

BARBADOS

RESPONDING TO NATURAL DISASTERS IN THE CARIBBEAN

PROGRAMME: Comprehensive Approach to Disaster Management in the Caribbean

Each year, Caribbean countries are threatened by significant loss of life, catastrophic property damage and total social disruption as a result of natural disasters. Tropical storms, hurricanes, tidal waves, heavy rains, droughts, earthquakes and volcanoes have been especially frequent and intense since the early 1970s.

Furthermore, vulnerability of the Caribbean to man-made disasters has increased markedly during the same period. The shift from agriculturally-based to tourism-based economies has resulted in more passenger and cargo traffic into and out of the region, significantly raising the risk of oil and chemical spills.

Over the past two decades, the disasters, natural and man-made, have cost the region billions of dollars in damage, with an attendant negative impact on economic health and development. Even more devastating is the human suffering and dislocation which prevails long after the disasters have occurred. Recent experiences with hurricanes Lenny and Georges are only the latest in a long line of disasters that have disrupted economic and social progress in the region. As is generally the case in developing countries, it is the poor who are most adversely affected when disasters occur.

The table below gives a stark indication of just how severe the consequences of natural disasters in the Caribbean region have been in recent decades.

NATURAL DISASTERS IN THE CARABBEAN – 1970-1999

Country	Number of Occurrences	Total Fatalities	Economic Losses (1998 \$m.)	Economic Losses as % of GDP (1995)
Antigua & Barbuda	7	7	105.7	18.1%
Bahamas	4	5	290.4	9.5%
Barbados	5	3	148.4	6.3%
Belize	6	5	33.8	5.4%
Dominica	7	43	133.4	55.0%
Grenada	4	0	30.1	9.5%
Guyana	5	0	29.8	4.6%
Jamaica	19	271	1,988.1	29.3%
Montserrat	5	43	323.7	899.0%
St. Kitts & Nevis	7	6	312.5	116.5%
St. Lucia	8	54	1,554.6	272.3%
St. Vincent	9	5	47.0	16.5%
Trinidad & Tobago	8	9	16.7	0.3%

Source: Inter-American Development Bank report: "Natural Disasters in Latin America and the Caribbean: An Overview of Risk", October 2000.

Early Disaster Management Efforts

In response to this ominous situation, and to the 1990-2000 proclamation by the United Nations of the International Decade for Natural Disaster Reduction, Caribbean governments have become more involved in disaster management activities. However, although most countries in the region have made significant progress in this effort, systematic, consistently adequate and appropriate responses to disasters still lie in the future.

Caribbean governments have had to deal with the unwanted and unpredictable problem of disasters in addition to efforts to solve chronic economic problems -- high unemployment, fiscal and balance-of-payments deficits and declining standards of living of their populations. This has set off a vicious cycle in which funds earmarked for development activities have had to be diverted to providing humanitarian relief, cleanup and rebuilding following natural disasters.

There have been previous attempts to establish national and regional disaster management entities. The Pan-Caribbean Disaster Preparedness Project (PCDPP) executed from 1981-91 recorded a number of important accomplishments, including the creation of central government disaster management organizations in several countries. The work of this project was institutionalized in 1991 with the establishment of a regional disaster coordination agency, the Caribbean Disaster Emergency Response Agency (CDERA). In addition, during the 1990s there were several other important disaster management projects active in the region. These included the UNDP-financed Disaster Emergency Response and Management Systems Project (DERMS), which ended in 2000, and ongoing projects funded by the United States Agency for International Development (USAID), the Organization of American States (OAS), the European Union (EU) and the Caribbean Development Bank (CDB).

However, much more needs to be done.

The CDM Project

The Comprehensive Approach to Disaster Management in the Caribbean (CDM) project is an extension of the earlier DERMS project. Like that project, it is designed to:

- Develop a regional Caribbean Disaster Management (CDM) strategy;
- Strengthen CDERA so that the CDM can be efficiently and effectively implemented;
- Build support for CDM at the national level.

The present project continues to serve the long-term goals of reducing disaster-related loss of life and property damage in the Caribbean, and of embedding Comprehensive Disaster Management (CDM) as a viable process in the region.

The DERMS project has convincingly demonstrated to key policy-makers and regional stakeholders that comprehensive approaches to disaster management can:

- Reduce repeated losses of life and property;
- Prevent or reduce the diversion of funds intended for development purposes for disaster-related reconstruction;
- Reduce the social and economic dislocation caused by natural disasters;

Countries participating in the CDM initiative include Anguilla, Antigua and Barbuda, the Bahamas, Barbados, Belize, the British Virgin Islands, Dominica, Grenada, Guyana, Jamaica, Montserrat, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Trinidad and Tobago, the Turks and Caicos Islands, Haiti, Dominican Republic and other countries in the region.

The CDM Strategy

The principal achievement of these projects to date has been the creation, through a participatory process, of a Comprehensive Disaster Management regional strategy. This strategy mandates pro-active management throughout all phases of the disaster cycle. These include prevention and mitigation of the likely impact of disasters, especially hurricanes; preparedness and response before and during the event; and recovery and restoration. These activities are being carried out by both the public and private sectors (including all segments of civil society and the general population) in hazard-prone areas. The CDM strategy also envisions the integration of disaster management into long-term planning and development processes.

