- A. HONDURAS
- B. NICARAGUA
- C. EL SALVADOR
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#### A. HONDURAS

#### 1. The impact of Hurricane Mitch on Honduras

Hurricane Mitch, one of the most powerful hurricanes of the century, hit northeast Honduras on 26 October 1998, slashing the northern Atlantic coast with destructive winds (of approximately 250 kph). Its torrential rains lasted for four days due to its slow speed (3 to 9 kph). While over the "Islas de la Bahia", Mitch suddenly shifted south, entered Honduran territory and became a tropical storm. Unpredictable and moving slowly, this tropical storm brought three days of torrential rain, which caused rivers to overflow and severely flooded all 18 departments of the country, especially on the Atlantic coast, the southern departments, and the capital, Tegucigalpa.

According to Government estimates, the total number of dead exceeds 6,600 (as of 17 November), with 12.000 people injured, 8,000 unaccounted for, 1.4 million affected, and with 285,000 persons still occupying 1,375 temporary shelters. It is estimated that 60 % of national infrastructure and over 50 % of agriculture have been severely affected or completely destroyed (FAO estimates). According to PAHO and the national water and sanitation service, 80 % of the country's 3,800 aqueducts have been damaged, sharply reducing the supply of potable water to 2.9 million people. In both rural and urban areas many people have lost their homes, most of their belongings, and their sources of income, whilst large parts of most urban centres are buried under contaminated mud, posing a serious health hazard.

The education sector was devastated with approximately 25 % of schools throughout the country destroyed. More than 250,000 children at primary level and 30,000 children at secondary school level cannot continue their studies. 2,000 teachers have been displaced from their jobs and classes have been suspended until further notice. Community day care and pre-school centres have also been destroyed or damaged, leaving 75,000 children without attention.

## 2. Response to the disaster in Honduras

#### (i) National initiatives

The Government of Honduras mobilised all resources and personnel immediately to mitigate the suffering of the victims. Owing to the magnitude of the disaster, the President of Honduras launched an international appeal for assistance and from the beginning, the government, as well as religious institutions and NGOs, spared no effort in providing assistance to those in need; donating food, water, clothing, and medical supplies. Preliminary estimates of private contributions total approximately US \$420,000, not including medical and other supplies.

A national ad-hoc Emergency Management Committee (CONE) was created to function as an information centre, headed by a Minister of State. The Permanent Committee for Contingencies (COPECO) is the coordinating body for all the Regional

Disaster Committees (CODERs) and Municipal Disaster Committees (CODEMs). Information is fed from the CODEMs through CODERs to COPECO and CONE.

#### (ii) United Nations initiatives

The UN System in Honduras also moved quickly to mobilise its resources immediately after the hurricane, providing assistance to the national services involved in relief and rescue operations, including financial and technical support for the provision of food aid, water supplies and medical care.

The office of the UN Resident Coordinator is performing the vital function of facilitating the flow of information on the situation, enhancing a coordinated response between the UN System, the Government and the international donor community. A special "Mitch" website on the Internet was established to keep the international community regularly updated. In addition, a United Nations Disaster Assessment and Coordination team was mobilised to assist the overall situation and needs assessment and in the coordination of the international assistance, and a senior emergency adviser was recruited to facilitate the coordination between all the main actors.

The operational agencies in Honduras - WFP, FAO, UNDP, WHO/PAHO and UNICEF - had already developed emergency plans with the support of United Nations Volunteers (UNVs), and were closely involved in relief assistance to the victims of this disaster (food, medical supplies, essential drugs, clean water and logistics).

## 3. Sectors to be addressed by the Appeal in Honduras

#### 3.1 HEALTH, WATER AND SANITATION

#### (i) Objective

To minimize adverse health effects by ensuring the provision of essential health care, safe water, sanitation, the treatment of infectious diseases and the establishment of emergency surveillance systems to prevent outbreaks among the affected population.

#### (ii) Damage and resulting needs

Hurricane Mitch affected the whole of Honduras causing major losses in all areas of the economy and society. In the health sector, according to data provided by the Ministry of Health, a total 107 health facilities were seriously affected or destroyed, including 23 out of the 30 hospitals which have suffered complete or partial damage to their water supply systems, and 68 rural health centres. This has resulted in a severe lack of basic preventative health care and treatment, in a country where dengue and cholera among other transmissible diseases are endemic, and at a time when more than 100,000 people are at greater risk from diseases such as diarrhoea, acute respiratory illness, dermatitis, malaria and conjunctivitis.

80 % of domestic water distribution systems were damaged. Sanitation facilities were destroyed in rural and marginal urban areas, increasing the probability of water

contamination and the proliferation of vectors, as well as the contamination of food supplies. Furthermore, large parts of the main cities are buried in 1-2 metres of contaminated mud, which not only prevents the return of families to their homes but also poses a serious health threat.

The severity and duration of the hurricane in Honduras and the magnitude of social and economical losses have also increased the levels of anxiety of the population, affecting its response to the emergency situation. Overall, the combination of increased demand for health services and the absence of potable water, necessitates a systematic approach to diminish and/or prevent outbreaks of disease.

#### (iii) Actions to be taken to address needs

Emergency response activities will include mitigation measures, vulnerability reduction and relevant institutional strengthening in accordance with WHO technical guidelines and standards.

