

## PROJECT SUMMARY: ENHANCING KNOWLEDGE AND APPLICATION OF COMPREHENSIVE DISASTER MANAGEMENT (CDM)

---

<b>NAME OF PROGRAMME</b>	Enhancing Knowledge and Application of Comprehensive Disaster Management (CDM)
<b>PROPOSED START DATE</b>	September 2013
<b>PROPOSED END DATE</b>	August 2018
<b>PROGRAMME DURATION</b>	5 years
<b>IMPLEMENTING AGENCY</b>	The University of the West Indies Disaster Risk Reduction Centre of the Institute for Sustainable Development.
<b>PROGRAMME FUNDING</b>	Canadian International Development Agency (CIDA) CDN\$2,714,285 University of the West Indies (in kind) CDN\$640,688
<b>TOTAL PROGRAMME COST</b>	CDN\$3,354,973

---

### i) **Project description:**

The purpose of the project is to establish an effective mechanism for managing and sharing Comprehensive Disaster Management (CDM) knowledge that is used for decision-making by governments, local communities, the voluntary sector and the private sector. The project's **ultimate outcome** is implementation of the CARICOM Enhanced CDM Framework (2007) to reduce the impact of natural and technological hazards and the effect of climate change on men, women and children in the region. It is expected that three **intermediate outcomes** will result from the project: creation of a *regional network* that generates, manages and shares knowledge on Disaster Management, including gender issues; increased use of *standardized training materials* for university degree courses and for short courses for students and professionals and others employed in the field; and establishment of *mechanisms to mainstream* fact-based policy and decision-making on CDM into key economic sectors and Small & Medium Enterprises (SMEs) in the region.

### ii) **The location and duration of the project:**

The project will be located in the Caribbean region and implemented by the Disaster Risk Reduction Center (DRRC) of the Institute of Sustainable Development (ISD) in The University of the West Indies (UWI) with the financial support of the Government of Canada provided through Foreign Affairs, Trade and Development Canada (DFATD). The DRRC secretariat is located at the university campus at Mona in Jamaica. UWI serves sixteen countries within the Caribbean. The duration of the project is five years.

#### **1.1 Description**

This project is intended to contribute to outputs 2.1 and 2.2 under Priority Outcome #2 of CDEMA's CDM strategy. The project will use expertise from the University of the West Indies (UWI) to help fill the gaps in knowledge of the impact of natural disasters on the private sector, governments and communities within the Caribbean.

##### **Ultimate Outcome**

Implementation of the CARICOM enhanced CDM Framework (2007) to reduce the impact of natural and technological hazards and the effect of climate change on men, women and children in the region.

##### **Purpose**

Establish an effective mechanism for managing and sharing Comprehensive Disaster Management knowledge that is used for decision-making in the public, private and voluntary sectors.

##### **Expected Outcomes**

The project will have three **intermediate outcomes**: a *regional network* that generates, manages and disseminates knowledge on Disaster Risk Management; increased availability of *standardized training materials* for tertiary level courses directed to

Small and Medium-sized Enterprises (SME), other private sector entities, professionals, government agencies and others already employed in the field as well as post-graduate and undergraduate students; and *mechanisms, including tools, courses and guidelines for mainstreaming CDM* into policy development, business practice and decision-making for important economic sectors in the region. Gender analysis will be mainstreamed throughout the outcomes. As the project progresses, reports on all three intermediate outcomes will be channeled through the Chair of the Education Sector Sub-Committee to the Coordination and Harmonization Council (CHC) for the CDM. These outcomes are described below.

*Intermediate Outcome 1: A Regional Network to generate, manage and share knowledge on Disaster Risk Management, including gendered issues, is operationalized.*

The regional network will be set up to support the knowledge needs of a wide variety of professionals. While a great deal of the network will rely on the use of Information Technology, this will be linked with opportunities for face to face meetings, research and training. The purpose of the network is to encourage men and women in the academic and professional communities to generate data and exchange information between sectors and this cannot be done solely by electronic means. There will be training seminars and opportunities will be taken to use existing regional meetings to assist in building a Community of Practice. This will allow for feedback from the users so that the network may evolve to continually meet user needs. Additionally, the CHC and its sub-committees will serve as a forum to collect gender-segregated data on how stakeholders perceive the usefulness of the network.

Some information on DRM already exists in disparate places within the Caribbean and such information must be gathered and put into a format that allows for sharing and updating, preferably by electronic means. This will be done by producing case studies and increasing the information available on disaster events and important DRM issues such as addressing gender concerns, and early recovery within the region. The case studies will collect gender-based data and at least one case study will focus specifically on gender. Data obtained from the studies will be incorporated into the courses developed under Intermediate Outcome 2 and into the Gender, Climate Change and Disaster Risk Management course offered by the IGDS at Mona. The methodologies for risk assessment and hazard mapping, as well as mitigation of disaster risk, require gender mainstreaming, standardization and improvement, following which they should be disseminated to a wide group of professionals. A platform that could support sharing some of this type of information was created under the Regional Disaster Risk Atlas project funded by the World Bank and implemented by the Institute for Sustainable Development (ISD) and Disaster Risk Reduction Centre (DRRC) at UWI. The platform allows persons to share GIS information online and is being used at UWI by the Department of Engineering, the Disaster Risk Reduction Centre, the Seismic Research Centre, the Department of Geography and Geology, the Earthquake Unit Research Centre and the Institute for Sustainable Development to share information on disaster risk.

