Terms of Reference

Preparation of Phase II WEFE Nexus Assessment for Lebanon

in the framework of

the "GEF/UNEP Environment "Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security" and particularly its Child Project 2.2. implemented by the Global Water Partnership-Mediterranean (GWP-Med)

1. Background

The Water-Energy-Food-Ecosystems Nexus ("Nexus") approach has been introduced in the natural resources management agenda to promote water, energy, and food security while also preserving ecosystems and their functions. This approach aims to integrate and coordinate efforts across sectors, addressing potentially conflicting interests that arise when competing for scarce resources, while also leveraging existing opportunities and exploring new ones.

Despite the recognition of this approach among practitioners, policymakers often overlook the interconnectedness of the Nexus resources when formulating related policies. This has led to the emergence of complex challenges, including in Lebanon, as policies and strategies within the WEFE sectors are frequently developed independently. Consequently, this fragmented approach has resulted, in many cases, in the absence of common targets, overlapping responsibilities, and conflicting objectives, all of which have impeded the sustainable development of the Nexus sectors.

Phase I WEFE Nexus Assessment for Lebanon was conducted by GWP-Med during 2022-2023. This assessment allowed for the evaluation of current interlinkages among sectors, in terms of both governance and management. It also identified significant policy and thematic areas where trade-offs exist among sectors. Based on these findings, specific WEFE Nexus solutions were proposed to improve the current situation.

The preparation of Phase I Assessment was a highly inclusive and collaborative process. It involved multiple bilateral meetings with representatives from various institutions, administrations, and other stakeholders and two multi-stakeholder Consultations on the WEFE Nexus in Lebanon, organized at important milestones throughout the assessment process. This effort resulted in the formation of a WEFE Inter-Ministerial Group, which is led by the Ministry of Energy and Water (MoEW) and facilitated by GWP-Med and aims to enhance technical coordination among various institutions related to water, energy, food, and the environment.

The Assessment carried out under Phase I has highlighted one critical issue that hinders cross-sectoral planning in Lebanon, namely the lack of accurate and comprehensive data regarding the status of water resources (quantity and quality) and demand to satisfy human and environment needs.

Moreover, the degradation of ecosystems caused by various human activities is a matter of great importance that cannot be adequately assessed, monitored, and addressed under the current circumstances prevailing in the country. These activities include the discharge of untreated or partially

treated municipal and industrial wastewater into the environment, excessive use of agro-chemicals like pesticides and fertilizers, unregulated disposal of municipal solid waste and other waste streams.

This lack of reliable information adversely affects the capacity of governing bodies to formulate policies, strategies, and investments, including for water allocation among various sectors, with agriculture being particularly crucial for ensuring food security, especially amid the present crisis, and irrigation alone estimated to account for over 55% of the total water demand.

This situation has also been highlighted in the National Water Sector Strategy 2020-2035 (NWSS), which has developed the following proposals. Firstly, it advised that the Government focuses on identifying the crops that are vital for ensuring the country's food security. Secondly, that the Ministry of Agriculture designates specific lands suitable for cultivating these crops. These strategic steps will facilitate effective resource and infrastructure planning by the water institutions and administrations, to adequately address the food security needs.

Therefore, Phase-II WEFE Nexus Assessment in Lebanon aims to provide decision makers with valuable insights for effectively achieving these goals.

2. Description of the assignment

Aim

The aim of this assignment is to provide a detailed assessment of options for the optimisation of water allocation between competing uses at the River Basin level, to improve food security in Lebanon. It will rely on strategic foresight tools, including modelling and scenarios planning.

Scope and Objectives

The lack of reliable hydrological and hydrogeological data poses challenges in the planning process within various sectors. Due to data uncertainty, estimations are often relied upon.

This situation hinders, for example, the development of a comprehensive national water balance in the National Water Sector Strategy (NWSS) as well as a proper planning in line with the requirements of Integrated Water Resources Management (IWRM) outlined in the new water law (77/2018 and its amendments 192/2020). Furthermore, the absence of reliable historical and recent data prevents the sustainable planning of agricultural development.

Ideally, such planning should take place at the watershed/river basin level, considering factors such as food security objectives, water resources availability, soil types, land suitability, existing cultivated areas, potential areas for agricultural development, altitudes, micro-climates, climate and population trends. An integrated and coherent approach in the design and prioritisation of policy options, measures, tools and interventions, based on updated and reliable data, would ensure the maximization of overall benefits across sectors.

