen the damage of future disasters.

4. International Technical Cooperation

The financial cooperation projects and programmes which have just been outlined should be supplemented by technical assistance additional to that which international organizations and friendly Governments are currently providing. This assistance should be basically oriented towards supporting the Government for National Reconstruction in dealing with economic areas and sectors defined as of priority importance, and particularly in the formulation of specific rehabilitation, reconstruction and development programmes and projects in order to facilitate and accelerate the granting of external financing. This cooperation could also be oriented towards the inclusion of the disaster requirements in national development plans.

Technical assistance could also be required in the formulation of plans for the reconstruction of road, railroad and drainage infrastructure and in a thorough study of the hydrological regime of rivers and in the establishment of an efficient flood forecasting system.

There is also the need to provide assistance in formulating plans for the recovery of debris-strewn land, the protection of eroded land, erosion control on the highlands and reforestation; in short, for control of the soil and forests so seriously affected. Cooperation in analysis and counteraction of the effects on marine fauna caused by the sediment deposited in estuaries might also be required.

Finally, there might be a need for advisory assistance in the planning of human settlements, with the aim of relocating the flood victims by applying the best criteria possible.

/To sum up,

To sum up, after the emergency phase -in which the cooperation of Governments, UNDRO, WFP, the International Red Cross and PAHO is crucial for the subsequent stages of rehabilitation and reconstruction- the Government of Nicaragua should urgently devote itself to the task of defining, as precisely as possible, the priorities and periods to undertake and complete the various fields of activities envisaged. Obviously, the sounder the basis and rationality with which action priorities converted into projects and preliminary projects can be submitted, the greater will be the possibilities that international, regional and sub-regional financing institutions, as well as friendly Governments, will make available the resources in the amount and on the conditions required. Perhaps one of the immediate steps would be to create technical ad-hoc groups, with the collaboration of international assistance, in order to prepare the required draft projects for at least the following fields: road transport infrastructure, bridges, railways, land management and protection, housing and human settlements. Once the Government has stated its needs in terms of technical assistance for this phase, the United Nations Development Programme (UNDP) could be entrusted with the task of finding and mobilizing the required expertise.

NOTES

1/ Some newspaper accounts initially attributed the occurrence of the persistent rains to tropical storm Aletta. However, reliable information obtained by means of meteorological satellite photographs and from radio-sonde stations, indicate that Aletta was already far away from Central America at the time of the disaster.

2/ See General Secretariat of the National Reconstruction Government Junta, Informe preliminar de la cuantificación de los daños ocasionados por el desastre, Managua, 27 May, 1982.

3/ The increase in transport costs does not affect Nicaragua only. Preliminary estimates show that the other Central American countries will have to pay an additional 1.4 million Dollars in transport costs during the next 18 months, as a result of the damages on the Nicaraguan road network.

4/ The same meteorological phenomenon also imposed heavy damage in neighboring Costa Rica and Honduras. Even though the CEPAL mission did not visit these countries, because their respective governments did not request it, the United Nations Disaster Relief Office (UNDRO) has estimated that in Honduras alone 200 people died and material losses amounted to about 100 million Dollars, of which 60 million refer to the agricultural sector, 30 million to roads and bridges, and the rest to education, health and housing facilities. In addition, water-supply systems are reported to be severely affected, thereby imposing danger of epidemics.

5/ See CEPAL, Informe sobre los daños y repercusiones del terremoto de la ciudad de Managua en la economía nicaragüense (E/CN.12/AC.64/2/Rev.1), January 1973.

6/ See CEPAL, Nicaragua: Repercusiones económicas de los acontecimientos políticos recientes (E/CEPAL/G.1091/Rev.1), December 1979.

7/ The Córdoba is Nicaragua's national currency whose official value is equal to 10 US cents.

8/ See Planning Ministry of Nicaragua, Programa de emergencia y reactivación en beneficio del pueblo, January 1980.

9/ Ministry of Economic Planning of Nicaragua, Programa económico de austeridad y eficiencia, 1981, January 1981.

10/ At the end of 1981, approximately 55% of the total assets of the economy were in private hands, and 45% in the public sector. The State controlled 24% of the agricultural sector, 22% of manufacturing, 100% of mining and finance, and 40% of trade.

11/ Official loans were obtained from the following sources:

<u>Multilateral</u>	<u>470.1</u>
BCIE	80.8
IBRD	90.7
IDB	189.1
Others	109.5
<u>Bilateral</u>	<u>348.8</u>
United States	72.6
Western Europe	68.7
Socialist countries	56.5
Latin America	51.0
Libya	100.0
<u>Credit lines</u>	<u>353.2</u>
<u>Suppliers</u>	<u>24.6</u>

Of the above figure, during the period analysed, 840 million Dollars were utilized and debt servicing absorbed 370 million (90 million in amortization payments and 280 million in interest payments).

12/ For a more detailed analysis of the situations described above, see CEPAL, Nicaragua: Notas para el Estudio Económico de América Latina, 1980 y 1981 (CEPAL/MEX/1042 and E/CEPAL/MEX/1982/L.23).

13/ See Nicaragua: Notas para el Estudio Económico, 1981, op. cit.

14/ It is considered that in May manufacturing operated at 60% of its installed capacity.

15/ Open unemployment had stood at 25%, 18% and 13% in 1979, 1980 and 1981, respectively.

16/ The average annual rate of increase in consumer prices had been 48%, 35% and 24% in 1979, 1980 and 1981, respectively.

17/ The cost-of-living index was expected to increase from 24% to 30% in 1982.

18/ The other 50% would have to be imported in 1983.