Since it is important to increase the number of women and men who are able to carry out research or take courses, and since cost is often a barrier to this, a programme of scholarships will be developed to support post-graduate students. There is also a need to generate new knowledge by carrying out primary research in areas in which research data are scarce or lacking. A number of the scholarships and assistantships will focus on research in specialized areas such as the gendered effects of hazards, and Disaster Risk Mapping. These studies will involve the Institute for Gender and Development Studies (IGDS), members of the insurance sector, the Seismic Research Centre and the Earthquake Unit at UWI, all of which will work alongside the DRRC. The scholarship programme will be supplemented by providing exposure to other experiences within those specialized subject areas of DRM in the Caribbean, and outside of the Caribbean will be facilitated by an exchange programme with partner universities and specialized centres. Two scholarships and one exchange will focus specifically on gender and DRM.

Management of knowledge will be achieved by developing an on-line portal which will allow access to and maintenance of a database of materials for tertiary courses, reference material for training and material to support professionals and researchers in their work. This will be done in conjunction with other databases such as the CDM portal operated by CDEMA, the CARDIN<sup>1</sup> and Caribbean Risk Atlas at UWI and the ECLAC Caribbean Documentation Centre and the Caribbean Disaster Resource Centre operated by the Red Cross<sup>2</sup> and funded by CIDA and the EU. The portal will be managed so that access to sensitive data will be restricted. Information generated by the Caribbean Risk Atlas project will be accessible from the portal. Provision in the project has been made for a portal moderator.

---

<sup>1</sup>[http://www.mona.uwi.edu/cardin/virtual\\_library/searchlibrary.asp](http://www.mona.uwi.edu/cardin/virtual_library/searchlibrary.asp)

<sup>2</sup><http://www.barbadosredcross.org/index.php/resource-centre>

In addition to providing access to knowledge through the portal, dissemination of knowledge will take place through courses being offered to full-time and part-time students by online and distance methods to facilitate full participation of employed men and women, as well as through face to face lectures, workshops and seminars. Conferences and technical publications including guidelines and working papers will further provide for further knowledge dissemination. Wherever it is advantageous, the UWI will use existing events such as the annual Caribbean Disaster Management conferences organized by CDEMA to ensure that a large audience will be reached. The **immediate outcomes** of this component are listed below.

Immediate Outcome 1.1: Improved knowledge generation in CDM.

1.1.1 Development of **case studies** on regional DRM mechanisms to identify and document successful risk reduction practices including mainstreaming or characterization and management of gender issues and lessons learned.

1.1.2 **Expanded documentation** of past disaster events in the Caribbean, including gender-based data, generated and stored in a database.

1.1.3 **Improved methodologies** for hazard mapping; gender-sensitive disaster risk assessment and risk mitigation standardized.

1.1.4 **Recommendations** on effective mitigation and risk reduction measures published.

1.1.5 **Scholarships and studentships** to support research and specialised studies (e.g. gendered issues and disaster risk mapping) related to disaster risk reduction.

1.1.6 **Exchange programme** in specialized studies and research in disaster risk reduction with Canadian and Small Island State Universities for students and staff.

Immediate Outcome 1.2: Improved knowledge management in CDM.

1.2.1 Caribbean Disaster **Data Warehouse Portal** – repository of materials for courses, methodologies, research and other material<sup>3</sup>.

1.2.2 **Training and certification** programme established and recognized as authoritative– this will comprise the short courses, training and regular university courses to be delivered in components 2 and 3.

Immediate Outcome 1.3: Improved knowledge dissemination in CDM.

1.3.1 Multi-disciplinary **training courses and seminars** delivered to professionals, students and policymakers<sup>4</sup>.

1.3.2 **Technical publications** (periodical journal, on-line publication, or working paper series) on disaster risk management for the Caribbean.

1.3.3 Policy guidelines and frameworks **presented** to policy makers for use.

1.3.4 **On-line mechanisms** to promote disaster risk reduction measures among public and private sectors and local communities moderated and operational.

1.3.5 **International technical conference series**<sup>5</sup> on best practices on disaster risk reduction in small island states.

