JAMAICA:

Disaster Mitigation, Preparedness and Response

A Community-Participation Approach

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I. BACKGROUND

In January 2010, a 7.3 magnitude earthquake devastated Haiti, destroying its capital Port-au-Prince, leaving over 220,000 dead, 300,000 injured, and about 1.8 million people homeless. According to an interview shortly thereafter by TIME magazine with a representative of the British Geological Survey in Edinburg, the particular type of earthquake that occurred in Haiti is a so-called "strike-slip - or transform - earthquake where one side of the fault slides horizontally past the other one. The Enriquillo-Plaintain Garden fault is a major plate boundary fault and is analogous to the San Andreas fault in California. It starts around the southern border between Haiti and the Dominican Republic and runs west until it reaches Jamaica. But strike-slip faults often run through populated areas, so they can be the most damaging to humans."

On the question whether the fault would be quiet now that the pressure had been released, the representative of the Geological Survey responded that "The pressure has probably shifted to the west, so it's likely that there will be another earthquake or perhaps a succession of earthquakes moving westward to Jamaica. That is not in the immediate future but in the next decades or 100 years. My guess would be that we will have another earthquake in Haiti or Jamaica within 20 or 40 years." ¹

A month later, on 27 February, Chile was hit by a 8.8 magnitude earthquake and a subsequent tsunami that left an official number of 521² people dead and over 100,000 in temporary shelters. Chile's second largest city of Concepción and other smaller towns close to the epicenter were structurally severely damaged. A comparison between this much stronger earthquake and the Haiti disaster followed immediately with the conclusion that – while there were a range of different circumstances – in essence more appropriate building codes and an in general better prepared population had resulted in comparably less loss and damage.

Haiti relief experts agree that the measure for success of the relief operation there will not only be the efficiency and effectiveness of humanitarian emergency assistance in the first weeks and months, but whether communities are left more resilient and better equipped when the next disaster strikes. The disaster risk profile for the Caribbean includes hurricanes, floods and earthquakes. Therefore, the question will not be if another disaster will strike - but when and how much damage it will cause.

With a population of over 2.7 million, Jamaica has recorded over 27 major natural disasters in the last 30 years.³ How fast the population of Jamaica, its natural environment and its economy will be able to recover from future disasters – such as the predicted earthquake through seismic activities along the Enriquillo-Plaintain Garden fault – will depend largely on the preparedness and resilience of its communities.

¹ Time Magazine, Seismologist Roger Musson: "Haiti Quake Was the 'Big One'", at

http://www.time.com/time/specials/packages/article/0,28804,1953379_1953494_1954165,00.html, 13 January 2010

² Radio Cooperative "<u>521 aumentaron los fallecidos por catástrofe en Chile</u>" at

http://www.cooperativa.cl/prontus_nots/site/artic/20100515/pags/20100515121228.html, 15 May 2010

³ PreventionWeb at http://www.preventionweb.net/english/countries/statistics/?cid=86

II. THE CASE FOR A COMMUNITY-PARTICIPATION APPROACH

Traditionally, the focus of disaster prevention, mitigation, preparedness and response rests on governments and their agencies as the primary bearers of responsibility for providing services to their populations. Consequently, during the preparation and in the actual event of a disaster, affected populations are generally relegated to the passive role of recipients of information and aid assistance.

While some initiatives acknowledge the importance of engaging communities in the process of drafting disaster response plans and in the course of needs assessments, they generally fall short of recognizing the communities themselves as a powerful resource to mitigate, prepare and respond to a disaster.

"Community participation has been recognized as the additional element in disaster management necessary to reverse the worldwide trend of increasing frequency and loss from disasters, build a culture of safety and disaster resilient communities, and ensure sustainable development for all."

It should be noted that in most documentation related to community involvement in disaster management, the concept is usually referred to as "community-based" disaster mitigation, preparedness and response. For the purpose of this document, the terminology "community participation" is preferred over "community-based", as the later may have the connotation of a process originating in the community while, in contrast, "community-participation" intends to stress a partnership with the government who remains the authority responsible for the national disaster management and policy framework.