## **♦ Provision of basic health services:**

As Honduras had few functioning health facilities it is essential to restore damaged ones quickly. A large part of the population remains without access to health services. Basic medical care, including mother and child clinics, will be provided through health brigades with the necessary medical supplies.

## Open Prevention, surveillance and control of outbreaks:

An emergency epidemiological surveillance system will be set up to monitor the highly transmissible diseases and to assist in the planning, coordination, transport and equipment of health teams to investigate suspicious cases and treat confirmed cases quickly

# Provision of water supply systems in rural and marginalised affected areas:

Quick action to restore critical water supply systems;

Ensure chlorination in the most affected areas, by continuous assessment;

Assist in the transport of drinking water to priority areas such as health facilities and shelters.

#### Replacement of equipment and provision of medicines/health supplies:

Replacement of essential lab and health centre equipment and the provision of the most urgent medicines and essential health supplies, carried out according to a continually updated diagnosis of priority needs to be established in coordination with the Ministry of Health;

Transportation of medicines and vaccines, particularly those that are temperature sensitive, and of essential medical teams;

A proper inventory of donated health supplies using SUMA (a computerised logistic supply management system, created by PAHO).

## **Education and health promotion:**

Institutional and community health personnel will be trained to provide basic health services adapted to emergency conditions. Good hygiene practice will be promoted amongst those involved in food production or solid waste disposal. Educational materials on sanitation and health, including sexual and reproductive health (SRH), will be produced and distributed by various media.

## **♦ Solid waste management:**

Assist municipalities and local communities in solid waste management, including the installation of latrines (up to 3,000) in the affected areas

## **○** Urgent clean-up of main cities:

Removal of contaminated sediment in the seven most affected cities. Tegucigalpa San Pedro Sula, La Lima, La Ceiba, El Progreso, Choluteca and Yoro, by hiring equipment and operators

## (iv) Responsibility for implementation

WHO/PAHO, UNICEF, UNDP and UNFPA will implement the above activities through the Ministry of Health, in cooperation with NGOs and with the participation of community health workers.

## (v) Budget for the Health. Water and Sanitation Sector

Item	Implementing	US \$
	Agencies	
Provision of basic emergency health services	WHO/PAHO	700,000
	UNICEF	300,000
Outbreak prevention and vector control	WHO/PAHO	1,200,000
	UNICEF	800,000
Provision of safe water to affected population	WHO/PAHO	800,000
	UNICEF	700,000
Equipment, medicines, essential health services	WHO/PAHO	800,000
	UNICEF	900,000
	UNFPA	300,000
Education and health promotion	WHO/PAHO	250,000
	UNICEF	250,000
	UNFPA	200,000
Latrines and solid waste management	WHO/PAHO	300,000
	UNICEF	400,000
Removal of contaminated sediment (from 7 cities)	UNDP	2,508,000

Subtotal for WHO/PAHO activities	4,050,000
Subtotal for UNICEF activities	3,350,000
Subtotal for UNFPA activities	500,000
Subtotal for UNDP activities	2,508,000

Overall Total for Health, Water and Sanitation	10,408,000
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#### 3.2 SHELTER

## (i) Objective

To reintegrate approximately 285,000 affected people currently living in temporary shelters throughout the country.

#### (ii) Damage and resulting needs

- The hurricane affected 14 out of 18 administrative departments of Honduras, leading to significant population displacement;
- \$\delta\$ 285,000 people are still living in temporary shelters, the main concentrations in the municipalities of Tegucigalpa, Choluteca and San Pedro Sula;
- About 80.000 had their homes seriously damaged, although the number of houses in safe areas which could be re-inhabited after relatively minor repairs is not yet known, nor has there been a reliable survey of those displaced people who could return to their damaged homes;
- The poorest communities were the hardest hit, particularly those living in marginal areas around the urban centres, many of which had their homes either completely destroyed or severely damaged by flooding. Municipal authorities have yet to make a full assessment of requirements for the rehabilitation and refurbishment of these houses:
- ♦ The dispersion of temporary shelters throughout the country complicates the distribution of assistance.

## (iii) Secondary and future threats

Temporary shelters are mainly located in schools which, unless they are vacated quickly, will prevent the school year from beginning in February as scheduled.

The need for quick interventions has led to inadequate organisation in the shelters and limited participation of the displaced in their management, where an inequitable distribution of work between men and women can also be observed. Special attention must be given to children and women in the shelters as well as to the economic reestablishment of adults in their home communities.

Epidemic outbreaks, threats to reproductive health and serious nutritional problems arising from poor diets and the health risks associated with the concentration of people in shelters and inadequate disposal of waste, could all be imminent, particularly as they are aggravated by the collapse of the water systems. The stress of living in crowded public shelters added to symptoms of psychological trauma (depression, dependence and frustration) may lead to interpersonal conflicts that could degenerate into violence against women and children.

#### (iv) Action to be taken to address needs

The response strategy envisages a two-pronged approach:

- Facilitating the return of the affected people where conditions allow, through repair and refurbishment of their damaged homes and the creation of income generating activities for the sustainability of their reintegration;
- Providing larger and better organised temporary facilities for those whose circumstances do not permit early return.