Therefore, the Nexus Assessment to be carried out based on this ToRs will enable to:

- Understand the availability of water resources at the River Basin level and the overall water needs for different human activities and ecosystem services.
- Determine the appropriate crops for cultivation, taking into account factors such as land characteristics, available water resources (quantity and quality), and climatic conditions.

- Consider how climate trends may influence the above factors, to provide a road map for the adaptation of cropping plans accordingly.
- Assess water resources (in time and space) required for irrigation, based on crops needs.
- Assist decision-makers to prioritize support for priority crops – key for the country's residents food security - through specific policy measures (such as incentives etc.) and the support of practices that allow for:
    - increased water productivity
    - reduced water and energy consumption
    - Preservation of soil and groundwater from pollution and overexploitation
- Identify needs for irrigation infrastructures for priority crops
- 'Climate proofing' water infrastructures and future investments for agricultural development and food security in the country.
- Sustain freshwater and estuarine ecosystems and the livelihoods that depend upon them by securing the biophysical and environmental conditions for ecological flows.

The modelling exercise will focus on five (5) River Basins, which have a crucial role in ensuring food security and sustainable food systems in Lebanon and are currently facing significant geo-environmental challenges, including declining water quality, unregulated waste management, water supply shortage, inconsistent water pumping, improper agricultural practices and land degradation.

Based on a thorough analysis of existing challenges, the Consultant(s) chosen for this task will identify and propose the five (5) River Basins that are most appropriate for the scope of this Assessment, leveraging available data from strategic documents, pertinent studies, and research, in addition to seeking input from relevant institutions. The final selection of River Basins will be fully justified and presented in the Inception Report and should consider the maximum possible coverage area that the task can encompass, in a way to generate deliverables and outputs based on scientifically supported findings and advice of high confidence.

Consultation process and steering mechanism

GWP-Med will seek input and guidance from the WEFE Inter-Ministerial Group during the implementation of the Assessment, to maintain country ownership of the activities throughout the process. This will also ensure that: (i) the activities are in line with the most recent national strategies and priorities, (ii) considerations from all relevant Nexus sectors are incorporated, and (iii) synergies with other ongoing initiatives are built.

Furthermore, the feedback from relevant actors will also be integrated and further opportunities explored to make this work relevant to the needs, priorities and context of the country. To this purpose, various relevant stakeholders will be collectively consulted through one targeted Workshop. This will engage representation from Ministries, Agencies, local and regional authorities, academia and research institutions, as well as members of civil society. In addition, they will be also kept regularly informed and updated about Phase II activities at three levels:

1. The relevant institutions, as part of the ongoing consultation process within the WEFE Inter-Ministerial Group meetings, led by MoEW and facilitated by GWP-Med.

2. Donors and implementing agencies will be engaged through regularly organized meetings for the water sector, also under the leadership of MoEW, or through bilateral meetings as required.
3. Other interested organizations, academia, and citizens will be kept informed through regular communication, as well as through bilateral meetings when necessary.

While GWP-Med is responsible for implementing the above-described activities, the Consultant(s) will provide assistance to the GWP-Med Team to prepare information packages (mainly presentations and information notes) that effectively convey the main findings and results of the Assessment to various target audiences. These may consist of both technical and non-technical individuals, requiring a tailored communication approach.

Moreover, the Consultant(s) will also assist with the preparation and organization of a multi-stakeholder consultation meeting that will be organized during the Preparation of Phase II WEFE Nexus Assessment.

Data conservation and knowledge management

The data collected during the preparation of the Assessment should be securely stored at the relevant institutions in a suitable format that allows for potential future utilization. To guarantee this, the Consultant(s), together with the institutions, will define the required assistance and training needed by the technical staff and provide the needed capacity.

