

#### **Consultancy:**

#### Technical analysis of flood risk assessment in the Dominican Republic to inform the second submission of the Nationally Determined Contributions

APPLICATION DEADLINE: STARTING DATE: LOCATION: 6<sup>th</sup> April 2020 15<sup>th</sup> April 2020 Flexible

### ABOUT GWP

The Global Water Partnership (GWP) is an international network established in 1996, whose vision is for a water secure world. The GWP mission is to advance governance and management of water resources for sustainable and equitable development. The GWP network is open to all organisations which recognise the principles of **integrated water resources management** endorsed by the network. The network spans 13 regions with more than 3,000 institutional Partners in 158 countries. The global Secretariat is in Stockholm, Sweden. More information can be found here: <u>www.gwp.org</u>.

#### BACKGROUND

GWP addresses the manifold threats and opportunities relating to sustainable water resource management by promoting partnerships, knowledge management and facilitation of reform/change processes. To this end, it works at a regional and country level to facilitate the inclusion of water in the development agenda (within the overall umbrella of SDGs), with an entry point on water security. The main thrust is for better implementation of water governance via IWRM.

The Global Water Partnership-Caribbean (GWP-C) has a mandate to assist Caribbean countries in achieving long-term water security through the sustainable management of their water resources. This is achieved through the promotion and implementation of IWRM; a participatory approach to managing water resources that involves engaging all sectors of the economy.

#### **Nationally Determined Contributions**

After the commencement of the Paris Agreement, country reports which were submitted before the Paris Conference (INDCs – Intended Nationally Determined Contributions) became Nationally Determined Contributions. Together with a new system for reporting on adaptation, these NDCs are central to the Agreement's implementation. Countries can decide whether to focus adaptation planning into their NDC, and/or use National Adaptation Plans, or National Communications.

The United Nations Framework Convention on Climate Change (UNFCCC), the 2030 Agenda for Sustainable Development, and the Sendai Framework for Disaster Risk Reduction 2015 – 2030, all have their respective global processes and platforms, and monitoring and reporting mechanisms. These provide entry points for dialogue and action to make best use of IWRM in increasing ambition to advance countries' commitments on climate action, sustainable development, and disaster risk reduction.



The NDCs are a powerful framework for laying out priorities for national climate action, with the potential to guide priorities such as building climate resilience and climate-resilient infrastructure. They can be developed into country-level strategies and/or approaches for mobilising finance for climate resilient infrastructure programmes and projects and for enhancing the necessary policy and regulatory frameworks. The first window of opportunity ahead is the submission of new or updated NDCs in 2020.

It is in this context that GWP is supporting the Government of the Dominican Republic to develop estimates of increased risk of flooding. This technical study will inform the preparation of the country's submission for the second round of NDCs. These activities are part of the Climate Action Enhancement Package from the NDC Partnership.

## **OBJECTIVE OF THE ASSIGNMENT**

- Develop a technical analysis to address additional climate risks that were not included in the first NDC submitted by the Dominican Republic to inform the second NDC submission in 2020.
- Generate climate projections for localised increased intense rainfall.
- Produce estimates of increased risk of flooding in major riverine valleys and large human settlements
- Assess threats of landslides on steep slopes and establish projections of affected households and loss of livelihoods.

### SCOPE

As described in the background section, this work will be carried out in the context of the formulation of the second round of Nationally Determined Contributions of the Dominican Republic to be submitted in 2020. The consultant / Firm is therefore expected to become familiar with the first NDC submitted by the Dominican Republic in 2015, as well as national policies and plans related to climate adaptation and mitigation that are relevant for the assignment. In addition, it is expected that the consultant / Firm keeps abreast with on-going and planned processes in the country that offer synergies with this task and has undertaken similar assignments related to climate change adaptation and mitigation

# ACTIVITIES

- Prepare a rapid review of available data and existing relevant literature. The work will draw on sources that include:
  - Existing climate projections for 2050 and 2070 developed by the Government of the Dominican Republic in 2015.
  - o Global and/or Regional Climate Models
  - Available literature from the IPCC, as well as other relevant available literature from global, regional and national sources.
  - Stakeholder input, facilitated by GWP
  - Additional literature
- Generate localised climate projections for increased intense rainfall based on existing climate scenarios for the Dominican Republic for 2050 and 2070.
- Participate in multi-stakeholder consultations to gather stakeholder input on the risk assessment, both at inception stage as well as at finalisation stage.
- Estimate flood hazard and exposure based on the projections generated.



- Develop projections of the change of impact induced by the change of climate, comparing the baseline to the future conditions to show spatial variability.
- Identify the threats of landslides on steep slopes and generate projections of affected households and loss of lives.
- Incorporate inputs from stakeholders consulted along the process.

# DELIVERABLES AND SCHEDULE

- 1. Inception report
- 2. Technical analysis report on climate change increased intense rainfall:
  - Review of the relevant literature.
  - Methodology and data used for the analysis, including inputs from stakeholder consultations.
  - Results of generated projections of localised increased intense rainfall related to climate change in the Dominican Republic, including maps and figures.
  - Recommendations for the assessment of flooding risk, including:
    - Review of existing available data
    - Recommended criteria to be used for the assessment and methodology
      - Specification for a viable methodology
- 3. Technical assessment report of flood risk on major riverine valleys and loss of livelihoods:
  - Review of the relevant literature
  - Methodology and data used for the analysis, including inputs from stakeholders.
  - Mapping of changes in flood risk originated by the change in increased intense rainfall in major riverine valleys and large human settlements.

Schedule: The consultancy will commence on the 15<sup>th</sup> April 2020. Item 1) to be submitted by 8<sup>th</sup> May 2020, Item 2) by 26<sup>th</sup> June 2020 and Item 3) should be completed by 31<sup>st</sup> July 2020.

# CONSULTANCY REQUIREMENTS

- At least 7 years' experience in the field of risk assessment.
- Extensive experience using climate models, including generation of rainfall projections and risk mapping.
- Prior experience using climate models for Caribbean countries.
- Prior exposure to climate-related policy development processes.
- Deadline driven and results oriented.
- Mastery of Microsoft Word and PowerPoint
- Fluency in English and Spanish

Please send in your technical and financial proposal for the services required to <u>gwp@gwp.org</u> with a copy to <u>simone.lewis@gwp-caribbean.org</u> by <u>Monday 6<sup>th</sup> April 2020</u>.

**Financial proposal should include all financial costs to be borne by the consultant / firm** for undertaking the assignment. **ONLY** proposals under consideration will be contacted.