I. Executive Summary

Hurricane Felix, a category 5 storm, made landfall at 4:45 am local time on Tuesday September 4th 2007, approximately at 15 km to the North of the Puerto Cabezas Municipality. The affected zones were located in the North Autonomous Region of the Atlantic Coast (RAAN), especially the communities in the northern and southern littoral of the town Bilwi (Puerto Cabezas municipality), the communities of Rio Coco Abajo (Waspm municipality), and the mining triangle (municipalities of Siuna, Bonanzas and Rosita).

The devastation of the category five hurricane was further worsened by the already precarious conditions of the region: the worst health and nutrition indicators in the country; elevated vulnerability to any disruption in food production or crop destruction; some three-quarters of the population living in rural areas; one of the highest levels of poverty and extreme poverty rates in the country; and the most isolated and difficult to access region due to lack of road infrastructure and means of transportation.

Some 67 people were killed and another 160,000 affected. Infrastructure was damaged, and nearly 10,000 houses were damaged or destroyed. Bilwi Hospital and several other health facilities were severely damaged. Roads and many bridges collapsed cutting off road access to the region. The airport control tower also collapsed seriously impeding access by air in the early stages of the emergency. 5,190 wells were contaminated and 6,000 latrines destroyed. Furthermore, the hurricane destroyed local food production and the region had no access to food reserves.

In this context, the UN System in coordination with the Nicaragua Government launched a $39,250,635 Flash Appeal covering a six month period, $22,870,535 of which was for emergency relief. The United Nations Country Team (UNCT) applied to Central Emergency Response Fund (CERF) for a portion of this amount targeted at life-saving and life-sustaining activities in terms of basic needs: food assistance, including child nutrition; emergency logistics; shelter; health; and water and sanitation.

The $5 million allocation from CERF’s rapid response window bolstered the Government’s own efforts. For example, CERF funds made it possible for emergency programmes to reach the most vulnerable child population between 6 and 24 months old and provide safe water to the affected population. Another good example was that CERF funding allowed WFP to provide immediate food aid relief to some 100,000 victims, WFP’s intervention prevented the deterioration of the nutritional status of beneficiaries.
### Total amount of humanitarian funding required and received (per reporting year)

<table>
<thead>
<tr>
<th></th>
<th>Required: $5,000,000</th>
<th>Received: $5,000,000</th>
</tr>
</thead>
</table>

### Total amount of CERF funding received by funding window

<table>
<thead>
<tr>
<th></th>
<th>Rapid Response: $5,000,000</th>
<th>Grand Total: $5,000,000</th>
</tr>
</thead>
</table>

### Total amount of CERF funding for direct UN agency/IOM implementation and total amount forwarded to implementing partners

<table>
<thead>
<tr>
<th></th>
<th>Total UN agencies/IOM: $3,500,000</th>
<th>Total implementing partners: $1,500,000</th>
</tr>
</thead>
</table>

### Total number of beneficiaries reached with CERF funding (disaggregated by sex/age)

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>&gt; 5</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number</td>
<td>100,000</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

### Geographic areas of implementation

- North Autonomous Region of the Atlantic Coast (RAAN)

## II. Coordination and Partnership-building

(a) **Decision-making process:**

The UN Disaster Management Team (UNDMT) was convened prior to the landfall of the hurricane to process incoming information and put in place the necessary elements in preparation for the hurricane. This included the establishment of a Situation Room, liaison with national authorities and issuance of Situation Reports. The UNDMT, with the support of UN Emergency Team (UNETE) and staff from UN House in Bilwi, met daily as the primary decision-making body. Decisions were taken based on the information compiled from UN Bilwi staff, UNETE EDAN field mission, and damage evaluation reports issued by SINAPRED (National System for Disaster Prevention, Mitigation and Attention), the Regional Committee for Disaster Prevention and Civil Defense. CERF proposals were elaborated in the framework of the overall Flash Appeal and the aforementioned damage assessment information and reports. The components were consulted and agreed upon with the central and regional government and emergency authorities such as SINAPRED.

(b) **Coordination amongst the humanitarian country team:**

The UN System was able to rapidly and effectively respond to the challenge by setting up a coordination system that allowed for greater coherence and effectiveness of humanitarian operations and the delivery of aid, both from within the UN System and among donors and the international community.