To ensure efficiency and avoid duplication of efforts, the assignment will incorporate and take stock of the findings from recent reports and projects that pertain to its specific focus, among which:

WFP Lebanon Livelihoods and Resilience Factsheet: https://docs.wfp.org/api/documents/WFP-0000141752/download/?_ga=2.128216453.80054394.1693903333-1018692245.1691397207

Climate change, agriculture, & livelihoods in Lebanon: Consolidated livelihoods exercise for analyzing resilience:
https://www.aub.edu.lb/ifi/Documents/programs/climate_change_and_environment/publications/20220426_lebanon_clear_study_climate_change_and_livelihoods.pdf

Integrated Vulnerability Assessment Application on the Lebanese Agricultural Sector - Regional Initiative for the Assessment of Climate Change Impacts on Water Resources and Socio-Economic Vulnerability in the Arab Region (RICCAR) : MoA, CNRS, ACSAD, UN ESCWA (2019):
https://riccar.org/sites/default/files/2020-01/VA%20Application%20on%20the%20Lebanese%20Agricultural%20Sector.pdf

Improved Water Resources Monitoring System/ Integrated Water Resources Management at regional level in Lebanon:
https://www.fao.org/policy-support/tools-and-publications/resources-details/en/c/1399030/
https://www.fao.org/documents/card/en/c/cb3453en

3. Tasks – Requested services

The Consultant(s) should implement the following tasks:

1. **Preparation of an Inception Report (IR)** to be consulted with GWP-Med for clearance and finalisation. The IR will entail the following:

   (i) Assessment of information/data requirements and availability for the implementation of the assignment, leading to the identification of information gaps and suggested approaches to address these gaps.

(ii) Justification and presentation of the selected River Basins to be focused upon in the Assessment, after evaluating strategic documents, pertinent studies, and research, and consulting relevant institutions. The objective should be to cover the maximum possible areal extent (number of basins relevant for food security in Lebanon) and produce deliverables and outputs of high scientific confidence.

(iii) Detailed description of the suggested approach, methods and tools for the development of the Assessment. This should include a workplan with a timeline and an annotated Table of Contents for the final Report that will describe the key findings and outputs from the Assessment. The following should be taken into consideration while preparing this:

a. Assessment of compatibility with modelling tools that are currently applied in Lebanon (e.g WEAP modelling tools). This aspect holds particular importance as it enables the incorporation of data collected and analyzed by ongoing projects with focus on IWRM in several River Basins in Lebanon.

b. Transfer of the model/its outputs and capacitation of the relevant Lebanese institutions on its use, to support collaborative decision-making processes and inter-sectoral planning.

c. Assessment of the potential for this exercise to contribute to the establishment of a virtual platform that enables various institutions to access and update shared data as additional information becomes available. This assessment should take into account ongoing relevant initiatives, such as the feasibility assessments being conducted for the development of an Integrated Hydrological Information System led by MoEW.

(iv) Listing of indicators presently utilized by the relevant sectors in Lebanon and assessment of their applicability in creating appropriate composite indicators allowing for a comprehensive analysis across multiple sectors, such as water – including availability and quality-, soil, land use, climate parameters, and ecosystem needs. These indicators shall assist planners and decision-makers understanding the interconnections between different natural resources and the various scenarios that will be created as part of the modelling exercise.

For this project, the selected indicators should facilitate the interpretation of interdependencies related to WEFE resources at the River Basin level following the Source-to-Sea approach adopted in the framework of the WEFE Nexus work in Lebanon, with the aim of supporting Integrated Coastal Zone Management efforts undertaken by other MedProgramme's partners in the country. To this effect, a more detailed analysis should be conducted in relation to the coastal area pertaining to the five River Basins that will be assessed, with focus on urban and agricultural areas and coastal/marine ecosystems, such as estuaries. This analysis shall be carried out at the level of coastal municipalities and coastal cazas, as applicable.

GWP-Med will enable communications with authorities and other stakeholders to assist, as appropriate and needed.

2. **Preparation of the WEFE Nexus Assessment Phase II**, including:

(i) Definition of objectives (e.g. water demand, food security, energy efficiency, conservation of livelihoods) and corresponding indicators (e.g. water productivity, (renewable) energy consumption for crop production, rivers with satisfactory environmental flows) in coordination with the relevant stakeholders.

(ii) Definition of potential intervention scenarios to reach the defined objectives, including a BAU scenario. Interventions might include mitigation measures including (for example) water harvesting, groundwater artificial recharge, enhanced irrigation efficiency and agricultural productivity, development of new irrigated areas, change in crop patterns, the consideration of energy requirements and renewable energy generation, alternative energy sources for pumping, etc.

(iii) Develop a modelling framework to evaluate the performance of potential interventions in regard to the selected indicators. This step will take into account existing modelling tools (e.g. WEAP) developed for the region.

(iv) Data collection to support the evaluation of the performance of the potential interventions. This step can start already through steps i to iii, to support the identification of objectives and potential interventions and might require verification missions to consolidate the data collection process.

