CLIMATE CHANGE, GENDER & PERSONS WITH DISABILITIES IN SMALL ISLAND DEVELOPING STATES

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Preface

This publication is produced jointly by Friedrich Ebert Stiftung (Jamaica and the Eastern Caribbean) and Panos Caribbean. It is a testimony to our shared vision for a society in which the right to a clean, safe and productive environment is enjoyed equally by women and men, girls and boys – regardless of class, race, social status or (dis)ability. Partnering with Panos Caribbean to produce this publication is guided by the desire to share our collective experiences and expertise in the fields of climate change, gender and (dis)ability. This partnership also involved collaborating with Persons with Disabilities, the Office of Disaster Preparedness and Emergency Management, local authorities, and first responders, creating synergies and pooling resources effectively. It represents another important milestone in our partnership for sustainable human development for Jamaica.

The IPCC Climate Change Report 2014 informs us that: “Throughout the 21st century, climate-change impacts are projected to slow down economic growth, make poverty reduction more difficult, further erode food security, and prolong existing and create new poverty traps, the latter particularly in urban areas and emerging hotspots of hunger.”

This confirms that Jamaica, like other Small Island Developing States (SIDS) in the Caribbean, is pursuing its development objectives in a “climate-constrained” environment. Jamaica faces the challenges
of unsustainable high debt, high levels of poverty and unemployment, little or no economic growth, weak governance and high levels of crime, among others.

To successfully address these challenges in the face of climate change impacts, SIDS, like Jamaica, require sustained and targeted adaptation and mitigation policies. Measures are also needed to ensure social protection and disaster-risk management. Adaptation planning and implementation can be enhanced through collaboration between individuals, communities and governments. A key benefit of an integrated approach is the increased resilience of poor and marginalized peoples who face the inequalities posed by the interlocking issues of gender, disability, race, social status and class.

These are some of the issues explored in this collaborative publication by FES Jamaica and Panos Caribbean. It also seeks to highlight opportunities for further research and advocacy in this field.

FES Jamaica acknowledges the work of Mira Krause, who, as part of her internship, contributed considerable background information to the production of this publication.

Judith Wedderburn  
Director/Representative  
Friedrich Ebert Stiftung, Jamaica and the Eastern Caribbean  
December 2014
Climate change is perhaps the single most devastating challenge facing small-island developing states (SIDS), among which Jamaica and the other islands of the Caribbean are counted. Among other things, their small size and struggling economies place them among the world’s most vulnerable to climate change impacts.

Such impacts range from extreme weather events, such as hurricanes, floods and droughts, to global warming, sea level rise and increasing sea surface temperatures, all of which pose a threat to lives, property and livelihoods.

But just what is climate change? It refers to global changes in climate characteristics, which means a change in temperature, rainfall patterns or weather events over a long period of time. To help put this into perspective, it is worthwhile to understand that while weather describes actual occurrences in the atmosphere, climate refers to the average weather over a longer period of time.

Changes in climate can be the result of naturally occurring events, but as current research indicates, it is also the result of human activities. For example, industrialisation and global pollution produce high levels of carbon dioxide (CO₂) emissions, which cause global warming – described as an overall warming of the earth.
China, the United States of America, Russia, Germany and several other developed countries lead the field in contributions to global CO\textsuperscript{2} emissions and are, therefore, the biggest “producers” of climate change.

Meanwhile, most definitions of SIDS share the following characteristics: “small size, remoteness, vulnerability to external shocks, narrow resource base [and] exposure to global environmental challenges”. SIDS, as noted, have vulnerable economies and their capacity for dealing with environmental challenges or responding to disasters is very limited. It is recognised that these states are among the most endangered and vulnerable to the impacts of climate change. The Environmental Vulnerability Index (EVI), for instance, classifies Jamaica as extremely vulnerable to climate change impacts.

Based on geographical location and economic status, SIDS have to contend with the consequences of climate change although they are not the trigger for these events. Climate change leads to rising sea levels and temperatures, increases in the intensity of hurricanes, and in vector-borne diseases, such as dengue.

In particular, rising sea levels and severe hurricane events have a significant impact on Jamaica and other Caribbean islands. Beaches are eroded, there is increased risk of saline intrusion into groundwater supplies and coastal ecosystems and important marine species are destroyed or otherwise come under threat.

In addition, natural disasters affect the long-term development of the Jamaican economy. Investments for reconstruction of damaged or destroyed infrastructure, for example, is a significant burden on government budget, which negatively impacts the economic growth of the country.

In 2004, Hurricane Ivan, for example, caused damage that amounted to over US$500 billion. The cost of appropriate adaptation and/or preventive measures in contrast to the cost of investments for reconstruction work could be much less.

Climate change impacts also endanger several sectors, notably agriculture, fisheries and tourism on which many SIDS are heavily
dependent. Farmers are particularly vulnerable to the after-effects of natural hazards as houses and farms can be destroyed, and whole harvests washed or blown away.

Consequently, many individuals and families lose their main source of income and food security in general is endangered. Access to basic needs, such as health care and other social services, including potable water, are severely limited or absent due to the destruction of infrastructure, roads and buildings following a hurricane or heavy rainfall event. Limited government budgets mean that there are delays in reconstruction. Destruction of infrastructure also contributes to several social problems, including increased costs for food, health care and transportation.

Research and personal experiences indicate that persons with disabilities are among those who stand to be worse affected by the impacts of climate change. There are, therefore, special requirements to be met for effective disaster risk management and protection of this group of persons, in response to disasters. These should include timely access to public warnings and information; transportation to shelters that are safe and readily accessible; as well as provisions for the purchase of basic supplies and medicine.

At the same time, the ways in which women and men are affected differently by these conditions are influenced by their gendered roles and responsibilities. Dunn (2013) notes that “justification for mainstreaming gender in disaster risk management is guided by the United Nations Framework Convention on Climate Change: the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC 2007) which noted the gender dimensions and differential impact of climate change”.5

This is supported at the regional level, through the Caribbean Disaster Emergency Response Agency (CDERA), which has produced an Enhanced Caribbean Disaster Management (CDM) Framework (2007–2012), and which states: “gender issues have been clearly highlighted in response to and recovery from recent events and should, therefore, be integrated into each of the four outcomes”.6
This publication provides insight into the experiences of persons with disabilities, men and women through a sharing of their own reflections and perspectives regarding their particular needs and strengths, in the effort to effectively treat with climate change. It looks, too, at existing legislative and policy frameworks and shares a best practice, as exemplified by the Panos Disaster Risk and Climate Change Management Project in Portmore, St. Catherine for which funding support was received from the Canada Caribbean Disaster Risk Management Fund (CCDRMF) through the Canadian International Development Agency.

