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Promoting participatory ICTs for adding value to traditional knowledge in climate change adaptation, advocacy and policy processes in the Caribbean

Concept note

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1. Project background

a. The global context

National adaptation programmes of action (NAPAs) provide a process for Least Developed Countries (LDCs) to identify priority activities that respond to their urgent and immediate needs to adapt to climate change – those for which further delay would increase vulnerability and/or costs at a later stage. The submission of a NAPA to the United Nations Framework Convention on Climate Change (UNFCCC) entitles the country to access funding from the Least Developed Countries Fund (LDCF) for the implementation of projects related to climate change adaptation. The LDCF was established to support a work programme to assist LDCs to carry out, inter alia, the preparation and implementation of NAPAs. The Global Environment Facility (GEF) is the entity that operates the financial mechanism. As of February 2012, 47 LDCs prepared their NAPA according to the UNFCCC database. Among non-African ACP countries the following have prepared their NAPA: Kiribati, Samoa, Solomon Islands, Tuvalu, Vanuatu, and Haiti.

The 7th Conference of the Parties (COP7) placed at the highest priority capacity building and identified among others the following needs: '*developing and enhancing technical capacities and skills to carry out and effectively integrate vulnerability and adaptation assessment into sustainable development programmes and develop national adaptation programmes of action'*, '*strengthening existing and, where needed, establishing national research and training institutions in order to ensure the sustainability of the capacity-building programmes',* and *'enhancing public awareness (level of understanding and human capacity development)*' (FCCC/CP/2001/ 13/Add.1, Decision 2/CP.7, paragraph 17).

In December 2010, Parties to the UNFCCC adopted the Cancun Adaptation Framework (CAF). CAF is intended to accelerate policy making and interventions that reduce human vulnerability to climate change, and build resilience - both biological ecosystem resilience and socio-ecological resilience. The CAF is founded on a number of principles including the recognition of the need to involve holders of different knowledge systems - traditional, indigenous and scientific.

The value of grassroots involvement in climate-related decision-making has received attention in several other official climate policy documents starting from Art. 6 of the United Nations Framework Convention on Climate Change (UNFCCC) (UN, 1992, p. 17). The Intergovernmental Panel on Climate Change (IPCC) recognizes the importance of traditional knowledge (TK) and the IPCC Third Assessment Report refers to '*active participation by concerned parties*' (IPCC, 2001, p. 899) and draws attention to local problems and solutions. The UNDP guidelines for adaptation strategies foster grassroots stakeholders' participation. Moreover the International Indigenous Peoples Forum on Climate Change (IIPFCC) is a recognised constituency in the UNFCCC COP.

Nonetheless, minority groups including indigenous peoples in many developing countries which prepared NAPAs are still largely excluded from climate-related decision-making. This contrasts with the values upon which the NAPA process was founded in 2001. This was supposed to be action-oriented and country-driven and to encourage multi-stakeholders' endorsement (FCCC/CP/2001/13/Add.4, Decision 28CP/7, paragraph 6, 7). NAPAs were meant to recognise the diverse biomes within national states, and involve participation of those whose livelihoods are tied to the sustainability of each of these biomes.

b. The regional context

Similar to other small island developing states (SIDS), communities in Tobago and the Caribbean are susceptible to the impacts of climate change and extreme climatic events.

Historically, hurricanes and floods have had the most disastrous impacts in the Caribbean islands. In the last half century, several storms and hurricanes have resulted in the loss of life and property. These events have caused the diversion of limited resources from other development priorities towards relief, rehabilitation and reconstruction activities.

Impacts of climate change in the Caribbean are projected to include sea level rise, ocean warming, and changing rainfall patterns. These are expected to have a significant economic and social impact.

Threats from climate change and extreme climatic events are exacerbated by the ongoing problems caused by human development, including inappropriate land use and poorly planned physical development, inappropriate agricultural practices on slopes, point and non-point source pollution including from improper disposal of solid wastes. These result in deforestation, land degradation, pollution and clogging of watercourses across the limited land space and degradation of coastal and marine ecosystems.

The vulnerability of Caribbean SIDS to climate change and extreme climatic events is especially high as there is very limited land space and much of the development occurs along coastal areas with very rugged topography where economic and social resilience are also generally very low.

Responses in the Caribbean have largely been at the general policy level, in response to international commitments, with few specific policies or plans yet developed to address priorities on the ground at the landscape or site level. Policy development has also been largely without the effective engagement of local communities, where much of the action will need to be taken. Public understanding of the issues and responses required is low. Although policy development recognises the importance of engaging sectors, "climate proofing" action still needs to be taken for key sectors, especially tourism and agriculture as the two main economic sectors. A coordinated and collaborative approach that effectively engages stakeholders across sectors and communities to take action to build resilience is still needed.

