











# NATIONAL INDIVIDUAL CONSULTANCY

# National Consultant to collect data and analyze the National Risk Atlas for its update and implementation

Job Title:	National consultant
Category:	DRR/DRM, GIS, Environment
Duty Station:	Kigali, Rwanda
Type of contract:	Individual contract
Expected starting date:	1st September 2019
Duration of assignment:	30 Working days for 3 months

# 1. Background

The Programme "Strengthening National and Local Disaster Risk Management (DRM) Capacity, Resilience and Enhancing Preparedness and Early Warning System (EWS) in Rwanda" fully funded by UNDP is a 5-year Programme implemented by the Ministry in charge of Emergency Management (MINEMA) and the Rwanda Meteorology Agency since January 2019. The programme aims to achieve the outcome 'to reduce risks and build the resilience of the population to climate change and natural disasters' by strengthening the technical capacities of institutions on better disaster risk management both in the long term, and short-term emergency preparedness at all levels and build disaster resilience of the population. This programme aligned with the government development Strategy as Disaster Risk Management (DRM) is one of the cross-cutting areas identified in the National Strategy for Transformation (NST I 2017-2024).

UNDRR (former UNISDR) with the CIMA Research Foundation initiated the new initiative "Building Disaster Resilience to Natural Hazards in Sub-Saharan African Regions, Countries, and Communities" in 2018. This initiative continues in the period 2019 -2020 and embraces the fine-tuning of Disaster Risk Profiles for floods and droughts in four countries including Rwanda, Tanzania, Zambia, and Angola. As per the previous activity in 2018, results will be combined with outcomes of a national DRR budget review, performed in the same countries under different components of the ACP-EU Project. As such, the involvement of stakeholders in the partner countries and the collection of local data and knowledge is essential for the development of the updated profiles.

The Ministry in charge of Emergency Management (MINEMA) is mandated to attain a highly proficient mechanism for preventing, mitigating, responding, recovering, securing, monitoring and timely acting natural and man-made disasters such as floods, drought, landslides, mudslides, volcanic activity, earthquakes, windstorms, and fire within a sector policy framework. In 2015, the MIDIMAR developed the National Risk Atlas of Rwanda with support from UNDP. The Risk Atlas is a tool to enhance decision-making to reduce the economic and social impacts of natural hazards with a focus on five natural disasters such as floods, droughts, landslides, windstorm, and earthquake. It aims to provide policymakers with the appropriate and relevant information to strengthen the capacity of Rwanda in developing strategic disaster management strategies. Given that risks are dynamic owing to rapid changes in the country's demographic, social and economic processes, it was recommended that the National Risk Atlas would be updated every five years in order to remain relevant, useful and sustained (Recommendation 5:p166).

To support on this, UNDP, UNDRR, and the CIMA Research Foundation intend to engage a local expert who will analyze the National Disaster Risk Atlas to identify gaps which should be addressed during the updating process under the direct coordination of MINEMA and supervision from UNDP Rwanda/-CIMA Research Foundation experts.

## 2. The Purpose of the Assignment

The purpose of the assignment is to analyze the National Disaster Risk Atlas in order to identify gaps which should be addressed during the updating process and inform the way forward for its update. This will require (1) to collect data to be compared to raw data of National Risk Atlas of Rwanda(field trothing); (2) to provide strategic solutions to cover challenges identified in development of Disaster risk atlas (3) assses the challenges on utilization of information from Disaster risk atlas and (4) provide the 2020 strategic roadmap and support in drafting ToRs in order to update the Atlas in 2020.

# 3. Objective, Scope of Work and Responsibilities

Working in close consultation with the Ministry in charge of Emergency Management and guidance from UNDP and the CIMA Research Foundation, the consultant is required to undertake below scope of work in three phases, with specific tasks outlined below. He/she will oversee the process, provide guidance and quality assurance, be the initial contact point with MINEMA/UNDP/CIMA and will provide a regular update.

## Phase 1: facilitate data collection, gap analysis and assessment

- Update national data on five main disasters based on the last version of National Risk Atlas and MINEMA disaster raw-database (comparative analysis to see the variations) with priority in the first phase of the data collection to data useful for Floods and Droughts.
- Collect data identified within the reference dataset proposed by the Programme, at highest spatial detail possible with national coverage, as described in Annex 1 and under the guidance of CIMA, using official data sources from relevant Ministries and other Gov. and N.G. agencies indicated by MINEMA.

