



## Terms of Reference

**Consultancy for Strengthening Agricultural Disaster Risk Management (ADRM) in the Caribbean Region through the Establishment of Drought Annexes to already existing ADRM Plans**

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## **TERMS OF REFERENCE (TOR)**

<b>Title of project:</b>	Intra-ACP Climate Services and Related Applications Programme (ClimSA)
<b>Project duration:</b>	Four years
<b>Donor:</b>	European Union
<b>Executing Entity:</b>	Caribbean Institute for Meteorology and Hydrology (CIMH)
<b>Consultancy:</b>	Strengthening Agricultural Disaster Risk Management (ADRM) in the Caribbean Region through the Establishment of Drought Annexes to already existing ADRM Plans

## **1. Programme Description**

### **1.1. Project Introduction**

The Intra-ACP Climate Services and Related Applications Programme (ClimSA) is a four-year project funded through the European Union (EU) African, Caribbean, Pacific (ACP) Secretariat and being implemented by the Caribbean Institute for Meteorology and Hydrology (CIMH).

Its goal is to support the climate information services value chain with technical and financial assistance, infrastructure, and capacity building. This will ultimately result in improved access and use of climate information, services, and applications at all levels of decision-making and will lead to improved adaptation measures that allow for the Caribbean region to become more sustainable and resilient.

For the Caribbean, these activities are timely and necessary since climate variability and change are already having and will continue to have severe impacts on national economies and key socio-economic sectors in the absence of this type of large scale, resilience intervention.

The ClimSA Caribbean Programme will be executed through pilot activities aimed at strengthening the climate services value chains in the:

- health sector of Dominica,
- water sector of Jamaica, and
- agriculture and food security sector of Guyana.

Key partners of the programme at the national level are the National Meteorological and Hydrological Services (NMHSs), government ministries with national responsibility for health, water and agriculture/food security sectors, private sector entities and end users of products and services from the three target sectors.

The 16 Caribbean Member Countries of the Organisation of the African, Caribbean and Pacific States (OACPS) will benefit from the programme through regional capacity building initiatives, sharing of results and lessons learned from the three pilot countries and the institutional and capacity building at the CIMH.

## 1.2. Project Outcomes and Outputs

The ClimSA programme is aligned to the Regional Roadmap and Plan of Action 2020-203 and aims to achieve the following Outcomes:

- Outcome 1 - Interaction between the users, researchers and climate services providers in the Caribbean regions is structured;
- Outcome 2 - Provision of climate services at Regional and National levels is effectively guaranteed and secured;
- Outcome 3 - Access to Climate Information is improved;
- Outcome 4 - Capacity of Caribbean region to generate and apply climate information and products relevant to particular concerns enhanced;
- Outcome 5 - Climate-informed decision-making is enhanced and climate services are mainstreamed into policy processes at regional and national levels.

## 2. Objective of the Consultancy and Activities

### Background

After the Caribbean wide El Niño driven droughts of 2009 – 2010 and 2014 to 2016, it is clear that the region's agriculture sector is significantly at risk with costly disruptions occurring when drought threatens. The two regional droughts, and some smaller droughts that impacted parts of the region and not the entire basin, also resulted in costly impacts on the agriculture sector in affected countries. In 2019 and 2020, a number of intense shorter duration droughts (flash droughts) impacted portions of the Caribbean, that were particularly severe on agricultural production. Unfortunately, the region's agriculture sector, though extremely vulnerable to drought, has not yet made a concerted effort to mitigate future drought impacts. In 2016, the Food and Agricultural Organization of the United Nations (UN FAO) and the Caribbean Disaster Emergency Management Agency (CDEMA), recognising the deficit in planning for drought in existing national Agriculture Disaster Risk Management (ADRM) plans, through a consultancy, developed a template as an annex to these plans. The template established responsibilities and activities surrounding drought risk and severity. The risk levels and responses are linked with a suite of globally recognized indices for monitoring drought, including agricultural drought. However, with limited technology, and data, including data related to soil moisture, drought monitoring and forecasting is limited to the use of information related to meteorological drought using rainfall (the most readily available data) indices, in particular the Standardised Precipitation Index (SPI, McKee et al 1993). CIMH and the National Meteorological and Hydrological Services (NMHS) use the SPI to monitor, forecast and alert the region as to potentially severe and impactful droughts.

The purpose of this Action therefore is to initiate better planning for future droughts and identify how the region can strengthen the resilience of its agricultural sector in the face of the increased frequency of droughts. This action will enhance Agricultural Disaster Risk Management plans that consider drought monitoring and forecasting information using in particular, the SPI over relevant timescales by investigating the relationships between the index and impacts to monitor and forecast based on

identified thresholds. The Action would then build the capacity of targeted countries to be able to develop drought annexes for their ADRM plans.