1. Consequences of not using a community-participation approach

The effects of not - or only to a limited degree - including communities as active participants in mitigation and preparedness planning and as active responders in the responses to an actual disaster may result in the following:

- a) communities remain in shock longer if unprepared, thus making the work of government agencies and non-state actors more difficult, lengthy and costly;
- communities show frustration quickly with a little-understood government emergency and recovery process, thus placing additional pressure on an already overstretched government in times of disaster;

⁴ "Community based disaster management in the Philippines: Making a Difference in People's Lives", Victoria Lorna, Center for Disaster Preparedness, 2002

- c) information that is immediately needed by the government and its response partners on the extent of loss, damage and the number of populations affected is more difficult and time-consuming to collect;
- d) more people may be killed or sustain long-term injuries if unprepared, and where government assistance may take days to reach them;
- e) as a result, populations take longer to recover and remain longer in need of assistance;
- f) "cookie-cutter" response plans may not easily fit a local context and cause unnecessary longer-term social and economic problems;
- g) especially countries with few resources of their own and unprepared populations have often little choice but to accept longer-term foreign aid that leads to conditional dependency with a range of social and political implications.

By utilizing communities as a resource and re-positioning their role, many of these negative effects can be prevented or mitigated by the affected communities themselves. They constitute an underestimated and largely unused resource.

2. Advantages of using a systematic and institutionalized communityparticipation approach

Lessons learnt from communities that have used the community-participation approach in Asia, notably, the Philippines, Bangladesh, Cambodia, Nepal and Sri Lanka, have illustrated its many advantages.⁵

It should be noted that – although ISDR (International Strategy for Disaster Reduction) and others have advocated for the inclusion of the community approach in a national disaster management framework – the examples that have been implemented so far are in a local or regional context only, and are usually driven by non-governmental organizations.⁶

"Communities are at the front line of disasters', is a globally acknowledged fact. The importance attached to community focused and community led approaches to disaster management is paramount. Over time, it has become apparent that top-down approach to managing disaster risks is not sufficient in holistically addressing specific vulnerabilities of communities."

⁵ "Cambodia – Community Risk Assessment and Action Planning project", ProVention Consortium, 2005

 $[\]hbox{``Community-based disaster risk reduction'', Asian Disaster Management News, May-August~2008}$

[&]quot;Community based disaster management in the Philippines: Making a Difference in People's Lives", Victoria Lorna, Center for Disaster Preparedness, 2002

[&]quot;Community based approaches to disaster mitigation", Victoria Lorna, Center for Disaster Preparedness, 2003

⁶ for example, the Philippine National Red Cross has implemented its Integrated Community Disaster Planning Program since 1994

⁷ Loy Rego, Editor-in-Chief, Asian Disaster Management News, May-August 2008

The advantages of using systematic and institutionalized community participation as a corner stone of a national disaster management framework – covering disaster prevention, mitigation, preparedness and response – can be summarized as follows:

- 1. governments would be able to have an additional prevention, mitigation, preparedness and response resource available;
- 2. affected populations would become active participants and responders;
- 3. better-understood government processes could lead to less frustration in the response phase of a disaster;
- 4. mitigation, preparedness and response plans would be more adequately tailored to local customs and traditions;
- 5. local knowledge can be effectively and instantaneously tapped into for planning and response purposes;
- while this holistic approach requires some initial investment, its long-term financial and social benefits outweigh it with an anticipated reduction in the loss of lives and in the damage to physical infrastructure;
- 7. ultimately, especially countries with fewer resources become more self-sufficient in disaster management, thus averting external aid dependency.

"The HFA [Hyogo Framework for Action] also stresses the need for a holistic approach to disaster risk reduction that can link international, regional, national and community level initiatives. Communities themselves are not only usually the first responders to disasters but are also central actors in reducing risk. Therefore one of the key tasks of a national preparedness capability is to strengthen and enhance this capacity at the community level (including resource capacity), and to make sure that this capacity is reflected in national level planning processes."

Therefore, for the community-participation approach to be effective and useful, it has to be fully integrated into all levels of the national disaster management and policy framework.

 $^{^8}$ "Disaster Preparedness for Effective Response – Guidance and Indicator Package for Implementing Priority Five of the Hyogo Framework", United Nations, 2008, p. 8

III. ELEMENTS OF A COMMUNITY-PARTICIPATION APPROACH

A comprehensive model of community participation in disaster prevention, mitigation, preparedness and response will include an integration at both levels of the national disaster management framework, i.e.