In order to achieve these, the following actions will be carried out:

- A reliable needs assessment to inventory the numbers, age, sex, skills and needs of people living in temporary shelters, identifying those that can immediately or soon be reintegrated into their areas of origin and those who will have to remain in shelters until conditions are met for their return;
- Repair and refurbishment of damaged houses to facilitate return to safe sites;
- Equip the areas of return with basic services sufficient to ensure safety and acceptable conditions (potable water systems, domestic supplies, wells, pumps, and basic sewage systems);
- Reorganise and refurbish the temporary shelters to concentrate the displaced population and facilitate the provision of services and assistance, including:

  The provision of a food ration, clean water supply and basic health care;

  Educational and psycho-social support to children and women.
- Nutritional surveillance, micronutient supplements and supplementary feeding for vulnerable groups, particularly young children;
- Oreate conditions to support sustainable livelihoods (training, skills development and income generation).

## (v) Responsibility for implementation

- a. The overall responsibility for repair and reconstruction belongs to the Government through its different designated authorities, notably the municipal authorities which will be responsible for planning and coordination.
- b. UNDP will have overall responsibility for coordinating UN support to this sector and for the implementation of some activities. In consultation with the Government, UNDP will work with national and international implementing partners, including IOM, and will monitor the implementation of activities and report on progress. Interdisciplinary teams of UNVs and IOM staff will:
  - ♦ Conduct a survey of the population in shelters;
  - Prepare and disseminate information in the shelters on actions being undertaken to achieve reintegration;
  - Seek guidance from the affected population for planning and implementing reintegration plans;
  - ♦ Identify and define groups for settlement in specific areas;
  - ♦ Facilitate income generating activities among the population in shelters;
  - Support municipalities or other local agents in organising, planning and managing the reintegration process.
- c. UNICEF will provide special attention to the needs of women and children in shelters, including the provision of medicines, educational and psycho-social support, and clean water where unavailable. WHO/PAHO will provide medical teams, support vector control and ensure proper sanitation. Together UNICEF

and WHO-PAHO will monitor proper processing, and ensure nutritional surveillance. UNFPA will support sexual and reproductive health (SRH) services to ensure adequate care during pregnancy and delivery, prevent sexually transmitted diseases (STDs) and unwanted and high risk pregnancies WFP will provide basic food rations to the shelter population as part of its country-wide food aid programme, including milk rations to approximately 25,000 children under five years

## (vi) Budget for the Shelter Sector

Field of Action / Component	Implementing	US \$
	Agency	
Medical teams, vector control, sanitation	WHO/PAHO	1,000,000
Subtotal for WHO/PAHO activities		1,000,000
Basic services for returnees	UNICEF	1,000,000
Supply of clean water	UNICEF	330,000
Nutrition	UNICEF	700,000
Surveillance and micronutrient supplements		-
Supplementary feeding for 60,000 children		-
with severe malnutrition		
Medicines	UNICEF	100,000
Educational materials for children	UNICEF	297,000
Psycho-social support for women and children	UNICEF	300,000
Subtotal for UNICEF activities		2,727,000
Equipment and material for SRH services	UNFPA	300,000
Subtotal for UNFPA activities		300,000
Needs assessment survey	UNDP	50,000
Temporary Shelters (100 shelters)	UNDP	2,000,000
Basic house repairs (approx. 10,000)	UNDP	2,000,000
Income generating activities for returnees	UNDP	2,000,000
Subtotal for UNDP activities		6,050,000
UNV interdisciplinary teams (315 x \$6,000)	UNDP, UNICEF	1, 890,000
Prevention of violence against women, children	UNFPA, UNICEF	150,000
Subtotal for joint activities		2,040,000
Milk rations (1/2 lt/day) for 25,000 under 5 yrs	WFP	2,500,000
Subtotal for WFP activities		2,500,000
Overall Total for Shelter		14,617,000

#### 3.3 FOOD SECURITY

#### (i) Objective

To provide emergency food aid to 600,000 affected people, of whom now displaced and live in 1.375 temporary shelters.

#### (ii) Damage and resulting needs

With the immense damage to infrastructure and means of production, the 350,000 affected people who have lost many of their possessions and their sources of income, and the 250,000 who have also lost their homes are now living in shelters, all will require food aid for months to come.

## (iii) Secondary and future threats

It is estimated that about 60 % of the people displaced in over 1,000 temporary shelters, are children under six and women, who are particularly vulnerable to malnutrition. Most had lived in poverty prior to the hurricane, with average annual incomes less than US S400. Even on their return home, they must wait until the next harvest for locally produce, necessitating a long and gradual reintegration into normal economic activities.

#### (iv) Action to be taken to address needs

Immediately after Hurricane Mitch, in-country WFP food stocks previously designated for development projects were released to meet the urgent needs of 100,000 victims. Soon after, WFP approved a regional Emergency Operation (EMOP) for about US \$58.4 million, of which US \$31,369,702 will be earmarked for use in Honduras. This EMOP represents a major logistical challenge. WFP will open four sub-offices in Honduras, to be nearer to the beneficiaries and to facilitate logistic and monitoring activities.

