

# HURRICANE DEAN AND REGIONAL MOBILIZATION

Between August 1st and 8th 1989, several PCDPPP member states posted either hurricane or tropical storm watch/warnings for Hurricane DEAN. The states affected included Dominica, Guadeloupe, Antigua & Barbuda, Montserrat, St. Kitts/Nevis, St. Maarten, Saba, St. Eustatius, Anguilla, British and US Virgin Islands, Puerto Rico, Turks & Caicos, Bahamas and Bermuda.

This was the widest mobilization seen for some time. PCDPPP saw this as a good opportunity for threatened islands to review their mobilization arrangements in order to identify improvements necessary or possible in their hurricane/severe weather action plans and subsequently urged member states to execute the review exercise. Islands which conducted such a review were Dominica, Bahamas, Turks & Caicos, Netherlands Antilles, St. Kitts & Nevis, Guadeloupe, Anguilla and Montserrat.

Dominica, Anguilla and Montserrat reported insufficient warning from designated Meteorological Centres. In the case of Montserrat, a tropical storm warning was received on the morning of August 2, to be followed half an hour later by a hurricane warning. Anguilla did not receive regular reports from Antigua, whilst Dominica felt that warnings received from Barbados were inadequate. Bahamas and the Netherlands Antilles did not indicate any problems with the adequacy or timing of Meteorological Warnings.

Some countries indicated that no need had arisen for full mobilization of the National Emergency System though standby orders were issued in the Bahamas.

In others where there was a

greater threat (Montserrat, Anguilla and St. Maarten), the Emergency Operating Centre was mobilized according to the procedures laid out in the National Disaster Plans.

In St. Kitts, a small emergency operations team was responsible for directing mobilization arrangements in the absence of an approved plan.

Reports from the different islands did not always indicate a distinction between public information management and media support. In St. Kitts, the dissemination of information to the public and media was undertaken by the Emergency Operations Team while others, it appeared, used prepared media kits to provide general information to the public. In some islands, weather bulletins were disseminated on a regular basis.

Public Works was the main sector activated or put on alert by all countries reporting. In St. Maarten, the flood mechanism was activated and so was the Heavy Duty Equipment Strategic Location Plan. In Montserrat, the focus was on the securing of government buildings.

St. Maarten reported that all sectoral plans were activated, whilst in Montserrat, special attention was given to ensuring a rapid replacement of the hospital roof in the event that it went, as anticipated.

Other states felt that although all sector plans were not tested or activated, some good lessons were learnt about what needs to be done to improve the situation in the future.

## COMMUNICATIONS

Many problems were experienced in the telecommunications sector. In St. Maarten, there appeared to have been some delays in activating the plan for this sector. Fortunately, no serious problems

ensued.

Montserrat reported that it had received no information from Antigua on the approaching weather system and had to rely on satellite data from Miami. In Turks & Caicos, VHF radios in two of the islands (North Caicos and Salt Cay) developed minor problems which were speedily solved by a technician from Grand Turks who was dispatched by chartered aircraft.

In most of the islands where hurricane warnings were in effect, official "ALLCLEAR" messages were issued. One country reported that the "demobilization was automatic after the last bulletin was issued by the Government Meteorological Office". No indication was given as to whether or not there was an official declaration.

## POST-INCIDENT REVIEW

The post-incident review process varied in the different islands. The following situations cover the range of actions taken:

1. Meeting of Chairman of Disaster Preparedness Committee, the National Disaster Coordinator and Meteorological Services to review procedures and draft recommendations for future information handling and dissemination.
2. Meeting of EOC members and Field Coordinators to draft an evaluation report and make recommendations for improvement.
3. Meeting of National Disaster Committee to review experience. Changes to Disaster Plan identified and made; equipment needs identified and costed.

## CONCLUSION

The passage of Hurricane DEAN has served to heighten the level of awareness of National Emergency Systems of many PCDPPP member states. In many instances, it has highlighted areas for procedural improvements and equipment servicing and maintenance.

The central area of telecom-

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# HURRICANE



***DAMAGE FROM  
HURRICANE HUGO  
IN ANTIGUA***

# HUGO



(from page 9)

munications is in need of much evaluation and strengthening. The situation which occurred of the crucial warning station for many islands - the Antigua Meteorological Services, losing its communications lines, raises the need for consideration and designation of alternate warning stations and less dependence on land lines. Memorandi of understanding between islands with available capability for meteorological warnings and dissemination should be worked out.

National Emergency Systems should seek to formalize the process of post-incident review of all emergencies and incidents requiring the activation of mobilization procedures. The lessons to be learnt can only serve to improve the National Emergency Response Systems of member states.

## UWIDITE SESSION ON DEAN

Following the threat of Hurricane Dean to the Leeward Islands in the first week of August, PCDDPP/UNDRO carried out an evaluation of warning and mobilization arrangements in threatened states.

Some deficiencies were found in the regional warning arrangements and PCDDPP organized a regional teleconference, using the University of the West Indies Distance Teaching Experiment (UWIDITE) facility, on September 1, to discuss these. This session coincided with the presence in the region of Hurricane Gabrielle. Participants included Mr. Bob Sheets of the Miami Hurricane Centre.

The difficulties and constraints to early warning were frankly discussed. The benefits of this exercise were evident in the passage of Hurricane Hugo where warnings were issued earlier and the populations had more time to secure themselves.

## HURRICANE DEAN AND THE USVI

As Hurricane Dean approached, the Director of the U.S. Virgin Islands Territorial Emergency Management Agency (VITEMA), Mr. William S. Harvey activated EOC's on all three major islands and called meetings of the Emergency Services Coordinators, those individuals assigned by each department head to manage that agency's disaster response activities. The Emergency Operations Plan was mobilized and each agency's functions or mission reviewed with the entire group.