1. the institutional level

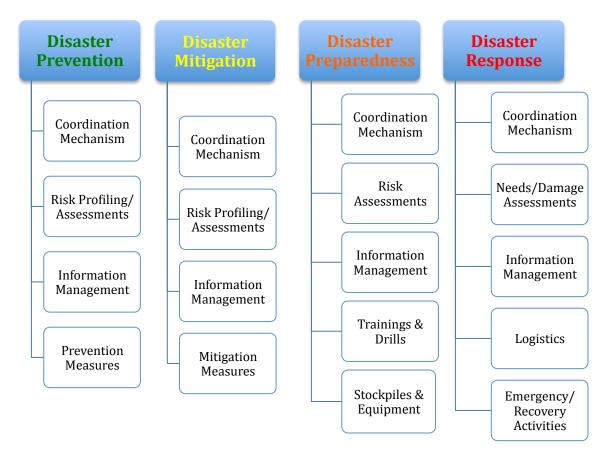
with appropriate participation at all levels, and

2. the policy level

with the substantive content of the national plans reflecting, where applicable and appropriate, the role of the communities.

A review of community participation in a national disaster management framework needs to take into account the various components for prevention, mitigation, preparedness and response. The question should be ask – for each – what contribution can be made at the community level, where can the community become active and help shoulder the responsibility?

Graph 1: Essential components of a typical disaster management framework –YR Model



The impact of a natural disaster on the progress of sustainable development will depend on the successful implementation of the different components of the disaster management framework

Although the substantive provisions and priorities for different national disaster plans will vary, these basic components should be present. Where there are additions, any possible community involvement there should be considered as well.

1. Common Components

Coordination mechanisms, assessments and information management are common components of the prevention, mitigation, preparedness and response processes.

a) <u>Coordination Mechanism</u>

While addressing different objectives for the four different phases, the issue of institutional participation cuts across prevention, mitigation, preparedness and response in the form of the "coordination mechanism".

What arrangements can be made for communities with their local knowledge and expertise to effectively feed directly into the decision-making process? How can they be included in the coordination structure?

b) <u>Assessments</u>

Again, the type of information to be collected during assessments will have a different focus for the prevention, mitigation, preparedness and response stages but they are closely linked. In fact, the assessments during one stage should ideal be an integral part and basis for the scope of assessments in the next stage. For example, risk profiling during the mitigation state will provide the foundation for information then used for disaster preparedness.

How can communities be included in i) defining the scope of assessments, ii) contributing to information collection, iii) participating in actual assessments, and vi) analyzing the findings and drawing conclusions for priority interventions?

c) <u>Information Management</u>

Information management is a critical mechanism that links communities with their government and other stakeholders in the disaster management framework. It ensures communication on efforts to respond to a threat or actual disaster and shapes expectations of what activities within what timeframes can be expected. For example, in order for communities to pace their own coping means during a calamity, it is important that they have been informed in advance on what to expect, how to prepare their household in light of the national response plans and how then to participate in the response itself.

How can information processes be adjusted so that communities are not only regarded as the recipient of information but become active participants in the production of material and information flow themselves?

2. Disaster Prevention and Mitigation

Involving the communities in the risk profiling process of their environment and drawing on local historical information is the starting point for designing prevention and mitigation measures. It also raises awareness of threats. Disaster mitigation specifically should consider using the concept of risk management composed of three interrelated components: a) hazard assessment, b) vulnerability analysis and c) enhancement of management capacity.

How can communities be involved in the design of disaster prevention and mitigation measures so that the best solutions are found — taking into consideration their local knowledge, customs and traditions?

3. Disaster Preparedness

The focus for stockpiles and equipment in a disaster preparedness phase is often on resources available at and to different levels of government and other organizations participating in disaster response. In some instances, households receive guidance on what minimum supplies (e.g. food, drinking water, first aid kid, radio etc.) they should stock up on to survive the first few days unassisted. This, however, is usually not the case in countries with few resources and where the population lives on a day-to-day basis. The fewer resources community members have, the more their vulnerability increases. Equally, training and drills often focus on disaster response agencies, but they rarely include community members at large. In some instances, disaster education takes place in schools.

Considering the fact that, in a large-scale disaster, individuals are often isolated for days until assistance arrives, it is important that — at the household level — community members receive the best available training on disaster preparedness. Initially, many will have to fight for their own survival and are the only ones to help their families and neighbors. First aid, how to use simple tools to recover a trapped victim, and initial survival strategies without little or no food are some of the basics that could help an individual to survive a disaster.

