

## Annex I - Terms of Reference

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**National or International consultant:** International

**Description of the assignment (Title of consultancy):** Provision of services for the creation of an enabling environment for the production and use of biopesticides in Lebanon

**Project Title:** Sustainable Land Management in the Qaraoun Catchment project

**Period of assignment/services:** 35 working days spread over a period of 5 months

**Is this a LTA (yes/no):** No

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### 1. Background / Project Description

The UNDP Sustainable Land Management in the Qaraoun Catchment (SLMQ) Project aims at embedding sustainability considerations in land use planning and development activities in the Qaraoun Catchment. The project is funded by the Global Environment Facility (GEF) and is implemented in partnership with the Ministry of Environment in Lebanon. The project is intended to reshape land and natural resource management to (i) alleviate land degradation, (ii) maintain existing ecosystem services and (iii) improve livelihoods in the Qaraoun Catchment.

The project objectives will be achieved by developing institutional tools upstream at national level which will provide the Ministry of the Environment (MoE) and the Ministry of Agriculture (MoA) as well as related agencies such as the Council for Development and Reconstruction (CDR), the Ministry of Interior and Municipalities, the Bekaa Governorate, and District Administrations and Municipalities in the districts of Zahle, Rachaya, and West Bekaa with the know-how, means and mechanisms for promoting sustainable land use as in the best interest of the land owners, farmers and communities as well as the nation.

The implementation of the proposed project will have an immediate environmental benefit, through the increased management efficiency of arable land and rangelands and the expansion of the area under forests through land use plans, buffer zones, and riparian strips. It will also contribute to the restoration of natural productivity and conservation of the habitats of various plant and animal species and valuable ecosystems and will secure migratory bird pathways.

In efforts to improve agricultural practices and reduce pressures on existing resources, the SLMQ project is aiming at improving the enabling environment for the use of biopesticides (local formulation or import of registered products). Indeed, over the past decades, crop protection has relied heavily on synthetic chemical pesticides, but their availability is now declining as a result of new legislation and the evolution of resistance in pest populations. Therefore, alternative pest management tactics are needed. However, these products are regulated by systems designed originally for chemical pesticides that have created market entry barriers by imposing burdensome costs on the biopesticide industry.

It is in this context, the SLMQ project is seeking the services of an international consultant to create and adapt the technical and regulatory set up for the use of biopesticides, locally formulated and imported, respectively.

This consultancy is divided into the following tasks:

- **Task 1** – Review the existing legal and technical conditions governing the sector
- **Task 2** – Assess the potential for local formulation
- **Task 3** – Develop the technical conditions for the formulation of biopesticides
- **Task 4** – Propose accreditation and registration protocols

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

The tasks mentioned below shall be performed in close cooperation with the UNDP SLMQ team in close consultation with national partners including the Ministry of Agriculture, Economy and Trade, Customs and others as needed. It is understood that the Consultant shall perform all the services/work as necessary to fulfill the objectives of the Consultancy Contract.

The Consultant is expected to undertake the analysis of current technical and regulatory frameworks and draw conclusions as to gaps to be filled in line with the existing regulatory framework and develop the technical conditions required for the licensing of such industries and product registration.

The main objective of the study is to provide the relevant ministries (most importantly the Ministry of Agriculture) with the tools to enable them to permit the formulation and register biopesticides, as an alternative to synthetic chemical pesticides.

The Consultant is expected to complete the following tasks:

### **Task 1 – Review the existing legal and technical conditions governing the sector and provide recommendations on creating the enabling environment**

1.1. The Consultant is expected to undertake a rapid review of current technical and legal frameworks using available legal and regulatory texts in order to identify gaps and barriers to the establishment of the biopesticides industry. The review shall cover **microbials, biochemical/herbal agents such as pheromones and plant extracts, and also beneficials**.

Technical and legal frameworks shall cover licensing and registration processes including formulation, production, permitting, and registration for locally formulated products and trade requirements for imported products.

1.2. The Consultant is expected to provide upon its assessment recommendations for creating an enabling environment for the use of biopesticides, locally manufactured or imported. Recommendations must be in line with the existing legal framework to ensure their applicability. As such, these recommendations shall include legal and regulatory provisions to enable the local production and licensing of this activity. It shall also cover the registration of imported products in addition to any environmental and health and safety due diligence requirements.

While this task requires both desk work and interviews with relevant stakeholders from the central authorities and private sector, including but not limited to the Ministry of Industry and Agriculture, the Consultant will be supported by the project team to allow remote data gathering. The Consultant shall however guide the team in identifying the needed resources and stakeholders and shall also conduct the necessary virtual meetings in order to successfully finalize this task.

### **Task 2 – Assess the potential for local formulation**

The Consultant is expected to:

- 2.1. Assess the potential for local manufacturing of biopesticides mainly at the level of academic and research institutions and possibly industrial sector.
- 2.2 Assess the potential market demand, based among other on local agricultural production data. This assessment shall also indicate most promising types of biopesticides to produce locally or import to be commensurate with the needs for locally produced crops and/or trees.
- 2.3 Provide a brief analysis of challenges faced and commercial viability in order to guide remaining tasks and prioritize types biopesticides.

Same as per Task 1, and while this task requires both desk work and interviews with relevant stakeholders from the central authorities and private sector, the Consultant will be supported by the project team to allow remote data gathering. The Consultant shall however guide the team in identifying the needed resources and stakeholders and shall also conduct the necessary virtual meetings in order to successfully finalize this task.

### **Task 3 – Develop the technical conditions for the formulation of biopesticides**

The Consultant is expected to develop Guidelines for *minimum* infrastructure facilities to be created by the manufacturers of biopesticides including but not limited to manpower requirements, general physical plant requirements, plant equipment/instrument requirements, laboratory equipment/instrument requirements. These requirements should be tailored to each type of biopesticide.