**UN Internal coordination scheme:** The UN was able to rapidly respond to the emergency in the most challenging and remote area of the country, by creating a new internal coordination scheme via the establishment an onsite emergency team, UNETE RAAN, represented by the UN Children’s Fund (UNICEF), World Food Programme (WFP), Food and Agriculture Organization of the United Nations (FAO), Pan American Health Organization (PAHO)/World Health Organization (WHO), UN Population Fund (UNFPA), UN Volunteers (UNV) and UN Development Programme (UNDP), using as a base of operations the UN House in Bilwi, RAAN capital, in view of the lack of communications with the region and the extremely complex logistical issues to be resolved on site. This allowed the UNCT/UNDMT and UNETE Managua up to the minute information on the situation during the first moments of the emergency, as well as to immediately deploy its assistance to the affected areas and communities, and have a direct liaison with autonomous regional authorities.
A permanent coordination and communication was established between the RC/HC, UNDMT, UNETE Managua, UNETE RAAN and national emergency response entity (SINAPRED) through the installation of a “Coordination Room” in Managua’s main UN building. Additionally, a UN emergency coordinator was deployed and based at the UN House in Bilwi to oversee and articulate response activities.

**Donor coordination through the UN’s Technical Secretariat:** The UN System though the Office of the Resident Coordinator (ORC) has been the acting Secretariat of the high-level Donor Roundtable since 2004. In the context of Felix emergency, the Secretariat role was paramount for donor coordination efforts. On the very day the hurricane made landfall, the Donor Roundtable was able to be immediately convening at the behest of the Technical Secretariat in order the guarantee the necessary flow of information among donors and the government, and to put in place coordination mechanisms among the international community for the provision and delivery of humanitarian aid.

The Technical Secretariat maintained a centralized information flow between the donors and with the government, and fostered coordination among donors and UN agencies for the provision and delivery of aid, using the UN House in Bilwi, the Situation Room in Managua (made available for the donor community and government), and the articulation capacities of the members of UNETE Managua and UNETE RAAN inserted within the national and local emergency response structures led by the government (SINAPRED Sector Commissions). The UN also organized the first Donor Roundtable meeting in the RAAN with the regional autonomous authorities to foster information sharing, donor funding and coordination of activities.

(c) **Partnerships:**

The UN System in Nicaragua has installed an UN System House in the North Atlantic Autonomous Region for more than three years now. Precisely this area was recently affected by Hurricane Felix and this arrangement facilitated the interagency coordination from the administrative and technical point of view. It has also been very convenient for the execution of CERF funds since it was possible to establish its continuous follow-up and monitoring through the support of a humanitarian coordinator that was named for three months in order to support all the coordination duties.

UNICEF and PAHO closely collaborated in the water and sanitation response using CERF funds, focusing respectively on affected communities and on health centres. This allowed an integral approach in facing quickly health risks related to lack of water and sanitation.

Another key partnership was among UNICEF and WFP in addressing food needs of children from two to twelve months.

UNICEF also used CERF funds to support non-governmental organizations (NGOs) such as Action against Hunger, Oxfam and Save the Children in their rapid response to water and sanitation needs, as planned in the Flash Appeal and in line with the Humanitarian reform principles. This coordination was carried out within the water, sanitation and hygiene (WASH) Cluster.

UNDP has a close collaboration with the UNV Program and 22 young volunteers were mobilized to the affected communities in order to promote the shelters project execution.

The sectors selected during the flash appeal and the implemented projects as well, were chosen in close coordination with the national and regional authorities.
III. Implementation and Results

Rapid Response projects

In general, the funding had a strong impact in response to life-saving needs, improving the Ministry of Health’s capacity to cope with increased Primary Health Care activities emergencies and the high risk of outbreaks in affected areas.

The CERF funds were made available in the second month following the hurricane. The funding strengthened and complemented Government activities already in place with the technical support of UN Agencies.

The target population in the municipalities of Puerto Cabezas and Waspam benefited from several activities including:

- Access to health care through the mobilization of health brigades in affected areas;
- Communicable diseases prevention and control through a comprehensive and intensive vector borne diseases campaign with emphasis in Malaria.
- Access to materials in order to build shelters

No major outbreaks were detected and the mortality due to communicable disease, maternal and child mortality was maintained within the expected range during the period under review.

According to damage assessments, the housing sector was the most affected. CERF funds were highly appropriate in order to satisfy the needs of some of the hardest-hit communities. With CERF funding, UNDP delivered the material for the construction of homes in time, of the required quality and respecting local customs.