#### (v) Responsibility for implementation

WFP is the responsible UN agency for implementing this programme. The Government counterparts are the Technical Secretariat for International Cooperation (SETCO) and the National Commission for Contingencies (COPECO), which coordinate food distribution with other government agencies, the Honduran Red Cross and NGOs.

#### (vi) Budget for the Food Security Sector

Item	Implementing Agency	US \$
Food (62,114 MT), external and internal transport	WFP	27,979,910
Direct Support Costs	WFP	1,614,150
Indirect Support Costs	WFP	1,775,640
Overall Total for Food Security (WFP)		31,369,700

## 3.4 AGRICULTURE

#### (i) Objectives

- To contribute to meeting the immediate needs of the affected people, and reduce their need for food aid in 1999, by ensuring local food production;
- To generate agricultural income for the period November 1998 to August 1999 (the time of the earliest basic grain harvest from the first re-plantings).

## (ii) Damage and resulting needs

The damage to agricultural infrastructure and production in Honduras is estimated at over 50 %, amounting to US \$811 million according to the Secretariat for Agriculture. Planting of the second season crop (the country's main crop) was virtually completed just before the hurricane which destroyed it. Maize harvested from the second season crop represents about 80 % of annual production, whilst the second season crop of beans represents about 65 % of annual output. Estimated losses are as follows:

Product	Quantity	Value	losses as a %
	lost (MT)	(US \$)	of 1997 crop
			(value)
Basic grains			
Maize	382,000	75,000,000	56 %
Beans	48,000	31,000,000	31 %
Rice	3,000	2,000,000	16 %
Sorghum	23,000	5,000,000	27 %
Subtotal	457,000	113,000,000	42 %
Other local consumptio	n products		
Sugar cane	164,000	106,000,000	N/A
Oil Palm		19,000,000	56 %
Milk	-	51,000,000	67 %
Meat	_	56,000,000	N/A
Subtotal		232,000,000	
Export products			
Coffee	30,000	72,000,000	20 %
Bananas	949,000	207,000,000	71 %
Cantaloupes	184,000	59,000,000	52 %
Pineapples	-	24,000,000	61 %
Shrimps		56,000,000	34 %
Subtotal		418,000,000	43 %
Others	••	48,000,000	N/A
Grand Total		811,000,000	

## (iii) Secondary and future threats

Coffee and bananas which are the main export crops and very important for income redistribution, suffered near complete destruction. The resulting loss of hard currency

earnings, the reduction in rural employment and loss of income caused by the destruction of these and other crops will cause serious and sudden depletion of the supply of basic foods. Damage to the tertiary road system will magnify these effects.

## (iv) Action to be taken to address needs

To help alleviate the food shortages nation-wide and cope with the losses to rural income, action must begin immediately. Where land and weather conditions permit, grains and other traditional vegetables and food crops, for both local consumption and for the market, must be replanted now and during the dry months in 1999, and irrigation systems must be repaired. The planting of the first crop 1999/2000 will also have to be secured.

An immediate supply of seeds, fertilizers and pesticides is needed to meet the preliminary targets for late 1998/99 season plantings and for the first crop of 1999, as per the Government's "Emergency Plan for the Supply of Basic Foods". Planting of some crops could begin immediately.

Product	Area to be planted (ha)	Expected production (MT)	Number of farmers*
Late season 1998/99			
Maize	14.056	31,945	4,000
Rice	2,168	5,912	300
Sorghum (grain)	11,119	20,216	3,200
Sorghum (forage)	1,399	-	300
Vegetable crops	( to be identified)	-	-
First crop 1999/2000			
Maize	76,923	174,825	22,000
Beans	25,000	20,455	17,000

<sup>\*</sup>Note: The figures should not be added, since some farmers will benefit from more than one crop.

To reach the above targets, basic inputs will be distributed to small farmers, consisting of seeds, fertilizers and some insecticides. The average size of planted plots for maize will be about 3.5 ha and for beans 1.5 ha. About 50,000 farm families will be targeted, some of them receiving seeds for a variety of crops. Local procurement of seeds is preferable.

## (v) Responsibility for implementation

FAO will be the UN agency responsible for this sector. Local leadership and coordination will be provided by the Ministry of Agriculture, with the participation of producer associations and NGOs. FAO/WFP food and food-security assessment missions are currently in Honduras, and they will provide updated estimates of food losses and relevant needs. WFP will continue its current environment and forestry support through food-for-work activities.

#### (vi) Preliminary budget for the Agriculture Sector\*

Item	Implementing Agency	US S
Seeds (1,863 MT: maize, rice, sorghum, beans)	FAO	4,499,000
Fertilizers (10,417 MT)	FAO	3,543,000
Pesticides (208,300 litres)	FAO	2,545,000
Promotion of seed production (424 MT: maize, beans)	FAO	434,000
Minor repairs to irrigation systems	FAO	150,000
General operating costs	FAO	907,000
Support costs	FAO	603,900
Overall Total for Agriculture (FAO)		12,681,900

<sup>\* &</sup>lt;u>Note</u>: This is the total budget for inputs required for the plantings of late season basic grains, as well as vegetable crops, some pastures and part of the first crop in 1999, based on the Government's "Emergency Plan". Preliminary needs for the rehabilitation of irrigation are estimated at some 300 ha used by about 450 vegetable and seed producers.

