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SUMMARY OF TOTAL INVESTMENTS

(Millions of US dollars)

	Investment	External financing
Rehabilitation stage	55.8	54.3
Reconstruction stage	449.4	370.9
Disaster prevention and forecasting	1.7	1.7
<u>Total</u>	<u>506.9</u>	<u>426.9</u>

I. REHABILITATION STAGE

SUMMARY OF INVESTMENTS AND FINANCING IN THE
REHABILITATION STAGE

(Thousands of US dollars)

Objectives		Investment	External financing
1.	Reactivation of the peasant economy	20 500	19 975
2.	Provision of fishing vessels and equipment for small-scale fisheries	1 200	1 100
3.	Health campaign	13 230	12 400
4.	Rehabilitation of bridges	15 000	15 000
5.	Technical co-operation in the evaluation of ecological impact and formulation of projects relating to forest restoration	500	500
6.	Technical co-operation relating to the revision of macroeconomic policies	100	100
7.	Technical co-operation relating to the formulation of reconstruction projects	250	250
8.	Preinvestment fund for reconstruction projects	5 000	5 000
<u>Total</u>		<u>55 780</u>	<u>54 325</u>

1. REACTIVATION OF THE PEASANT ECONOMY

SUMMARY: REACTIVATION OF THE PEASANT ECONOMY

(Thousands of US dollars)

Number	Title	Investment	External financing
I.1.1	Reactivation of the peasant economy in the Fifth Region and Special Autonomous Zone II	17 250	17 000
I.1.2	Reactivation of the peasant economy: Fourth Region	1 000	900
I.1.3	Reactivation of the peasant economy: Sixth Region	2 250	2 075
	<u>Total</u>	<u>20 500</u>	<u>19 975</u>

PROJECT OUTLINE

Sector: Agriculture and livestock

Subsector: Agriculture

Project title: Reactivation of the peasant economy in the Fifth Region and Special Autonomous Zone II

Project objectives: To re-establish minimum living conditions, including the production capacity of the most affected peasant families.

Description of activities to be carried out: Establishment of a food assistance programme and of means for carrying it out and maintenance of that programme until the winter harvest of August 1989. Collaboration in a programme for the reconstruction of housing through the supply of building materials (lumber, zinc sheets, nails, tools, etc.).

Expected project output: Restoration of the standard of living of the peasants affected due to their being provided with the means of production they need to return to and, where possible, to surpass, their previous standard.

Total investment required: US\$ 17 250 000

Breakdown (US\$)

- Manpower:	250 000
- National inputs:	2 000 000
- Imported inputs:	15 000 000

Financing (US\$) 17 250 000

Local:	250 000
External:	17 000 000

National agency in charge: Ministry of Agricultural Development and Agrarian Reform, regional delegation of the government of the Fifth Region and Special Autonomous Zone II.

Tentative duration: 10 months

Estimated starting date: December 1988

Special observations:

PROJECT OUTLINE

Sector: Agriculture and livestock

Subsector: Agriculture

Project title: Reactivation of the peasant economy: Fourth Region

Project objectives: To re-establish minimum living conditions including the production capacity of peasant families.

Description of activities to be carried out: Establishment of a food assistance programme and of the means for carrying it out and maintenance of that programme until the winter harvest. Collaboration in a programme for the reconstruction of housing through the supply of building materials.

Expected project output: Restoration of the standard of living of the peasants affected due to their being provided with the means of production they need to return to and, where possible, to surpass their previous standard.

Total investment required: US\$ 1 000 000

Breakdown (US\$)Financing (US\$) 1 000 000

- Manpower:	100 000	Local:	100 000
- National inputs:	50 000	External:	900 000
- Imported inputs:	850 000		

National agency in charge: Ministry of Agricultural Development and Agrarian Reform, Department of Agrarian Reform, and government authorities of the Fourth Region

Tentative duration: 10 months

Estimated starting date: December 1988

Special observations:

PROJECT OUTLINE

Sector: Agriculture and livestock

Subsector: Agriculture

Project title: Reactivation of the peasant economy: Sixth Region

Project objectives: To re-establish minimum living conditions including the production capacity of peasant families.

Description of activities to be carried out: Establishment of a food assistance programme and of the means for carrying it out and the maintenance of that programme until the winter harvest. Collaboration in a programme for the reconstruction of housing through the supply of building materials.

Expected project output: Restoration of the standard of living of the peasants affected due to their being provided with the means of production they need to return to and, where possible, to surpass their previous standard.