According to previous studies, the nutritional situation of the Autonomous Region is critical and coverage of safe water and latrine use is low. The rapid assessment showed that child nutrition, water, and sanitation were among the main priorities of the affected population. With the CERF funds, a timely humanitarian response was possible to reach the most vulnerable child population between 6 and 24 months old and provide safe water to the affected population. With technical support of UNICEF, a nutritional package was implemented to prevent severe malnutrition since families had lost their productive means and capacity to provide appropriate food for their children. The child population received appropriate complementary food for their age, respecting their cultural values. Given the timely availability of funds, water and sanitation interventions were rapidly initiated with counterparts. This ensured that there was no increase in the rate of infant mortality due to diarrhea.

WFP’s Emergency Operation (EMOP) focused on: (i) Timely provision of food in sufficient quantity and quality for targeted beneficiaries; (ii) Maintaining and preventing the deterioration of the nutritional status of the affected population, with special attention to pregnant and lactating women and children under 5; and (iii) Preserving assets and restoring livelihoods and community infrastructure through food-for-work activities.

CERF funding allowed WFP to provide immediate food aid relief to 98,650 victims. About 1,805 MT of food were purchased, with a food basket composed of cereals, pulses, oil and corn-soya blends. WFP’s intervention prevented the deterioration of the nutritional status of beneficiaries and was able to assist all 183 affected communities.

(a) Monitoring and evaluation

- Implementing partner reports; planning distribution booklets, monthly monitoring reports, etc.
- WFP internal reporting and accountability systems (i.e., COMPAS Commodity Tracking; Pipeline, Waybills, etc.)
- Community participation: community leaders, heads of households (men and women) are part of the monitoring process to verify that the aid was distributed to every person in the community.
• Food/shelters/nutrition/health distribution committees: judges, religious leaders (local community structures) and women verify that all community members are included in distribution lists.

(b) Other initiatives that complemented CERF-funded projects

UN agencies coordinated actions and contingency planning with government counterparts namely Ministry of Agriculture (MAGFOR), Ministry of Health (MINSA), SINAPRED (National System for Disaster Prevention, Mitigation and Response), COREPRED (Regional Committee for Disaster Prevention), COMUPRED (Municipal Committee for Disaster Prevention), and Regional Autonomous Government.

Several UN agencies invested resources in the strengthening of capacities of SINAPRED in emergency preparedness and response thus allowing them to efficiently coordinate actions at the central level in Managua and at the regional level in the affected area (RAAN). For examples: WFP has played an advisory role for SINAPRED on food assistance interventions in several emergencies since 2002 and has contributed to the strengthening of its organizational capacities.

IV. Lessons learned

- The activation of both the UNDMT (United Nations Disaster Management Team) and the UNETE (United Nations Emergency Team) from the moment the first alerts were given made it possible to take relevant decisions with institutions and field staff in the hurricane-stricken area.
- The joint working process within the UN system (preparation of the CCA, UNDAF, mainstreaming and alignment) and its coherence as to the UN Reform allowed quick integration and response to the emergency.
- The availability of a consolidated UN team for the management of the emergencies (which has been functioning for more than three years, 6 of the 7 members being national staff and part of UNETE since its creation; they work with an annual plan and regular meetings), allowed rapid distribution and attention to the sectors or clusters activated before the emergency.
- In the affected area, a UNETE was established, UNETE RAAN (Región Autónoma Del Atlántico Norte), which allowed a fast information flow and response.
- A central Situation Room was established, and systematic situation reports were prepared and circulated, making the most immediate needs visible as well as the degree of response by different actors. One week after the emergency, the Situation Room was turned into the Coordination Room of the Resident Coordinator, from which the intervention strategies of the agencies were directed and discussed with UNDMT.
- A Situation Room was established in the hurricane-stricken area, which served as a centre of reference for UNETE-RAAN to map the intervention areas and coordinate the response with all actors present.
- For future emergencies, it is necessary to physically establish a situation room according to the requirements indicated in the Interagency Plan, i.e. with computer and communication equipment, work materials and a quick mapping system for the affected areas. It is recommended to establish manuals for the correct functioning and operation of the Room, which will allow the reduction of improvised actions.
- Under the leadership of UNETE Managua, the flash appeal was formulated in less than three days. Due to the little understanding of the concept of early recovery, the negotiation process prior to the launching of the flash appeal to donors was slow and, as a consequence, the approval of the funds was also delayed.
- A UN damage assessment mission was set up jointly (EDAM). However, for a higher quality and effectiveness of the information, it is necessary to have formats which are homogenized and approved by all agencies.
- Through WFP, the UN system activated a logistics cluster and at an early stage was already able to establish a logistics network to support the UN system, the government and civil society, which allowed smooth delivery of the first aid shipments to the affected areas.
- The function of the Technical Secretariat of the donor round table, exercised by the Resident Coordinator, was very useful to organize the international cooperation agencies around the emergency.
The Resident Coordinator's Office and the Situation Room took charge of the development of matrices for the monitoring of the contributions of the Donor Community and NGOs, which were then handed out to the donors, civil society and government. This positioned us as a reference in the management of the information.