#### 3.5 EDUCATION

## (i) Objectives

To meet the most fundamental and pressing needs of the emergency "Hundred-Day Plan for Education" developed by the Honduran Ministry of Education.

#### (ii) Damage and resulting needs

Hurricane Mitch destroyed in a week what had taken Honduras decades to develop in its education sector. The destruction is such that if one primary school classroom were rebuilt each day, it would take eight years to replace what was lost in one tragic week

Damage and resulting needs include

- Loss of 2,800 primary school classrooms, leaving 100,000 children without school in 1999;
- ♦ Loss of up to 1,000 pre-school centres;
- ♦ 100 Community Day Care centres damaged or destroyed;
- ♦ 10,000 teachers affected, with some 2,000 displaced;
- The community education network has been disrupted and weakened.

#### (iii) Actions to be taken to address needs

- Repair and refurbishment of 1,000 pre-school centres, 100 Community Day Care centres, 2,800 classrooms in primary, secondary schools and adult education sites;
- Replace lost educational materials for pre-school, primary and secondary schools;
- ♦ Provide psychological support for children, teachers and communities.

Financing sources must be identified urgently, as the cost of emergency activities considerably exceeds the capacity of the Ministry and of ongoing programmes.

## (iv) Responsibility for Implementation

The Ministry of Education has overall responsibility for the implementation of the Emergency "Hundred-Day Plan for Education". Different government institutions will be involved in the implementation of specific components in their respective fields. In line with the education decentralisation process, local municipalities and community-based organisations, such as NGOs, civic and religious organisations, will play an active role in the implementation of the plan. UNDP, UNFPA, UNICEF and UNESCO will support the implementation of these activities and provide technical backstopping to the Ministry. WFP will also provide food aid support to people involved in the rehabilitation activities, including school children in the most affected areas.

## (v) Budget for the Education Sector

Item	Implement-	US \$
	ing Agency	
Urgent repair/refurbishment of primary schools	UNDP	5,000,000
Repair of schools used as shelters	UNDP	1,500,000
20 temporary schools in severely affected areas.	UNDP	600,000
Subtotal for UNDP activities		7,100,000

Subtotal for UNICEF activities		2,460,000
Vehicles for community implementation of the plan	UNICEF	225,000
Psychological support for children and communities	UNICEF	1,000,000
Repair and refurbishment of 100 day care centres	UNICEF	85,000
Repair and refurbishment of 1,000 pre-school centres	UNICEF	1,150,000

Subtotal for joint activities		4,000,000
	UNFPA	
Secondary school educational materials/textbooks	UNESCO,	1,000,000
	UNFPA	
	UNESCO,	
Primary school educational materials/textbooks	UNDP,	3,000,000

Overall Total for Education	13,560,000

#### 3.6 COORDINATION AND MANAGEMENT

#### (i) Objective

Under the overall leadership of the UN Resident Coordinator, key coordination and management activities of the programmes implemented under the UN Appeal will be undertaken by the UN System

#### (ii) Identified needs

Given the magnitude of the disaster in Honduras, the UN System will need to support the coordination and management of the assistance mobilised through the UN Appeal. to ensure a smooth transition from emergency relief to rehabilitation and development.

## (iii) Action to be taken to address needs

The UN Resident Coordinator will establish a special temporary cell which will assist coordination by

- Establishing and maintaining a database of the transition/rehabilitation programmes and projects,
- Receiving monitoring reports from UNVs on the actual delivery of assistance, for the preparation of reports to donors,
- OPreparing a monthly bulletin to inform donors on the status of the assistance channelled through the UN.
- Organising donor meetings to keep donors updated on new developments,
- Preparing an inter-agency evaluation on the impact of the emergency relief to contribute to lessons learned.

## (iv) Responsibility for implementation

a. Overall responsibility Office of the Resident Coordinator

b. Executing UN Agency: UNDP

#### (v) Budget for Coordination and Management

Three additional staff and office support will be needed for six months to assist the UN-DMT in the coordination of international humanitarian assistance mobilised through the appeal. UNDP will provide US \$150,000 from its core resources to implement the above activities. Additional funding will be required to cover the remaining costs, amounting to US \$300,000.

Overall Total for Coordination and Management (UNDP)	300,000

## 4. Summary of relief and immediate rehabilitation needs for Honduras

The total budget, broken down by sector, for the UN Inter-Agency Transitional Appeal on behalf of Honduras, is as follows:

	Total requirement:	US \$	82,936,600
6	Coordination and Management	US \$	300,000
5	Education	US \$	13,560,000
4	Agriculture	US \$	12,681,900
3	Food Security	US\$	31,369,700
2	Shelter	US\$	14,617,000
1	Health, Water and Sanitation	US \$	10,408,000

#### B. NICARAGUA

## 1. The impact of Hurricane Mitch on Nicaragua

Although its winds diminished as Hurricane Mitch travelled inland over Honduras on October 30, the storm continued to produce torrential rains in the whole region. The most recent report of the National Emergency Committee has put the number of fatalities from the storm in Nicaragua at 2,863. Many died as a result of a large mudslide, burying ten communities situated at the base of the Casitas Volcano. A total of 867,752 people were affected nation-wide to different degrees. According to the most recent information of the National Civil Defence, 370,641 were severely affected and will require assistance for 2 months or more.