The intention is to inform next steps on the road to successful medium- to long-term climate change adaptation in Jamaica, other islands of the Caribbean and SIDS in general.

Indi Mclymont Lafayette
Petre Williams-Raynor
Panos Caribbean
December 2014
It is one of the things that many people detest: having to go to a shelter during or after a hurricane. It can be a very stressful experience for anyone, but even more so for persons with disabilities.

‘Each time you go to the bathroom as a blind person, if you are not orientated to the area where the shelter is or the surroundings, you are going to be asking somebody to go with you. So sometimes it takes away your privacy, your dignity,’ said Gloria Goffe, Executive Director of the Combined Disabilities Association (CDA), a non-government advocacy organisation for persons with disabilities. ‘If the bathroom is not accessible, sometimes the person who uses a wheelchair has to be lifted out of that chair and placed. And women especially would have a challenge because how we use our bathrooms are sometimes a little different, even for passing urine.’

Goffe gave just one example of how the basic rights of persons with disabilities get overlooked in disaster preparedness planning. But there are others. Yet, every individual, regardless of sex, gender, age, disability or impairment – whether intellectual, physical, visual, hearing or speech – has a right to humane treatment during and after disasters at shelters. The barriers faced in exercising their rights, and the real difficulties encountered by persons with disabilities during and after disasters are many, but not well known. There is, therefore,
an urgent need to raise public awareness about the particular challenges facing this group.

‘[...] We still have people who are not very aware [...]’ said Goffe.7

An effective Disaster Risk Management Programme will address the needs and concerns of all persons affected by a disaster, and will ensure that the special requirements of persons with disabilities are met, irrespective of their specific disabilities. Such programmes will ensure the presence of specially trained and sensitised staff during rescue operations and at shelters.

This staff will ensure that persons with different disabilities are respected and receive adequate care and treatment. This is urgently required to correct the current situation in which, Goffe reports, the special needs of male and female persons with disabilities are not respected or fulfilled in case of a disaster.

Shelter from any disaster is expected to provide basic first aid and sanitary supplies (e.g. water, special medication and sanitary napkins) and should be made available to all persons in need of them. This is the only way to guarantee the proper and humane provision of basic needs and health services. This point is closely connected to the need to create spaces for privacy. Persons with disabilities must have access to a bathroom without assistance (unless required) to protect their privacy, especially women.

It is further emphasised that shelters must also be safe and secure spaces for all persons needing this service, especially women and children with disabilities who are more vulnerable to sexual abuse. Shelters should be monitored to provide special protection and prevent sexual abuse and rape. Apart from these general needs of persons with disabilities, there are also special requirements of persons with different disabilities that need to be addressed.

**Persons with intellectual impairment:** Instructions or warning messages concerning disasters should be clear and simple to ensure that they are easily understood, and will not leave persons at risk and in danger due to a lack of understanding. Depending on the intellectual impairment, the “new” environment at the shelters can be disruptive
and psychologically challenging. Therefore, “it’s always good to have people who are understanding and who have the knowledge of how to interact with the different types of disability groups or at least recognise the differences and therefore apply the behaviour or the treatment that is relevant to that individual” (Goffe, CDA). Also, depending on the individuals’ mental state and experiences during a disaster and at the shelters, follow-up treatment might be required.

**Persons with physical impairment:** It is very important that information and warning messages are announced in good time on TV, radio and through any other media, including social media. This is to ensure that sufficient preparation can be made for any approaching disaster. Shelters should be on the ground floor, with proper ramps in place to ensure ease of access. In addition, transportation to the shelters in case of emergency must be guaranteed. Many of Jamaica’s shelters still need to have ramps installed and other disabled friendly improvements made.

*Shelters should be on the ground floor with proper ramps in place to ensure access.*
Persons who are visually impaired: Clear and detailed announcements on television, radio and in print and Braille – made available in good time – are vitally important for ease of access to information. Persons who are visually impaired also need precise information about the location of the shelter and about unfamiliar routes. For example, familiar routes to the shelter might be destroyed or made inaccessible due to the disaster so that extra time and information is necessary for them to re-orient themselves, in case of an emergency. It is difficult for a visually impaired person to re-orient him or herself in a new environment so it is essential that they receive the information concerning location and alternate routes to shelters in advance.
Persons with hearing and speech impairments: Information and warning messages must also be announced in sign language on television to ensure that this community of persons with disabilities can receive and use this information.

‘Then how the information is disseminated [also] affects how Persons with Disabilities cope or prepare for the disaster. For example, the deaf person might see the information on the television but most of the discussion takes place verbally, orally, and unless that deaf person is very good at lip reading, it will be difficult for them to know what’s happening. So they are not able to prepare effectively for the disaster,’ explained Goffe. ‘And women... women with disabilities
also have children that they need to prepare [and] they themselves need to prepare for the disaster just like every other woman. But for them, if they have a disability, they might have to use additional preparation.

Further, trained staff at the shelters should be able to speak sign language and information made available on public notice boards. Communication limited to verbal conversations and transmission of information exclude this group of persons with disabilities. There is, too, an urgent need for an emergency text number that enables a speech-impaired person to trigger an alarm. ‘We have been trying, but we could not get support to ensure that there is a 119 emergency service by text that deaf persons can access’ (Goffe, CDA).\textsuperscript{8}

\hspace{1cm} A bathroom that is fitted for persons with disabilities.
### DIGNIFIED TREATMENT – HONOURING THE RIGHTS OF PERSONS WITH DISABILITIES

