

TECHNICAL COOPERATION PROFILE

I. BASIC PROJECT DATA

Program Name/Number:	Natural Hazard Management in Urban Coastal Areas (JA-T1019)	
Team Leader/Members:	Leader: Javier Cuervo (RE3/EN3); other members: Evan Cayetano (COF/CJA); Annette Killmer (RE3/EN3); Edward Andersen (RE3/EN3); Monica Lugo (LEG/OPR); and Gisella Barreda (RE3/EN3).	
Date of Request:	August 18, 2006	
Beneficiary:	Jamaica	
Executing Agency:	Office of Disaster Preparedness and Emergency Management (ODPEM)	
Financing plan:	IDB: (DPF)	US\$ 800,000
	Local: (ODPEM)	<u>US\$ 200,000</u>
	Total:	US\$1,000,000
Tentative dates:	Loan Committee/EVP:	November 2006
	DIR/PRE:	December 2006

II. BACKGROUND AND PROBLEM STATEMENT

- 2.1 Natural Hazards and their impact on urban areas in the coastal area: Jamaica is located in the north Caribbean region and is exposed by virtue of its location to tropical storms, hurricanes and storm surges. Also, the island lies within the Caribbean Plate in seismically active zone. As a consequence of the above, Jamaica over the past 300 years has been subjected to geological, hydrological, and atmospheric hazards, particularly the southern coast of the island. Wind storms not only cause direct impact when hitting directly or passing nearby but are also cause to storm surges and rise in water levels that create severe flooding, a hazard particularly worrisome for urban coastal areas. According to historical data, storm surge has brought most of the death and destruction during hurricanes, and is the primary reason that coastal areas are evacuated as storms approach. Table 1 shows historical data for natural disasters in Jamaica.

Table 1: Summarized Table of Natural Disasters in Jamaica from 1900 to 2005

Natural Disaster	# of Events	Killed	Injured	Homeless	Affected	Total Affected	Damage US\$ (000's)
Drought	5	0	0	0	100,000	100,000	6,500
Avg. per event	0	0	0	0	20,000	20,000	1,300
Earthquake	1	1,200	0	0	90,000	90,000	30,000
Avg. per event	0	1,200	0	0	90,000	90,000	30,000
Epidemic	4	46	0	0	300	300	0
Avg. per event	0	12	0	0	75	75	0
Flood	13	767	0	53,422	845,290	898,712	1,262,740
Avg. per event	0	59	0	4,109	65,022	69,132	97,134
Slides	1	40	0	0	0	0	0
Avg. per event	0	40	0	0	0	0	0
Wind Storm	23	574	225	99,420	1,224,516	1,324,161	1,793,912
Avg. per event	0	25	10	4,323	53,240	57,572	77,996

Source: "EM-DAT: The OFDA/CRED International Disaster Database, www.em-dat.net - Université catholique de Louvain - Brussels - Belgium"

- 2.2 In 1979, after damaging floods, the government recognized the need to establish a permanent disaster management organization. The Office of Disaster Preparedness and Emergency Relief Coordination (ODIPERC) was established in July 1980. In 1993, with the Disaster Preparedness and Emergency Management Act, ODIPERC was changed to the Office of Disaster Preparedness and Emergency Management, created as a statutory body.
- 2.3 ODPEM actions have focused on disaster preparedness and emergency relief provision. However, Jamaica still has a high level of vulnerability to natural disasters. Disaster preparedness and emergency management are only one element that needs to be considered when promoting comprehensive risk management and there is need to work on other issues such risk identification, risk mitigation and risk transfer. Recent events such as Hurricane Ivan in 2004¹ and the severe flooding caused by torrential rains in May/June 2002² confirm the need to reduce Jamaica's vulnerability to natural disasters. This assessment was also confirmed with the report "Indicators of disaster risk and risk management" where Jamaica was found to be a high-risk country with high vulnerability as measured by different indexes³. This technical cooperation aims to partially fill the gap

¹ The ECLAC damage assessment estimated the cost of the impact in US\$580 million of which 62% were direct damage to physical assets and 38% were indirect losses.

² An ECLAC report valued the damage caused by the rains at US\$51.2 million, with US\$45.8 million being direct damages and US\$5.4 million being indirect.

³ The report proposed four indicators to represent the main elements of a country's vulnerability: (i) the Disaster Deficit Index (DDI) that measure country risk from a macroeconomic and financial perspective to catastrophic events; (ii) the Local Disaster Index (LDI) that identifies the social and environmental risks resulting from lower local events; (iii) the Prevalent Vulnerability Index (PVI) to characterize exposure and lack of resilience to natural disasters; and (iv) Risk Management Index measure risk management performance. Jamaica ranked low particularly in the LDI and PVI. For further information, see www.iadb.org/sds/doc/Main%20technical%20report%20IDEA.pdf

between current institutional capabilities and the establishment of a proper set-up for comprehensive disaster risk management. It must be noted that the latter requires a long-term strategy that incorporates risk identification; risk mitigation; risk transfer and improved preparedness in addition to the more well know areas of emergency relief, disaster response and post disaster recovery and reconstruction.