(v) Definition of climate scenarios. Climate scenarios will be based on the IPCC scenarios, considering uncertainty in projections (e.g., RCP4.5 and RCP8.5). The resulting scenarios will be interlinked to the prevalent socio-economic aspects, including population projections, energy prices, fertilizer prices, and crop export and import prices.

(vi) Evaluation of the performance of interventions based on the proposed indicators. This assessment will evaluate the uncertainty related to the defined climate change scenarios. This step will lead to suggest adaptation measures to the proposed interventions, or the development of alternative interventions in an iterative process.

(vii) Formulation of a set of proposals for policymakers and stakeholders to promote the identified options and solutions through effective management practices, the enhancement of local stakeholders' capabilities, reinforcement of institutional capacity, and streamlined coordination among sectors.

(viii) Integration of inputs gathered during the multi-stakeholder consultation process (see the point below) and development of the final Nexus Assessment Report.

3. **Contribution to the multi-stakeholder Consultation process** (to be facilitated by GWP-Med) by:

(i) Providing regular updates regarding the progress of the Assignment in a format suitable for communicating them to the members of the Inter-Ministerial WEFE Group (in Arabic and English)

(ii) Preparing targeted inputs in the form of presentations, information sheets, and other suitable communication resources to be used during bilateral meetings with relevant stakeholders and for the purpose of enhancing visibility (in Arabic and English)

(iii) Assisting with the preparation and implementation of one multi-stakeholder consultation event organized by GWP-Med including: input on the draft agenda, preparation of presentations and interventions, facilitation of specific sessions, contribution to the drafting of the event's report, etc. (in English)

4. **Effective transfer of the data collected, and the outputs derived from the modelling exercise to the relevant institutions for future use.** This will include providing necessary technical training to enhance their capabilities for utilizing the information in the future. The Inception Report, which will be

prepared after extensive consultation with the concerned institutions, will help identify the specific requirements and the most suitable methods to accomplish this transfer in an efficient manner.

It is required that throughout the implementation of the Assignment, the Consultant(s) **closely liaise** with the Project Manager and Senior Programme Officer at GWP-Med at regular basis (bi-weekly).

The Consultants will use **Remote Sensing, Geographic Information Systems** and field surveys for the spatial presentation and geo-reference of the information included in the deliverables listed above. The related files and respective database will be among the deliverables of the Consultants.

4. Reporting, Deliverables and Milestones

The Consultant(s) are expected to provide the following deliverables, which are directly related to the tasks outlined in detail under Section 3, based on the below timeline (expressed in months after the contract is signed). The schedule for submission may be adjusted as necessary during the contract preparation period. All deliverables should be submitted in English, unless otherwise specified.

	Deliverables	Deadline / months after contract signature
1.	Inception Report, including the selection of the five river basins, a detailed work-plan with a timeline and a draft Table of Contents for the final report.	Month 1
2.	Report detailing: - Current challenges in the selected river basins - Definition of objectives and corresponding indicators - Definition of potential intervention scenarios to reach the defined objectives, including a BAU scenario. - Inventory of data collected - Verification missions report (as applicable)[1] - Modelling framework and tools used - Data survey/analysis and mapping of geospatial datasets.	Months 2-4
3.	Report describing: - Inventory of data required for modelling - Modelling framework developed - Definition of climate scenarios and their interlinkage with socioeconomic aspects	Months 2-4

[1] The consultant should detail a contingency plan in the "Approach and Methodology / Risks and Mitigation Measures" to address the potential escalation of the situation in the country that might prevent the organisation of verification missions in case these are required to consolidate the data collection process.

	- Economic loss from adopted climate scenarios	
4.	- Assessment of socio-economic opportunities related to the adopted scenarios and indicators - Recommendations for policymakers and stakeholders (English and/or Arabic).	Months 6-8
5.	Report describing: - the transfer of the data collected and of the outputs from the modelling exercise to the relevant institutions - the capacity building activities carried out to empower the technical personnel of institutions to enable to uptake and use of the produced data/information	Months 6-8
6.	- Report of stakeholders' engagement through bilateral or multi-lateral meetings. - Presentations and report of the multi-stakeholder Consultation event. - Information in different formats to support communication materials prepared by GWP-Med during the implementation of Phase II Assessment targeted to National institutions and other stakeholders (English and Arabic).	Month 1-10: To be developed at key stages of the Assignment preparation process to be agreed with the Consultant(s) (English and/or Arabic)
7.	Final Nexus Assessment report and related Information Note (English and Arabic)	Months 10

