Caribbean priorities for climate change and disaster risk reduction
Report of Caribbean webinar held May 16th, 2014

1. Background
The international community is working to develop a set of post-2015 Sustainable Development Goals (SDGs) which will replace the Millennium Development Goals (MDGs) as the overarching global development framework after 2015. As part of this process, CARICOM Member States are seeking to identify regional priorities and effectively negotiate these in the post-2015 SDGs process. This work is intimately linked with preparations for the Third International Conference of SIDS being held in Samoa in September 2014. SIDS have agreed that sustainable development priorities identified for Samoa should be reflected in the post-2015 agenda.

The Caribbean Natural Resources Institute (CANARI) has been working to provide technical assistance, independent input and analysis to support development and negotiation of a strong and coherent regional perspective, reflecting priorities of Caribbean stakeholders across countries, in the post-2015 SDG and SIDS processes. As part of this work, CANARI is facilitating a series of webinars to reach out to Caribbean stakeholders to elicit opinions on key issues drawn from the topic areas identified in the post-2015 process, as well as Caribbean priorities identified in the preparatory process for the SIDS 2014 conference. CANARI is conducting the webinars as part of a two-year programme of work by the Independent Research Forum (IRF), which is being funded by the Swiss Agency for Development and Cooperation (SDC).

The specific objective of the webinars is to refine sustainable development priorities for the Caribbean and provide technical input to contribute to the identification of potential targets which can help to inform CARICOM negotiation in the SDGs and SIDS processes.

2. Scope of the focus area
For the focus area on “climate change,” the proposed global goal is to: “Take urgent and significant action to mitigate and adapt to climate change” and “Build a climate change goal based on the outcome of COP21 of the UNFCCC.”

Recognising that interlinkages would exist between this goal and other goals, draft targets identified under this goal as of early May were:

a) hold the increase in global average temperature below an x°C rise in accordance with international agreements
b) build resilience and adaptive capacity to climate induced hazards in all vulnerable countries
c) integrate climate adaptation and emissions reductions into development plans and poverty reduction strategies
d) introduce instruments and incentives for investments in low-carbon solutions in infrastructure, industry and other sectors
e) improve education and awareness raising on climate change

1 This is taken from the latest working document available at http://sustainabledevelopment.un.org/focussdgs.html.
3. Webinar topics and speakers
Recognising the breadth of the focus area, presenters in the webinar focused on discussing the following:

- CARICOM climate change priorities in international negotiations: Carlos Fuller, International and Regional Liaison Officer, Caribbean Community Climate Change Centre (CCCCC)
- Priorities for building resilience to natural disasters and climate change: Ronald H. Jackson, Executive Director, Caribbean Disaster Emergency Management Agency (CDEMA)
- Priorities to address impacts of climate change in the Caribbean: Adrian Cashman, Senior Lecturer - Water Resources Management, Centre for Resources Management and Environmental Studies (CERMES), University of the West Indies - Cave Hill Campus
- Priorities for building resilience at the community level through on the ground actions and capacity building: Nicole Leotaud, Executive Director, Caribbean Natural Resources Institute (CANARI)