Total investment required: US\$ 2 250 000

Breakdown (US\$)Financing (US\$) 2 250 000

- Manpower:	175 000	Local:	175 000
- National inputs:	250 000	External:	2 075 000
- Imported inputs:	1 825 000		

National agency in charge: Ministry of Agricultural Development and Agrarian Reform, Department of Agrarian Reform and government authorities of the Sixth Region.

Tentative duration: 10 months

Estimated starting date: December 1988

Special observations:

2. PROVISION OF FISHING VESSELS AND EQUIPMENT
FOR SMALL-SCALE FISHERIES

PROJECT OUTLINE

Sector: Industry

Subsector: Fisheries

Project title: Rehabilitation of artesanal fisheries on the Atlantic coast

Project objectives: To return to previous levels of artesanal fishing in Bluefields Bay, the Laguna de Perlas basin, La Barra de Río Grande and Corn Island.

Description of activities to be carried out: Replacing the artesanal fishery infrastructure with new machinery, equipment, tools, etc. To provide equipment, inputs and other products needed in order to reactivate artesanal fisheries.

Expected project output: Provision of food to the population, the generation of exports and the overcoming of the unemployment caused by the hurricane.

Total investment required: US\$ 1 200 000

Breakdown (US\$)Financing (US\$) 1 200 000

- Manpower:	50 000	Local:	100 000
- National inputs:	50 000	External:	1 100 000
- Imported inputs:	1 100 000		

National agency in charge: National Fisheries Institute

Tentative duration: 6 months

Estimated starting date: January 1989

Special observations:

3. HEALTH CAMPAIGN

SUMMARY: HEALTH CAMPAIGN

(Thousands of US dollars)

Number	title	Investment	External financing
1.3.1	Integral recovery of health conditions: Fifth Region	5 000	4 900
1.3.2	Integral recovery of health conditions in the South Atlantic Autonomous Region (RAAS)	6 000	5 500
1.3.3.	Strengthening the system for monitoring water quality	330	260
1.3.4	Controlling rabies in animals	640	600
1.3.5	Urgent strengthening of the national capacity to provide emergency medical attention	360	360
1.3.6	Urgent strengthening of the national malaria programme	900	780
	<u>Total</u>	<u>13 230</u>	<u>12 400</u>

PROJECT OUTLINE

Sector: Health

Subsector: Organization and development

Project title: Integral recovery of health conditions: Fifth Region

Project objectives: To re-establish the integral health programme of the municipalities of Boaco, Chontales and Zelaya Central for a population of 50 000 affected inhabitants, and thus to avoid a deterioration in the health of this population.

Description of activities to be carried out: a) Provision of the means for recovering and operating the programmes for waste collection, vector control and immunization; b) restoration of the 40 most severely deteriorated health units (civil works and equipment); and c) to enlarge the motor vehicle stock.

Expected project output: a) Recovery and improvement of hygienic and sanitary conditions in the Fifth Region; b) prevention of an increase in mother and child morbidity and mortality; c) lessening of the risks of epidemics of diseases which can be prevented by immunization; and d) support to the re-establishment of the productive activities of the affected population.

Total investment required: US\$ 5 000 000

<u>Breakdown</u> (US\$)		<u>Financing</u> (US\$)	5 000 000
- Manpower:	100 000	Local:	100 000
- National inputs:	500 000	External:	4 900 000
- Imported inputs:	4 300 000		

National agency in charge: Regional government

Tentative duration: 18 months

Estimated starting date: January 1989

Special observations:

PROJECT OUTLINE

Sector: Health

Subsector: Organization and development

Project title: Integral recovery of health conditions in the South Atlantic Autonomous Region (RAAS)

Project objectives: a) To re-establish the integral health programmes in Bluefields, La Cruz del Río Grande and Corn Island for a population of 60 000 inhabitants, and b) to keep the health of that population from deteriorating.

Description of activities to be carried out: a) Provision of the means for recovering and operating the programmes for waste disposal, vector control, and immunization; and b) restoration of the 12 most severely affected health-service units (two hospitals, five health centres, five health stations).

Expected project output: a) Recovery and improvement of hygienic and sanitary conditions in the South Atlantic Autonomous Region; b) prevention of an increase in mother and child morbidity and mortality; c) lessening of the risks of epidemics, of diseases which can be prevented by immunization; and d) support for the re-establishment of the economically productive activity of the affected population.