5. Payment modalities

Accomplishment of deliverable 1: 20% of total contract amount
Accomplishment of deliverables 2-3: 30% of total contract amount
Accomplishment of deliverables 4-5: 20% of total contract amount
Approval of final deliverables 6-7: 30% of the total contract amount

6. Contract price and duration.

The maximum fee for this assignment is 100,000 USD. This amount includes all other costs, income taxes and any other amount payable or cost that may be required for the completion of the work/service, including VAT.

The overall duration of the contract will be for a maximum of **10 months** after the contract signature. Payments will be made upon acceptance and verification of the related deliverables, as laid out in section 4 "Reporting, deliverables, and Milestones"

7. Disqualification criteria ON/OFF

For details on the ON/OFF disqualification please refer to the Call for Offers

8. Selection Criteria (pass / fail)

Successful participant (Natural or Legal Person or Entity) must:

- Have annual turnover for the last three financial years, at least equivalent to the maximum amount of this call. As supporting documentation, the applicant must provide their official Financial Statements or equivalent financial documents confirming the applicant's financial capacity, stamped, and signed by the legal representative of the company.
- Be enrolled in one of the official professional or trade register kept in their country of registration
- Have minimum duration of operation of ten (10) years. Proof to be provided by the related chamber (date of registration).
- Have a record of minimum 3 projects over the last 10 years of comparable nature and degree of complexity relevant to those required for this Contract
- Have a record of minimum 5 projects over the last 10 years showing the capability to produce GIS maps and use Remote Sensing and modelling tools required for the preparation of the specific Assessment

Failure to comply with the above pass / fail requirements and provide relevant proof with the application is considered ground for exclusion.

9. Qualification and Experience

Participants in the call are required to have solid experience in developing and managing complex projects in the field related to the tasks described in the ToR.

This needs to be demonstrated in the Technical Offer to be submitted as part of the application. A template for the Technical Offer form is available in the Call for Offers.

The Technical Offer Form consists of the following sections:

- Section 1: Expertise and work experience

- Section 2: Approach and Methodology

Regarding Section 1: Expertise and work experience:

The scope of work requires an interdisciplinary team of skilled experts with previous experience in activities similar to those that this assignment entails. The required qualifications for all experts to be engaged in this assignment are presented in Table 1 below.

The inclusion of experts so as the team responds to every area of expertise defined in the table below is mandatory.

If the qualifications of an expert cover the requirements of more than one area of expertise, that expert can be also proposed for these other areas.

Qualifications additional to the minimum requested per category will receive additional score under the evaluation process as described in the section Evaluation Process and Awarding Criterion.

In addition, the Participant may propose -as they deem appropriate- additional experts covering other specific areas of expertise.

Failure to provide the minimum required qualifications is considered ground for disqualification.

Table 1 – Required qualifications for the Team of Experts

Expert #	Area of expertise	Qualifications
1	**Senior Remote Sensing and GIS Specialist for Water-Energy-Food Nexus Team Leader**	• A minimum of a Master's degree (MSc or equivalent) in Remote Sensing, Geographic Information Systems (GIS), Environmental Science, or a directly related field **(Required).** • A minimum of 10 years professional experience in the field of Remote Sensing, GIS, Spatial Analysis and Modelling and their applications in water or environmental monitoring, **(Required).** • A proven track record of a minimum of 3 successful assignments or projects in Lebanon that are directly relevant to water resources management using Remote Sensing and GIS **(Required).** • Minimum 1 assignment or project directly relevant to the Water-Energy-Food Nexus approach within the past 5 years **(Required).** • Strong leadership skills with the ability to lead a team of experts and effectively manage project activities **(Required)**Minimum position as team leader of team leader for 3 projects of similar complexity over the last three years • Proven experience in project management, including planning, budgeting, and reporting **(Required)** Minimum experience as project Manager of 3 projects of similar complexity over the last three years • Excellent oral and written communication skills in both Arabic and English **(Required).** For the spoken Arabic it is preferable that the candidate speaks Levantine Arabic.
2	**Water Resources Management expert / Climate Change Expert**	• A minimum of a Master's degree (MSc or equivalent) in Water Resources Management, Environmental Science, or Climate Change (**Required**). • Minimum 10 years of professional experience in the field of water or environmental resources management or climate change (**Required**).