Disaster Risk Management for Persons with Disabilities

<table>
<thead>
<tr>
<th>Persons with intellectual impairment</th>
<th>Persons with physical impairment</th>
<th>Persons with visual impairment</th>
<th>Persons with hearing and speech impairments</th>
</tr>
</thead>
<tbody>
<tr>
<td>– Simplified instructions and information material</td>
<td>– Information and warnings announced on TV and radio in good time</td>
<td>– Information and warnings announced on TV and radio in good time and information material in Braille</td>
<td>– Information and warnings in sign language on TV and social media in good time</td>
</tr>
<tr>
<td>– Sensitised and trained staff during rescue and at the shelters</td>
<td>– Accessibility of shelters e.g. ramps or rooms on the ground floor</td>
<td>– Exact information about location of the shelter</td>
<td>– Emergency text numbers for messages</td>
</tr>
<tr>
<td>– Suitable bathrooms for Persons with Disabilities</td>
<td>– Suitable bathrooms for Persons with Disabilities</td>
<td>– Information about unfamiliar routes to the shelter</td>
<td>– Trained staff who know sign language for rescue and at shelters</td>
</tr>
<tr>
<td>– Special protection for women and children (due to vulnerability to sexual abuse)</td>
<td>– Trained and sensitised staff during rescue and at the shelters</td>
<td>– Accessible terrain</td>
<td>– Information available on public notice boards, not only verbally</td>
</tr>
<tr>
<td>– Medical and sanitary supplies e.g. water and sanitary napkins</td>
<td>– Accessible terrain</td>
<td>– Suitable bathrooms for the Persons with Disabilities</td>
<td>– Special protection for women and children (due to vulnerability to sexual abuse)</td>
</tr>
<tr>
<td>– Protection of privacy, especially for women</td>
<td>– Special protection for women and children (due to vulnerability to sexual abuse)</td>
<td>– Trained and sensitised staff during rescue and at the shelters</td>
<td>– Medical and sanitary supplies e.g. water and sanitary napkins</td>
</tr>
<tr>
<td>– Follow-up treatment (if needed)</td>
<td>– Medical and sanitary supplies e.g. water and sanitary napkins</td>
<td>– Special protection for women and children (due to vulnerability to sexual abuse)</td>
<td>– Protection of privacy, especially for women</td>
</tr>
</tbody>
</table>
Is it really necessary to assess how disasters affect men and women differently? Isn’t the key thing to ensure that all groups, as much as possible, are covered in disaster recovery responses? These are common questions that many ask when this issue is initially raised, but there is much to show that disaster preparation and response benefits greatly from applying a gender lens.

Research shows that when gender is taken into consideration, the needs of men and women are better met in post-disaster recovery. For example, the Guide to Gender-Aware Post-Disaster Needs Assessment is a tool designed by UNDP/ECLAC to identify and assess post-disaster needs of women, girls, boys and men across sectors. Not surprisingly, the findings closely mirror the different demands and social expectations that women and men generally face due to their gendered roles and responsibilities.

The Guide reports that “post-disaster experience reveals that:

i. women and men are affected by natural disasters in similar and different ways; and

ii. recovery activities are often effective when they reflect and address the specific articulated needs, priorities and interests of both women and men.

There is also growing recognition that women play important roles
in recovery processes, despite perceptions about women’s roles and place in public and private spheres”\textsuperscript{10}.

To better understand the differential impact of climate change-related hazards on families and communities, some additional factors need to be considered, such as socio-economic status, access to social infrastructure, size and composition of family, and gender of household head.

Research confirms that climate change-related hazards include hurricanes and periodic severe weather events, such as storm surges, floods and droughts. These have specific implications for coastal communities which are home to critical economic activities and services, such as tourism, the livelihoods of fisherfolk, and air transportation.

Mountainous communities provide livelihoods for subsistence farming families, and for important export agricultural sectors, such as coffee and bananas, as well as food for domestic consumption – the latter being critical to food security. The above-mentioned hazards often result in disruption in access to important social infrastructure, such as hospitals, as well as electricity supplies and road networks.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{bridge_swept_away.jpg}
\caption{A bridge being swept away during flood rains which affect access to social infrastructure.}
\end{figure}
It is vitally important to understand how this impacts men and women. For example, men are mainly involved in preparatory safety activities, such as battening down windows, securing roofs and cutting trees) or on the road preparing for a potential disaster or helping in rescue activities and reconstruction work afterwards. What particular dangers could men face in fulfilling these expected gender roles?

Women, on the other hand, are responsible for providing and caring for the family, purchasing emergency items, preparing food, and taking care of the children and the elderly. It is reported that 47 percent of households in Jamaica, for example, are headed by single women, many of whom are financially dependent on men. Paid construction work, which may become available after a hurricane, is mainly done by men so women have less possibilities for earning money after a disaster, despite the fact that households headed by single women are often larger than those headed by men. The result of women’s gendered role is that they continue to stay home and care for the family and not to work outside, further increasing their financial dependence on men.
Do women and men face different risks from natural hazards, in light of their expected gender roles and responsibilities? Can disasters reinforce or change roles of women and men, whether as heads of households or as first responders?

Further exploration of these questions requires consideration of women’s traditional care work, when they are the only adult head-of-household and the family needs urgent help to secure a roof or window. This requires that such women take on additional gender roles, to protect the family from this particular vulnerability, and related risks.

On the other hand, men’s traditional gender responsibility for cutting down trees, cleaning up landslides, securing animals, and fixing roofs is likely to be reinforced, both as first responders and heads of households. This exposes them to different risks, such as physical

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### Summary: Differential Gender Impacts of Hazards on Women and Men

<table>
<thead>
<tr>
<th>Gender Impact on Women</th>
<th>Gender Impact on Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female household head, usually with no partner.</td>
<td>Male household head, usually has a partner</td>
</tr>
<tr>
<td>Household has access to one regular income</td>
<td>Household may have access to two incomes.</td>
</tr>
<tr>
<td>New tasks may emerge in addition to normal caring/household work.</td>
<td>Gender roles reinforced in post-disaster period?</td>
</tr>
<tr>
<td>Possibility of additional/changing gender roles?</td>
<td>Increased risk of physical injury in post-disaster period</td>
</tr>
<tr>
<td>Increase social vulnerabilities in post-disaster period</td>
<td>May have access to repair work in post-disaster period</td>
</tr>
</tbody>
</table>
injury, but also to the possibility of earning additional income from post-disaster restoration activities.

Reports from the Combined Disabilities Association (CDA Jamaica) indicate that in respect of disasters, shelters are often not sensitive to the personal hygiene needs of women and girls, as protection by way of suitable bathrooms, which offer privacy and proper sanitary equipment, are oftentimes not provided. As a result, at shelters, women and girls are most vulnerable to sexual abuse and violence, and women with disabilities are particularly vulnerable under these conditions.