What measures can be taken at the household level to better prepare communities for a disaster, particularly with regard to training and stockpiles/equipment? Can these measures also be applied to communities with few resources? What extra preparedness will have to take place to respond to the specific survival needs of vulnerable groups, such as children, the elderly and the disabled?

4. Disaster Response

During a large-scale disaster – as the one that occurred in Haiti in January 2010 – probabilities are high that also local administrations and other organizations that have been assigned a function in the national disaster management framework sustain substantial damage, even at times to a degree that they are temporarily rendered non-functional. While communities cannot replace them, they can play a critical role in ensuring that basic functions, such as helping with the logistics of allowing external help to arrive, continue.

Members of the community will have sustained trauma and might be in shock to perform simple tasks. However, research has shown that those who are mentally prepared for a disaster and have practiced a response are more likely to survive and apply what they have practiced.

"We have the ability to survive almost any disaster—even the worst-case scenario of a terrorist-deployed nuclear bomb. Our bodies take care of a

lot of things for us, constricting vessels to reduce blood loss, and boosting muscle-enhancing hormones. Half the battle is just cognitively knowing you can survive. The other half is making it happen ... It's really important to create a sense of confidence in the public in their own abilities before a disaster because they're the only ones who are going to be there."

A community that has been well prepared and subsequently participates in the disaster response is more likely to survive and display less impatience while a government-led response unfolds. It can significantly assist the government and the aid community in its efforts and shorten the recovery time. Moreover, emergency and recovery costs can be reduced significantly. The affected communities themselves play a key role in the overall success of the emergency and recovery efforts, but much depends on their inclusion in the national disaster management framework.

How can communities be better prepared to participate in the emergency and recovery phase? What information needs to be disseminated to explain the emergency and recovery processes? How can communities be trained to help with needs/damage assessments, and where can functions be assigned to community members, where possible down to the household level, to actively participate in the response from day one?

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⁹ "The Unthinkable: Who Survives When Disaster Strikes—and Why", Amanda Ripley, 2008, also at http://motherjones.com/politics/2008/06/five-ways-survive-any-disaster

IV. STRENGTHENING COMMUNITY PARTICIPATION IN THE JAMAICA DISASTER MANAGEMENT FRAMEWORK

The current national disaster response plans for Jamaica, which came into effect in 1997, recognize the importance of the role of the community in minimizing the effects of an emergency or disaster:

"Although the Government has the overall responsibility for responding to a disaster, a community effort is invariably needed if the overall effect is to be minimized. It is part of the responsibility of the NEOC staff to ensure that a coordinated effort is made to avoid fragmentation and alienation." (Section 9.0)

The Ministry of Local Government and Works is tasked to liaise with the Parish Disaster Committee to "encourage the development of community arrangements to reduce the effects of emergencies and disasters" (Section 4.15). It is at that level through the Parish Disaster Committee that community-level activities are defined through **Zonal Programmes**, which then feed into the Parish Disaster Plans.

"The objective of the National Zonal Programme, is to strengthen the Disaster response capability of the communities and to develop local response mechanisms within the framework of the Parish Disaster Committees. The zonal programme will try to identify and network with active community-based organizations and to sensitize and train community leaders (and through them the residents) on how to reduce damage and to protect themselves from natural and man-caused hazards through local efforts at being prepared trained and properly equipped." (Section 8.6)

Communities are referred to in the entire cycle of disaster management, i.e. prevention, mitigation, preparedness and the recovery processes. Thus, the national disaster response plans recognize the potential of the communities in general terms.

However, with the information on disaster risks for Jamaica available at the moment and in light of tested and expanded models of community participation, the disaster management framework could benefit from a review and for an investigation into where it may be improved – in particular related to the activities and roles of its community members. Such a review may wish to, among others, focus on the following:

1. Institutional Participation

Apart from a Zonal Focal Point/Committee at the lowest level of the institutional disaster management structure, community representation does not seem to be present – or at least not institutionally assigned - at the next or following higher levels of administration.

For example, even at the next level of the Parish Disaster Committee (PDC) no mention is made of a community representative:

"The Custos and Mayor of the parish, with the Mayor being the working member of the committee, chair the PDC jointly. Other sitting members of the committee include all Parish Councilors and local representatives of the various agencies and interested groups." (National Disaster Response Plan)

Although in various sections the national disaster response plans refer to "community-based" organizations, this should not be a substitute for a community representative – someone who ideally should be independent and does not represent the interests of any single organization or representing only one specific group within that particular community. From the Parish level upward, no community representation has been assigned.

