

Terms of Reference

National or International consultant: National consultant

Description of the assignment: National consultant on climate change adaptation to update Lebanon's Technology Needs Assessment

Project Title: Lebanon's Third Biennial Update Report and Fourth National Communication

Period of assignment/services: 60 work-days spread over a maximum of 5 calendar months

1. Background / Project Description

The project aims to enable Lebanon to prepare, produce and disseminate its Third Biennial Update Report (BUR) and Fourth National Communication to the UN Framework Convention on Climate Change (UNFCCC) in order to fulfill Lebanon's commitments as a Non-Annex 1 Party to the Convention. As part of the activities planned under the Fourth National Communication 4NC, the project aims at updating Lebanon's technology needs assessment for both mitigation and adaptation actions.

Lebanon experiences, and will continue to face, increased temperatures, more frequent and severe natural disasters related to climate change caused by shifts in temperature, precipitation and water regimes (e.g. heat waves, drought spells, floods and other climate-driven extreme events). Climate change is expected to have significant impacts on water supply and demand for domestic, industrial and irrigation uses, as well as on agricultural production and food security.

The latest Technology Needs Assessment (TNA)¹ undertaken in 2012 has identified the water and agriculture sectors as key priority sectors for adaptation to climate change in Lebanon and has identified a set of soft and hard technologies to strengthen and accelerate Lebanon's adaptation efforts. In line with Decision 17/CP.8 and Decision 2/CP.17 and the project document, the purpose of this consultancy is to update Lebanon's TNA for climate change adaptation with a focus on the agriculture and water sectors and identify related adaptation measures that are being implemented in the country by governmental institutions, international organizations, NGOs and the private sector.

2 . Scope of work, responsibilities and description of the proposed analytical work

UNDP is seeking the services of a consultant to 1) Identify and prioritize adaptation technologies with a focus on agriculture and water, 2) Identify barriers and develop Technology Action Plans (TAPs) for the deployment of adaptation technologies in Lebanon and 3) identify climate change adaptation measures being implemented in Lebanon for both sectors.

¹ <https://climatechange.moe.gov.lb/viewfile.aspx?id=150>

General tasks

The tasks mentioned below shall be performed in close cooperation with the UNDP/Climate change team and the Ministry of Environment. The Consultant should report to the UNDP BUR3/4NC Project Manager.

Task 1: Identify and prioritize adaptation technologies for Lebanon

- 1.1 Assess the status, progress and effectiveness of implementation of the previously prioritized technologies in Lebanon's TNA²
- 1.2 Identify new available adaptation technologies (with a focus on agriculture and water), and describe their adaptation potential, expected costs, sustainability impacts (environmental, social, and economic), short or medium to long-term availability, scale of implementation (small or large scale) and mitigation co-benefits;
- 1.3 Prioritize at least 6 technologies based on a multi-criteria decision analysis and in close coordination with relevant stakeholders;

Task 2: Prepare Technology Action Plans for the prioritized adaptation technologies

- 2.1 Identify barriers for the deployment of the prioritized adaptation technologies in Lebanon, including policy, financial, legal and institutional analysis and market assessment and mapping, etc.;
- 2.2 Prepare Technology Action Plans (TAPs) for the deployment of the each of the prioritized technologies including market development measures, institutional, regulatory and financial measures, and human and institutional capacity development requirements.
- 2.3 Consolidate and present information in technical report including data, methodology and results.

Task 3: Update the Climate Change Adaptation Database

- 3.1 Identify all projects, activities, policies and initiatives undertaken by the government, private sector and non-state actors related directly or indirectly to climate change adaptation (with a focus on the agriculture and water sectors) for the period 2016-2021
- 3.2 Report these actions in the climate change adaptation database (to be provided by the project team) including source of funding, executing entities, budget, achievements, adaptation potential, link to Lebanon's NDC, etc.

3. Methodology of Work

The tasks should be completed by combining findings from background desk review and direct consultations and validation with key stakeholders from the Ministry of Agriculture, Ministry of Energy and Water, international organizations, active NGOs and others. Regular meetings with the UNDP BUR3/4NC Project Manager are required. The work is expected to be carried out by one nationally recruited consultant with

² <https://climatechange.moe.gov.lb/viewfile.aspx?id=150>

expertise in climate change adaptation and with an established network of experts in related national institutions.

Expected Outputs and deliverables

Deliverables/ Outputs	Target Due Dates	Working Days	Review and Approvals Required <i>(Indicate designation of person who will review output and confirm acceptance)</i>
Technology prioritization report (Task 1)	2 months after contract signature	20 days	Project manager
Technology action plans (Task 2)	4 months after contract signature	20 days	Project Manager
Climate Change Adaptation Database (Task 3)	5 months after contract signature	20 days	Project manager

1. Institutional arrangements

a) The Consultant will be accountable to UNDP’s BUR3/4NC Project Manager, for all matters relating to the preparation of the deliverables, as well as abiding by the set deadlines. During this process, the Consultant will brief UNDP’s BUR3/4NC project manager about the progress at least every two weeks. The supervision will include approvals/acceptance of the outputs as identified in the previous section.

b) In the event of delay, the Consultant will inform UNDP promptly so that decisions and remedial action may be taken accordingly.

c) Should the UNDP Country Office deem it necessary, it reserves the right to commission additional inputs, reviews or revisions (including omissions), as needed to ensure the quality and relevance of the final Report.

d) Any public speaking (including social media usage) about the activity (whether with the target groups or indirect) should be coordinated with UNDP.

5. Duration of work

The consultancy is for 60 work-days and is expected to last for 5 calendar months from the signature of the contract.

6. Duty station

The consultant’s work will be home based with several meetings to be held with the project manager and stakeholders.

7. Requirements for experience and qualifications

The Consultant should possess the following minimum qualifications:

I- Academic Qualifications:

- a. Masters degree in environmental science/studies/engineering or closely related fields. PhD will be considered as an asset.

II- Experience:

- a. Local relevant experience in the field of climate change related work of not less than 10 years;
- b. Extensive knowledge of and experience in adaptation technologies and national related policies and projects (preferably in water and agriculture)
- c. Previous experience in preparation of studies, reviews, sectoral recommendations regarding the analysis climate change impacts and adaptation (preferably in water and agriculture)

8. Scope of Price Proposal and Schedule of Payments

Payments will be made upon submission and approval of deliverables and upon submission of the certificate of payment.

The schedule of payment is detailed below:

Deliverables/ Outputs	Target Due Dates	Payment terms³
Technology prioritization report	2 months after contract signature	33 percent
Technology action plans report	4 months after contract signature	33 percent
Climate Change Adaptation Database	5 months after contract signature	34 percent

³ Payments will be processed once UNDP approves the deliverables