It is recommendable to review the roles and responsibilities in the information flow between UN Agencies and the Situation Room, and to test the networks and information sources before emergencies take place, in order to improve the quality, speed and validity of the information. The UN Agencies have to constantly deliver situation reports, so as to give the international community a clearer orientation on adequate support for the most affected areas.

A direct link between the UN System and the Regional Government of the RAAN facilitated the immediate organization of the response. This kind of relations between Autonomous Government and UN System has no precedent in Latin America or the Caribbean.

The existence of a tightly organized UN communications group made adequate press coverage possible.

Due to the short implementation timeframe, delayed receipt of CERF funds, and Organization administrative procurement requirements, project implementation was challenging within the short time period.

The purchase in different countries of specific products (impregnated mosquito nets, insecticide) has required 1) a technical clearance process (WHOPES), (two) to book the product (mosquito nets) in a market with few availability and (three) transportation of the goods from country of origin to Nicaragua in a short time.
## V. Results

<table>
<thead>
<tr>
<th>Sector/Cluster</th>
<th>CERF projects per sector</th>
<th>Amount disbursed (US$)</th>
<th>Number of Beneficiaries (by sex/age)</th>
<th>Implementing Partners</th>
<th>Expected Results</th>
<th>Actual results and improvements for the target beneficiaries</th>
</tr>
</thead>
</table>
| Health UNICEF  | **07-CEF-074-A** Medical Brigades for RAAN (Mobile medical teams) | 99,510                 | 30,000 affected people                | MOH, Regional Government and Local NGOs | 1.- Increase access to health service through medical brigades mobilization of Ministry of Health MOH (in coordination with PAHO)  
1.1 Support the Mobilization of MOH Health Brigades.  
1.2 Provide basic equipment to transport the teams (boats, vehicles, motorcycles, horses, fuel) and protective gear for team members (backpacks, raincoats, life jackets, flashlights, etc.). | In coordination with PAHO, MOH received support in logistic for medical brigades mobilization and medical supplies to affected communities. Support with vehicles, trucks and aquatic transportation for those zones which are only reachable by this way, was also provided. Medical Brigades activities were supported with the provision of working supplies like a boots, flashlights and raincoats, etc.  
A total of 20 tents were delivered as provisional health posts given that the main health centres suffered severe damages. For the humanitarian responses, 2,000 blankets were delivered.  
The only regional Hospital was evacuated and re-established in another location and required assistance that included basic and urgent medical supplies, kitchen tools, etc. In the mean time, the hospital was rehabilitated in critical areas of maternal and children wards in order to initiate its regular operations as soon as possible.  
A total of 230,000 oral re-hydration salt sachets were supplied for diarrhea treatment and a social communication strategy was implemented to promote the prevention and early detection of danger signs due to diarrhea; 100 UROC (Community Oral Re-hydration Units) were implemented in the communities. |
| Health WHO / PAHO | **07-WHO-065** Health Care Services during post disaster period in the RAAN Region | 517,452                 | Approximately 100,000 direct beneficiaries among a total population 314,000 inhabitant in the Region of the North Atlantic (RAAN). 50/50 gender ratio. | MOH | 1.- To insure the continuity of Health Care through the mobilization of Ministry of Health MOH Field Brigades during a period of three months with emphasis (but not only) in the Districts of Waspam & Puerto Cabezas.  
1.1 To insure Health Care & Disease Prevention with a special focus on Maternal & Child Health within the framework of National Standards (Integrated Management of Childhood)  
1.2 Medications, Insecticides and Impregnated Mosquito Nets were purchased and used during Vector Borne Diseases Control activities which have been dispatched to provide care to affected people in communities of the RAAN region.  
100 % of the affected communities in the Health Districts of Waspam and Puerto Cabezas were visited by Mobile Health Teams during the period under review.  
No increase of Maternal & Child Mortality indicators were detected by the surveillance system. |
Illnesses IMCI, Essentials Obstetrical Care EOC).