Physical access to shelters and threats to personal security are additional challenges faced by both women and men with disabilities. Mitigation and disaster risk management programmes and activities should, therefore, be gender-sensitive and should respond to the specific needs and rights of persons with disabilities.
To identify the multiple gender dimensions and issues affecting persons with disabilities, the *Guide to Gender-Aware Post-Disaster Needs Assessment* also seeks to promote the recommendations articulated in the guidance handbook of the Inter-Agency Standing Committee (IASC) published in 2006,\(^\text{11}\). These recommendations include, among others, that assessors should put women, men, boys and girls at the centre of assessments and consult with the affected populations. This would include all vulnerable groups, including persons with disabilities and women.

In addition, the Guide\(^\text{12}\) outlines how to:

i) Collect post-disaster quantitative and qualitative sex- and age-disaggregated data across sectors;

ii) Identify post-disaster resilience and vulnerabilities of women, girls, boys and men who experience multiple forms of marginalisation which class/caste, ethnic/racial, rural/urban distinctions may intensify;

iii) Identify post-disaster context-specific needs and priorities of affected communities and authorities, and the gendered dimensions therein;

iv) Identify public and private multi-sectoral strategies, mechanisms and processes that serve to reinforce gender-aware, community-based, spontaneous recovery initiatives; and

v) Enhance post-disaster recovery planning through inter-agency collaboration and shared response to identified gender-aware sectoral needs.

In relation to the points listed above, the Panos Disaster Risk and Climate Change Project in Portmore, St. Catherine is an example of how some relevant issues have been addressed through inter-agency collaboration and multi-sectoral strategies, mechanisms and processes. It highlights the value of partnership involving:
disaster response organisations, such as the Office of Disaster Preparedness and Emergency Management (ODPEM), Red Cross and the Meteorological Service of Jamaica;

- a local authority, such as the Portmore Municipal Council;

- the Combined Disabilities Association; Jamaica Association for the Deaf and the Portmore Self Help Group

- international development partners, such as the Canada Caribbean Disaster Risk Management Fund, and the Friedrich Ebert Stiftung; and

- the media (a private local radio station).

The partnership ensured that persons with disabilities in three (3) communities in Portmore, St. Catherine were able to design and implement an early warning system that would enable them to respond more quickly to disasters, such as hurricanes. The next chapter provides more detailed information.
A Best Practice

The Panos Disaster Risk and Climate Change Project

Synopsis

In October 2013, Panos Caribbean, the Office of Disaster Preparedness and Emergency Management (ODPEM), the Combined Disabilities Association (CDA) and Jamaica Association for the Deaf (JAD) collaborated to launch an Early Warning System (EWS) for persons with disabilities in three communities – Gregory Park, Waterford and Bridgeport in Portmore, St Catherine.

The EWS saw more than 140 individuals trained in working with persons with disabilities during disaster situations. It also saw persons with disabilities being trained on the impacts of climate change and disasters. Additionally, all stakeholders were trained in the operation of Emergency telecommunications equipment as part of the EWS response. Another partner – the Portmore Municipal Council – also did a simulation exercise to identify how well the EWS functions.

Background

The idea for this project had its genesis in the June 18, 2009 National Forum for the Disabled, put on by the Government of Jamaica. The forum revealed a significant disconnect within the disabled commu-
nity and between the community and the rest of society. Among other things, significant communication gaps, it emerged, had resulted in critical information not being shared with or disseminated within the disabled community, leading to slow disaster response. The deaf community in particular was highlighted as being especially vulnerable to not receiving information.

The idea was further developed over a two-year period, through meetings and discussions with representatives from the disaster and disabled sectors. Those meetings highlighted the extent of the vulnerability of disabled persons in a disaster while revealing that many of the leading organisations for disabled persons were not a part of any structured disaster response mechanism. Numerous stories were told of getting disaster-related information late and the serious challenges to responding to a disaster that came about as a consequence.

The identified challenges included:

1. A lack of early notification of a disaster, resulting in a lack of preparedness.
2. The inability to relocate from home to a shelter or a safer place due to the lack of necessary resources, such as transportation, manpower, etc.
3. Shelters ill-equipped to deal with the needs of the disabled (including inaccessible bathrooms and a lack of wheelchair ramps).
4. The minefield of physical infrastructure created after a disaster, leaving persons with disabilities vulnerable to injury, courtesy of debris and road damage of which they are not appropriately advised.

From as early as 2004, Goffe of the CDA has been highlighting some of the weak areas regarding disaster risk preparation for persons with disabilities.
“Even if you can get into the shelter itself, the bathrooms are not accessible for people in wheelchairs and even persons with crutches. The toilet seats are uncomfortable. To use the toilet some disabled persons need chairs because their knees can’t bend and if the chairs are too low or too high, it might affect them,” Goffe was quoted in the Jamaica Observer of December 12, 2004 as saying.

“It is also important to have bars in the toilets and showers, for them to be able to grab onto so that they can seat themselves on the toilet or bathe,” she added.13

The cry has not changed much as reflected in the July 11, 2011 edition of the Jamaica Gleaner, in which President of the Jamaica Association for Persons with Intellectual Disabilities, Michael Rodriguez called for the disabled to be included in disaster planning.

“There is an urgent need for the involvement of people with disabilities and other vulnerable populations to ensure equal access to disaster response and relief,” declared Commander Michael Rodriquez, who was attending a Disaster Management Symposium and Information Fair in Portmore, St. Catherine.

“Individuals with disabilities are disproportionately vulnerable in (times of) emergencies and face numerous challenges accessing resources for response and recovery. Emergency preparedness drills should include real participation of people with disabilities,” he added, while also noting that simulation exercises where able-bodied persons take the role of disabled people should be avoided.

This project has helped to bridge the disconnect between disabled community and agencies with responsibility for disaster management by ensuring that there is an adequate pilot response system in Portmore, St. Catherine that has been designed with the full input of persons with disabilities to meet their needs. United Nations estimates are that about 10% (280,000) of Jamaica’s population are disabled.
Purpose

The project created a pilot early warning system and evacuation plan for Waterford, Gregory Park and Bridgeport in the vulnerable community of Portmore in St. Catherine. The EWS was developed for hurricane and flooding and was guided by the Tsunami and Evacuation Plans that ODPEM already has for Portmore. This system catered specifically to the disabled (physically and mentally challenged, deaf and blind persons).

The UN Convention on the Rights of Persons with Disabilities says that ‘persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments, which, in interaction with various barriers, may hinder their full and effective participation in society on an equal basis with others.’