- Analyze, edit and manipulate data to be carried out with the GIS hardware and software of the Consultant, in order to guarantee topological consistency and IT standards
- Provide cataloguing data according to the criteria established by the Program: in case of the collection of non-official data, this has to be clearly visible at every step of the process of management and written with suffix '\_TEMP' in the names of layers and folders collected, plus described in their metadata;

# Phase 2: design and lead a pre-validation workshop

- Meet with stakeholders and institutions involved in the program, and in particular with the national DRR focal point, National Institute of Statistics of Rwanda, and Rwanda Meteorology Agency
- Provide updated data and identify challenges to upgrade the Atlas
- Design and facilitate a workshop with national stakeholders to review data and mid-term results of the project
- Collect more data and recommendations from representatives of all sectors in the country, academic experts and key stakeholders through the workshop

# Phase 3: propose the 2020 road map to upgrade the Natural Disaster Risk Atlas

- Upload cataloguing data and metadata compilation on the website (Geonode africa.cimafoundation.org)
- Provide updated raw data set of five disaster types floods, drought, landslides, windstorm, and earthquake to the Ministry
- Analyze the National Disaster Risk Atlas in order to identify gaps which should be addressed during the updating process and inform the way forward for its update
- Provide the 2020 strategic roadmap and **ToRs** in order to **update** the Atlas

#### 4. Deliverables

The consultant will provide the following key deliverables:

- (1) Inception report with a clear methodology, data resources, and workplan to analyze and assess the existing national Risk Atlas from the designing stage to the implementation within 1 week from the start of assignment
- (2) Data collection based on Annez 1 & Assessment report including challenges, gaps, analysis results, and recommendations within 5 weeks from the start of assignment
- (3) After the workshop within 1 weeks, workshop report with gathered information and recommendations from all relevant stakehodlers for future use within 8 weeks from the start of assignment

(4) Final assessment report with dataset, 2020 roadmap and ToRs for Atlas update, digitalization and publication on Geonode (Africa.cimafoundation.org) within 12 weeks from the start of assignment

# 5. Required Skills, Experience and Competencies

The Individual consultant should have the following skills/competencies and characteristics:

## **Academic Qualifications**

A Masters' degree in field related to disaster management, environmental sciences, environmental
economics, climate change, meteorology, and climate change adaptation. A Bachelor's degree
combined with at least ten years proven experience in these fields will also be considered qualified.

# Experience

- At least 5 years of professional work/field work in envionemental and natural resources sector;
- Proven record of achievement and demonstrated professional experience in conducting research in the field;
- Experience in at least two similar assignments
- Ability to assess country's natural disaster, climate change adaptation information, vulnerabilities and risks;
- Ability to anticipate and understand different actor's needs, formulate clear strategic plans, prioritize interventions, and determine resources needs according to priorities.
- Knowledge of the country, and a good network of contacts from various and diverse national organizations;
- Proven analytical and writing skills;

# Language Skills

• An effective English communicator, both oral and written, French is an added advantage

# **Competencies**

- Strong project management and coordination skills;
- Strong leadership skills, able to coordinate multiple stakeholders and guide a process at national level;
- A good network, and effective experience working with climate information and services at different sectors:
- Strong track-record of achievements organizing national level multi-stakeholder processes;
- Good Diplomacy skills;

#### 6. Duration of the Contract

The assignment is expected to take 30 working days in a period of 3 months.

### 7. Institutional Arrangement

This section describes the organizational and management structure for the consultant and outlays the roles, key responsibilities and lines of authority of all parties involved in the evaluation process. Implementation arrangements are intended to clarify expectations, eliminate ambiguities, and facilitate an efficient and effective evaluation process.

#### **UNDP**

UNDP is responsible for the management of this consultancy and will recruit and contract the independent individual consultant to undertake the consultancy work on behalf of the Government of Rwanda. UNDP will ensure that all issues pertaining to the contract with the consultant, including payments are completed on schedule and will be responsible for facilitating the work of the consultant. UNDP will cover a part of consultancy and logistical costs related to the workshop.

#### **UNDRR/CIMA Foundation**

UNDRR/CIMA Foundation is responsible for the supervision of the data collection and preparation of the workshop. UNDRR/CIMA Foundation will cover a part of consultancy payment.

