- education and adequate distribution of fortified biscuits in at least 216 communities (PROMUJER data);
- Monitor nutrition indicators in children and women at risk, and prevent acute malnutrition by the provision of micro-nutrients and anthelmintics;
- OPsychosocial rehabilitation of 14,000 children living in 229 shelters, especially those whose friends and relatives have died, and whose homes and schools have been destroyed:
- ♦ Sustain critical health programmes for women, including SRHS.

(v) Responsibility for implementation

a. Overall: Ministry of Public Health

b. Women Organisation: PROMUJER (Social Work Secretariat of the Office of the First Lady)

c. UN Agencies: WHO/PAHO, UNICEF*, UNFPA

(vi) Budget for the Health Sector

Field of action / Component	Implement-	US \$
	ing Agency	
<u>Health</u>	WHO/PAHO	
Health information system		150,000
Epidemiological surveillance		50,000
Treatment of cholera/diarrhoeic diseases		176,000
Immunisations		24,000
Treatment of snake and rodent bites		45,000
Vector control (dengue and malaria)		210,000
Dermatological diseases		40,000
Subtotal for WHO/PAHO activities		695,000

Health	UNICEF	
Other medicines (ORS, penicillin, sulfametoxole,		150,000
termos KST)		
Nutrition component (micro-nutrients, monitoring)		105,000
Psycho-social rehabilitation		50,000
Social Communication	UNICEF	
Public awareness campaigns		500,000
Community-based women's organisations		195,000
Subtotal for UNICEF activities		1,000,000

^{* &}lt;u>Note</u>: These activities/requirements have been identified and proposed by UNHCR and will be implemented by UNICEF, since UNHCR is finalising its operations in Guatemala.

Sustaining Critical Women's' Health Programmes	UNFPA	
Technical assistance		500,000
Subtotal for UNFPA activities		500,000

3.2 WATER AND SANITATION

(i) Objective

To prevent deterioration of the health status of the Guatemalan population due to water and sanitation problems, particularly the 750,000 most directly affected.

(ii) Damage and resulting needs

Among the main consequences of the torrential rains brought on by Hurricane Mitch was the widespread destruction and/or damage to the existing water distribution and sanitation systems, and a significant deterioration of the hygienic-sanitary conditions in the most affected areas. The risk or actual outbreak of cholera and other diarrhoeic diseases, and others such as acute respiratory infections have characterised the recent health conditions of the affected population.

Water and sanitation problems have been reported in at least 150 communities. The reconstruction of at least 60 water systems, 2,500 latrines, and 2 sewage systems is urgently needed, in addition to sanitary education and water quality surveillance in such communities (UNICEF calculations based on Institute of Municipal Development data). Overall, the existing water distribution and sanitation systems in urban and rural areas require urgent restoration in order to mitigate the risk of disease proliferation.

(iii) Secondary and future threats

Secondary threats include the possible spread of cholera, the proliferation of vector-borne diseases (dengue, malaria, leptospirosis) and the significant increase in pests (flies, rodents, snakes) normally associated with widespread flooding.

(iv) Action to be taken to address needs

- Assessment and quantification of damaged/destroyed water and sanitation systems;
- Provision of technical assistance, equipment and materials for the restoration of identified systems;
- Installation of purification systems and training local authorities in their maintenance, including provision of stocks of hypochlorite;
- Ensuring sufficient water fit for human consumption and the hygienic disposal of human waste, based on the mobilisation of local organisations to rehabilitate 60 water systems, 2,500 latrines, 2 sewage systems and to provide quality control and treatment to at least 150 community water systems;
- ♦ An increase in water quality surveillance.

(v) Responsibility for implementation

a. Water and Sanitation: Institute of Municipal Development (INFOM) and the network of municipalities

b. UN Agencies: UNICEF*

(vi) Budget for the Water and Sanitation Sector

Field of action / Component	Implement- ing Agency	US \$
Restoration of Damaged Wat/San Infrastructure Rehabilitation of 60 water systems, 2,500 latrines, 2	UNICEF	1,850,000
sewage systems and provision of quality control and treatment to 150 water systems Rehabilitation of 5 systems in returnee communities	UNICEF*	150,000
Overall Total for Water and Sanitation (UNICEF)		2,000,000

^{* &}lt;u>Note</u>: These activities/requirements have been identified and proposed by UNHCR and will be implemented by UNICEF, since UNHCR is finalising its operations in Guatemala.