There are some important initiatives to address these challenges in the Caribbean islands, including using innovative methods to raise public awareness and capture the voice of local communities and traditional knowledge (for example work by CANARI, Panos Caribbean and Buccoo Reef Trust), facilitating participatory policy development (for example CANARI's facilitation of the development of a Civil Society Climate Change Agenda for Saint Lucia), and facilitating development and implementation of climate change resilience-building plans by local communities (being piloted by CANARI).

However, despite these efforts, there is generally weak appreciation of or capacity to facilitate participatory approaches to building resilience to climate change and extreme climatic events.This

project will aim to address these needs by piloting participatory Information Communication Technologies (ICTs) as a new tool that can be used across the Caribbean islands to facilitate effective participation by local communities and other stakeholders in the identification of general policy priorities, as well as specific policies and actions needed on the ground at the landscape and site level to address the impacts of climate change and extreme climatic events. This tool will allow inclusion of relevant knowledge (including traditional / indigenous knowledge), increase capacity, facilitate coordination and collaboration across sectors, and build buy-in for implementation of plans for resilience to climate change and extreme climatic events.

This project will facilitate the use of participatory three dimensional modelling (P3DM) in the island of Tobago to document, share and combine traditional and other forms of knowledge to identify the risks from climate change and extreme climate events and to recommend the adaptation policies and actions required.

The P3DM process will be complimented by the use of other ICTs (participatory video, Web 2.0 social media), to facilitate sharing of knowledge at various levels and contribute to building the capacity of stakeholders to contribute to the development of island-wide policies for Tobago as a pilot case.

This project will serve as a pilot for similar exercises in the Caribbean region. It will build capacity in using P3DM by using a training of trainers (ToT) approach coupled with targeted dissemination of lessons learnt at specific regional fora. A cadre of technical experts from across the region (government, inter-governmental organisations, civil society, and academia) will participate in this training of trainers conducted as part of the pilot in order to catalyse dissemination and use of the tool across the Caribbean islands.

2. Problem statement

The core problem the project will address is that development and implementation of policy to address the impacts of climate change and extreme climatic events has been largely without the effective engagement of local communities, from which useful traditional knowledge exists and among whom much of the adaptation action will need to be taken.

The effect is that policy responses in the Caribbean have largely been at the general policy level, with few specific policies or plans developed to address priorities at the landscape or site level. Sectoral considerations or traditional knowledge have not been adequately considered, stakeholders are not effectively engaged, and there has been little on the ground action to build resilience or to “climate proof” key sectors such as tourism and agriculture.

There are several root problems that are contributing to this including that:

- Land use and development planning do not effectively involve or integrate the concerns of government, private sector/developers and local communities into decision making.
- Development and risk management efforts are fragmented and uncoordinated across sectors.
- The impacts of climate change and extreme climatic events and responses needed are poorly understood by stakeholders.
- Communities are not aware of the need for and do not feel empowered to participate in community-based planning to respond to the impacts of climate change and extreme climatic events.
- Policy makers and technocrats do not have a culture of, knowledge of relevant tools, capacity for, and experience in facilitating community-based planning to respond to the impacts of climate change and extreme climatic events.

3. Overall Objective

Increased engagement of stakeholders to adopt Information and Communication Technologies (ICT) to influence climate change adaptation policy processes.

4. Project purpose

Local and traditional knowledge and values are recognized and made more authoritative in decision making about climate change adaptation in the Caribbean region.

5. Target countries

The countries in the Caribbean region.

6. Intended beneficiaries

Direct Beneficiaries:

- *Tobago:* Community leaders, fisherfolk, farmers, tourism entrepreneurs, NGOs and CBOs, policy makers and resource managers in government agencies, and students.
- *Facilitators to be trained from the other Caribbean islands:* academia, regional and national NGOs, government agencies, inter-governmental technical agencies.
- *Observers:* Government agencies, academia, NGOs and CBOs from Trinidad; regional inter-governmental secretariats and technical agencies; regional NGOs, international technical agencies.

Indirect Beneficiaries:

Residents of Tobago, residents of other Caribbean SIDS where P3DM will be applied.

7. Project implementation

The project will be implemented by the Caribbean Natural Resources Institute (CANARI) in partnership with the University of the West Indies, the Tobago House of Assembly, Division of Agriculture, Marine Affairs, Marketing and the Environment and the Partners with Melanesians (PwM).