Total investment required: US\$ 6 000 000

Breakdown (US\$)Financing (US\$) 6 000 000

- Manpower:	180 000	Local:	500 000
- National inputs:	320 000	External:	5 500 000
- Imported inputs:	5 500 000		

National agency in charge: Autonomous regional government

Tentative duration: 18 months

Estimated starting date: January 1989

Special observations:

PROJECT OUTLINE

Sector: Health

Subsector: Water and sanitation

Project title: Strengthening of the system for monitoring water quality

Project objectives: To establish a system for sampling the sources of water supply and the water distribution network to study the bacteriological and physical-chemical quality of the water.

Description of activities to be carried out: a) Providing the equipment and materials needed to monitor water quality in the zones affected; and b) providing technical assistance in the formulation and implementation of a plan for the systematic sampling of the water source and distribution network.

Expected project output: Systematic knowledge concerning the bacteriological and physical-chemical quality of the water for the purpose of taking action to prevent water-transmitted diseases and of treating such diseases should they occur.

Total investment required: US\$ 330 000

<u>Breakdown (US\$)</u>		<u>Financing (US\$)</u>	330 000
- Manpower:	20 000	Local:	70 000
- National inputs:	50 000	External:	260 000
- Imported inputs:	260 000		

National agency in charge: Ministry of Health

Tentative duration: 12 months

Estimated starting date: January 1989

Special observations:

PROJECT OUTLINE

Sector: Health

Subsector: Prevention and control

Project title: Controlling rabies in animals

Project objectives: To prevent the spread of rabies in animals.

Description of activities to be carried out: a) Erecting sanitary barriers in population nuclei by administering anti-rabies vaccinations; and b) strengthening the epidemiological control of persons wounded by animals suspected of having rabies and administering vaccines and serums in confirmed cases.

Expected project output: Prevention of the infiltration of rabies affecting wildlife and of the emergence of this disease, thereby helping to preserve human life.

Total investment required: US\$ 640 000

<u>Breakdown</u> (US\$)		<u>Financing</u> (US\$)	640 000
- Manpower:	10 000	Local:	40 000
- National inputs:	30 000	External:	600 000
- Imported inputs:	600 000		

National agency in charge: Ministry of Health

Tentative duration: 12 months

Estimated starting date: January 1989

Special observations: The fight against rabies should be intensive and have wide coverage so that the disease can be effectively controlled.

PROJECT OUTLINE

Sector: Health

Subsector: Organization and development

Project title: Urgent strengthening of the national capacity to provide emergency medical attention.

Project objectives: To support the national capacity to provide the emergency medical services needed because of the immediate and real increase in disease risk due to the cumulative deterioration suffered by the sanitary situation of the country.

Description of activities to be carried out: a) Providing the medical services with 15 ambulances with the capacity to operate in urban and rural areas and five boats supplied with out-board motors; and b) acquiring spare parts for the ambulances and out-board motors.

Expected project output: A decrease in the risk of death following the disaster.

Total investment required: US\$ 360 000

<u>Breakdown (US\$)</u>	<u>Financing (US\$)</u>	360 000
- Manpower:	Local:	
- National inputs:	External:	360 000
- Imported inputs:		360 000

National agency in charge: Ministry of Health

Tentative duration:

Estimated starting date: As soon as possible

Special observations:

PROJECT OUTLINE

Sector: Health

Subsector: Prevention and control

Project title: Urgent strengthening of the national malaria programme

Project objectives: a) To intensify action to prevent outbreaks of malaria in areas affected by hurricane Joan and to prevent and increase in mortality caused by malaria; and b) to diminish the risk of malaria becoming a permanent scourge.

Description of activities to be carried out: a) Carrying out a rigorous control of the malaria transmission vector through the application of the measures usually employed to combat mosquito larvae and adult mosquitoes, i.e., 1) fumigating the most severely affected localities with residual-action insecticides, and 2) developing action to combat larvae in the same localities.

Expected project output: Prevention of the propagation of malaria and a decrease in morbidity and mortality from this disease, thereby contributing to the more effective use of the labour force.

Total investment required: US\$ 900 000

<u>Breakdown (US\$)</u>	<u>Financing (US\$)</u>	900 000
- Manpower:	80 000	Local: 120 000
- National inputs:	250 000	External: 780 000
- Imported inputs:	570 000	

National agency in charge: Ministry of Health

Tentative duration: 10 months

Estimated starting date: December 1988

Special observations:

4. REHABILITATION OF BRIDGES

PROJECT OUTLINE

Sector: Transport and communications

Subsector: Road network

Project title: Temporary rehabilitation of some essential bridges

Project objectives: To re-establish road links before the onset of winter in August 1989.