The CDM regional strategy was adopted at a regional stakeholders' forum in June 2001. Development of the CDM strategy has benefited from a baseline study of CDM in the region and an institutional study of CDERA. The current project seeks to encourage adoption of the CDM at the national level among Caribbean countries and to facilitate its integration into national development planning processes.

Until quite recently, the destructive consequences of natural disasters in the Caribbean, especially hurricanes, were regarded as inevitable and unavoidable. Repeated, overwhelmingly powerful assaults by nature tend to reduce victims to a state of passive, fatalistic acceptance. To be sure, hurricanes and other natural disasters cannot themselves be prevented or controlled. However, among the most important aspects of the CDM strategy is the aggressive promotion of the idea that with comprehensive, long-term planning and a pro-active approach to, and attitude about, disaster

mitigation, the physical and economic consequences of disasters can be significantly reduced. Disasters need not be so disastrous: lives need not be lost: the loss of property, infrastructure and crops can be minimized: life need not be disrupted for months or years.

The CDM strategy also places great emphasis on the benefits of investing in disaster mitigation before it strikes -- for example, in the public sector, building roads, drainage systems, buildings, electrical and water lines and other civic installations in ways that make them as storm resistant as possible. However, persuading governments to make such investments is always a challenge, even though it is well understood that the cost of post-disaster cleanup and rehabilitation is invariably much greater than the cost of preventive measures.

In the private sector, the imposition of storm-oriented building codes for houses and commercial structures, both existing and new, and of controls over where new structures are located, are obvious disaster mitigation steps. However, in poor communities (which are found on most of the islands), mechanisms must be devised to enable people to pay for such improvements. Government cost-sharing grants or long-term, low-cost loans might effectively serve this purpose.

Implementation Activities

The objective of the CDM project is to further reinforce and embed the CDM strategy. This will be accomplished by:

- Educating policy-makers about the issues involved;
- Regional and international level promotion of the principles of disaster management to the Caribbean Community Council on Trade and Economic Development (COTED) and the Caribbean Group for Cooperation in Economic Development (CGCED);
- Presentations to a high-level grouping of Heads of States and development partner representatives;
- Dissemination of information about CDERA's experience and ongoing intervention through its website;
- Preparation of national strategies based on the regional strategy.

Project Expectations

It is expected that the CDM project will lead, over time, to implementation of a regional CDM policy that:

- Enhances the institutional capacity of participating countries in the area of disaster management;
- Strengthens regional and national disaster response training programmes;
- Involves the private sector;
- Has strong community and NGO participation;
- Strengthens disaster mitigation policies and programmes;
- Enhances disaster management communications systems;
- Strengthens regional meteorological capacity;
- Enhances emergency warning and response capabilities.

The CDM programme will also strengthen CDERA's operations in the areas of:

- Organization, staffing and management;
- Administrative and financial practices;
- Communications;
- Research;
- Information dissemination and networking in the region.

This project will further embed support for CDM at the national level and enhance multi-donor co-operation on disaster management for the Caribbean through promotion of national strategies prepared with participation at all levels.

There is a high probability that the objectives, activities and outcomes of the project will eventually be achieved, and there are no known factors that would challenge this expectation. The project has already shown positive results, in large part due to cooperation with CDERA and national support for the CDM strategy. This support is expected to continue.

The cost of activities under the original project is US\$209,650, jointly funded by USAID, the Office of US Foreign Disaster Assistance (OFDA), CDERA and UNDP. USAID/OFDA will provide additional cost-sharing

resources of approximately US\$200,000: this will extend the intervention by another year, to mid 2003.

Project Management

Management arrangements for the CDM programme will continue as it has in the original project. Under these arrangements UNDP, USAID, and CDERA constitute a Technical Advisory Group (TAG) that will be responsible for the co-ordination and review of project management. The group will be chaired by UNDP. The team will also have responsibility for the overall co-ordination of a stakeholders working group consisting of members of the TAG as well as the Caribbean Development Bank, the Canadian International Development Agency, the Organization of American States, the United Kingdom Department for International Development, the Caribbean Institute for Meteorology and Hydrology (CIMH), the University of the West Indies (UWI) and the Red Cross.

CDERA as Designated Institution will also be responsible for carrying out regional activities in support of national strategies, and for providing assistance to the consultants hired with UNDP and USAID funds to help prepare those strategies. CDERA will work closely with both UNDP and USAID/OFDA in the design of the scope of work and work plans for the preparation of national disaster strategies for each country.

The structure that currently exists to review implementation, management, and monitoring issues will continue. Stakeholders and partners will be invited to participate in order to further promote interest in CDM and to receive feedback from observers. UNDP will sign a Country Office Support Agreement with CDERA to undertake specified tasks on behalf of particular institutions.

Legal Context

The project is being undertaken in accordance with normal UNDP and USAID legal requirements and documentation. In addition, UNDP and USAID have signed a joint agreement that will set forth the joint understandings and responsibilities under this project, including the cost sharing aspects.