The pilot EWS focused on the needs of all disabled persons accessible within the three named communities. Portmore in South-eastern Jamaica was chosen based on its location and vulnerability. It has over 250,000 persons, accounting for nearly 10% of the country’s population. Several neighbourhoods in Portmore are in low-lying areas, prompting major and time-consuming evacuation exercises once a major climate hazard threatens. It is also said to have a good concentration of persons with disabilities. According to the CDA, at least 5,000 persons with disabilities live in the three target communities in Portmore.

The project helped improve the capacity of the disabled to respond, plan and adapt/mitigate against climate change and major hazards to which Jamaica is exposed (flooding and hurricanes – two of the impacts of climate change). The main component entailed the development of the pilot EWS model, which was complemented by a media and communication element.

This helped to:

a) improve the availability and uptake of disaster management and climate change information by the disabled sector to ensure
improved emergency communication and response mobilisation; and

b) strengthen multi-sector information sharing and communications (among the disabled sector, disaster management agencies, media and other relevant stakeholders/actors) to ensure a smoothly operational EWS.

Outputs:

1. **Documented and established interagency communications channels.**

The channel started with ODPEM and the Met Office of Jamaica’s identification of the disaster threat level. They would then ensure that the disabled are informed of the disaster threat as well as their other key stakeholders. ODPEM already has a disaster response channel but under this project, an element was added to ensure that the sensitised persons in the disabled community were alerted to help mobilise and evacuate others. The disabled, depending on their level of vulnerability, would then be evacuated to the Nago Head shelter. Under the project, there was newly improved physical infrastructure (ramp, portable potties and improved bathroom facilities) for Nago Head, which serves as a key shelter in Portmore to ensure that it is equipped to cater for persons with disabilities. It did not have a ramp and the bathroom facilities were remodeled to ensure easy access by persons with disabilities. Aids, such as bars for holding on, were also installed.

2. **At least 200 persons with disabilities trained and equipped to respond to climate change and disasters.**

Ten of these persons were deaf persons with the video phones equipping them to reach at least another 100 deaf persons in their network in a disaster.
3. **Media engagement.**

   At least two media houses (television and radio) engaged as part of the early warning response system.

4. **Mobilisation and Training.**

   At least 20 shelter managers and 40 caretakers of the disabled/community mobilised and trained to assist the disabled in disaster response, preparedness and evacuation.

5. **Registry creation.**

   An updated listing and registry of persons living with disabilities in flood-prone areas, starting with those in Portmore. This was shared with key disaster responders in the Kingston Metropolitan Area (KMA).

6. **Disabled representation in community disaster planning.**

   This meant that an organisation working for the disabled, such as the Portmore Self Help Group was asked to be the focal point and sat on the Parish Disaster Committee and/or the Portmore Community Disaster Committee. Input was fed via this mechanism to ODPEM. However, there was also direct access to ODPEM if and when necessary.

7. **Production and airing of media messages.**

   After the pilot EWS was successfully tested and in place, several media messages were produced and aired.

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**Project highlights**

1. **Interagency meetings (3) and project steering committee established.**

   These strengthened the lines of communication among the disaster response agencies.
2. **Compilation of a registry of disabled persons living in vulnerable areas for ODPEM coming out of the interagency meetings.**

The CDA worked with the Jamaica Council for Persons with Disabilities and produced a registry with 148 persons with disabilities in the vulnerable communities. The media component of the project encourage persons to sign up so that they could be a part of the disaster response nexus.

3. **Development and sharing of hazard, disaster and climate risk information for the disabled.**

This was done through a series of six training workshops reaching 190 stakeholders (disabled, media and disaster response teams, including the community and parish response coordinators). Workshop details are:

- Two workshops to share hazard, climate change and disaster information with the disabled community in Portmore and the rest of the Kingston Metropolitan Area. These were organised jointly by ODPEM in collaboration with Panos and FES Jamaica.
- Two workshops involving training and sensitisation for disaster response agencies and community persons on working with the disabled. These were led by the organisations working on disability issues, such as the CDA. This was important to the functioning of the EWS to ensure that the requisite disaster response agencies felt comfortable working with the disabled, and were not intimidated when they are not clear on how to tackle the problem.
- One workshop to train media practitioners and how to report issues concerning persons with disabilities was also held.
- A final workshop providing communication training with a focus on designing appropriate disaster messages and disseminating information was organised jointly by Panos Caribbean and FES Jamaica. FES partnered with Panos initially in the training of journalists re disabilities and climate issues as well as on
the project itself. FES also funded and partly organised a follow-up messaging session with persons with disabilities in Kingston to ensure that the media messages fully reflected the voices of Persons with Disabilities.

4. Development of a special EWS for the disabled on hurricanes and flooding.

This activity supported ODPEM’s 2011–2014 country work programme. It fell directly under outcomes 1.1, 2.1 and 4.1 respectively. Outcome 1.1 calls for improved knowledge and understanding of communities on priority hazards and disaster preparedness and mitigation. Outcome 2.1 speaks to enhanced institutional capacity of key agencies, sectors and local authorities to manage disasters. Finally, Outcome 4.1 concerns early warning systems for disaster risk reduction enhanced at the national, parish and community levels for all hazards.

These outcomes all fall under Jamaica’s 2030 National Development Plan. It would support the section on reducing risk to hazards and adapting to climate change over the long term.

With this specific EWS, once a hurricane or flood alert is identified, point persons in ODPEM and the national disaster response mechanism will liaise with designated persons in the disabled community and media sector to notify the disabled network of the approaching disaster. Currently, ODPEM sends out a national disaster alert through the media etc.

Before the project, disabled persons, may or may not have received the information regarding an approaching disaster. With this pilot, a system was put in place to ensure that key responders within the disabled community get the information quickly enough to take action. Via the special radio system identified through ODPEM, these point persons will trigger the mechanism in place to ensure that disabled persons can either move to safer places, such as a shelter, or take recommended precautions.
The system took a three-pronged approached, including the training of key personnel, infrastructure improvements and dissemination of disaster and climate information for preparedness. The special radio system would be activated by ODPEM’s issuing of an emergency warning. This will ensure that all the disabled persons who have the radios get the message and are able to mobilise their section.

The transportation capacity already existed to move persons with disabilities to shelters so under the project the Jamaica Urban Transit Company was approached to assist with evacuation during the pilot of the EWS.

Under the EWS, a special system was put in to ensure that critical information gets to deaf persons. SunCity Radio in Portmore and the Public Broadcasting Corporation were the two media houses that partnered on this project. Power 106 also gave part sponsorship. None of the television stations currently do close captioning. Ten video phones were purchased for use by designated point persons in the deaf community to boost their response to reach at least another 150 persons within the broader deaf community.

