

Request Submission Form for CTCN Technical Assistance (version 1.0 - January 2014)

APPLICANT/CONTACT:

National Designated Entity: Instituto Dominicano de Desarrollo Integral (IDDI)

Contact person: Ms. Evaydée Pérez

Position: Director, Center for Climate Change and Sustainable Development, IDDI

Phone: (809) 534-1077, ext. 240, 261

Fax: (809) 534-1080

Email: dluther@iddi.org

Postal address: Luis F. Thomén #654; Santo Domingo, D N.

COUNTRY: *Dominican Republic*

TITLE: *A Community based Early Warning System in Every Pocket from Santo Domingo, D. N.*

GEOGRAPHICAL FOCUS: *{Select the most relevant geographical level}*

Community-based *Sub-national* *National* *Multi-country*

Poorest Neighborhoods of D. N., the capital city of the Dominican Republic (i.e., *24 de Abril, Capotillo, Domingo Savio, Espaillat, Gualey, La Zurza, Luperón, María Auxiliadora, Mejoramiento Social, Simón Bolívar, Villa Consuelo, Villa Francisca, Villa Juana, and Villas Agrícolas*)

SECTOR/THEME *{Select the most relevant sector}*

<i>Mitigation:</i>	<input type="checkbox"/> <i>Energy</i>	<input type="checkbox"/> <i>Forestry</i>
	<input type="checkbox"/> <i>Transport</i>	<input type="checkbox"/> <i>Water Resources</i>
	<input type="checkbox"/> <i>Industry</i>	<input type="checkbox"/> <i>Coastal Zones/Oceans</i>
	<input type="checkbox"/> <i>Agriculture</i>	<input type="checkbox"/> <i>Terrestrial Ecosystems</i>
	<input type="checkbox"/> <i>Forestry</i>	<input type="checkbox"/> <i>Human Health</i>
	<input type="checkbox"/> <i>Waste</i>	<input type="checkbox"/> <i>Infrastructure/Human Settlement</i>
	<input type="checkbox"/> <i>Cross-sectoral</i>	<input type="checkbox"/> <i>Tourism</i>
<i>Adaptation:</i>	<input checked="" type="checkbox"/> <i>Early Warning/ Disaster Reduction</i>	<input type="checkbox"/> <i>Businesses</i>
	<input type="checkbox"/> <i>Agriculture/Fisheries</i>	<input checked="" type="checkbox"/> <i>Education</i>
		<input type="checkbox"/> <i>Cross-sectoral</i>

OTHER RELEVANT SECTORS:

{Indicate relevant sectors, only from those included in the list above}

PROBLEM STATEMENT (up to half a page)

The Dominican Republic has become increasingly susceptible to natural disasters, putting at risk the population, the physical environment and built infrastructure, and resulting in social and economic impacts on the country. Threats, such as extreme weather and the rising sea level, increase the risk of environmental problems including floods, landslides, coastal erosion, contamination and salinization of fresh water. These threats also impact the health and the socioeconomic development of the population, of which more than 60% is concentrated in urban areas which are under continual expansion, and are largely located in coastal regions or in areas at high risk of extreme weather occurrences. According to Global Climate Risk Index (2013), the Dominican Republic is the eighth most-affected country by extreme climate events, amongst which the most vulnerable are the poorest people from neighborhoods and sub-urban communities.

To develop and to implement an early warning systems (EWS) is a cost-effective manner to reduce both climate change vulnerability and disaster risks. A complete and effective EWS comprises four interrelated elements, ranging from the knowledge of risks and vulnerabilities to the preparedness and response capacity. This includes information coming from multiple sources in the region and abroad, including scientific institutions responsible for monitoring hydro-meteorological and geological hazards in the country and as well as scientific institutions that contribute complementarily its monitoring, data and technology. So far, there are no others EWS in place in the Dominican Republic, which means an opportunity for innovative APPs for cellphones and tablets to share information about climate change, disaster risks and hazards.