3.3 FOOD SECURITY

(i) Objective

To ensure food security for 13,000 affected families (65,000 people), with a view to rehabilitating their parcels and their basic social and productive infrastructure. Food assistance will play a key role in ensuring adequate levels of nutrition during the reconstruction phase and enhancing the nutritional status of women and children.

(ii) Damage and resulting needs

Damage inflicted on cereal was principally to the second season crop, as the first had already been harvested. There may have been damage to cereal stock warehouses. The departments affected are among the main cereal and bean producing areas.

(iii) Secondary and future threats

Food security is the main concern. In normal conditions, subsistence production almost always results in deficit and the peasants must complete their diet by selling labour to other communities. This situation is aggravated by the damage suffered by the large banana. coffee and sugar cane plantations, limiting employment opportunities.

(iv) Actions to be taken to address needs

Provision of a standard food ration to 13,000 families (including returnees) to ensure food security.

(v) Responsibility for implementation

a. Overall: Ministry of Agriculture, Livestock and Food

b. Execution: Social Investment Fund (FIS), local authorities in

affected communities and grass-root organisations

c. UN Agencies: WFP*

(vi) Budget for the Food Security Sector

Product	Daily	No. of	MT	Implementing	US \$
	Ration(gr.)	Rations		Agency	
Maize	237.5	11.700,000	2,779	WFP	555,750
Pulses	60	11.700,000	702	WFP	301,860
Canned fish	60	487,333	29	WFP	43,860
Oil	30	11.700,000	351	WFP	294,840
Rice	237.5	11.700,000	2.779	WFP	555,750
CSB	5	11.700,000	59	WFP	20,183
Ext. transport				WFP	736,806
ITSH				WFP	468,877
DSC				WFP	178,676
NFI				WFP	200,000
Support to retur	nee communiti	ies		WFP*	150,000
Overall Total	for Food Secu	rity (WFP)			3,506,602

^{*} New These activities/requirements have been identified and proposed by UNHCR and will be implemented by WFP, since UNHCR is finalising its operations in Guatemala.

3.4 AGRICULTURE

(i) Objective

To restore productive capacity in 12,925 hectares of basic grain, vegetable and fruit plots by the beginning of the 1999 agricultural season, through immediate attention to 5.170 families, supporting productive rehabilitation and enhancing food security of in the departments of Alta Verapaz, El Progreso, Chiquimula, Izabal, Suchitepéquez, Escurntla, Chiquimula and Zacapa.

(ii) Damage and resulting needs

Official information regarding damage to the agricultural sector is as follows:

Crop / item	Affected area	Value US \$
	(ha)	
Basic grains	26,504	12, 302,229
Vegetables (potato, sugar-beet, lettuce)	1,256	3,499,773
Cash crops (coffee, banana, etc.)	62,278	196,467,547
Other crops (fruit, tobacco, tomato, plantain, pepper)	8,212	30,721,765
Livestock		8,130,837
Hydro-biological		3,669,697
Infrastructure		5,213,908
Total	98,250	260,005,756

The restoration of agricultural production the departments above is considered by the UN System in country as a point of entry project for an integrated inter-agency response addressing not merely the needs derived from the disaster, but aiming at improving living conditions and the sustainability of development gains.

(iii) Secondary and future threats

Rehabilitation of agricultural infrastructure is crucial in order to restore productive capacity at the beginning of the dry season, particularly as irrigated areas are threatened by the damage to pumps, dams and conduction channels.

(iv) Actions to be taken to address needs

- Provision of seeds, insecticide and herbicides to restore food production;
- Provision of 1,350 tool kits, 2,200 agricultural input kits, 22 sets of pumping equipment for small irrigation works, and 1,400 poultry kits;
- ♦ Technical assistance to design an integrated production restoration strategy.