5. **Media messages to reach unregistered persons with disabilities in and outside the designated communities in Portmore so that they can access relevant disaster information.**

Ten public service radio announcements have been done towards this end. The messages would highlight the response system in place and encourage registration so that vulnerable disabled persons can be reached as the EWS becomes a part of the national framework.
6. **Infrastructural improvement.**

This was done through building a ramp, the purchase of portable potties and improvements to the bathroom facilities for the Naggo Head Primary School, which is a key shelter in Portmore. As previously indicated, there was no ramp at the school. Also as recommended by CDA, the bathroom was made wheelchair-accessible and equipped with bars, to enable persons with disabilities to maximise its use.

7. **Testing and evaluation for replication.**

One simulation of the system was done to ensure that it functions efficiently and can be replicated at the national level.

**Challenges**

1) Delays in project implementation due to establishment of coordinating mechanisms with the disabled community.

2) The participatory nature of the project ensured that the necessary stakeholders were consistently consulted on key activities of the project. However, while this significantly built the level of ownership by the stakeholders, it also meant that it took longer than estimated to implement activities.

3) Sourcing equipment that could effectively meet the communication needs of the different disabilities group within the project. ODPEM had to do extensive research to source equipment that had audio mechanisms to ensure that blind persons could be informed and lights so that deaf persons could see texts in an emergency. It also took some time to ensure that materials were produced and made accessible to the various disabled groups in different channels, for example, via braille and email for blind persons.
Main successes

1) Establishment of the first EWS for persons with disabilities in Jamaica.

2) Conducting the first-ever simulation for persons with disabilities, held in Portmore and involving almost 50 people.

3) Establishment of the first disabled-friendly shelter in Jamaica at the Naggo Head Primary School in Portmore.

4) Creation of greater lines of communication between disaster responders and the disabled community in the Kingston Metropolitan Area, through the sharing of the disabled registry as well as targeted meetings and workshops.

5) Awareness raising among more than 60 disaster and community responders on the needs of persons with disabilities and the education of over 60 persons with disabilities on their climate and disaster risk.

Participants in the first-ever simulation exercise for persons with disabilities at the Naggo Head Shelter, 2014. (Photo Floyd Smith).
6) Sensitisation of at least six (6) journalists on covering issues affecting persons with disabilities.

7) Strengthened partnership and engagement among ODPEM, the Portmore Municipal Council and disability organisations, such as the CDA. This is also seen through the policy decisions to include persons with disabilities on the Parish Disaster Response Committees.

8) ODPEM’s commitment to continue rolling out the equipment and telecommunication aspect of the project in other parishes.

Recommendations

- Islandwide replication of the project to ensure that more disabled persons are able to access the EWS while building on the other achievements from the project.
- Continued efforts at deepening the involvement of the two main telecommunications entities on the island. This would boost ODPEM’s capacity to reach vulnerable disabled communities, such as the deaf, through greater text messaging access.
- Establishment of an emergency response line accessible to deaf persons via text messaging to reduce their vulnerability during disasters.
- Explore in more detail the gender dynamics of persons with disabilities in disaster situations.
- Continued engagement of the media to ensure that disaster information is broadcast in a way that will reach persons with disabilities. The Broadcasting Commission has already been engaged on this and Panos and other partners will continue to their efforts to see this becomes a part of media policy.
- Greater awareness of the general public on the EWS as well as the special needs of persons with disabilities during a disaster. This will help to ensure that these vulnerable groups are not neglected.
Partnerships

The success of the project was primarily due to the commitments of the partners involved in the project. Panos Caribbean partnered with the CDA and ODPEM as the main implementors. Other key partners were the Portmore Municipal Council, Jamaica Council for Persons with Disabilities, the Jamaica Association for the Deaf, the Jamaica Urban Transit Company and FES Jamaica.

The project is funded by the Canada Caribbean Disaster Risk Management Fund (CCDRMF) through the Canadian International Development Agency.

All partners were eager to perform their roles in the project and would prompt Panos if activities fell behind targeted deadlines. There was a highly developed sense of unity and commitment on implementing this groundbreaking project. For example, the simulation for the EWS took numerous planning meetings and partners were present for all of them.

There were no reservations or complaints in getting the work done. At one point, when there was a delay with project funds, ODPEM and the Municipal Council volunteered to go ahead with activities out of their own budgets, pending reimbursements.

Based on the project success, all the partners are already in discussions on how to replicate this project. In order for the impacts of projects like these to be sustained, however, there has to be an institutional and policy framework that creates an enabling environment. A key part of that policy framework is having the requisite legislation. This is further developed in the next chapter.
There exist several international conventions, especially from the United Nations (UN), as well as national policies and legislation, which address issues of climate change, disabilities and gender.

The following chapter will give a brief overview of existing national and international legislation, frameworks, policies and conventions.

1. The Millennium Development Goals (MDG) are eight global development goals established by the UN to reduce global inequality in areas such as health, basic services and education, to achieve global equality. Goal 3, namely “Promote gender equality and empower women”\(^{14}\) aims to achieve gender equality as well as the strengthening of women’s rights. Goal 7 states “Ensure environmental sustainability”\(^{15}\)

2. The UN Framework Convention on Climate Change (UNFCCC) and the related Kyoto Protocol focus on the protection of the environment through the reduction of greenhouse gas (GHG) emissions and the inclusion of climate change in all policies and programmes, across sectors and social classes. “The Kyoto Protocol is seen as an important first step towards a truly global emission reduction regime that will stabilise GHG emissions, and can provide the architecture for the future international agreement on climate change”.\(^{16}\)
The Convention acknowledges SIDS as especially vulnerable to the effects of climate change:

“The Parties to this Convention recognising further that low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change”.

The Convention continues:

“The Parties to this Convention noting that the largest share of historical and current global emissions of greenhouse gases has originated in developed countries [...]”.

These statements recognise that the major responsibility for the global emissions of GHGs is related to the production and industrialisation processes, which have contributed to the growth and development of the developed countries.