The recent Haiti earthquake has illustrated the delays of information flow upward and downward - and a corresponding delayed disaster response as, amongst others, a result of various levels of government having become incapacitated themselves by the magnitude of the calamity and the destruction to government institutions themselves.

Institutionally, the current disaster response plans make no provisions for how, in particular, information flow will be maintained where one management level has been incapacitated. This becomes particular important where the community-Parish structure has been disrupted.

One solution could be to compose a communications team of zonal programme members that convenes at the Parish level under the direction of the chair of the PDC and is trained on information that needs to be available without delay in the event of an emergency. If a PDC management is disrupted, the NDC may still be able to contact the communications team, composed of a number of individuals as opposed to a single focal point.

"A critical aspect of CERT effectiveness and potential for expanding into community development or other roles is representation of the entire local population. Drawing together diverse racial, ethnic, religious, and other groups provides a host of resources and experiences, but more importantly provides transparency in the local decision making process."10

2. Policies Incorporating a Community-Participation Approach

A comprehensive review of the entire national disaster management framework also from a policy perspective would be useful in engaging the community as a resource systematically - in the event of different types of disasters and in relation to corresponding activities that need to be carried out.

¹⁰ "Effective Community Response to Disaster: Exploring the Role of Community Emergency Response Teams", M.A. Brennan, January 2009

a) Streamlining the National Plan with Sub-Plans

While the National Disaster Plans make reference to the role of the community in some parts, it is not systematic. For example, the National Fire Management Plan mentions "community involvement" and "community policing", however the same is not the case for the national Earthquake Response Plan.

The Plan and its Sub-Plans – and with that their eventual execution shall the event arise – would benefit from i) a determination of what proactive role the community can play other then being the object of information or assistance, throughout the entire disaster management framework, and ii) once the community resources are identified, their systematic incorporation into the entire plan. Activities that apply to all types of disasters should also accordingly be reflected in all corresponding sub-plans.

b) Mitigation, Preparedness and Response at the Household-Level

"Before implementing CBDM it is important to know who in the community should be involved. The most vulnerable are the primary actors in a community. The focus should be at the household level." 11

The National Zonal Programme addresses community members directly by informing that

"Citizens can assist and benefit from the National Zonal Programme:

- Know the nearest focal point to you
- Know the nearest zone and zone chairperson
- Report any known hazards in your community such as broken down buildings, blocked drains etc.
- Be willing to give your service in a disaster (shelter manager, nurse)
- Be willing to lend equipment such as bulldozers in a disaster
- Attend community meetings
- Take part in seminars and workshops dealing with disaster management"

The overall policy structure, however, falls short of stating that one of the prime objectives of the National Plan is mitigation, preparedness and response at the household-level, and no specific policy provisions for how to achieve this systematically are made explicit in the National Plan or its Sub-Plans. For example, in Section 8.6 of the National Disaster Management Plan it states that

"The zonal programme will try to identify and network with active community-based organizations and to sensitize and train community

¹¹ "Disaster Preparedness and Management", S. Yodmani, Chapter 13 in "Social Protection in Asia and the Pacific, Asia Development Bank. 2001

leaders (and through them the residents) on how to reduce damage and to protect themselves from natural and man-caused hazards through local efforts at being prepared trained and properly equipped."

The Zonal Programme does not explain how it engages or benefits households directly. The focus seems to be on sensitizing and training community-based organizations and community leaders.

A review of the National Disaster Management Plan would benefit from a perspective of the household-level, how it can received the best available training, overall participate in the disaster mitigation, preparedness and response processes, and how it can itself to contribute to disaster management in Jamaica.

V. CONCLUSIONS

Jamaica is in a unique position to improve its national disaster management framework by (a) using currently available information on predictions for natural disasters that threaten its territory as well as (b) drawing on lessons learnt from experiences in other regions of the world that have experienced a range of different types of large-scale natural disaster over the past decades.

One opportunity now is to redefine the role of the community and tap into the enormous resource that it constitutes itself within the disaster management framework. Being the recipient of awareness-raising information material or the beneficiary of humanitarian aid assistance alone is not an adequate role for the communities. They can significantly contribute to government efforts, help minimize loss and damage, and effectively shorten the time and cost of recovery.