Description of activities to be carried out: To install metallic bridges for emergency use as temporary substitutes for old bridges (Waslala 1 and 2, Mulukuku, Mayari, La Barranca, El Arroyo, La Cusuca, Piedra Colorado, Tepenaguazapa and several other short-span bridges).

Expected project output: Maintenance of the continuity of the road network during the winter season, thereby allowing traffic to flow without obstacles and detours.

Total investment required: US\$ 15 000 000

Breakdown (US\$)Financing (US\$) 15 000 000

- Manpower:	Local:	
- National inputs:	External:	15 000 000
- Imported inputs:		15 000 000

National agency in charge: Ministry of Construction and Transport

Tentative duration: 6 months

Estimated starting date: December 1988

Special observations:

**5. TECHNICAL CO-OPERATION IN ASSESSING ECOLOGICAL IMPACT
AND FORMULATION OF PROJECTS ON FOREST RESTORATION**

PROJECT OUTLINE

Sector: Technical co-operation

Subsector: Evaluation and preinvestment

Project title: Environmental impact assessment of the hurricane and the formulation of forest and timber reclamation projects

Project objectives: To utilize the forest timber affected by the hurricane.

Description of activities to be carried out: a) The interpretation of aerial photographs of the affected forests; b) field work for assessing the ecological impact; and c) the formulation of specific proposals concerning activities involved in the reclamation of forests and the utilization of the timber.

Expected project output: Project proposals for forest rehabilitation and timber utilization.

Total investment required: US\$ 500 000

Breakdown (US\$)Financing (US\$) 500 000

- Manpower:

Local:

- National inputs:

External: 500 000

- Imported inputs: 500 000

National agency in charge: DIRENA

Tentative duration: 6 months

Estimated starting date: As soon as possible

Special observations:

6. TECHNICAL CO-OPERATION IN THE REVISION OF
MACROECONOMIC POLICIES

PROJECT OUTLINE

Sector: Technical co-operation
 Subsector: Policies
 Project title: Revision of macroeconomic policies

Project objectives: To reformulate short-term macroeconomic policies so as to incorporate the changes in prevailing conditions resulting from the effects of the hurricane.

Description of activities to be carried out: Technical co-operation missions.

Expected project output: New short-term macroeconomic policies.

Total investment required: US\$ 100 000

Breakdown (US\$)Financing (US\$) 100 000

- Manpower:	Local:	
- National inputs:	External:	100 000
- Imported inputs:		100 000

National agency in charge: Department of Programming and the Budget

Tentative duration: 6 months

Estimated starting date: As soon as possible

Special observations:

**7. TECHNICAL CO-OPERATION IN THE FORMULATION OF
RECONSTRUCTION PROJECTS**

PROJECT OUTLINE

Sector: Technical co-operation

Subsector: Preinvestment

Project title: Reconstruction projects formulation

Project objectives: To facilitate the financing of reconstruction investment projects.

Description of activities to be carried out: The formulation of reconstruction projects.

Expected project output: Documents concerning specific sectoral reconstruction projects.

Total investment required: US\$ 250 000

Breakdown (US\$)

- Manpower:

- National inputs:

- Imported inputs: 250 000

Financing (US\$) 250 000

Local:

External: 250 000

National agency in charge: Department of Programming and the Budget and other sectoral agencies.

Tentative duration: 1 year

Estimated starting date: As soon as possible

Special observations:

8. PREINVESTMENT FUND FOR RECONSTRUCTION PROJECTS

PROJECT OUTLINE

Sector: Financial

Subsector: Preinvestment

Project title: Preinvestment fund for the assessment of reconstruction projects in the affected areas

Project objectives: To prepare feasibility studies concerning the crop-farming, stock-raising, agroindustrial, small and medium-scale enterprise, industrial fishery, self-employed or small-scale fishing and mining sectors and subsectors.

Description of activities to be carried out: a) A review of sectoral diagnostic analyses; b) a provisional prioritization of the projects to be undertaken; c) the formulation of terms of reference; d) the identification and recruitment of consultants; and e) activity co-ordination and follow-up.

Expected project output: A portfolio of economically viable projects; a knowledge of alternative sources of funding; the availability of reliable information for use in presenting development strategies and investment programmes.

Total investment required: US\$ 5 000 000

Breakdown (US\$)Financing (US\$) 5 000 000

- Manpower:	3 000 000	Local:	
- National inputs:	1 000 000	External:	5 000 000
- Imported inputs:	1 000 000		

National agency in charge: Nicaraguan Investment Fund

Tentative duration: 2 years

Estimated starting date: February 1989

Special observations: Adjustments will be made on the basis of the project outlines identified in the course of the diagnostic study.