Additionally, special conditions for Environment, Health and Safety should be detailed in order to allow the relevant authorities to regulate the sector and ensure the safe production of these pesticides.

Validation of the approach should be done prior to finalizing the output.

### **Task 4 – Develop guidelines/data requirements for registration of locally manufactured biopesticides**

For each biopesticide, the Consultant is expected to develop guidelines for reporting to the relevant authorities on the manufactured product. Formulation method should be included where relevant. Minimum data to be reported for conditional approval for registration should include chemistry, bio-efficacy and toxicity, processing packaging & labelling. The guidelines should account for special cases and exceptions, where relevant and the consultant should provide justification for the approach presented based on international best practices or standard approaches but also accommodate for the local context and production needs and capacities.

Validation of the approach should be done prior to finalizing the output.

### **3. Expected Outputs and deliverables**

<b>Deliverables/ Outputs</b>	<b>Estimated Duration to Complete</b>	<b>Target Due Dates</b>	<b>Review and Approvals Required</b>
<b>Deliverable 1:</b>	10 working days	1 month from	Project Manager

<b>Inception report</b> incl. desk review and recommendations		contract signature	
<b>Deliverable 2:</b> <b>Rapid Market</b> <b>assessment</b> <b>report</b>	5 working days	3 months from contract signature	Project Manager
<b>Deliverable 3:</b> <b>Technical</b> <b>requirements</b>	10 working days	4 months from contract signature	Project Manager
<b>Deliverable 4:</b> <b>Guidelines for</b> <b>registration</b>	10 working days	5 months from contract signature	Project Manager

#### **4. Institutional arrangements**

The consultant will work under the direct supervision of the SLMQ Project Manager.

#### **5. Duration of work**

The overall duration of the contract covered by this ToR is 35 working days spread over a period of 5 months from the date of contract signature.

#### **6. Duty station**

The assignment is home based. The required information will be gathered with the support of the project team. The Consultant is expected to guide the team in identifying relevant information for the fulfillment of the objective of the assignment. Additionally, The Consultant shall be ready to undertake needed virtual meetings with the local project team and other stakeholders (private sector, local authorities, farmers, experts, etc.) to ensure a good understanding of the local context, accurate and updated information to validate desk review results, draw conclusions and provide the needed recommendations.

## 7. Requirements for experience and qualifications

### I. Academic Qualifications:

Advanced university degree (Masters or higher) in organic chemistry, biotechnology, or a closely related field with applications in agriculture.

### II. Years of experience:

At least 10 years of work experience, preferably in research and development of synthetic and botanical pesticides, development of bioactive natural products with pest control properties.

### III. Technical experience:

- Relevant work experience, specifically with agricultural policy related to pest control;
- Knowledge of the Lebanese agricultural production system is an asset;
- Experience in the elaboration of regulatory texts;
- Experience in collaborating with UN and other international agencies.

### IIV. Competencies:

- Proficiency in English;
- Demonstrable analytical skills and report writing skills;
- Strong motivation and ability to work and deliver under short deadlines.

## 8. Scope of Price Proposal and Schedule of Payments

The Consultant is expected to submit a financial proposal based on a Lump Sum amount including fees and foreseeable expenses.

- Lump sum amount must be “all-inclusive”<sup>1</sup>;
- The contract price is fixed regardless of changes in the cost components.

## 9. Criteria for selection of the best offers

The award of the contract should be made to the individual Consultant whose offer has received the highest score out of the following criteria:

- a) Technical Criteria weight: 70%
- b) Financial Criteria weight: 30%

Only candidates obtaining a minimum technical score of 70 points would be considered for the financial evaluation.

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<sup>1</sup> The term “all inclusive” implies that all costs (professional fees, travel costs, living allowances, communications, consumables, etc.) that could possibly be incurred by the Contractor are already factored into the final amounts submitted in the proposal.

<b><i>Criteria</i></b>	<b><i>Weight</i></b>	<b><i>Max. Point</i></b>
<b><i><u>Technical Competence</u></i></b>	<b><i>70%</i></b>	<b><i>100</i></b>
<ul style="list-style-type: none"> <li>• <b>Criteria A: Academic qualifications</b> <ul style="list-style-type: none"> <li>- Master's Degree: (21 points)</li> <li>- Ph.D. Degree: (25 points)</li> <li>- Relevant trainings and specialization: (Additional 5 points)</li> </ul> </li> </ul>		<b><i>30</i></b>
<ul style="list-style-type: none"> <li>• <b>Criteria B: Years of relevant experience</b> <ul style="list-style-type: none"> <li>- 10 years of relevant experience: (21 points)</li> <li>- 15 years of relevant experience: (25 points)</li> <li>- More than 15 years: (30 points)</li> </ul> </li> </ul>		<b><i>30</i></b>
<ul style="list-style-type: none"> <li>• <b>Criteria C: Technical experience</b> <ul style="list-style-type: none"> <li>- Relevant work experience, specifically with agricultural policy related to pest control (15 points)</li> <li>- Knowledge of developing countries agricultural and pest management contexts (10 points)</li> <li>- Experience in the elaboration of regulatory texts (10 points);</li> <li>- Experience in collaborating with UN and other international agencies; (5 points)</li> </ul> </li> </ul>		<b><i>40</i></b>
<b><i><u>Financial (Lower Offer/Offer*100)</u></i></b>	<b><i>30%</i></b>	<b><i>100</i></b>
<b><u>Total Score</u></b>	<b>Technical Score * 0.7 + Financial Score * 0.3</b>	