1.2- To insure Surveillance, Control & Management of Expected Outbreaks with a focus on Vector Borne Diseases (Malaria, Dengue and Leptospirosis).

1.3- To insure the logistics and communications for field operations in hard to reach areas of Rio Coco, Llanos (plains) and Coastal Areas.

divided in three different phases according to geographic areas using an epidemiological stratification: (one) Sandy Bay, Sisin & Sahsa areas (representing the highest risk areas); (two) Coastal regions south of Sandy Bay, Bilwi and South of Bilwi, Wisconsin Area; and, (three) Rio Coco. CERF funds were used to cover phase one and two. No major outbreak of Malaria or Dengue was detected. One (one) cluster of three cases of Leptospirosis was detected and controlled.

1.3- Two (two) four by four vehicles were assigned to the Health districts of Waspam and Puerto Cabezas insuring the mobilization of Malaria Control Personnel and Primary Health Care Personnel in the plains. As PAHO/WHO purchased three boats with another funding in order to cover the Rio Coco and the coastal areas, the CERF budget was re-oriented toward the organization of Disease Control activities.

Water and Sanitation UNICEF

<table>
<thead>
<tr>
<th>07-CEF-074-B</th>
<th>Joint humanitarian response to water, sanitation and hygiene needs in communities and schools in support to GRAAN, MoH, SINAPRED, COMUPREDs and community networks</th>
</tr>
</thead>
<tbody>
<tr>
<td>248,775</td>
<td>7,200</td>
</tr>
<tr>
<td>MOH, Regional Government and Local NGOs</td>
<td></td>
</tr>
</tbody>
</table>

1. -Contribute to the improvement of the health status of the 7,200 affected population through the provision of safe water, basic sanitation and promotion of hygiene, within the emergency response strategy set by the GRAAN, in critical areas of the Municipalities of Puerto Cabezas and Waspam.

1.1-To provide safe water to 3,000 people through the rehabilitation of water infrastructure in accordance to SPHERE standards targeting

1.2- To provide 500 families (nearly 3,000 people) with water filters

1.3-To provide 200 families (nearly 1,200 people) with emergency rainwater collection items

1.4- To rehabilitate 200 latrines in shelters and schools

1.5- To promote basic safe hygiene practices with 7,200 people in communities and schools, considering socio-cultural characteristics of the affected population.

1.6-To provide 1,000 hygiene kits to families, schools and health centres Waspam.

1. 351 people with access to safe water through the rehabilitation and or disinfection of wells.

2. Ceramic water filters and trained on their use for 2001 families.

3. 500 families provided with emergency rainwater harvesting solutions

4. Activity not done given that other interventions took place.

5. A total of 19,250 people, including children were involved in hygiene promotion activities. Training and promotional material reproduced.

6. A total of 9,250 people were provided with Hygiene Kits and chlorine for water disinfection.
### Nutrition

<table>
<thead>
<tr>
<th>UNICEF</th>
<th>07-CEF-074-C</th>
<th>149,265</th>
<th>MOH, Local NGOs ALISTAR/US AID. Famisalud/USAID CEPS Clinica Bilwi National Red Cross Uracan Health unlimited</th>
</tr>
</thead>
</table>
| Child Nutrition in the RAAN Region | | 44,600 children from 6 to 24 months | 1.- To insure a nutritional strategy to mitigate the impact of hurricane Felix in child nutrition (in children from 6 to 24 months of age)
1.1- To insure the distribution of complementary food for children from 6 to 24 months of age
1.2- To insure vitamin A supplementation
1.3- Implement a educational strategy for the adequate use and preparation of complementary food for children from 6 to 24 months of age |

- To mitigate the impact of the hurricane on the nutritional situation of children a nutrition strategy was designed and implemented.
- Community and civil society were organized for the distribution of nutrition kits for 14,000 families. These included kitchen utensils and educational material elaborated in indigenous languages (Miskito and mayagna).
- Community network established to train a total of 60 people including members of local organizations, community leaders, health personal working at hospital, Maternal Houses and the Network of Women Survivors. These facilitators carried out nutritional training in the communities on preparation of food and best practice in nutrition.
- Provision of complementary food for 44,600 children during three month in 63 affected communities. Educational material was elaborated in local language. Monitoring of cultural acceptance through focal groups.
- Distribution of Vit A through medical brigades