III. PROGRAM OBJECTIVE AND DESCRIPTION

A. Objective

- 3.1 The objective of this technical cooperation is to strengthen disaster risk management in towns and cities located in coastal areas in Jamaica. Specific objectives include improving coordination between ODPEM, local governments and communities; enhancing parish response capabilities; and providing institutional support to ODPEM.

B. Description

- 3.2 To fulfill the objective the technical cooperation has three components:
- a. Risk analysis for adequate planning: Includes the production of multi hazard assessments, hazard specific maps, a hazard vulnerability survey for households, organizations and critical facilities. In addition, this component will include the development of disaster risk management tools that can be incorporated in the formulation of development plans and the processes for development decisions.
 - b. Building resilient communities: This component includes public education and awareness programs; outreach preparedness programs to work with selected organizations, production of information materials and dissemination events; training of key local personnel in the areas of damage assessment, shelter management, development of community mitigation projects with ample stakeholder ownership.
 - c. Institutional strengthening of ODPEM: This component will include technical training and equipment to enhance ODPEM's understanding of disaster risk management in urban coastal areas. Appropriate training materials and programs will be designed and applied.

IV. COST AND FINANCING

- 4.1 The estimated total cost of the Technical Cooperation is US\$1,000,000, with US\$800,000 coming from the Disaster Prevention Fund of Ordinary Capital and

US\$200,000 being local counterpart funding. The estimated budget, to be refined during the design of the TC is shown in table 2.

Table 2: Estimated Total Cost (in US\$000's)

Budget Items	IDB	ODPEM	TOTAL
Component I: Risk analysis for adequate planning	350	50	400
Component II: Building resilient communities	120	30	150
Component III: Institutional strengthening	260	40	300
Administration	20	80	100
Evaluation and Audit	40		40
Contingencies	10		10
TOTAL	800	200	1,000

V. EXECUTING AGENCY AND EXECUTION STRUCTURE

- 5.1 Executing Agency: The executing agency is Office of Disaster Preparedness and Emergency Preparedness (ODPEM). ODPEM was established in 1995 with the Disaster Preparedness and Emergency Management Act. ODPEM, with a staff compliment of 67 people, operates out of the Ministry of Local Government and Environment and the day-to-day operations and management of ODPEM is under a Director General who reports to a Board of Management. There are three operational areas: (i) Preparedness and Emergency Management Operations; (ii) Mitigation, Planning and Research; and (iii) Projects Implementation and Monitoring. The technical cooperation will use ODPEM technical capabilities as much as possible and when necessary additional technical expertise will be contracted.

VI. MAJOR ISSUES

- 6.1 During the design phase of the TC, ODPEM's capacity to execute the TC will be examined, including mechanisms to monitor and evaluate the operation. Special attention will also be given to the need to involve other agencies, specially planning agencies, during the execution of the TC. This is because the cross sector nature of disaster risk management. Demand from local communities for the services that the TC will bring will be confirmed. Policy-makers and entrepreneurs have only recently acknowledged the significance of managing disaster risk. Traditionally, regional disaster management initiatives have focused on disaster preparedness and response to hurricanes in particular, with little attention paid to the complete prevention phase of the disaster cycle, or to sector

specific planning except in the case of health. In the design of the proposed technical cooperation, care will be taken to include measures that will increase the awareness of the need of prevention.

- 6.2 The operational guidelines of the DPF establish that at least 20% of the total cost of the operation should be local counterpart, preferably in cash. Considering Jamaica's current fiscal situation, the local counterpart source of funding will be judiciously examined with the executing agency and the government of Jamaica.

VII. ACTION PLAN

- 7.1 The approval of the TC Profile is expected for October 2006, and that of the Plan of Operations for December 2006. During the preparation of the Plan of Operations, the project team will undertake a mission to Jamaica to finalize the Plan of Operations. An individual consultant has been hired by EN3, with charge to the budget of the special initiative for disaster risk management, to collaborate in the preparation of the proposal.
- 7.2 The tentative execution period of this TC is 30 months, with a disbursement period of 36 months.

VIII. ENVIRONMENTAL AND SOCIAL STRATEGY

- 8.1 Since the technical cooperation focuses mainly on technical assistance, consultancy services, workshops, and publications, no environmental or social impact is expected from the execution of the TC. Following indications provided by the Implementing Guidelines for the Environment and Safeguards Policy (GN-2208-25), this operation is under category "C" and no Environmental Assessment process beyond this categorization is needed.