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VII. ANNEXES

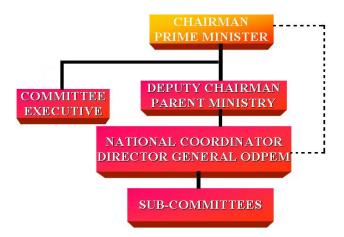
ANNEX 1 Jamaica's National Disaster Management Framework

Source: Government of Jamaica, ODPEM, at http://www.odpem.org.jm

The National Disaster Committee (NDC)

At the national level, Jamaica's disaster management programme is managed by the National Disaster Committee (NDC) and its six sub-committees.

The NDC is the senior Jamaican disaster planning body. The ODPEM is the main body within the NDC responsible for coordinating the management of the various types of disasters that affect the nation. The Prime Minister is the Chairman of the NDC and he/she is the overall manager of the nation's preparedness, mitigation, recovery and rehabilitation efforts.



Structure of the National Disaster Committee (NDC)

The National Disaster Committee (NDC) was initially conceptualized in the late 1970s as a Policy and Technical Oversight Committee to guide the Prime Minister on the planning and implementation of all measures considered necessary or desirable to plan for and counter the effects of disasters.

The Committee was then under the Chairmanship of then Prime Minister, Honourable Edward Seaga, and included several key agencies such as the permanent secretaries of several ministries, the Kingston and St. Andrew Corporation (KSAC), the Jamaica Fire Brigade (JFB), the Commissioner of Police, the Chief of Staff of the Jamaica Defense Force (JDF), among others. The Committee then became dormant during the 1980's but was eventually resuscitated in 1989 under the Chairmanship of Prime Minister Michael Manley

The Members of the NDC

Several agencies are members of the NDC that work alongside the ODPEM to fulfill its mandate. These include:

- All government ministries
- All utility companies
- International donor agencies such as the Salvation Army and the Red Cross
- Search and rescue organizations such as the Jamaica Defense Force (JDF), the Jamaica Constabulary Force (JCF) and the Jamaica Fire Brigade (JFB).

These agencies are placed within the response matrix to maximize their effectiveness.

The General Responsibilities of the NDC

As Chairman of the NDC, the Prime Minister meets once annually to approve disaster policy matters with the National Disaster Executive (NDE), the body that oversees the management of the ODPEM and the activated National Emergency Operations Centre (NEOC) in the event of a national emergency.

Normally, the various committees of the NDE produces and monitors mitigation, prevention and preparedness plans, while the ODPEM implements these plans to include the provision of education, training and other liaison activities with government organizations, non-government organizations (NGOs), public volunteer organizations (PVOs) and the Parish Councils, which are mandated to provide disaster relief at the local level.

The following are the general functions of the NDC:

- Meet annually to provide policy directives aimed at the protection of life and property in the event of a disaster.
- Review and monitor the National Strategy for dealing with disasters.
- Formulate guidelines and assign responsibilities to the National Response Team (NRT).
- Ensure adequate manpower and physical resources for emergency operations before, during and after a national disaster, while reviewing and evaluating national emergency operations contingency plans.
- Promote a public awareness programme on disaster preparedness and updating of database on potential disaster areas for effective management.
- Advise, monitor and supervise the annual work programmes of disaster related activities while coordinating emergency activities of voluntary organizations, both locally and overseas.

The Six Sub-Committees of the NDC

The following are the six NDC sub-committees and their various roles.

1. Administration, Finance and the Public Service Committee

The Administration, Finance and the Public Service sub-committee is jointly chaired by the Ministry of Finance and the Public Service (MF&PS) and the ODPEM. It is this Committee's responsibility to:

- Properly equip disaster management agencies
- · Ensure adequate staffing of disaster management agencies
- Fund emergency activities such as the provision of relief assistance
- Provide assistance in the National Emergency Operations Centre (NEOC)

2. Damage Assessment, Recovery and Rehabilitation Sub-Committee

The Ministry of Transport, Housing, Water and Works and the ODPEM jointly chair this sub-committee, which is divided into two entities: Damage Assessment and Recovery and Rehabilitation. The Ministry, through the National Works Agency (NWA), oversees the Damage Assessment component while the Recovery and Rehabilitation component is overseen by the Planning Institute of Jamaica (PIOJ).