The "Preliminary estimates of damage caused by Hurricane Mitch" issued by the Central Bank of Nicaragua on 16 November 1998, reports the following losses:

Infrastructure	Cost (US \$)
Public Sector	
Road network	605,300,000
Energy	18,000,000
Water	19,800,000
Communications	12,000,000
Rural housing	226,000,000
Health	83,800,000
Education	51,300,000
Lose of production (income)	6,100,000
Subtotal	1,022,300,000
Private Sector	
Agriculture, fisheries, and forests	222,900,000
Industry and mines	3,500,000
Commerce, transports, and others	9,700,000
Urban housing	245,100,000
Subtotal	481,200,000
Total Losses	1,503,500,000

## 2. Response to the disaster in Nicaragua

## (i) National initiatives

The Government launched an appeal for international assistance. Initial national emergency operations focused on saving lives, distributing basic supplies and providing immediate repair to the road infrastructure in order to reach isolated communities.

#### (ii) United Nations initiatives

The United Nations Resident Coordinator is coordinating the UN System response to this disaster through the UN-DMT, in close collaboration with the Government's National Emergency Committee. Several coordination meetings were held with the donor community and with the national and international NGO community. A permanent working group of the emergency focal points from the UN agencies (WFP, UNICEF, UNDP, WHO/PAHO, IOM, UNFPA, FAO, plus the World Bank, IDB and IMF) was established to strengthen coordination mechanisms during the emergency.

This document outlines the proposed contributions by the UN system to the initial rehabilitation phase (December 1998 to May 1999), with each agency complementing others' intervention on the basis of their specific comparative advantage. As this Inter-Agency appeal is an integrated approach, overall coordination and orientation will be provided by the Resident Coordinator of the UN System, while each agency is responsible for its specific inputs according to its mandate and capacity.

## 3. Sectors to be addressed by the Appeal in Nicaragua

#### 3.1 HEALTH

#### (i) Objective

To reduce the negative impact of the hurricane on the health status of the population, by restoring the primary health coverage provided by SILAIS (the Integral System of Local Medical Attention) to at least pre-hurricane levels, with emphasis on children and women, reproductive health, epidemiological surveillance, control of transmissible and vector-borne diseases.

## (ii) Damage and resulting needs

- A dramatic increase of the acute respiratory infections (ARI), diarrhoeic diseases, cholera, dengue and malaria;
- ♦ Scarcity of food and food insecurity;
- Multiple damage to health service infrastructure, specifically 3 hospitals, 20 health centres and 58 health posts, plus destruction of the cold chain, loss of equipment, drugs and vaccines;
- Occapion of the population in overcrowded shelters with poor living and hygiene conditions, or in other settlements without appropriate facilities.

## (iii) Secondary and future threats

- ♦ An increase in water-borne, vector-borne and vaccine-preventable diseases;
- ♦ Shortage of essential drugs, vaccines and other inputs;
- Deterioration of the population's reproductive health, unwanted pregnancies and increased exposure to sexually transmitted diseases (STDs).

## (iv) Action to address needs

- Operation and control of transmissible diseases:
- A Repair and rehabilitation of the primary health infrastructure;
- Provision of essential drugs, cold chain and other medical equipment, vaccines;
- Transport and communications equipment;
- ♦ Equipment of mobile medical teams;
- Provision of primary preventive health care to children through the school network (periodic attention including Expanded Programme on Immunisation (EPI), growth monitoring etc.);
- Recovery and strengthening of the health information system;
- © Recovery and strengthening of the medical laboratories network;
- Nutritional surveillance with emphasis on the shelters and other areas where the affected population is concentrated;
- ♦ Health/hygiene information, social communication and education (preventive measures, early detection of diseases, nutrition and mother and child care);
- Reproductive health care kits and preventive measures;
- Recreational and educational activities on SRH issues for adolescents;

## (v) Responsibility for implementation

- a. **Overall.** The Ministry of Health/SILAIS, ENACAL (the Water Authority), the Ministry of Education, and municipalities will be provide human resources and directly implement the activities.
- b. UN Agencies. WHO/PAHO, UNICEF and UNFPA will be responsible for purchase, contracting of technical staff, technical assistance, monitoring and evaluation of activities. Interventions will concentrate on the most affected municipalities, relying on local networks of technical personnel established by existing programmers.

#### (vi) Budget for the Health Sector

Item	Implementing	US \$
	Agency	
Purchase/distribution of insecticides and equipment	WHO/PAHO	1,300,000
Repair and rehabilitation of infrastructure	WHO/PAHO	170,000
Transport and communication equipment	WHO/PAHO	160,000
Health information system	WHO/PAHO	60,000
Medical laboratories network	WHO/PAHO	50,000
Medical care and health mobile teams	WHO/PAHO	300,000
Essential drugs, cold chain and other equipment	WHO/PAHO	350,000
Primary preventive health to children through schools	WHO/PAHO	50,000
Subtotal for WHO/PAHO activities		2,440,000