		• Minimum 3 assignments/projects in Lebanon relevant to water resources management (**Required**). • Minimum 1 assignment/project directly relevant to the Nexus approach in the past 5 years (**Required**). • Excellent oral and written communication skills in Arabic and English (**Required**). For the spoken Arabic it is preferable that the candidate speaks Levantine Arabic.
3	**Hydrological Modelling Expert**	• At least a University degree (MSc or equivalent) in water resources management, Hydrological modelling, Decision Support System and management, or a directly related field **(Required).** • Minimum 10 years of professional experience in the field of water or environmental resources management **(Required).** • Minimum 3 assignments/projects in Lebanon relevant to water resources management **(Required).** • Minimum 1 assignment/project directly relevant to the Nexus approach in the past 5 years **(Required).** • Excellent oral and written communication skills in Arabic and English **(Required).** For the spoken Arabic it is preferable that the candidate speaks Levantine Arabic.
4	**Soil expert**	• At least a University degree in the field of Soil Science, Soil Classification, Soil Mapping and Soil Management. **(Required).** • Minimum 15 years of professional experience in the field of Soil Management, Land Degradation, Desertification Risk Assessment and Agriculture **(Required).** • Minimum 3 assignments/projects in Lebanon relevant to Soil, Agriculture, or Food-Water-Energy Nexus **(Required).** • Excellent oral and written communication skills in Arabic and English **(Required).** For the spoken Arabic it is preferable that the candidate speaks Levantine Arabic.
5	**Environment expert**	• At least a University degree in environmental engineering/management or a directly related field (**Required**). • Minimum 10 years of professional experience in the field of environmental policy or environmental management (**Required**). • Minimum 3 assignments/projects in Lebanon relevant to the assessment of environmental policies, plans, or projects, especially in the context of ecosystems management and river basin management (**Required**).

		• Proficient in Geographic Information System (GIS) with a minimum of 5 years of hands-on experience in utilizing GIS tools for environmental analysis and mapping (Required). • Excellent oral and written communication skills in Arabic and English (**Required**). For the spoken Arabic, it is preferable that the candidate speaks Levantine Arabic.
6	**Energy policy expert**	• At least a University degree in the field of Engineering or Energy or a directly related field **(Required).** • Minimum 5 years of professional experience in the field of energy **(Required).** • Minimum 3 assignments/projects in Lebanon relevant to renewable energy or energy use efficiency in the water or agriculture sectors **(Required).** • Proficient in Geographic Information System (GIS) with a minimum of 5 years of hands-on experience in utilizing GIS tools for environmental analysis and mapping **(Required).** • Excellent oral and written communication skills in Arabic and English **(Required).** For the spoken Arabic it is preferable that the candidate speaks Levantine Arabic.
7	**Socio-economic expert**	• At least a University degree in Economics, Political Sciences, Rural Development, or any other related field **(Required).** • Minimum 5 years of relevant professional working experience in the field of socio-economic analysis **(Required).** • Minimum 2 assignments/projects in Lebanon relevant to socio-economic analysis in the environment and/or water sector **(Required).** • Excellent oral and written communication skills in Arabic and English **(Required).** For spoken Arabic, it is preferable that the candidate speaks Levantine Arabic.

10. Evaluation Process and Awarding Criterion

The Award criterion is the **most economically advantageous tender considering the best price / quality ratio.** Offers that meet the exclusion grounds and selection criteria will undergo further evaluation, focusing on the requirements outlined in the "Qualification and Experience" section, as follows:

(1) Criterion	**(2) Weighting (w)**	**(3) Points of criterion (c)**	**(4) Score= (2) x (3)**
Section 1: Expertise and work experience	**80% of total**		