In 2021 under the SDCR programme, a consulting team reviewed the template using Saint Lucia and Grenada as test beds. Lack of agricultural data was an impediment to the establishment of relationships between the rainfall/drought index (SPI) and agricultural impacts. Initial conversations with the Ministry of Agriculture in Guyana suggest that data paucity will be less of an issue. Further, the consulting team made several recommendations to enhance the Caribbean drought annex template that will be considered in the development of the Guyana drought annex.

**Objective:**

To establish triggers for actions in the agriculture sector based on SPI (or some other relevant drought index) information to support the development of drought annex to the Agricultural Disaster Risk Management (ADRM) plans in Guyana.

### **3. Scope of Work and Deliverables**

The following activities to be implemented by the consultant in collaboration with CIMH are envisaged to support the achievement of the following objectives:

- I. Convene meetings with the relevant national agencies in Guyana, CIMH and CARDI on drought planning for the agriculture sector and agricultural impacts related to drought events in Guyana;
- II. Perform analysis to establish relationships between various timescales of the SPI and impacts, particularly on key agriculture commodities, including rainfed rice;
- III. Develop a drought annex (drought plan) for the agriculture sector driven by the established relationships from ii above;
- IV. Through at least 2 workshops, build national capacity on drought planning for the agriculture sector relative to the existing Caribbean template (or a recommended template);
- V. Convene a sub-regional workshop focusing on lessons learnt and key results from Guyana, to be facilitated by the consulting team in collaboration with CIMH.

### **Deliverables**

#### **Consultant deliverables and indicative schedule (time after commencement)**

<b>No.</b>	<b>Deliverable</b>	<b>Timeline</b>
1.	Inception Report outlining approach and methods	1 month
2.	Report on meetings with national and regional stakeholder agencies	3 months
3.	Report on relationships between SPI and agricultural impacts	7 months
4.	Reports on National capacity building workshops on drought planning for the agriculture sector relative to existing FAO/CDEMA (or other recommended) template	8 months
5.	Agricultural Drought Management Plan (ADRM Drought Annex) that utilizes relationships between SPI and agricultural outcomes	8 months
6.	Sub-regional workshop of lessons learnt and key results	9 months
7.	Final consultancy reports	10 months

### **CIMH inputs**

- I. Daily rainfall and/or SPI data for Guyana;
- II. Reported drought impacts data for Guyana, including for rainfed rice;
- III. Administrative and technical support for and at meetings and workshops.

## **4. Duration & Expected Start Date**

The contract will be for 10 months and is expected to start in July 2025.

The working time includes home/office-based work. Travel is involved. Up to 10 days travel to Guyana for national and regional meetings/workshops. All travel and travel costs will be covered and organized by the consultant within the contract sum.

## **5. Contract Type and Price**

The assignment will be contracted through a fixed-priced consultancy agreement.

The contract will be concluded between the Consultant and CIMH and will contain the above-stated deliverables.

Payment for consultancy services will be made upon satisfactory delivery of services.

## **6. Proposal Requirements**

Technical Proposal Inclusive of the following:

- a) A detailed curriculum vitae of each person engaged in the execution of the work assignment including a description of main achievements if applicable;
- b) Methodology for completion of the work assignment with specific work plan and schedule;
- c) References of previous work completed that is similar to the TOR;
- d) Contact information for three (3) references.

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Financial Proposal:

- a) Full financial proposal – This should include all travel, and any potential items needed to fully complete the consultancy.
- b) Hourly rate for additional work beyond this scope;
- c) Full work plan inclusive of time for the provision of feedback.

## 7. Selection Criteria

The consulting team must at least have:

- a) Advanced degree(s) (MSc, PhD) with the lead consultant having a PhD with at least 3 years' experience or a MSc with at least 5 years experience in relevant areas such as climatology, water resources management, social science, disaster management;
- b) Track record of research and development in drought monitoring and planning inclusive of SPI development; and
- c) Professional experience in capacity development work in drought monitoring and/or planning.
- d) Experience working in the Caribbean on drought management issues would be an asset.

## 8. Evaluation and Selection Process

Candidates will be evaluated based on:

Category	Description	Weighting
1	Advanced degree(s) (MSc, PhD);	15
2	Track record of research and development in drought monitoring and planning inclusive of SPI development	20
3	Professional experience in capacity development work in drought monitoring and/or planning in the Caribbean	15
4	Methodology	20
	<b>Total</b>	<b>70</b>

**Proposals will be evaluated according to the Combined Scoring method – where the technical criteria will be weighted at 70% and the financial will be weighted at 30%.**

### Supervision of contract

The Consultant shall report directly to the Chief of Section, Applied Meteorology and Climatology (AMC) or his designate. Review and feedback on Consultant outputs will be provided by CIMH and its partners. However, outputs will be approved by the CIMH.