### Shelters

<table>
<thead>
<tr>
<th>UNDP</th>
<th>07-UDP-034</th>
<th>1,791,180</th>
<th>Municipality and regional government of Puerto Cabezas and the local government of 14 communities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency shelters</td>
<td></td>
<td>14 communities equivalent to 20,000 peoples. 50/50 gender ratio.</td>
<td>To provide shelter solutions in the most affected areas under a culturally and gender sensitive approach to create a safe and an enabling environment for future rehabilitation and reconstruction.</td>
</tr>
</tbody>
</table>

A total of 20,000 persons from 14 affected communities were benefited with tools to remove rubble and use the local materials to build shelters and were provided with the necessary building materials to build their shelters.

22 university students were hired from the affected communities, with fluency in Miskitu language, and in the framework of UN volunteers. They played the role of community promoters to ensure the organizational process for the self-construction and information on risks reduction techniques.

Access to the communities was a major challenge, taking into account that most of the communities can only be reached by sea, thus having arrived with construction materials in a timely manner meant a great relief to the affected populations.
| Food Aid                      | 07-WFP-059 Emergency Food Assistance to Hurricane Felix Victims | 2,169,318 | 80,000 affected people (Food Distribution) | Ministry of Agriculture (MAGFOR), SINAPRED and COMUPRED | 1. - The overall purpose of this emergency operation is to provide immediate food assistance to victims of Hurricane Felix which occurred on 4 September 2007 to prevent deterioration of the nutritional status of the affected population and at the same time assist in the recovery efforts to restore livelihoods and community infrastructures.  
1.1-To stabilize and prevent the deterioration of the nutritional status of the affected population, with special attention to pregnant and lactating women and children under five; and  
1.2-To preserve assets and restore livelihoods and community infrastructures through food-for-work supported activities  
- 98,650 victims assisted with immediate food aid  
- 150 feeding days provided for GFD and FFW beneficiaries  
- 183 communities assisted with food aid  
- 183 food distribution committees created  
- four affected municipalities assisted with food aid  
- 3,152 MT distributed* |
|-----------------------------|-------------------------------------------------------------------------------------------------|----------|------------------------------------------|----------------------------------------------------------|-------------------------------------------------------------------------------------------------|
*Quantity distributed since 04 September
VI. CERF in Action: Success stories

WATER PURIFIERS “FILTRON” THROUGHOUT THE COMMUNITIES OF PUERTO CABEZAS AND WASPAM

Reina Contrera received one of the 127 water filters distributed in the community of Betania to create access to purified water. “I use the filter as they explained to us”, she commented in her native language, Miskito, as a schoolteacher translated. “I boil a little water to clean the filter, both inside and out, and then throw out the initial water, wait an hour, and use the rest”. Reina is not the only person benefiting from her Filtron; she shares it with her entire family, composed of her seven children and one newly two month’s old grandchild. “Before they brought the filters”, she says as she serves a glass of water, “we had to go to the well to get water. It is not very far, about 50 meters, but even so it is much more comfortable, safe and fast to have it in our house”.

1,000 Filtron water filters financed by UNICEF and distributed by OXFAM and AMC have been given to the communities of Coco River, in Waspam. In Puerto Cabezas a total of 378 people have been given Filtrons, which include 100% of the houses of the local communities of Wawa Boom, Boom Sirpe and Betania, and 70% of Auyapihni. A second phase of distribution carried out during the month of December saw 391 more Filtrons delivered so that all families of Auyatara, Butku, Panua, Hiltara, Sannilaya, Tuapi, and Tulu Tigni had them. The distribution of Filtrons and chlorine was planned in Sahsa on the 22 of November through the local Mesa de Agua, an organizational structure risen up from the aftermath of Hurricane Felix. The idea arose to look for local pottery organizations in order to foster local involvement and assure Sustainability. These water purifiers have an average of life of two years and a cost of approximately $20, but with transport to the region constantly increasing, the possibility of having close-by replacements will assure water quality in these communities. Reina Contreras will be very happy of having the ability to change her Filtron in two years without any problems. “The possibility of a factory of Filtrons close-by would be a great relief for most of us”, she commented with hope.