Senior Remote Sensing and GIS Specialist for WEFE Nexus / Team Leader	**17%**		
A minimum of a Master's degree (MSc or equivalent) in Remote Sensing, Geographic Information Systems (GIS), Environmental Science, or a directly related field **(Required).**	3%		
A minimum of 10 years of professional experience in the field of Remote Sensing, GIS, Spatial Analysis and Modelling and their applications in water or environmental monitoring, **(Required).**	6%		
A proven track record of a minimum of 3 successful assignments or projects in Lebanon that are directly relevant to water resources management using Remote Sensing and GIS **(Required).**	3%		
Minimum 1 assignment or project directly relevant to the Nexus approach within the past 5 years **(Required).**	2%		
• Strong leadership skills with the ability to lead a team of experts and effectively manage project activities **(Required)**. Minimum position as team leader of team leader for 3 projects of similar complexity over the last three years	1%		
• Proven experience in project management, including planning, budgeting, and reporting **(Required)** Minimum experience as project Manager of 3 projects of similar complexity over the last three years	1%		
Excellent oral and written communication skills in Arabic and English (**Required**). For the spoken Arabic it is preferable that the candidate speaks Levantine Arabic.	1%		
Water Resources Management expert / Climate Change Expert	**12%**		
A minimum of a Master's degree (MSc or equivalent) in Water Resources Management, Environmental Science, or Climate Change (**Required**).	3%		

Minimum 10 years of professional experience in the field of water or environmental resources management or climate change (**Required**).	3%		
Minimum 3 assignments/projects in Lebanon relevant to water resources management (**Required**).	3%		
Minimum 1 assignment/project directly relevant to the WEFE Nexus approach in the past 5 years (**Required**).	2%		
Excellent oral and written communication skills in Arabic and English (**Required**). For the spoken Arabic it is preferable that the candidate speaks Levantine Arabic.	1%		
Hydrological Modelling Expert	**12%**		
At least a University degree (MSc or equivalent) in water resources management, Hydrological modelling, Decision Support System and management, or a directly related field **(Required).**	3%		
Minimum 10 years of professional experience in the field of water or environmental resources management **(Required).**	3%		
Minimum 3 assignments/projects in Lebanon relevant to water resources management **(Required).**	3%		
Minimum 1 assignment/project directly relevant to the Nexus approach in the past 5 years **(Required).**	2%		
Excellent oral and written communication skills in Arabic and English **(Required).** For the spoken Arabic it is preferable that the candidate speaks Levantine Arabic.	1%		
Soil expert	**12%**		
At least a University degree in the field of Soil Science, Soil Classification, Soil Mapping and Soil Management. **(Required).**	3%		
Minimum 15 years of professional experience in the field of Soil Management, Land Degradation, Desertification Risk Assessment and Agriculture **(Required).**	4%		

Minimum 3 assignments/projects in Lebanon relevant to Soil, Agriculture, or Food-Water-Energy Nexus **(Required).**	4%		
Excellent oral and written communication skills in Arabic and English **(Required).** For the spoken Arabic it is preferable that the candidate speaks Levantine Arabic.	1%		
Environment expert	**9%**		
At least a University degree in environmental engineering/management or a directly related field (**Required**).	2%		
Minimum 10 years of professional experience in the field of environmental policy or environmental management (**Required**).	3%		
Minimum 3 assignments/projects in Lebanon relevant to the assessment of environmental policies, plans, or projects, especially in the context of ecosystems management and river basin management (**Required**).	2%		
Proficient in Geographic Information System (GIS) with a minimum of 5 years of hands-on experience in utilizing GIS tools for environmental analysis and mapping **(Required).**	1%		
Excellent oral and written communication skills in Arabic and English (**Required**). For the spoken Arabic, it is preferable that the candidate speaks Levantine Arabic	1%		
Energy policy expert	**9%**		
At least a University degree in the field of Engineering or Energy or a directly related field **(Required).**	2%		
Minimum 5 years of professional experience in the field of energy **(Required).**	3%		
Minimum 3 assignments/projects in Lebanon relevant to renewable energy or energy use efficiency in the water or agriculture sectors **(Required).**	2%		
Proficient in Geographic Information System (GIS) with a minimum of 5 years of hands-on experience in utilizing GIS tools for environmental analysis and mapping **(Required).**	1%		

Excellent oral and written communication skills in Arabic and English **(Required).** For the spoken Arabic it is preferable that the candidate speaks Levantine Arabic.	1%		
Socio-economic expert	**9%**		
At least a University degree in Economics, Political Sciences, Rural Development, or any other related field **(Required).**	2%		
Minimum 5 years of relevant professional working experience in the field of socio-economic analysis **(Required).**	3%		
Minimum 2 assignments/projects in Lebanon relevant to socio-economic analysis in the environment and/or water sector **(Required).**	3%		
Excellent oral and written communication skills in Arabic and English **(Required).** For spoken Arabic, it is preferable that the candidate speaks Levantine Arabic.	1%		
Section 2: Approach and Methodology	**20% of total**		
The approach to the requested Assignment will include a detailed description of the methodology to achieve all objectives and tasks, deliver all outputs as described in the Terms of Reference, and consider the appropriateness to local conditions.	15%		
Risks and Mitigation Measures: description of the potential risks associated with the implementation of the Assignment, which have the potential to hinder the successful achievement and timely completion of anticipated outcomes, as well as compromise their quality. This will also entail a description of the counteractive measures that will be implemented to mitigate these risks.	5%		

Failure to provide the minimum required qualifications is considered ground for disqualification.