*Intermediate Outcome 2: Increased use of standardized gender-sensitive educational and training materials for Comprehensive Disaster Management by professionals and students in the Caribbean.*

A major component of the project is the development of materials for training and education, to be delivered by the knowledge dissemination infrastructure established under Immediate Outcome 1.3. To develop suitable materials that meet the needs of practitioners and the SME sector in the region, the UWI will assess what materials exist and where

---

<sup>3</sup><http://drh.edm.bosai.go.jp/> is an example of a database for disaster risk reduction technology

<sup>4</sup> In addition to the Masters Degree option offered by UWI DRM

<sup>5</sup> As an extra day on CDEMA, ODPEM and similar conference existing conferences wherever possible

there are gaps with respect to training needs of the private sector, disaster management professionals and government, as well as the capacity of regional educational and professional organizations to incorporate and use new material, provide learning opportunities and deliver training. This will take into account gaps identified in the recent work done by CDEMA (2012), as well as global and regional research related to gender and DRM. A review panel comprising stakeholders from key business sectors, government agencies, youth and community groups, the IGDS at the UWI and other academic entities will be constituted to provide technical advice throughout the project and beyond. Based on the results of the assessment, course material will be developed for tertiary and professional educational institutions. To ensure the widest possible access to men and women who are employed, a strong emphasis will be placed on developing online material. At least one course at the post-graduate level will be developed on Gender and DRM. This may be developed from an existing course such as the course on Gender, Climate Change and Disaster Risk Management currently offered by the Institute for Gender and Development Studies (IGDS) at UWI, Mona<sup>6</sup>. Other course material will be created *de novo* since there are several areas in which course material is absent.

Immediate Outcome 2.1: Increased quality and availability of multi-disciplinary gender-sensitive educational and training materials for Comprehensive Disaster Management.

- 2.1.1 **Assessment** of gaps between existing education and training materials for CDM at the tertiary level and training needs for Government, civil society and private sector organizations.
- 2.1.2 **Network of experts** established to review and standardize existing material.
- 2.1.3 **Course materials** in DRM for tertiary educational institutions in the Caribbean developed.
- 2.1.4 **Online materials** for training business and private sector developed.

*Intermediate Outcome 3: Effective mechanism for gender-sensitive fact-based policy and decision-making on CDM to be mainstreamed into key economic sectors and Small & Medium Enterprises (SMEs) established.*

This component will carry out research into the specific needs and vulnerabilities with respect to national policies and the needs and capacities of private sector operators within key economic sectors with respect to DRM. Once these are characterized, the UWI will work with stakeholders to create special materials, support and training to ensure that policy makers, decision makers and SMEs in those key sectors have the means, knowledge and skills to incorporate CDM into policy development, business practice and implementation. The main products will be designed to meet the needs identified in surveys carried out in the early stages of the project. Products will include data, policy guidelines and frameworks, tools, manuals, training materials and courses tailored to the needs of the key economic sectors at the policy level. The object will be to provide sufficient information and learning to allow for mainstreaming of gender-sensitive DRM into policy. There will also be tools and training materials produced to integrate gender-sensitive DRM into business practice, focusing on SMEs within the key economic sectors. In this way it is hoped to infuse knowledge at all levels of the sector so actors on the ground will be facilitated by enlightened and informed policies. The UWI will use its expertise at the Mona School of Business and Management (which offers a graduate course in Enterprise Risk Management), the Cave Hill School of Business, the IGDS, the Sustainable Economic Development Unit (SEDU) and the Faculty of Social Science at St Augustine to work with key private sector organizations<sup>7</sup> within the region, as well as with government policy-makers to develop appropriate tools, expose professionals within each sector to the relevant tools, and train them in their use.

Immediate Outcome 3.1: Improved incorporation of disaster risk management research outputs into policy and practice.

- 3.1.1 **Needs assessment**<sup>8</sup> on inclusion of DRM in national policy in five (5) sectors.
- 3.1.2 **Policy guidelines and frameworks** for mainstreaming in areas of need.
- 3.1.3 **Strategic plan to mainstream DRM** in the region and take early action on infusing gender-sensitive DRM strategies into the planning and decision-making frameworks developed.

---

<sup>6</sup> The [course](#) is offered by IGDS Mona and examined in conjunction with the ISD.

<sup>7</sup> E.g. Small Business Association of Jamaica, the Chambers of Commerce and Manufacturers' Associations in the various islands and the members of sector groups such as insurance, agriculture, IT and tourism.

<sup>8</sup> Needs assessment information will be added to the knowledge database.

Immediate Outcome 3.2: Increased availability of gender-sensitive tools to mainstream disaster risk management into two (2) key economic sectors<sup>9</sup>.

3.2.1 **Manuals** on mainstreaming gender-sensitive DRM into two (2) key regional economic sectors.

3.2.2 **Specialized training modules, workshops and courses** for mainstreaming gender-sensitive DRM into at least two key regional economic sectors identified under CDM.

Immediate Outcome 3.3 Increased availability of tools to integrate disaster risk management into SMEs within two (2) key economic sectors<sup>10</sup>.

3.3.1 **Assessment of needs and barriers to** including DRM in business practice for SMEs

3.3.2 **Manuals and Decision Support Systems** to support mainstreaming gender-sensitive DRM into business practice for SMEs.

3.3.3 **Specialized training modules, workshops and online courses** for mainstreaming DRM into SME business practice

---

<sup>9</sup> Possible candidates could include Tourism, Agriculture or Transportation but would be informed by the results of the needs assessments in 3.1.1& 3.3.1

<sup>10</sup> This will focus on SMEs within the two key sectors