This sub-committee is responsible for:

- Conducting damage assessment after a disaster
- Coordinating restoration activities to restore services and institutions after a disaster
- Providing assistance in the National Emergency Operations Centre (NEOC)

3. Emergency Operations, Communications and Transport Sub-Committee

The Jamaica Fire Brigade (JFB) and the ODPEM jointly chair the Emergency Operations, Communications and Transport sub-committee. It is this sub-committee's responsibility to do:

- · Rescues and evaluations
- · Law enforcement
- Establish and maintain communication links
- Coordinate transportation for emergency response

4. Public Information and Education Sub-Committee

The Jamaica Information Service (JIS) and the ODPEM jointly chair the Public Information and Education sub-committee. This subcommittee comprises representatives from partner agencies as well as media and communications managers who contribute to the effectiveness of the ODPEM's various public education programmes. It this sub-committee's responsibility to:

- Disseminate disaster management information.
- Conduct training exercises.

5. Welfare/Shelter and Relief Clearance Sub-Committee

The Ministry of Labour and Social Security (MLSS) and the ODPEM jointly chair the Welfare/Shelter and Relief Clearance sub-committee. It is this sub-committee's responsibility to:

- Establish and maintain the National Shelter Programme.
- Coordinate the clearance and distribution of relief supplies.

6. Health Planning Sub-Committee

The Ministry of Health and Environment (MoH&E) chairs this sub-committee along with the ODPEM. It is this sub-committee's responsibility to coordinate Emergency Health.

Disaster Management at the Parish Level

At the Parish level, the ODPEM works through Parish Disaster Committees (PDCs) that operate out of the Parish Council Offices.

These committees respond at the parish level whenever there is a disaster. They also forge links with the response agencies, community groups and community-based organizations.

The Custos and Mayor of the parish, with the Mayor being the working member of the committee, chair the PDC jointly. Other sitting members of the committee include all Parish Councilors and local representatives of the various agencies and interested groups.

Each Parish has a Parish Disaster Coordinator who is responsible for coordinating all activities geared towards awareness, prevention and response. Each Parish Disaster Coordinator has the responsibility of formulating its own plan to meet with local emergencies in keeping with the guidelines set out by the ODPEM.

Each PDC has the responsibility of formulating its own plan to meet with local emergencies in keeping with the guidelines set out by the ODPEM.

Disaster Management at the Community Level

- The National Zonal Programme
- The National Zonal Committee
- How You Can Help

The National Zonal Programme

After Hurricane Gilbert in September 1988, the ODPEM felt that communities needed to be better prepared to react in a disaster. As such the National Zonal Programme was put in place so that communities could manage internally for at least 72 hours until outside assistance could reach them following a disaster.

The Seventh Day Adventist Movement, through its Adventist Development and Relief Agency (ADRA), was identified and given the responsibility for providing leadership of the Zonal Programme in 1996.

This programme works by dividing the island into clusters of communities called zones, which are further divided into focal points.

1. Zones:

Communities across the island are divided into clusters called zones. A zone chairman, who gives information on disasters or potential disasters to the Parish Disaster Committees (PDCs), monitors each zone. The chairman must identify resource personnel, identify needed equipment for communities (e.g. radio, CB, cellular phones) and also identify other resources like backhoes and bulldozers.

In the event of a disaster the zones will be the first group to render assistance. Information concerning what has occurred will be communicated from the zone headquarters, which would be located at a Seventh Day Adventist church hall or school. Whatever assistance is needed would be coordinated from that location. It would also be the distribution centre where other support agencies such as the Red Cross, Salvation Army, and ADRA will give assistance to victims.

2. Focal Points:

Under the National Zonal Programme zones are further divided into focal points. The focal points operate on a smaller level to the zone and work along with the zone chairman.

Personnel at focal points should identify resources, ensure the availability of cellular phones, power saws and support personnel, e.g. nurses and doctors.

Focal points will also pass on information to zones regarding the state or level of disaster within their community.

The National Zonal Committee

The National Zonal Committee is the coordinating body for the National Zonal Programme and is responsible for:

- Monitoring all aspects of the programme
- · Preparing public education programmes
- Arranging fund raising programmes
- Preparing detailed Policy/Mission Statement for the programme

How You Can Help

Citizens can assist and benefit from the National Zonal Programme:

- Know the nearest focal point to you
- Know the nearest zone and zone chairperson
- Report any known hazards in your community such as broken down buildings, blocked drains etc.
- Be willing to give your service in a disaster (shelter manager, nurse)
- · Be willing to lend equipment such as bulldozers in a disaster
- Attend community meetings
- Take part in seminars and workshops dealing with disaster management

ANNEX 2 Jamaica Historical Disaster Statistics

Source: PreventionWeb, March 2010, at http://www.preventionweb.net/english/countries/americas/jam/

Jamaica - Disaster Statistics

Data related to human and economic losses from disasters that have occurred between 1980 and 2008.