(v) Responsibility for implementation

a. Overall: Ministry of Agriculture, Livestock and Food

b. Execution: Social Investment Fund (FIS), Institute of Agricultural

Commercialisation, local authorities in affected

communities and grass-root organisations

c. UN Agencies: FAO

(vi) Budget for the Agriculture Sector

Item	Implementing	US \$
	Agency	
Seed, fertilizer, insecticide and herbicide	FAO	147,400
Agricultural tool kits (basic hand tools)	FAO	97,875
Pumping/irrigation equipment	FAO	78,320
Poultry kits (construction materials and birds)	FAO	207,200
Technical assistance for medium/long-term strategy	FAO	120,000
Overall Total for Agriculture (FAO)		650,795

3.5 EDUCATION

(i) Objectives

To ensure the continuation of the on-going programmes for expansion of coverage and quality improvement of the Education System, as contemplated in the Peace Agreements, by repairing damage to school buildings, replacing lost materials and preparing the system for the beginning of the 1999 school year. To prevent school drop-out by children from among the 21,600 families who have lost their homes and/or are unemployed, by providing small grants for six months and basic education materials, whilst a public awareness campaign reinforces the importance of continuing studies.

(ii) Damage and resulting needs

The school buildings in the most affected areas suffered damage that ranges from easily removable debris to total destruction. Although assessments are not yet completed due to difficulties in accessing some communities, to date the Ministry of Education has reported 39 schools totally destroyed, 10 severely damaged, 59 with moderate damage, 124 flooded and 3 at risk of further deterioration. Furniture and equipment were lost along with textbooks and didactic materials that had distributed in advance for the 1999 school year. In addition, at least 66 smaller buildings of the community-managed school programme PRONADE were damaged and 70 schools are or were used as shelters and will need refurbishment before the 1999 school year.

The Ministry of Education has identified the following priority needs which must be addressed before the beginning of the school year in January 1999:

- To finalise assessment in order to quantify accurately the cost of repairs, replacement and other needs.
- ♦ To repair damaged buildings;
- O To reconstruct destroyed buildings, in some cases in safer areas and conditions;
- ♦ To replace lost furniture, textbooks, teaching materials.

(iii) Secondary and future threats

The main secondary effect foreseen is a decrease in the schooling rates, in contrast to

the projected increase enshrined in the Peace Agreements. This will be a consequence not of the direct damage to educational infrastructure, but of the effects of the hurricane on employment, as some 21,600 families have lost their homes and are at risk of losing their jobs. Financial constraints may generate migration and increased school drop-out rates, with children, particularly those between 10 to 12 years at higher risk as they will be forced to engage in income-generating activities. Families must be financially supported in order to keep their children in school, and public awareness campaigns should be launched reinforcing the importance of allowing them to continue their studies.

(iv) Actions to be taken to address needs

- Assessment and quantification of damaged/destroyed school buildings and lost furniture, equipment and materials;
- O Provision of technical assistance, equipment and materials for the reconstruction and/or restoration of identified buildings;
- ♦ Procurement and distribution of furniture and equipment;
- ♦ Reproduction and distribution of textbooks and materials;
- Supply of 242 "Edukits" (emergency educational kits) to most affected primary schools;
- O Provision of at least 21,600 small education grants for six months, and basic material packages to children of high-risk families;
- O Public awareness campaign to stress the importance of keeping children in school.

(v) Responsibility for implementation

a. Overall: Ministry of Education

b. Infrastructure: Social Investment Fund (FIS) and National Peace Fund

(FONAPAZ)

c. UN Agencies: UNICEF, UNDP

(vi) Budget for the Education Sector

Item	Implementing	US \$
	Agency	
Reconstruction of regular (3-room) schools (25)	UNDP	1,125,000
Repairs to regular system schools (69)	UNDP	690,000
Minor repairs to regular system schools (134)	UNDP	670,000
Repairs to PRONADE schools (66)	UNDP	660,000
Replacement of furniture	UNDP	628,320
Replacement of textbooks and materials	UNDP	800,000
Subtotal for UNDP		4,573,320

Item	Implementing Agency	US \$
Provision of 242 "Edukits"	UNICEF	41,000
Small grants (21,600 at US \$8 per month x 6)	UNICEF	1,036,800
Educational packages for 21,600 families	UNICEF	130,000
Public awareness campaign	UNICEF	25,000
Subtotal for UNICEF		1,232,800

Overall Total for Education	5,806,120

3.6 COORDINATION AND MANAGEMENT

(i) Objective

To ensure a smooth transition from emergency relief to rehabilitation and development.