#### **MINEMA**

Day-to-day management of the consultant will be provided by MINEMA with the support of UNDP Resident Representative or by his representative (Sustainable Growth Unit Team) overseeing the project. The MINEMA will be the government focal point for the evaluation and approval after each phase of work and provide technical assistance during all phases of the process. The MINEMA will provide all documentation to the team for the desk review, support the setting up of interview appointments and field visits and convene focus group meetings.

## **Technical Working group**

A Technical working group led by UNDP composed of representatives of UNDP, UNDRR, CIMA, and MINEMA, will oversee the conduct of the evaluation at the technical level. The team will provide quality assurance and guidance to the consultancy to ensure that it meets quality criteria. The technical committee will oversee the implementation of the agreed schedule of consultation activities, ensure wide stakeholder consultations, will be in charge of verifying all facts in the report and oversee the production of the final reports and the drafting and implementation of follow up actions.

## 8. Duty Station

The duty station of the work is Kigali, Rwanda with at least 2 required travels supported by the CIMA Research Foundation.

## 9. Payment Modality

Co-financing with UNDRR and CIMA, UNDP shall be paid the consultancy fee upon completion of the following milestones:

- 20% after the submission and acceptance of the Inception Report.
- 25% after the submission and acceptance of the Data Collection Report.
- 25% after the submission and acceptance of the Workshop Report
- 30% after the submission and validation of the Final report, including specific inputs under the different sections to be inserted in the final document.

The remuneration stated above is subject to applicable taxes in accordance to the laws of the Republic of Rwanda.

# 10. Application Procedure

Interested companies should apply by presenting the following documents:

- Personal CV or P11, indicating education background/professional qualifications, all past experience from similar projects, as well as the contact details (email and telephone number) of the Candidates and at least three (3) professional references;
- 3 portfolios in color indicating similar projects conducted from the past;
- Brief description of why the consultant considered herself/himself as the most suitable candidate for the assignment including a methodology on how they will approach and complete the assignment as well as a financial proposal of all breakdown costs for the assignment

#### 11. Evaluation Criteria

The consultant will be evaluated against a combination of technical and financial criteria, using the Combined Scoring Method. Maximum score is 100% out of which technical criteria equals 70% and financial criteria equals 30%. For each of the 3 profile candidates of the consultancy firm, the technical evaluation will include the following:

**Table 1: Selection criteria technical evaluation** 

Criteria		Max. Point
A Masters' degree in field related to disaster management,	20%	20
environmental sciences, climate change, meteorology, and		
related fields		
At least 5 years of professional work/field work in the sector; A		20
Bachelor's degree combined with at least ten years proven		
experience will also be considered qualified.		
Experience in at least two similar assignments	30%	25

Methodology (submitted on the proposal) Ability to assess country's natural disaster, climate change, climate adaptation, vulnerabilities and risks; Ability to anticipate and understand different actor's needs; Ability to formulate clear strategic plans, prioritize interventions, and determine resources needs according to priorities.	35%	25
An effective English communicator, both oral and written, French is an added advantage	10%	10
TOTAL	100%	100

UNDP is committed to achieving workforce diversity in terms of gender, nationality and culture. Individuals from minority groups, indigenous groups and persons with disabilities are equally encouraged to apply. All applications will be treated.

# Annex:

# 1. LIST OF DESIRABLE INFORMATION

		Possible Formats			
	Desirable information	Geographic layer with associated attribute table	Information provided through the corresponding section in the Survey	Table or document	
	Official Country Boundaries				
Built – up	Building blocks or building footprints (possibility with attribute information see detailed methodology)				
	Statistical information on built-up area characterization				
Population	Population census polygons at sub municipal scale with information on gender, age minorities.				
	Population statistics (age distribution, gender minorities at national or sub national scale				
GDP	Sector-specific gross domestic product				
	Local gross domestic product (e.g. regional municipal)				
Agricultural production	Agricultural areas with associated type of crop production cost and / or wholesale price in \$ per ton				
Ag	Information on the growing cycle of each crop				

2. The National Risk Altas (2016)
<a href="http://minema.gov.rw/uploads/tx\_download/National\_Risk Atlas\_of Rwanda\_electronic\_version.pdf">http://minema.gov.rw/uploads/tx\_download/National\_Risk Atlas\_of Rwanda\_electronic\_version.pdf</a>