DEVELOPMENT OF THE REQUEST (up to half a page)

Instituto Dominicano de Desarrollo Integral (IDDI) is developing a comprehensive scheme to fight the climate change supporting other public, private and civil society entities in areas as vulnerability and adaptation. Regarding these matters, IDDI is participating with the Ministry of Environment and Natural Resources of Dominican Republic in several initiatives; many of them related with the effects and impacts of climate change in low-income communities and neighborhoods, specially the risks and hazards over the population lives, primary infrastructure and livelihoods. In this context IDDI presented the current proposal to Ministry of Environment (in two meetings with the team of Ministry of Environment dated July 24 and on September 3, 2014) looking for financial and technical support to develop and to implementation of an early warning system based on an APP for suitable for web, smartphones, tablets, and other no so-developed cellphones devices which can be utilized to prevent the people in case of hurricanes, floods, storms, earthquakes, etc.

The Ministry of Environment is highly interested in this project due it can be used as model to create a system which can be implemented in the rest of the country and can be easily replicated in other similar countries. In general, IDDI will be the leader organization working with the project, but working together with a community based framework developed by IDDI in the past to work in aspects as education, reproductive health, AIDS, energy, recycling, cooperatives, and microcredit in the targeted neighborhoods.

ASSISTANCE REQUESTED (up to one page)

The purpose of the requested assistance is –in the first stage- to identify the type of natural disasters affecting the targeted neighborhoods in the Santo Domingo, D. N., enabling the better design of an early warning system; to assess the mobile telecommunications infrastructure implemented nationwide in order to deter-

mine the most suitable for the project; and to identify best technologies for the design of early warning system (types of sensors and systems management) and its further implementation in the selected area. It is likely to develop a study of impact on the social and economic welfare of Northern Zone neighborhoods with the implementation of the system (depending on the availability of resources and specialist to do it).

In a second stage, the CTCN assistance will be further needed. It would be necessary to carry: a perform conceptual and technical design of the system; to evaluate the technical feasibility of system supported on mobile telecommunications networks; to assess the economic viability of the system of early warning; to develop the necessary regulatory framework to implement the system, if is necessary; and to prepare an set of activities of capacity building and technology transfers. It's estimated the total amount of resources necessities for this action will be –maximum- 150,000 USD, which does not include the IDDI counterpart.

Expected results are:

- Over 500,000 people more and better informed about risks and hazards on their lives;
- Enhanced skills of relevant human resources, mainly those developing and maintaining the APP;
- A specific assessment to identify suitable technologies to be used for emergency communications;
- An integrated system for early warning, which can be extended to the rest of the country;

This support provided by CTCN can help to overpass the identified problem, through:

- Enhanced people capabilities to deliver and improve access to high-quality weather, climate, water and related environmental predictions, information, warnings and services;
- Enhanced community people capabilities to reduce risks and potential impacts of hazards caused by weather, climate, water and related environmental elements;
- Enhanced local people capabilities to produce better weather, climate, water and related environmental information, predictions and warnings to disaster risk reduction and climate adaptation strategies;
- Enhanced targeted communities capabilities to contribute and draw benefits from the global research capacity for climate change and the related environmental science and technology development.

ALIGNMENT WITH NATIONAL PRIORITIES (up to half a page)

The Dominican Republic main climate change concern is the potential impacts caused by more frequent or intense extreme weather events. Reflecting this concern, a number of studies have been undertaken and several workshops have been held in recent years to identify and prioritize adaptation measures in various sectors. A detailed account of these adaptation measures can be found in the two National Communications the country has submitted so far to the United Nations Framework Convention on Climate Change (UNFCCC) and in the National Adaptation Plan of Action (PANA). Climate risk management and capacity building are identified as cross-cutting themes, while poorest communities, freshwater, agriculture and food security, and coastal and marine systems were prioritized due their high vulnerability and importance.

The Human Development Index of the Dominican Republic remains low, relative to and despite the wealth of natural resources endowed by the country, 10.5% of the population lives in extreme poverty and 40.9% live below the poverty line. The poorest provinces by population percentage are found along the border of

Haiti and in the east of the country, however the highest incidence of families living in poverty conditions are found in the larger cities, particularly in Santo Domingo D. N. Given these situations, it is easy to see the need to prioritize initiatives for climate change adaptation in the Dominican Republic, and to adhere to the National Development Strategy (END) to achieve objective 4.3 of “Adequate adaptation to climate change” for the year 2013, as approved by the Dominican Government, and integrate it into this proposal.