4. Summary of key findings and recommendations

- CARICOM countries are recognised as one of the groups most vulnerable to the adverse impacts of climate change, which affects agriculture, fisheries, infrastructure, tourism and water and particularly all activities in coastal zones.
- CARICOM is already experiencing climate change and its effects. For example:
  - Temperatures in Belize, Guyana, Jamaica, and Trinidad and Tobago are already 1°C warmer while the average global temperature rise is 0.7°C.
  - Sea level rise is occurring five times faster in Guyana than the global mean.
  - The Caribbean is experiencing more intense rainfall events, longer and more intense droughts, and more frequent coral bleaching episodes.
- Projections include: rising sea level, increased annual average temperature, generally drying trend (with reduced length of rainy season and decreased wet season precipitation).
- The Caribbean is vulnerable to a range of hazards:
  - Hydro-meteorological (hurricanes, tropical storms, flooding, drought, storm surges, and landslides/mud flow)
  - Geological (earthquakes, tsunamis, and volcanoes)
  - Biological (epidemics, wildfires/bushfires)
  - Man-made (chemical releases)
- Building resilience to risks is critical because impacts can set back or reverse development gains. This encompasses: greater ability to prepare and mitigate; greater ability to respond; and greater ability to recover and rehabilitate.
- Building resilience to disasters and climate change involves strengthening ecological systems as well as socio-economic systems (e.g. financial systems, cohesive communities, engaged societies, strong institutions). Specific requirements are: political buy-in and policy support; budgetary support; appropriate legal and institutional arrangements; technical capacity; broad-based awareness; communities mobilised to protect themselves and their livelihoods; mechanisms to protect environmental assets; and all stakeholders working in partnership with emergency services.
- Climate change threatens water security through impacts on water resources and water services (for supply, wastewater and sanitation), which in turn impacts on food security, energy security, human/community security and national security. Increased vulnerability to shocks negatively impacts economic growth.
- Water resources will be impacted by more intense rainfall events resulting in higher run-offs, less infiltration and recharge, and flooding as well as prolonged periods of low flows resulting in increased competition for water resources. Impacts will be exacerbated by land cover changes, sea level rise impacting on coastal aquifers, and higher daily temperatures increasing evapotranspiration. Water services will be affected as infrastructure is impacted by more intense hurricanes.
• Many Caribbean countries are very vulnerable to the impacts of climate change on its water resources as they are already experiencing seasonal shortages. In some countries, demand exceeds supply during parts of the year. There are periodic drought events, with demand often peaking in the dry season (because of tourist arrivals). Populations are generally becoming more urbanised.

• Water sector responses have focused on the supply side through engineering solutions, but less attention has been paid to the managing the demand side. Augmentation of supply through rainwater harvesting has been widely promoted, but the potential negative impacts on stream flow and groundwater recharge have not been fully assessed.

• Protected areas are playing an important role in contributing to the maintenance of healthy ecological systems and therefore building resilience to disasters and climate change.

• Building resilience at the community level is a critical strategy which is needed in the Caribbean islands.

Recommendations for addressing climate change:
Proposed targets mirror CARICOM negotiating positions, which are:

a. **Dramatically reduce emissions** to contain global warming to as far below 1.5°C as possible. A 2°C target is too high.

b. **Provide adequate, predictable and additional new financing** to CARICOM Members to adapt to inevitable climate change.

c. **Develop and provide** appropriate technology to CARICOM Members for both adaptation and mitigation.

d. **Provide support for building capacity** for increasing awareness, preparedness and action.

Recommendations for building resilience:

a. **Address underlying risk drivers** such as poverty and natural resource destruction and degradation.

b. **Develop indicators to measure resilience in all dimensions**: social, economic and environmental.

c. **Adopt an integrated risk management approach** to development planning and sectoral risk management (e.g. in the financial sector).

Recommendations for building resilience for water security:

a. **Enhance resilience of infrastructure** by using historical data on extreme events in current planning and designs, requiring explicit incorporation of climate change and other risks in planning and design, investing in maintenance and improvement of existing water infrastructure that is resilient to climate change and other risks, and considering multiple interconnectivity to provide redundancy in the system.

b. **Increase water use efficiency and demand side management**.

c. **Implement integrated land and water management strategies**.

d. **Move towards the incorporation of ‘previously utilised’ water** (recycled and reused water) in water strategies, using an integrated urban water management approach.

Recommendations on interlinkages and implementation strategies:

a. **Incorporate interlinkages** between climate change and disasters in targets on water, energy, economy, infrastructure and agriculture/food security.

b. **Adopt integrated planning and budgeting**.

c. **Enhance regulation of development** to ensure protection of ecosystems and natural capital for building resilience. The value of natural ecosystems needs to be captured and communicated to build awareness and support.

d. **Build awareness, political support, and broad engagement of all sectors** in resilience building as fundamental for national development and to protect development gains. Climate change adaptation
and disaster risk reduction need to become ballot issues. People need to feel empowered and emboldened to act. Changing culture is needed for individual action (e.g. water use efficiency).

e. **Catalyse and support local community level resilience building** for communities to protect their lives and livelihoods. Capacity needs to be built and financing and technical support provided for community action.

f. **Strengthen local governance** to support and sustain local community adaptation initiatives.

g. **Engage the private sector** by making the business case for efficiency and resilience building.