3. In relation to climate change, the UN Office for Disaster Risk Reduction (UNISDR) endorsed a plan to reduce loss due to natural hazards titled the Hyogo Framework for Action (HFA). It proposes that the negative effects on people’s lives and on global society and economy should be reduced through resilience and disaster risk reduction. HFA draws attention to the urgent need for an integration of risk reduction approaches and the implementation of programmes for emergency preparedness, response and recovery into diverse sectors, such as the media and education policy. Furthermore, HFA proposes to “strengthen the implementation of social safety-net mechanisms to assist the poor, the elderly and the disabled, and other populations affected by disasters”. In summary, this framework affirms the need for an approach which is not only gender-sensitive, but also addresses the needs and concerns of vulnerable groups.
4. The UN Convention on Rights of Persons with Disabilities (UNCRPD) guarantees human rights, fundamental freedoms and full social participation of all persons. This Convention highlights the special vulnerability of women with disabilities and, therefore, reinforces the critical importance of mainstreaming both gender and vulnerabilities of persons with disabilities: “The State Parties to the present Convention emphasising the need to incorporate a gender perspective in all efforts to promote the full enjoyment of human rights and fundamental freedoms by persons with disabilities”. In addition, persons with disabilities are entitled to equal access to “[...] information, communication and other services, including electronic services and emergency service”.

5. The Convention on the Elimination of all Forms of Discrimination against Women (CEDAW) aims to eliminate discrimination against women in all walks of life. “[...] The term ‘discrimination against women’ shall mean any distinction, exclusion or restriction made on the basis of sex which has the effect or purpose of impairing or nullifying the recognition, enjoyment or exercise by women, irrespective of their marital status, on a basis of equality of men and women, of human rights and fundamental freedoms in the political, economic, social, cultural, civil or any other field”. CEDAW is the most important international instrument to protect the rights of women and to achieve equal participation of women in all areas. “States Parties shall take in all fields, in particular in the political, social, economic and cultural fields, all appropriate measures, including legislation, to ensure the full development and advancement of women, for the purpose of guaranteeing them the exercise and enjoyment of human rights and fundamental freedoms on a basis of equality with men.”
Caribbean Disaster Emergency Management Agency (CDEMA).

CDEMA is a Caribbean Disaster Management Agency consisting of eighteen (18) member states, which affirms that impacts of disasters on human life shall be lessened through proper mitigation measures and preparedness, “Managing Disasters with Preparedness”. The goal of the Comprehensive Disaster Management (CDM) Strategy and Programme Framework 2007–2012, adopted by CDEMA, is: “Regional Sustainable Development enhanced through Comprehensive Disaster Management”. The four outcomes of this Framework are following:

- “Outcome 1: Enhanced institutional support for CDM program implementation at national and regional levels
- Outcome 2: An effective mechanism and programme for management of comprehensive disaster management knowledge has been established
- Outcome 3: Disaster Risk Management has been mainstreamed at national levels and incorporated into key sectors of national economies (including tourism, health, agriculture and nutrition)
- Outcome 4: Enhanced community resilience in CDERA states and territories to mitigate and respond to the adverse effects of climate change and disasters”

The CDM Framework further states that “Gender issues have been clearly highlighted in response to and recovery from recent events and should therefore be integrated into each of the four outcomes”. While persons with disabilities and their needs and vulnerabilities are not mentioned specifically, CDEMA sees itself as an agency with responsibility for all people. “So CDEMA proposes what we call an all people approach that looks at all persons of our society. We do not separate any member of the society from the bene-
fit of having a safe, harmonious environment” (Ronald Jackson, CDEMA).29

7. Office of Disaster Preparedness and Emergency Management (ODPEM)

“ODPEM is committed to leading the process of reducing the impact of disaster on Jamaica through Comprehensive Disaster Management” (ODPEM Mission Statement).30 ODPEM is a government agency that promotes disaster awareness and seeks to achieve disaster preparedness through its policies and programmes. These include early warning, first aid, risk management and mitigation measures. The ODPEM Vision is “a proactive world-class agency, building a disaster resilient nation”.31

8. Climate Change Policy and National Hazard Mitigation Policy

The vision of the National Hazard Mitigation Policy “[...] is to have a society in which hazard mitigation has evolved to become a part of everyday life”32 To achieve this vision, a community-based approach is necessary. “This Policy therefore promotes the active participation and partnership of communities, governmental and non-governmental organizations, the private sector and development partners, the conceptualization, design and implementation of hazard mitigation measures”.33 All these measures aim to lessen the effects of natural and man-made disasters.

At the time of writing, December 2014, the Climate Change Policy of the Government of Jamaica was in the final stage of approval. The Vision Statement states: “Jamaica achieves its goals of growth and prosperity for its people while meeting the challenges of climate change as a country with enhanced resilience and capacity to adapt to the impacts and to mitigate the causes in a coordinated, effective and sustainable manner”.34 Women are recognised as specially vulnerable to climate
change impacts in the Policy Framework: “The Government will engage interested and relevant stakeholders, including those most vulnerable to climate change impacts (women, children, disadvantaged populations), local communities, academia, research institutions, public and private sectors, NGOs, and CBOs, in the development of strategies and approaches to address climate change”.35

Speaking at a national consultation in preparation for the 20th Conference of Parties (COP20), which was held in December 2014,36 the Honourable Robert Pickersgill, Minister of Water, Land, Environment and Climate Change, clarified that the Government of Jamaica (GOJ) was taking the challenges related to the impact of climate change on people’s lives, livelihoods, the natural and the built environments seriously. The Minister emphasised this position with the phrase: “With climate change, we must change” and pointed out that climate change was a “clear and present danger”. Making reference to the undisputable scientific evidence from the IPCC 5th Assessment Report, the Minister reminded the gathering that:

“Human influence on the climate system is clear, and recent anthropogenic emissions of greenhouse gases are the highest in history. Recent climate changes have had widespread impacts on human and natural systems. Warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. The atmosphere and ocean have warmed, the amounts of snow and ice have diminished, and sea level has risen.”37

9. **Vision 2030 Jamaica** is the national development plan for Jamaica in which the Vision Statement affirms: “Jamaica, the place of choice to live, work, raise families, and do business”.38 Vision 2030 identifies four overall national development goals which are linked to national outcomes.

National Goal (4) affirms that Jamaica has a natural healthy environment. This goal is supported by three (3) complementary national
outcomes: Sustainable Management and Use of Environmental and Natural Resources (13), Hazard Risk Reduction and Adaptation to Climate Change (14), and Sustainable Urban and Rural Development (15).” In relation to Outcome 14, the four (4) national strategies identified include “improve resilience to all forms of hazards, and improve emergency response capability”, with a specific sector strategy which speaks to “establishing measures for increasing resilience of the poor and most vulnerable”.