The organization Action against Hunger was named as coordinator of Mesa de Agua during the last meeting in Tasba Pri so that they can coordinate the joint efforts of government and local organizations in their response to both, short and long-term problems. Although initially this structure was born as a result of hurricane Felix, the idea is being held that this type of organization remain to become a focal point of discussions, analysis and response to water problems and sanitation in the zone. At the moment they are asking for the Water Committee of Sahsa that it gives water so that it can supply 12,000 people of the community. In Waspám, URACCAN University has been selected to guide interviews and to gather information together with the person designated by the mayorship.

Little by little the sectoral Mesas are taking a greater leadership role and acquiring more obligations to strengthen itself as a group coordinator and to make present its role in the communities.
NICARAGUA : The Techo Project
A response to Hurricane Felix

On September 4, 2007, Hurricane Felix struck Nicaragua on its Atlantic Coast Region and left a trail of devastation behind as it swept over the Sandy Bay communities. The destruction caused by this category 5 hurricane was considerable. Some hours before, the several dozen fishermen who were on the Miskito Cays, an archipelago approximately one hundred kilometers off the Nicaraguan Coast, did not imagine that only a few thousand kilometers away from them, a powerful hurricane was drawing near at great speed. The local authorities were alerted just 5 hours beforehand and thus unable to take action. It was towards the end of the lobster season, and since it represents the main economic resource of the region, a big number of fishermen were on the Miskito Cays: more than 350 fishermen died.

In the framework of the emergency caused by the hurricane, UNDP, with the help of the regional government, launched a series of initiatives for the rehabilitation of the devastated region. One of these initiatives, the Techo project, provides saws and zinc sheets to facilitate the reconstruction of the damaged houses. The purpose of the saws is to enable the community to take advantage of the timber from different trees knocked down by the hurricane. The zinc sheets can be used to rebuild the roofs blown off by Hurricane Felix. 90% of the houses touched by Felix suffered damage to their roofs. This project started in December and is planned for 3 months. A special aspect of the Techo project, which aims at repairing the roofs destroyed or affected by the hurricane, is the employment of volunteers from the different local communities, so that the communities themselves can take ownership of the management of the resources put at their disposal. After the hurricane, UNDP made an agreement with the regional government of the Autonomous Region to support the reconstruction of the villages of the North Atlantic struck by the hurricane. "Since the victims are psychologically affected, the participation of persons who had not been hit directly by the hurricane was needed. Therefore, we pointed out to UNDP that there was a need for local social promoters capable of training and directing the communities in the reconstruction work, in water treatment and the promotion of community work.", declared the Director of the regional government, Robert Watson. To be selected, volunteers have to speak Miskito, the local language, know the local culture and traditions, and have a degree in sociology or rural engineering. In total, 22 United Nations volunteers are forming an integral part of this project today. Most of the material has already been distributed and the project is now in its last phase. Almost all of the communities (in total, 14) have been covered. To allow the volunteers to live within the communities, their inhabitants have assigned them a house. The main objective of the project is not only the training of the inhabitants in the construction of solid homes, which are less vulnerable to hurricanes, but there is also an ecological component aimed at raising awareness on the right use of local resources available, such as wood. Additionally, the project also wants to show how to build latrines or clean water wells. In Krukira, one of the communities hit by the hurricane where more than 148 families live, corrugated iron and nails have been distributed to repair or rebuild the roofs damaged, as well as in the other communities. The saws are handed out one to each group of five families and allow them to cut the wood they need. In the month of December, the volunteers came to evaluate the needs of these communities. In January, the time came to buy saws and fuel so that the community could start to rebuild its roofs. "At first, we had to help the most vulnerable people within the communities, the widows, the elderly, those without any support, because the project was primarily aimed at them. These vulnerable persons are unable to work themselves on the roofs of their houses and they would have had to pay for the labor.