Scoring for each evaluated section will be made as following:

Section 1 – Expertise and work experience: score starts at 100 points (when minimum requirements are met) and can reach 150 points depending on the description of the participant and the number of projects

implemented in excess of those required as a minimum. (100p Base +10p for extra criteria over base up to 50 additional points)

Section 2 – Approach and Methodology: score starts at 100 points and can reach 150 points depending on the length, detail, depth, and structure of the information provided.

Each Section/evaluation criterion is evaluated autonomously. The final scoring of each evaluation criterion is the outcome of its scoring multiplied by the corresponding weighting factor. The overall score of the technical offer is the sum of the final scoring of all the Sections/evaluation criteria.

The overall score of the technical offer is calculated on the basis of the following formula:

Bi = w1 x c1 + w2 x c2 +……

For the overall score which will determine the ranking of offers, technical evaluation will be weighted with 80%, and the financial offer with 20%.

The final listing of the most advantageous offers will be made on the basis of the following formula:

Λi = 0.8* (Bi/Bmax) + 0.2 * (Kmin/Ki).

Where:

- Bmax: the max score received by the best of the technical offers received
- Bi: the score of the technical offer
- Kmin: The cost of the financial offer with the minimum price offered.
- Ki: The cost of the financial offer

The most advantageous offers is the one with the greater value of Λ.

In case of equality of overall scores, the winning proposal is the one whose corresponding technical proposal received the highest rating.

11. Monitoring and Progress Controls

Mr. Dimitris Faloutsos, Deputy Regional Coordinator and Ms. Barbara Tomassini, Senior Programme Officer at GWP-Med, will be providing oversight and guidance from the side of the Project Team.

Coordination meetings between the consultant and the Project Team shall be scheduled on a bi-weekly basis in order to effectively monitor the progress pertaining to the workplan that was submitted with the Inception Report. The rendering of services shall be executed, and completion thereof shall be determined, upon the satisfaction and approval of the deliverables by the Project Manager and GWP-Med Executive Secretary.

12. Place of Performance

The tasks will be carried out from a place of the Consultant's preference. Missions for the consolidation of data (verification missions, as applicable) and for consultation purposes will be conducted (all in Lebanon).

13. Terms and Conditions

• **Language**

The language of the key deliverables/outputs is English. Specific materials and communication packages will also be prepared in Arabic, as previously described.

• **Data and information**

The Consultant(s) is responsible to collect all information and data necessary for the completion of this assignment. Missing information (from any side) would not be considered as eligible reason for not completing the tasks. GWP-Med can assist in communicating with relevant institutions and stakeholders to verify the availability of needed data or information.

• **Submission of data, reports and other material produced**

All primary data, reports, and other documentation produced during this assignment shall be made available to GWP-Med and to the relevant institutions in electronic format. All data acquired, and products developed during the assignment will be in the ownership of the Project and cannot be used by the Consultant and its team without prior written permission.

• **Cooperation requirements**

The Consultant is expected to work closely with GWP-Med and the beneficiaries (visited during the consultation missions).

• **Review and quality assurance**

A thorough evaluation of the Consultant's work conducted during the course of the assignment implementation, as well as a comprehensive review of the deliverables, may be conducted by an independent external expert or team of experts. The Consultant is expected to thoroughly consider and incorporate any relevant observations or recommendations provided by the reviewer(s) into the final versions of the deliverables.

• **Public consultations / meetings**

The responsibility for organizing any required workshops or working meetings will be shared between the Consultant(s) and the Project Team. The Consultant(s) shall be responsible for: preparation of working material, technical specifications etc. ensuring participation of the key team members as required, preparation of minutes etc. The Project Team will be responsible for: preparation of agenda, invitations, distributing the invitations and enabling participation.