8. Project timeframe

The project will be implemented over a 17 month period from July 2012.

9. Project funding

Funding is provided by the Technical Centre for Agricultural and Rural Co-operation (CTA).

10. Project results and associated activities

Result 1*: P3DM model of Tobago is completed and handed over to national stakeholders for use in policy development and decision making to build resilience to climate change and extreme climatic events in Tobago*

Activities

i. Identify Tobago's stakeholders and develop a participation plan to mobilise communities.

ii. In collaboration with UWI, organise and run a **one-day P3DM/PV introductory and planning workshop** in Tobago attended by approximately 30 delegates from local stakeholders.

iii. In collaboration with UWI and 2 facilitators deployed by CTA, organise and run a two-week long P3DM exercise which will result in a relief model of the entire island of Tobago at a 1:10,000 scale, and involve approximately 120 community representatives, 40 youth (students) from local schools, 5 local government officials and representatives from local NGOs and CBOs.

***Result 2**: A total of 49 people are trained in complementary disciplines as follows:*

- *12 representatives from national and regional organisations are competent in using PGIS/P3DM to facilitate participatory planning for climate change adaptation.*
- *6 residents of Tobago are capable of facilitating Participatory video processes.*
- *6 practitioners and GIS technicians are in the position to contribute to the P3DM process, export and safeguard data within the confines of good practice. (Complementary result attained by UWI using GEF-SGP funding).*
- *25 representatives from Tobago stakeholders are skilled in the use of Web 2.0 and Social Media for communication and advocacy purposes (Complementary result attained via related CTA capacity building project).*

Activities

(i) In collaboration with UWI and 2 trainers deployed by CTA, train 12 delegates from organisations in the region and running of the P3DM exercise listed under Result 1. This will include an orientation on the topic and role playing during the map making process in the following phases: legend making, tracing, cutting, pasting, consolidating, transfer of mental maps by knowledge holders, data capturing and extraction, and handing over. Special attention will be paid to the ethics in the practice.

(ii) Train 6 participants resident in Tobago in the facilitation of participatory video processes. This will include use of a video camera, recording systems, development of a story board, interviewing, video capturing and collaborative editing.

(iii) Further train 6 participants in their respective countries in the use of opensource GIS (QGIS) for capturing, analysing data extracted from a P3DM and cross-validating these with the knowledge holders and against other data sets obtained from formal scientific sources. This activity will be carried out by UWI using GEF-SGP funding.

(iv) 25 delegates from Tobago stakeholders involved in the P3DM exercise are trained in the use of Web 2.0 and Social Media for communication and advocacy purposes. This activity is carried out directly by CTA or via UNITAR/FAO/CTA e-learning schemes.

***Result 3** : At least 300 persons from communities and decision-makers from key sectors in Tobago have increased understanding, capacity and motivation to take joint action to build resilience to climate change and extreme climatic events.*

Activities

(i) Ensure a well-balanced selection of participants in the P3DM exercise.
(ii) Discuss and agree with concerned stakeholders on which entity will safe keep the completed 3D model and receive it at the handing over ceremony.
(iii) Facilitate media engagement and media coverage.
(iv) Invite and facilitate the participation of observers from national, regional and international entities.

***Result 4** : The process, and experiences made, in the use of PGIS / P3DM (and related ICTs) to value traditional knowledge in decision making about climate change adaptation, are documented and shared by a range of means including multimedia, Web 2.0 and social media.*

Activities

(i) Produce PV and – provided Free Prior Informed Consent (FPIC) is obtained from the knowledge holders – disseminate it widely via various means (Funded by GEF-SGP via UWI).

(ii) Produce a professional 15-20 min video documentary on the process and – provided Free Prior Informed Consent (FPIC) is obtained from the knowledge holders – disseminate it widely via various means.
(iii) Produce and publish at least 14 daily blog posts about the PGIS/P3DM process.

Result 5*: Report, papers and policy briefs are produced and disseminated to climate change focal points, key government agencies in at least 15 countries in the* Caribbean and at high level regional fora.

Activities
(i) Document and analyse the processes, their outcomes and impacts.
(ii) Organise and run a **one-day feedback and reflection workshop** attended by 40 participants.
(iii) Produce a report (e-version) including the lessons learned while implementing the P3DM process and the outcomes of the one-day feedback and reflection workshop.
(iv) Elaborate, translate and print a policy brief(s) in English, French and Spanish, and other papers.
(v) Attend high level events to share lessons learned and recommendations.
(vi) Disseminate report, papers and policy brief(s) to selected target audiences.