(ii) Identified needs

- Sustaining and enhancing the information network (Government-Donor-UN System) during the emergency phase, in order to expand it to other partners (NGOs) and to further profit from it during the transition, rehabilitation and reconstruction stages;
- O To contribute to the design of a UN System strategy of intervention in the rehabilitation and reconstruction phases;
- ♦ To increase the capacity of the UN System to manage natural disasters.

(iii) Action to be taken to address needs

In the early stages, the UN Resident Coordinator's office will establish the Government - Donor - UN System - NGO information network through a permanent cell that could be mirrored in the corresponding government agencies, for their own use in later stages in the process. This cell will:

- Follow-up to appeal process, identifying gaps in resources to cover the transition period;
- Establish a database of transition/rehabilitation/reconstruction programmes and projects for which funding is required and make efforts to mobilise resources;
- Monitor UN and donor-funded emergency, transition, rehabilitation and reconstruction projects and contribute to their timely evaluation and the capitalisation of lessons learned.

The UN strategy of intervention in the rehabilitation/reconstruction phases aims at:

- Optimising the use of available resources and the comparative advantages of each agency;
- Ensuring that the concepts of mitigation and preparedness permeate the rehabilitation/reconstruction programmes;

- Ensuring compatibility of the rehabilitation/reconstruction programme with the peace programme;
- ♦ Identifying the main components of a national capacity building programme in disaster management.

The capacity of the UN System to manage natural disasters will be enhanced by:

- ♦ Ensuring the continuation of the UNDAC concept in Guatemala;
- Strengthening the disaster management team via intensive training to expand the number of UN professionals able to deal with the various phases and components of disasters and to activate the diversity of mechanisms available to the UN Resident Coordinator.
- Ensuring that disaster-development linkages are included within the ongoing CCA UNDAF processes.

(iv) Responsibility for implementation

a. Overall responsibility:

Office of the UN Resident Coordinator

b. Executing UN Agency:

UNDP

(v) Budget for Coordination and Management

Field of action / Component	Implement-	US \$
	ing Agency	
Staff	UNDP	
1 professional 6 m/p		20,000
1 assistant /information manager		10,000
Sub-contracts	UNDP	
Data bases, mapping, information systems		25,000
Training		30,000
Equipment		15,000
Overall Total for Coordination and Managemen	nt (UNDP)	100,000

4. Summary of relief and immediate rehabilitation needs for Guatemala

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

1	Health	US\$	2,195,000
2	Water and Sanitation	US\$	2,000,000
3	Food Security	US\$	3,506,602
4	Agriculture	US\$	650,795
5	Education	US\$	5,806,120
6	Coordination and Management	US \$	100,000
	Total requirement:	US \$	14,258,517

1. The impact of Hurricane Mitch on Belize

Since forecasts had predicted that Hurricane Mitch was going to make a direct hit on Belize, it is considered a miracle that the country narrowly escaped the ravages of a category V hurricane. Nevertheless, heavy rains and strong gusty winds took their toll on the fragile tourism industry, roads, and on the educational facilities which were used as shelters during the crisis period. Floods also damaged agricultural production, and pools of stagnant water are a major health risk, due to vector and water-borne diseases.

2. Response to the disaster in Belize

The Government of Belize identified immediate relief needs, in particular the provision of food to those in shelters and who were affected by floods. These needs were transmitted to the international community in Belize. In addition, the Government has identified the need to strengthen the capacity and condition of designated hurricane shelters, and to establish institutional frameworks to mitigate future threats, including disaster management capacity.

3. Sector to be addressed by the Appeal in Belize

3.1 HEALTH, WATER AND SANITATION

(i) Objective

To provide services for cholera prevention and vector control, to populations at risk.

(ii) Damage and resulting needs

Hurricane Mitch left large areas of pooled water which is now stagnating. These represent a major health risk, as they have now produced a large population of mosquitoes which threaten a potential malaria and dengue epidemic. The inability to guarantee pure drinking water increases the possibilities of cholera outbreak. At present, there are five cases of cholera reported in the Cayo District, of whom one has died in Belmopan. the capital city.

(iii) Secondary and future threats

- ♦ An increased risk of an epidemic outbreak of cholera;
- lncreases in secondary epidemic outbreaks of vector-borne diseases (dengue and malaria).

