#### THE UNIVERSITY OF THE WEST INDIES, MONA

# STRENGTHENING WATER RESOURCES MANAGEMENT AND CLIMATE RESILIENCE IN COASTAL AND INLAND WATERSHED COMMUNITIES IN JAMAICA PROJECT

## CONSULTANCY SERVICES FOR A TECHNICAL ASSISTANT -

## WATER RESOURCE MANAGEMENT

## **REOUEST FOR EXPRESSIONS OF INTEREST**

The University of the West Indies (UWI) Mona has received financing from the Caribbean Development Bank (CDB) in an amount equivalent to US\$909,000.00 (Nine Hundred and Nine Thousand United States Dollars) towards the cost of the 'Strengthening Water Resources Management and Climate Resilience in Coastal and Inland Watershed Communities in Jamaica' Project and intends to apply a portion of the proceeds of this financing to eligible payments under a contract for which this invitation is issued. Payments by CDB will be made only at the request of the UWI Mona and upon approval by CDB and will be subject in all respects to the terms and conditions of the Financing Agreement. The Financing Agreement prohibits withdrawal from the financing account for the purpose of any payment to persons or entities, or for any import of goods, if such payment or import, to the knowledge of CDB, is prohibited by a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations. No party other than the UWI Mona shall derive any rights from the Financing Agreement or have any claim to the proceeds of the Financing.

The UWI Mona, the Executing Agency, now wishes to procure consultancy services for a Technical Assistant (TA) – Water Resource Management.

The objective of the consultancy is to ensure that project activities are executed in a timely and appropriate manner to achieve expected outputs and outcomes. The TA will work with the relevant Team Lead throughout the entire duration of the project, and will be expected to carry out their assigned tasks and complete the stated deliverables as specified in the attached TOR.

The duration of the assignment is expected to be for a period of 16 consecutive months.

The UWI Mona now invites interested eligible individual consultants to submit Expressions of Interest indicating qualifications and experience required to provide these consultancy services.

Consultants shall be eligible to participate if:

- (a) the persons are citizens or *bona fide* residents of an eligible country; and
- (b) in all cases, the consultant has no arrangement and undertakes not to make any arrangements, whereby any substantial part of the net profits or other tangible benefits of the contract will accrue or be paid to a person not a citizen or bona fide resident of an eligible country.

Eligible countries include member countries of CDB and non-member countries that meet the eligibility criteria for procurement under the European Union (EU)-funded programme, in accordance with the EU Eligibility Rules. Consultants are advised to review the detailed eligibility criteria detailed in Section 4 and conflict of interest provisions in Section 5 of the Procurement Procedures for Projects Financed by CDB (January 2021), as published on CDB's website.

In the assessment of submissions, consideration will be given to qualifications and experience on similar assignments.

All information must be submitted in English. Further information may be obtained from the first address below between 9:00 am and 4:00 pm Monday to Friday.

An electronic copy of the Expressions of Interest including cover letter and curriculum vitae, must be submitted to the following two addresses no later than 4:30 pm Jamaica Time on June 4, 2025. The subject line should read "Expression of Interest – Consultancy Services for Technical Assistant – Water Resource Management".

Following the assessment of submissions, the most technically capable and appropriately experienced applicant will be invited to negotiate a contract to provide the consultancy services. The UWI Mona reserves the right to accept or reject late applications or to cancel the present invitation partially or in its entirety. It will not be bound to assign any reason for not engaging the services of any applicant and will not defray any costs incurred by any applicant in the preparation and submission of Expressions of Interest.

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2. Procurement Policy Unit Caribbean Development Bank P.O. Box 408 Wildey St. Michael Barbados

Tel: 246-539-1600

Email: procurement@caribank.org

## **DRAFT TERMS OF REFERENCE**

## TECHNICAL ASSISTANT - WATER RESOURCE MANAGEMENT

## 1. BACKGROUND

4.01 Under the supervision of the component/team lead - In-depth Evaluation of Surface and Groundwater Resources, the Technical Assistant will provide support for the collection and analysis of fieldwork data, modelling of surface and groundwater resources as well as the dissemination of results. The Technical Assistant is expected to possess postgraduate training with skills, knowledge and competence in geographic information system (GIS) based surface and groundwater modelling, water resources and CC research. The goal is to contribute to building up the competence of young professionals to engage in the urgent issues of CC and water resources.

## 2. OBJECTIVES

2.01 To assist the component lead with data analysis (rainfall, streamflow and groundwater abstraction data), and the creation and use of soil and water assessment tool (SWAT) and groundwater flow (MODFLOW) models. The Technical Assistant will also assist the component lead in writing reports and research publications.

# 3. SCOPE OF WORK

- 3.01 The duties of the Technical Assistant are:
  - (a) Research Duties Secondary research and background document reviews
    - (i) Drafting of reports and summaries.
    - (ii) Assisting with field and secondary data collection on rainfall, surface and groundwater resources.
    - (iii) Modelling of water resources using SWAT, WEAP, hydrologic modelling system (HEC HMS) and MODFLOW.
  - (b) Data entry and Analysis
    - (i) Data entry using quantitative software packages.
    - (ii) Assessment of data quality control.
    - (iii) Mapping using GIS software.
    - (iv) SWAT model for surface water resources using present and future climate scenarios.
    - (v) MODFLOW for groundwater resources under scenarios of climate change and demand.
    - (vi) WEAP modelling for demand and supply for surface and groundwater under impacts of climate change and population growth.
    - (vii) Appropriate illustration of project findings.
  - (c) Writing
    - (i) Co-authoring research reports and manuscripts for journals.
    - (ii) Dissemination of data for various purposes e.g., workshop and conference presentations.

- (d) General Administration
  - (i) Assist with tracking of fieldwork progress.
  - (ii) Secure management of data collection and storage.
  - (iii) Support the organisation of meetings and contacting stakeholders.
  - (iv) Support with the organising of research trips.
  - (v) Develop presentations and related materials.

## 4. QUALIFICATIONS AND EXPERIENCE

4.01 The Technical Assistant shall have the following:

## Required:

- (a) Postgraduate degree in Hydrology, Hydrogeology, Water Resources or Master's degree closely related to the primary area of q
- (b) Five years of experience in carrying out research on water resources using modelling tools.
- (c) In depth knowledge of GIS, SWAT, WEAP, HEC and MODFLOW modelling tools.
- (d) Willingness to travel and availability for training.

#### **Desirable:**

- (a) At least five years of experience in quantitative research, including data collection, modelling and mapping.
- (b) Proven knowledge of quantitative software packages.
- (c) Ability to communicate effectively in English.

#### **Skills:**

- (a) Excellent writing and analytical skills.
- (b) Ability to write reports, research papers and presentation skills.

## 5. <u>DELIVERABLES</u>

- 5.01 The Technical Assistant will prepare monthly reports that will underscore inter-alia:
  - (a) Main activities undertaken, and key results achieved, and
  - (b) Key challenges and opportunities.

# 6. <u>DURATION</u>

6.01 The Technical Assistant will be hired for 16 consecutive months and paid on a monthly basis.