This integrated approach indicates that Vision 2030 recognises that those natural and man-made disasters that have affected Jamaica’s economic, social and environmental development will continue to do so, unless national development policy responses to the impacts of climate change are treated with the urgency that is required.
The previous chapter provided a summary overview of the main components of the national, regional and international legislative frameworks in which Jamaica, as a Small Island Developing State, is currently operating in the field of climate change.

It highlighted the main legal agreements, conventions and policies at international, regional and national levels, which are relevant to this discussion on climate change, gender and persons with disabilities in SIDS. Other Caribbean SIDS like Jamaica are working towards their own national development goals and objectives in a “climate-constrained” world, although SIDS have not contributed significantly to the dangerously high levels of greenhouse gas emissions, which are at the root of the climate change threats.

The publication *Climate Change 2014: Impacts, Adaptation and Vulnerability*, which is one component of the IPCC’s Fifth Assessment is instructive, and can help to guide stakeholders towards the effective use of the various components of the legislative framework. In this process, both challenges and opportunities could be identified.

It notes that:

“Climate change is a threat to sustainable development. Nonetheless, there are many opportunities to link mitigation, adaptation and the pursuit of other societal objectives through integrated responses (high confidence). Successful implementation relies on relevant tools, suitable
governance structures and enhanced capacity to respond (medium confidence). [3.5, 4.5]"41

The linkages suggested through integrated policy responses draw attention to the importance of using all relevant and available global, regional and national conventions and legislation when designing policies and programmes which seek to address the challenges from the impacts of climate change. Such an approach would not only address the challenges, but could also identify the linkages between mitigation, adaptation and the pursuit of other societal goals, such as poverty reduction, food security, gender equality and reduced levels of unemployment for both women and men.

For example, CEDAW, which seeks to protect women from all forms of discrimination, when coupled with the UN Convention on Rights of Persons with Disabilities for the design of adaptation and resilience-building programmes would address the special vulnerability of women with disabilities. Such an approach would serve the joint function of mainstreaming both gender and the specific vulnerabilities of persons with disabilities.

It is acknowledged that the Jamaica Climate Change Policy Framework and Action Plan does not specifically respond to the specific needs and concerns of persons with disabilities. However, Vision 2030 Jamaica identifies a specific sector strategy which points to the importance of establishing measures for increasing resilience of the poor and most vulnerable, which would require addressing the needs and concerns of persons with disabilities, who are counted among the most vulnerable.

Research confirms that climate change has major impacts on both human livelihoods and lives, and that the impacts are not gender neutral. This points to the need for ongoing gender-sensitive data collection and analyses of the gender dimensions and dynamics of the relations of power and decision-making in the households and in communities, including persons with disabilities. This approach would identify the gendered climate experiences of both women and
men, and should guide the design and implementation of policies and programmes to build the resilience of families living in poverty.

This integrated legislative and policy approach is highly recommended, given the multidimensional nature of vulnerability, and the intersecting dimensions of inequality. A statement from the IPCC Fifth Assessment Report, Summary for Policymakers provides guidance: ‘Climate change will amplify existing risks and create new risks for natural and human systems. Risks are unevenly distributed and are generally greater for disadvantaged people and communities in countries at all levels of development.’ [2.3]^{42}

The Report identifies six (6) markers and dimensions of inequality: gender, class, ethnicity, age, race, and (dis)ability. It points out that these dimensions of inequality intersect to produce multidimensional vulnerability that affects how people can or cannot respond to existing and new risks. This analysis reveals:
Some privileged and resilient people with very little or no multidimensional vulnerability;

Many marginalised and at-risk people, with fewer capacities and opportunities and higher multidimensional vulnerability; and

Many people in between.

Legislation which speaks of “all Jamaicans” or “all people” requires detailed and complementary analyses of the lived experiences of women, men, boys and girls. Goffe emphasizes: “So we need to be more specific sometimes to make sure that we meet the needs of all our citizens”43.

It is critical that persons with disabilities, both women and men, participate in climate change planning and decision-making. They will contribute their own valuable knowledge, experiences and perspectives and leadership capacities to the national effort which is required to successfully address the impacts of climate change. The CDA president notes: “the gaps [in the legislation] are being bridged slowly but presently we are not there yet”44.
Research on gender and development now recognises that the interlocking issues of gender, disability, race, social status and class are at the centre of the differential power relations between women and men in the household, and in communities. These interlocking issues also impact access to resources, and often result in women and men experiencing different levels of vulnerability, influencing their capacity to adapt to the many risks associated with droughts, floods and storms. Women often have fewer rights to land, credit and capital that would allow adaptation to the impacts of climate change.

For the foreseeable future, Jamaican women and men will be challenged by the adjustments being undertaken as a result of the agreement with the International Monetary Fund. The impacts from climate change will have to be addressed while Jamaican families try to secure their survival, and create safe, productive communities in which to live.

For this to happen, citizens across sectors will need to be fully involved, through their communities and associations in the design, implementation and monitoring of adaptation programmes. A participatory approach to decision-making is critical to building their resilience to the impacts of climate change.
This publication highlighted how persons with disabilities can be fully involved in emergency early warning systems which increase their capacity to protect themselves, and provide leadership for community interventions when a disaster strikes. It also demonstrated the value of partnerships, which allow pooling of human and financial resources for the training of persons with disabilities and of first responders, while providing support for the volunteerism which is central to the success of community initiatives.

Given the likely severity of the impacts of climate change, the capacity of the most vulnerable groups to survive and adapt successfully is closely related to a country’s social and economic development. Research indicates that in many SIDS where social and economic development does take place, it is unevenly distributed across and within societies.

It is hoped that this publication will draw attention to the need for more targeted research to understand the possible differential impact of climate change and other development policies on women and men, and will help to address the rights and needs of persons with disabilities.
Notes

3. cp. EVI, URL: http://www.vulnerabilityindex.net/EVI_Results.html
6. Ibid.
8. Ibid.
10. Ibid.
11. Ibid.
12. Ibid.
25. CDM, p. VII.
26. Caribbean Disaster Emergency Respond Agency (CDERA); in 2009 CDERA changed their name to CDEMA.
27. CDM, p. VII.
29. Ronald Jackson, Executive Director CDEMA, December 1, 2014.
42. Ibid.
43. Interview, Gloria Goffe, President, Combined Disabilities Association, November 27, 2014.
44. Ibid.
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<th>Acronym</th>
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<td>CBO</td>
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<td>GHG</td>
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