Item	Implementing Agency	US \$
Nutritional surveillance	UNICEF	50,000
Health/hygiene information and social communication	UNICEF	200,000
Medical care and health mobile teams	UNICEF	150,000
Essential drugs, cold chain and other equipment	UNICEF	150,000
Primary preventive health to children through schools	UNICEF	100,000
Subtotal for UNICEF activities		650,000

Subtotal for UNFPA activities		1,000,000
adolescents		
SRH information and education for women and	UNFPA	200,000
Counselling and therapeutic activities on SRH	UNFPA	300,000
Reproductive health care kits	UNFPA	500,000

Overall Total for Health Sector	4,090,000

#### 3. 2 SPECIAL PROTECTION

## (i) Objectives

- Achieve the psychosocial rehabilitation of children affected by the disaster through a programme of special attention in the most affected communities, with wide participation of civil society;
- Ensure counselling and treatment for mothers and pregnant women in response to the special needs of these high risk groups;
- Support the integration of orphaned children with other family members, preferably within their communities of origin;
- Ensure that awareness campaigns for children are included in the overall national de-mining plan.

## (ii) Damage and resulting needs

The post-traumatic effects of any emergency have a particularly strong impact on mothers, pregnant women and children. The gravity of the experience they lived through could generate serious consequences unless strategies for their psychological and emotional rehabilitation are rapidly implemented. Manifestations such as isolation, irritability, refusal to talk, aggressive behaviour and depression, need to be detected and correctly handled from their onset to prevent the development of longer-term problems. Special attention should be devoted to mothers who have lost their children and children who have lost their parents, to avoid separation from other members of their families and communities. Also at serious risk are people, particularly children, living in areas where land-mines have been washed away from their initial locations.

## (iii) Secondary and future threats

The possibility of permanent psychological damage to children, impairing their ability to integrate in society and participate fully in the education and production processes.

## (iv) Action to be taken to address needs

- Therapeutic play events with detection of cases requiring psychological attention, each covering up to 300 children, and related training of teachers, community leaders, parents, and volunteers;
- Training and support to mobile health teams, to follow-up the cases detected:
- Recreational activities within the education structure and school brigades;
- Support to families who provide care to children of relatives or friends:
- ♦ Support to single mothers (especially adolescents);
- © Child-to-child activities to prevent land-mine accidents.

## (v) Responsibility for implementation

- a. **Overall.** The Ministries of Education and Health, the Red Cross, NGOs and municipalities will provide human resources and directly implement the activities.
- b. UN Agencies. UNICEF will be responsible for purchase, contracting of technical staff, technical assistance, monitoring and evaluation of activities. Interventions will concentrate on the 55 most affected municipalities.

## (vi) Budget for the Special Protection Sector

Item	Implement- ing Agency	US \$
Therapeutic play events and related training	UNICEF	450,000
Training and support of mobile teams for detected cases	UNICEF	180,000
Recreation activities within the school system	UNICEF	160,000
Support to families caring for children of relatives/friends	UNICEF	150,000
Child-to-child activities to prevent land-mine accidents	UNICEF	100,000
Total for Special Protection (UNICEF)		1,040,000

#### 3.3 WATER AND SANITATION

#### (i) Objectives

- ♦ To restore the coverage of safe drinking water and sanitation in affected communities to at least pre-hurricane levels;
- To increase community involvement in the construction, operation and maintenance of water and sanitation systems.

#### (ii) Damage and resulting needs

- Ocontamination and destruction of safe drinking water sources and latrines;
- ♦ Large volumes of untreated solid waste, and large flooded areas

## (iii) Secondary and future threats

The main threat is the increase in exposure to water- and vector-borne diseases.

#### (iv) Action to be taken to address needs

- OPurchase and distribution of equipment and supplies (calcium hypochlorite) to produce chlorinated water in municipalities, for shelters and families;
- O Purchase and distribution of domestic water containers and filters;
- O Community cleaning campaigns.
- Repair/rehabilitation/reconstruction of deep tube and dug wells, gravity-fed water supply systems and construction of latrines for single and multi-family service,
- Training and organisation of local water and sanitation committees.

## (v) Responsibility for implementation

- a. **Overall.** ENACAL (the Water Authority) and Municipalities will provide human resources and directly implement the activities.
- b. UN Agencies. WHO/PAHO and UNICEF will be responsible for purchase, contracting of technical staff, technical assistance, monitoring and evaluation of activities Interventions will concentrate activities on the most affected municipalities (WHO/PAHO will work in 22 municipalities and UNICEF in 33).

## (vi) Budget for the Water and Sanitation Sector

Field of action / Component	Implement-	US \$
	ing Agency	
Drinking Water Chlorination	WHO/PAHO	
Purchase and installation of 30 SANILEC equipment sets		90,000
Purchase 300 sets of chlorine measurement equipment		6,000
Purchase and distribution of calcium hypochlorite		20,000
Purchase and distribution of 20,000 plastic containers	WHO/PAHO	100,000
Purchase and distribution of 5,000 domestic filters	WHO/PAHO	150,000
Community cleaning campaigns	WHO/PAHO	100,000
Repair / Rehabilitation / Reconstruction of Facilities	WHO/PAHO	
Deep tube and dug wells for multi-family service		300,000
Gravity-fed water supply systems for multi-family use		800,000
Latrines for family service (also construction)		200,000
Subtotal for WHO/PAHO activities		1,766,000