The public was advised by radio and television announcements that the meetings were being held and that frequent updates would be issued on the weather, the possibility of evacuation and appropriate shelter information.

This information was disseminated via the Emergency Broadcast System (EBS) and releases were telephoned by the Director to the primary EBS station on St. Croix which then relayed the information to other stations on that island. On St. Thomas VITEMA staff advised that island's primary station which, in turn transmitted the data to other St. Thomas stations.

The level of interest shown by the Emergency Services Coordinators and the efficiency of the EBS function was very heartening.

More work, however, needs to be done on the evacuation and sheltering procedures. In the Territory, the American Red Cross is responsible for inspecting and opening the shelters and the Police Department is responsible for evacuation. Although shelters were opened in high population areas, there is need for a better designed plan which will clarify where shelters should be opened and also clearer procedures for establishing the need for evacuation and having it accomplished.

During a follow-up meeting, the Executive Director of VITEMA, Major General Robert L. Moorehead, who is also the Adjutant General of the Virgin Islands National Guard appointed a committee chaired by the

Red Cross director and including representatives from Police, Fire, Housing, Health, Education and Purchasing to study sheltering and evacuation concerns. The committee will report to the Emergency Management Council meeting in October. The Council consists of top ranking officials from all government agencies.

Over the past two years these bi-monthly Council meetings have been very successful in bringing emergency management concerns to a broad range of Government officials and have generated considerable interest in increased management coordination. They have also increased public awareness that the government is addressing such matters since the media is always invited to the meetings and have been very generous with television and radio coverage.

(VITEMA)

### NEW NATIONAL DISASTER CO-ORDINATORS NAMED

New National Disaster Coordinators have been named for Belize and Martinique:-

#### Belize:

Mr. Anthony Sylvester  
Cabinet Office  
Prime Minister's Office  
Belmopan, Belize

#### Martinique:

Mr. Bertin Desti  
Directeur de la Protection  
Civile  
Prefecture de la Martinique  
Fort-de-France.  
Martinique  
Tel: 596-71-63-26  
Tlx: 912-650 - M>R  
Fax: 71-40-29

# WORLD BANK, NATURAL DISASTERS AND DEVELOPMENT

Urgent attention must be focused on reducing the consequences of natural disasters, experts in the fields of hazard management and development concurred at the World Bank "Colloquium on Disasters, Sustainability, and Development: A Look to the 1990's" held June 6 in Washington D.C.

Meeting as part of the Environment Department's ongoing effort to boost disaster prevention, mitigation, and recovery, the experts urged more action in the light of predictions by authorities that calamities will increase in frequency and impact in the future. This acceleration is expected to be caused by continued degradation of environmental defenses, population growth on hazardous sites, and poor design of infrastructure.

The colloquium, designed to promote awareness of the links between natural disasters, their prevention and mitigation, and sustainable development, was sponsored by the Environment Department and the Human Resources Development Division. At the June 6 symposium, delegates included speakers from natural and international organizations, NGO's, and academic institutions.

In its recently formulated approach to coping with natural disasters the Bank complements traditional reconstruction lending with individual projects and with integrated development planning di-

rected at redressing disaster vulnerability. In addition, Bank loans support local and community-based initiatives for prevention, mitigation, and recovery. Examples of this strategy to emphasize disaster prevention and mitigation, and local empowerment are the 1985 Mexican earthquake reconstruction loan, 1986 Brazilian flood recovery project, 1988 Jamaica hurricane rehabilitation operation.

The Bank is taking a collaborative role with other involved institutions and is also a member of the Steering Committee for the International Decade for Natural Disaster Reduction in which the United Nations has designated the 1990's as the Decade for concerted effort by the international community and individual nations to abate natural disasters.

World Bank representatives at the colloquium said the Bank has begun to heed the experts forecasts of greater incidence of calamities in the future — recognizing that natural disasters impose heavy costs on the socioeconomic fabric of disaster stricken nations and thus create obstacles to the achievement of sustainable development.

It was stated that many of the feedback mechanisms for positive change in the disaster management field are in place: technological wherewithal is available, public awareness and political consensus is expanding, understanding is growing,

and institutions are availing themselves as instruments for coordination. As the Decade approaches, development and disaster preparedness planners need to maintain their sensitivity to local societies, which often have acquired strategic knowledge and unique resiliency to cope with natural hazards.

The experts agreed that cooperation in the transfer of technology and communications systems is integral to the fulfillment of the Decade's objectives. A consensus arose at the conference that technologies employed for the reduction of natural hazards must be economically viable over the long term and the existing technological know-how should be exploited more fully. Regional cooperation is also essential. Disasters strike across borders and scarce resources for disaster mitigation need to be pooled. Regional entities, such as the Pan American Health Organization, the Pan Caribbean Disaster Preparedness and Prevention Project, and the Organization of American States, all act as vehicles of coordination and sources of expertise.

The speakers also agreed that individual countries will need to assume a significant share of the responsibility for controlling natural disasters. Because a calamity's environmental trigger is essentially immutable, the magnitude of a "natural" disaster depends largely on the decisions made during the process of development. Only by implementing disaster reduction measures throughout this process can development be resistant to extreme environmental events and sustainable over the long run.

*(Michele Zador, World Bank Environment Bulletin, June/July 1989)*

**EARTHQUAKES... VOLCANOES... HURRICANES... FLOODS**

**SUPPORT DISASTER PREPAREDNESS**

**FIRES..... OIL SPILLS..... AIR CRASHES**