

Terms of References

Individual Consultant

AGIR Database and Expansion (SDG Climate Facility Project)

September 2020

Background

The Arab region is particularly susceptible to climate change, with temperatures rising faster than the global average. Moreover, it is also the most-water scarce and food-import dependent region in the world. These vulnerabilities have contributed to various forms of social unrest, exacerbated conflicts, and driven the displacement of large numbers of people.

The Sustainable Development Goals, the Paris Agreement on Climate Change, and the Sendai Framework on Disaster Risk Reduction have stressed that for development to be sustainable and resilient to shocks, it must integrate climate change and disaster into short-term responses, and long-term planning. Likewise, the Secretary General's Strategy and Roadmap for financing Agenda 2030 calls on stakeholders to scale up climate finance, and enhance sustainable financing strategies and investments at all levels, and across the different, but interlinked spheres of work.

Against this background, the League of Arab States (LAS), the Arab Water Council (AWC) and multiple UN agencies (UNDP, UNEP-FI, WFP, UN-Habitat, UNDRR) have launched a regional project with the title "SDG-Climate Facility Project: Climate Action for Human Security" (2019-2022) that aims to enhance the capacity of regional and national institutions to address climate change in a way that brings benefits across multiple goals, while also reducing the impacts of conflict and crises. Through joint action, the project will:

- a) Promote integrated solutions for climate action that brings benefits across the SDGs, and crisis and recovery efforts; and
- b) Scale up local partnerships and finance towards those efforts.

Output 2.1 of the regional project focuses on "better characterization of multi-dimensional risk, and to establish baseline on the state of climate security, social vulnerability and adaptive capacity needs across the region." At the base of a risk-informed approach to decision-making is the need for better evidence and information on the nexus of climate impacts with development and crisis prevention/recovery priorities. Enhancing the use of climate science and combining it with community experiences can provide a powerful foundation for better decision-making and policy setting in a region defined by increasing complexity and greater need for systems-based thinking and decision-making.

Efforts have been made to use scientific climate data to describe these complexities, however, critical gaps still exist to predict with more reliability temporal and spatial distribution of risk, particularly in fragile environments and in areas affected by conflict and unrest. Remote sensing, addition in situ measuring systems, Geographical Information Systems (GIS), Management Information Systems (MIS) will be utilized to forecast severity and frequency of climatic events, evapotranspiration, droughts, floods, and more. The Arab Geographical Information Room (AGIR) created by the League of Arab States and hosted by the Arab

Water Council is one key frameworks to expand such capacities in the region. The project seeks to engage a **Technical Consultant** to work in partnership with agencies working in the Climate Facility project, in order to enable AGIR to build database to support defining and initiating national and regional datasets and to create main maps/layers needed to acquire the best available GIS data as well to determine the gaps in GIS systems to analyze climate risks interactions with development and crisis challenges across the Arab States. At the same time, with the intention to operationalize the Climate Risk Nexus Initiative's four areas of work and to enable AGIR to link up with the SDG-Climate Facility, a key question to address is to assess, adjust and expand the structure and scope of AGIR to enable it to provide disaggregated data and information related to climate risks and linkages with development and crises to decision-makers, academic institutions and climate-security networks. The consultant is expected to determine the required institutional set-up, proposed structure, partnership modalities and specifications of building a regional platform within AGIR that will enable the timely sharing of data and results with different stakeholders and end-users.

Objectives and Scope of the Assignment

The assignment has to key objectives:

- 1)** In cooperation with UN Agencies, and Relevant Arab Specialized Organizations that have adequate capacity, create an inventory of **current** key regional and national datasets (Environmental & socioeconomic) for assessments of multi-dimensional risks and for better understanding the complexity of converging risks. This mapping exercise shall focus on highlighting gaps, and providing operational recommendations for building a coherent and relevant Geo-Spatial Information System during the 2nd phase of AGIR and shall outline what services and tools the system could support and feed into to build on what was developed under AGIR 1st phase. **(10 days)**
- 2)** In cooperation with partners, such as WFP, define and initiate **new** types of database sets required for climate risk validation, including but not limited to climate and disaster risks in the Arab region with focus on food and water security, Human development and social vulnerability (Database expertise). **(10 days)**
- 3)** Update AGIR long and short-term work plan to address the current gaps in knowledge and information and initiate a detailed description of the required activities to fulfill the role of AGIR in enhancing characterization of hazards, vulnerabilities and exposure for assessment and monitoring purposes, under the framework of Climate Risk Nexus Initiative (CRNI). **(10 days)**
- 4)** Providing recommendations on possible ways to establishing linkages with on-going initiatives by LAS and the UN, such as: ESCWA's Regional Initiative for Assessment of Climate Impacts on Water Resources and Socio-Economic Vulnerability in the Arab Region (RICCAR) and Arab Science and Technology Advisory group for Disaster Risk Reduction & WFP Community of practice (COP) for anticipatory action to better coordinate existing regional scientific capabilities for enhanced use of science and technology in understanding risks. **(5 days)**
- 5)** Draft a detailed report outlining consultations and mapping of different options for the institutional set-up, partnership modalities, structure and design of AGIR's data-sharing platform based on AGIR's existing operations and vision to expand AGIR into a key pillar and platform under the Climate Risk Nexus Initiative (CRNI) and the SDG-Climate Facility. **(10 days)**

Deliverables:

- Report outlining current locations/deposits of relevant data that AGIR could benefit from incorporating, including outlining of barriers to accessing the data and proposed measures to obtaining the data in a continuous way in the long-term, to enable AGIR to draw on timely data in the long-term beyond the duration of this particular consultancy;
- A detailed updated long-term and short-term work plan for AGIR, with detailed description of technical and capacity building activities with estimated initial costs to support the development and sharing of disaggregated data by localities and regions as possible to enable a risk-informed planning and investment at regional, national and local levels.
- Report outlining different design options to expand AGIR into a key pillar and platform under the Climate Risk Nexus Initiative and the SDG Climate Facility to provide data and information with decision-makers related to the SDG-Climate-Security Nexus.

Qualifications:

- Masters' degree in data science, environmental science, hydrology, soil science, international development or related areas;
- First degree, or other qualification related to development of ICT platforms
- Minimum 10 years of experience in mapping or analyzing quantitative and qualitative data related to environmental resources scarcity or other related issues;
- Excellent understanding of climate change impacts on natural resources quality and quantity in Arab States;
- Experience of working in developing countries, including in crisis countries;
- Excellent communication skills in English and Arabic.
- Prior experience in developing business models or institutional set-ups of academic or research think tanks is considered an asset;

Duration of the Work

The assignment is expected to last for a period of 3 months and to cover a total of 45 working days.

Duty Station:

The consultant is expected to report to Arab Water Council headquarters in Cairo, Egypt, if the situation related to COVID-19 allows. Parts of the work may be carried out remotely in agreement with the Deputy Technical Director at Arab Water Council.