PAST AND ONGOING EFFORTS (up to half a page)

IDDI recently authored the study “*Critical Points concerning the Vulnerability and Adaptation to Changing Climate in the Dominican Republic*” The study found that 13 provinces are the most vulnerable to Climate Change effects. Currently, IDDI is working on climate change with 9 city governments in the interior of the country, as well as with the 11 municipalities that compose the Commonwealth of the Greater Santo Domingo. The aim of this initiative is to work with the National District (DN), concentrating specifically on a strip of marginalized neighborhoods (commonly referred as the “Northern Zone”) due to its high vulnerability that was ranked No. 1 in priority as a result of their precarious condition. Currently IDDI is highly focused into continue supporting Northern Zone communities in climate change and risks management.

Other efforts that can be supported by the CTCN are:

- a) Climacción: a multi-sectorial platform, whose goal is to maximize available resources to avoid overlap of activities directed towards addressing vulnerability and adaptation for climate change.
- b) Network of Community Organizations of Greater Santo Domingo for climate change adaptation, which comprises of 76 organizations from schools, local government, NGOs and community based groups.
- c) A current direct partnership with the Santo Domingo D. N. municipal government for climate change adaptation and increase of the resilience of the city, which include public and private utilities.

EXPECTED BENEFITS (up to half a page)

Proposed project represents an innovative alternative to develop an early warning on different platforms; web, smartphones, tablets, and SMS to facilitate rapid and efficient access by the alerted people and institutions responsible for prevention, preparedness, planning and humanitarian response (government, donors, international agencies, and civil society organizations). In this sense, the platform will serve as a filter and simultaneously as an access point for early warning information focused in the targeted neighborhoods.

Other potential benefits are:

- To reduced mortality / destructions trough early warning in case of disasters.
- Creation on a reliable channel to help reduce false alarms and misinformation.
- Facilitates political and social decision-making bodies and prioritize risks.
- Minimizes gap between alert and to attend treated people and infrastructure.
- An intuitive and easy access tool to disseminate information on climate change
- Job creation for technicians and professional developing the APP and its implementation
- Synergies among local institutions, cooperation, and private sector in climate change

As well, this project can be demonstrative for other similar efforts in other Caribbean countries.

EXPECTED TIME FRAME

Up to 6 months, depending on the availability of economic and technical resources. Project start date is expected be on January 2015 and it can be complete as soon as June 2015. Main tasks will be done in 4 months, but the socialization, results diffusion, and preparing papers, it can take up to 2 additional months.

KEY STAKEHOLDERS


Stakeholder	Role in the response
<i>Instituto Dominicano de Desarrollo Integral (IDDI)</i>	<i>Leader Organization and main developer – link among CTCN and Beneficiaries</i>
<i>Claro – Orange – TRICOM - VIVA</i>	<i>Main carrier companies in DR which platforms can be utilized by the project</i>
<i>Ministry of Environment and Natural Resources of Dominican Republic</i>	<i>Assistance into capacity building contents and to further expand the project</i>
<i>Centro de Operaciones de Emergencia (COE)</i>	<i>Country's higher level in Coordination of institutions for prevention, mitigation and disaster response to ensure a timely response to emergencies and disasters</i>
<i>Others (IDDI Communities Centers, Neighborhoods Joints, etc.)</i>	<i>Community based assistance to promote the project implementation and benefits.</i>

MONITORING AND EVALUATION

By signing this request, I affirm that processes are in place in the country to monitor and evaluate the assistance provided by the CTCN. I understand that these processes will be explicitly identified in the Response Plan in collaboration with the CTC, and that they will be used in the country to monitor the implementation of the CTCN assistance.

I understand that, after the completion of the requested assistance, I shall support CTCN efforts to measure the success and effects of the support provided, including its short, medium and long-term impacts in the country.

DATE AND SIGNATURE

<p>NDE: <i>Direccion de Cambio Climatico</i> Date: <i>19/01/2015</i> <i>Ministry of Environment and Natural R.</i> Responsible: <i>Pedro Garcia Brito</i> Signature: </p>

****PLEASE LIST ANY RELEVANT BACKGROUND DOCUMENTS AND PROVIDE THEIR WEB LINKS (IF WEB LINKS ARE NOT AVAILABLE PLEASE ATTACH THEM AS PDF FILES TO THE APPLICATION)**

THE COMPLETED FORM SHALL BE SENT TO THE [CTCN@UNEP.ORG](mailto:ctcn@unep.org)

Need help? The CTCN team is available to answer questions and guide you through the process of submitting a request. The CTCN team welcomes suggestions to improve this form.

>>> Contact the CTCN team at ctcn@unep.org