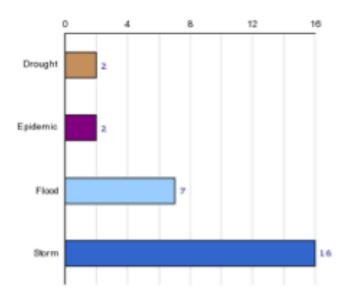
Please see also Risk profile

Natural Disasters from 1980 - 2008

Overview

No of events:	27
No of people killed:	210
Average killed per year:	7
No of people affected:	1,889,611
Average affected per year:	65,159
Ecomomic Damage (US\$ X 1,000):	2,599,855
Ecomomic Damage per year (US\$ X 1,000):	89,650

Natural Disaster Occurence Reported



Top 10 Natural Disasters Reported

Affected People

Disaster	Date	Affected	(no. of people)
Storm	1988	810,000	
Flood	1991	551,340	
Storm	2004	350,000	
Flood	1986	40,000	
Storm	2007	33,188	
Storm	1980	30,009	
Flood	1987	26,000	
Flood	2002	25,000	
Storm	2005	8,000	
Flood	2006	5,000	2

Killed People

Disaster	Date	Killed	(no. of people)
Flood	1986	54	
Storm	1988	49	
Flood	1991	15	
Storm	2004	15	
Storm	2008	12	
Flood	1987	9	
Flood	1993	9	
Flood	2002	9	
Storm	1985	7	
Storm	1980	6	

Economic Damages

Disaster	Date	Cost	(US\$ X 1,000)
Storm	1988	1,000,000	
Storm	2004	595,000	
Storm	2004	300,000	
Storm	2007	300,000	
Flood	1986	76,000	
Storm	2008	66,198	
Storm	1980	64,000	
Storm	2001	55,487	
Flood	1987	31,000	
Flood	1991	30,000	

ANNEX 3 Jamaica Risk Profile

Source: PreventionWeb, March 2010, at http://www.preventionweb.net/english/countries/americas/jam/

Jamaica - Risk Profile

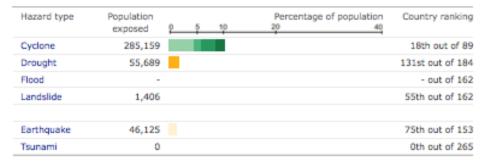
The risk is the combination of the probability of an event and its negative consequences.

This risk profile is an analysis of the mortality and economic loss risk for three weather-related hazards: tropical cyclones, floods and landslides. In addition new insights have been gained into other hazards such as earthquakes, tsunami and drought.

Please see also: Jamaica Disaster Statistics

Human Exposure

Modelled number of people present in hazard zones that are thereby subject to potential losses.



| Legend: | Tropical Cyclones (Saffir-Simpson categories) | Cat1 | Cat2 | Cat3 | Cat4 | Cat5 | | Earthquake (modified Mercalli scale classes) | V & VI | VIII | VIII | IX to XIII |

Economic Exposure

Modelled amount of GDP (Gross Domestic Product) present in hazard zones that are thereby subject to potential losses.

Hazard type	GDP exposed (billions-US\$)	0	5	10	20	Percentage of GDP	Country ranking
Cyclone	0.93						18th out of 89
Flood	-						- out of 162
Landslide	0.05						51st out of 162
Earthquake	1.50						64th out of 153
Tsunami	0.00						0th out of 265



Vulnerability and Risk

The characteristics and circumstances of a community, system or asset that make it susceptible to the demacing effects of a hazard.



>> How to read this table

Multiple Risk Map on Jamaica

The PREVIEW Global Risk Data Platform is a multiple agencies effort to share spatial data information on global risk from natural hazards. Users can visualise, download or extract data on past hazardous events, human & economical hazard exposure and risk from natural hazards. It covers tropical cyclones and related storm surges, drought, earthquakes, blomass fires, floods, landslides, tsunamis and volcanic eruptions. This was developed as a support to the 2009 Global Assessment Report on Disaster Risk Reduction (GAR). View the application: Global Risk Platform.