Field of action / Component	Implement- ing Agency	USS
Repair / Rehabilitation / Reconstruction of Facilities	UNICEF	
Deep tube and dug wells for multi-family service		300,000
Gravity-fed water supply systems for multi-family use		800,000
Latrines for family service (also construction)		200,000
Training/organisation of water and sanitation committees	UNICEF	30,000
Subtotal for UNICEF activities		1,330,000

Total for Water and Sanitation	3,096,000

#### 3.4 SHELTER

## (i) Objective

To provide basic training skills and technical assistance to community members in support of the rehabilitation of 8,400 seriously damaged houses and the construction of temporary shelter for approximately 8,300 families whose homes have been destroyed

## (ii) Damage and resulting needs

An estimated 16,500 houses have been either destroyed or severely damaged in the Departments of Esteli, Madriz, Nueva Segovia, Matagalpa, Jinotega, leaving 8,400 families (each with 8 to 9 individuals) homeless and another 8,300 in precarious housing conditions. There is an urgent need for technical assistance and training in basic skills, in addition to the provision of tools and materials, for the construction of temporary shelters and repair of damaged houses

#### (iii) Secondary and future threats

It community members involved in rehabilitation of houses and construction of temporary shelters do not receive the necessary skills and technical support, there is the risk that houses and shelters will not reach standards adequate for families' needs, or that completion of construction will be unduly delayed.

#### (iv) Action to be taken to address needs

The immediate provision of building materials needs to be coupled with the provision of basic training, organisational skills and technical assistance, in order to support affected communities in the construction of temporary shelters and repair of damaged houses.

#### (v) Responsibility for implementation

Under the coordination and orientation of the UN Resident Coordinator, IOM will be responsible for contracting technical staff, organising and monitoring the provision of training and technical assistance. UNDP will be responsible for the supply of materials

and the repair and reconstruction work. IOM and UNDP will cooperate closely with local authorities in order to ensure the provision of appropriate training and technical assistance.

## (vi) Budget for the Shelter Sector

Field of action / Component	Implementing Agency	US \$
Construction Tools and Materials	UNDP	
For repair of 8,400 seriously damaged houses,		2,520,200
including water supply and latrines		
For construction of 8,300 provisional family shelters		415,000
Subtotal for UNDP activities		2,935,200

Training and technical assistance	IOM	420,000
Subtotal for IOM activities		420,000

	,	
Total for Shelter	3,3	55,200

#### 3.5 FOOD SECURITY

## (i) Objective

To provide emergency food aid during six months to 400,000 most affected people, of whom it is estimated that about 60% are women, and children less than six years old.

#### (ii) Damage and Resulting Needs

- Significant crop losses exacerbating El Niño induced losses due to drought;
- Depletion of food stocks and lack of income to purchase food until the next harvest, six to eight months from now;
- ♦ Loss of employment opportunities for wage earners on large plantations and in marginal urban labour;
- ♦ The affected population is at extreme nutritional risk, especially in the quarter of households (approximately) headed by women, which are already at risk under normal conditions.

#### (iii) Secondary and future threats

- ♦ Lack of access to additional inputs such as tools, utensils, seeds, tree nurseries and small animals;
- ♦ Lack of access to credit by farmers of marginal land;
- Inability to market the production because of damage to rural infrastructure;
- Ohealth centres.

#### (iv) Action to be taken to address needs

- Replenishment of stocks and shipment local purchase of commodities (to a total of 41,244 metric tons of basic foodstuffs);
- Addressing the logistical challenge of mobilising four to five times the amount of commodities that are distributed normally in the country, by:

  Putting in place a basic telecommunications infrastructure supporting the logistics operation, internal coordination and field staff security (at six sites);

  Deployment of four telecommunications technicians to assist the initial deployment of the network and provide on-site support and training for three months before handing over the operation of the network to local staff;
- Provision of transport, communication equipment and additional staff for planning, monitoring and reporting on food distribution;
- Provision of essential non-food items including basic implements for food preparation, fuel-efficient stoves, pots and pans for use in shelters, and tools for clearance of debris and related activities.

Food assistance will be targeted at the following population:

Area	Beneficiaries
Region 1 Estelí, Madriz, North Segovia	57,500
Region 2. León, Chinandega	240,500
Region 6 Matagalpa, Jinotega	87,000
Autonomous Region of North Atlantic	9,000
Autonomous Region of South Atlantic	6,000
Total	400,000

#### (v) Responsibility for implementation

Operational aspects will be handled by the implementing unit of an ongoing WFP project, which will coordinate with central government, local emergency committees and NGOs which have a permanent presence in the distribution areas. Government counterparts will present a monthly report and at the end of the operation, the Government will present a final report and an external auditor will audit all accounts.

WFP will be responsible for monitoring all stages, from the initial unloading at port to the final delivery of commodities to beneficiaries. The WFP Country Office will deploy its project staff and will contract additional monitors who will assist in the implementation of activities. Sub-offices will be established where needed, in order to be closer to beneficiaries and facilitate monitoring, for which there will be a specific plan. Food assistance to vulnerable groups will be carried out in coordination with the activities of UNICEF and WHO. Arrangements with NGOs will be considered, either to participate in monitoring and/or as co-executing partners.