(iv) Actions to be taken to address needs

- Oholera and vector-borne disease prevention through education and surveillance:
- O Cholera and vector-borne disease treatment:

(v) Responsibility for implementation

The Public Health Department of the Ministry of Health has initiated activities to mitigate possible outbreaks. However, to ensure appropriate and timely interventions, WHO/PAHO will implement an immediate disease control and prevention programme.

(vi) Budget for the Health, Water and Sanitation Sector

Field of action / Component	Implement-	US \$
	ing Agency	
Disease case management	WHO/PAHO	168,902
Vector control (larvacides, rodenticides, equipment)	WHO/PAHO	57,900
Surveillance laboratory services (equipt., reagents)	WHO/PAHO	8,931
Water and food safety	WHO/PAHO	13,374
Health education and mass media communication	WHO/PAHO	16,401
Mobilization	WHO/PAHO	5,600
Overall Total for Health, Water and Sanitation (WHO/PAHO)		

3.2 SHELTER

(i) Objective

To heighten Belize's hurricane preparedness by conducting minor repairs and adjustments to buildings used as temporary shelters.

(ii) Emergency experience and resulting needs

Fortunately for Belize, Hurricane Mitch did not have the devastating impact it had in other countries. However, the recent emergency management experience highlighted the madequacy of some of the buildings that are used as hurricane shelters throughout the country. These deficiencies include:

- A lack of structural soundness and/or a state of disrepair;
- A lack of protective shutters;
- ♦ Inadequate sanitary and cooking facilities;
- ♦ Lack of facilities for the emergency storage of potable water.

(iii) Action to be taken to address needs

An estimated 162 buildings throughout the country, most of them schools and community centres, are in need of minor but urgent repair and/or modification and upgrading in order to serve as adequate hurricane shelters in the future. These repairs

and/or modifications include new roofs, windows, shutters, doors, plumbing and pest control. Immediate action is necessary to ensure that this project is completed before the start of the next hurricane season.

(iv) Responsibility for implementation

The Ministry of Works, under the supervision of the National Emergency Management Organisation (NEMO), will be responsible for this work, whilst UNDP will be responsible for monitoring the implementation of the project.

(v) Budget for the Shelter Sector

Item		Agency	US \$
Repair/upgrade of shelters in district:	No. shelters	Responsible	
Corozal	33	UNDP	15,000
Orange Walk	29	UNDP	13,310
Belize	30	UNDP	105,998
Cayo	28	UNDP	87,330
Stann Creek	24	UNDP	18,141
Toledo	18	UNDP	35,221
Overall Total for Shelter (UNDP)			275,000

3.3 DISASTER MANAGEMENT CAPACITY BUILDING

(i) Objective

It is the general policy of the Government of Belize to establish an Office of Disaster Preparedness under the direct responsibility of the National Emergency Management Organization (NEMO), to advise, prepare policy recommendations, and to respond to all matters relating to natural and man-made disasters.

(ii) Emergency experience and resulting needs

Belize is on the pathway of hurricanes every year, and is also vulnerable to major manmade disasters such as oil spillage, which could devastate the tourism industry.

(iii) Action to be taken to address needs

NEMO is established under the Chairmanship of the Prime Minister, with the participation of various sub-committees chaired by Government Permanent Secretaries. These sub-committees include food, shelter, transportation, communications, security and foreign assistance. NEMO meets during emergency situations, but at present there is no permanent office to support it and, as a consequence, the Cabinet Secretary is the only official to whom such responsibility is delegated, among many other duties.

The Office of the Prime Minister will establish a permanent Office for Disaster Preparedness with a full complement of staff and equipment, which will be able to

communicate with national, regional and international agencies during major emergencies.

(iv) Responsibility for implementation

The Office of the Prime Minister, through NEMO, will have overall responsibility for project execution. UNDP will implement the programme in Belize.

(v) Budget for Disaster Management Capacity Building

Item	Implementing Agency	US \$
Personnel	UNDP	100,000
Electronic data processing equipment	UNDP	50,000
Training and technical assistance	UNDP	100,000
Fellowships / study tours	UNDP	50,000
Total for Disaster Management Capa	300,000	

4. Summary of relief and immediate rehabilitation needs for Belize

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

1	Health	US\$	271,108
2	Shelter	US\$	275,000
3	Disaster Management Capacity Building	US \$	300,000
	Total requirement:	US \$	846,108