The majority of the remaining houses belong to vulnerable sectors. Naida Dixon Robert, United Nations Volunteer, a promoter of the Krukira community, has a degree in agronomy and forest management. According to her, the people are happy with this aid because they have limited resources. In this region, a zinc sheet costs about 350 Cordoba, people cannot afford ten sheets for the price of 3000 Cordoba, equivalent to about 150 USD. "In the past, roofs were build with palm leaves, which was the
main culture of these communities. But this tradition has been gradually lost. "People simply do not want to cultivate it. There are even people who have begun to construct their homes in cement", emphasizes Naida despairingly as she points to one village house. The volunteers have not only helped to reconstruct the villagers' houses, but they have also sensitized them on the impact of this catastrophe on their environment. They have expressed the need for a sustainable use of resources." I insist a lot on the fact that it is important not to touch the standing trees, unless it is really necessary, and that they should first use the trees struck down by the hurricane. "According to Roberto Watson, Executive Director of the regional government, "in spite of the difficulties we met, once the program is finalized in less than two weeks, the communities will be benefited by the work done by the volunteers." Until then, the community members will have to acquire the capacity to continue the reconstruction work by itself. Even though the project raises some doubts, it did constitute a rapid response able to reduce, for the time being, the main difficulty encountered by these communities: the absence of roofs.
PAHO/WHO NICARAGUA

According to reports and needs assessments carried out by Ministry of Health and PAHO / WHO in Nicaragua 198,000 persons are reported to have been affected by Hurricane FELIX among a total population of 314,000. The official reports indicated that 6 among 8 RAAN municipalities were impacted by the hurricane, there are about 200 reported deaths and missing persons, 10,000 homes destroyed, more than 30,000 families affected, 60 Schools destroyed and 39 Health Units damaged. The RAAN is an endemic area for Malaria, Dengue and Leptospirosis. Due to the very difficult access to Health Services previous to FELIX the coverage of immunization and other control programs was already under the national standards.

It was crucial to insure a wide coverage of surveillance activities of the RAAN territory in order to avoid any reemergence of diseases (e.g. Malaria) in areas previously controlled.

During the period under review the MOH was supported by CERF through PAHO / WHO in order to control Malaria and other vector borne diseases with emphasis in the communities of the north plains (Llano norte), Tasba Pri, Sahsa and the coastal areas north of Puerto Cabezas.

During the period under review the Malaria post disaster campaign supported by CERF was organized around 3 main axes:

1. Vector control using thermo fogging in areas were housing was destroyed and intra domiciliary spraying with a average of 1,000 Households treated per day;

2. Distribution of Long lasting Impregnated Mosquito nets (more than 7,000 nets Family sizes were purchased with CERF:

3. Mass Medication of Risk population living in shelters in areas with previous transmission of Malaria:

As a result of these interventions no death by Malaria were reported by both MOH and communities during the post disaster period. The timely CERF support helped the MOH to save life through the early detection of Malaria cases an immediate access to treatment combined with intense Vector Control Activities.
WFP NICARAGUA

Through the EMOP implementation, WFP field office in Puerto Cabezas in the North Atlantic Region (RAAN) has been assisting 183 affected communities with food aid relief. Food purchased with CERF funds has been distributed by road and by sea as well. The majority of the affected population lives in remote and isolated communities that have difficult access and are spread out among the keys and the shoreline. Food distribution in these areas is carried out through aquatic transportation which makes this operation very complex and highly expensive. Community involvement and participation has demonstrated that food transportation costs can be decreased when the community assumes a proactive role. A good example of community participation was shown during the third distribution, when leaders from 13 coastline communities traveled up to 12 hours in open sea using rudimentary sailing boats (pushed by the winds) to collect food from WFP for the hungry and isolated population. The self organized community leaders came to WFP’s office in Puerto Cabezas and in coordination with the Municipal Committee of Disaster Mitigation (COMUPRED) delivered food aid to the affected communities, decreasing WFP logistics’ costs.
List of Acronyms

CERF - Central Emergency Response Fund
COMUPRED - Municipal Committee of Disaster Mitigation
COREPRED - Regional Committee for Disaster Prevention
EMOP - Emergency Operation
FAO - Food and Agriculture Organization of the United Nations
MAGFOR - Ministry of Agriculture
MINSA - Ministry of Health
ORC - Office of the Resident Coordinator
PAHO - Pan American Health Organization
RAAN - Northern Atlantic Autonomous Region
SINAPRED - National System for Disaster Prevention, Mitigation and Attention
UNCT - United Nations Country Team
UNDAF - United Nations Development Assistance Framework
UNDMT - United Nations Disaster Management Team
UNDP - United Nations Development Programme
UNETE - United Nations Emergency Team
UNFPA - United Nations Population Fund
UNICEF - United Nations Children's Fund
UNV - United Nations Volunteers
WASH - Water, Sanitation and Hygiene
WFP - World Food Programme
WHO - World Health Organization