

## Terms of Reference

**National or International consultants:** National (Lebanese)

**Description of the assignment (Title of consultancy):** Provision of consultancy services for the development of Management plans for Rangelands outside Forests (RMP) in the districts of West Bekaa and Rachaya.

**Project Title:** Sustainable Land Management in the Qaraoun Catchment (SLMQ)

**Period of assignment/services:** 80 working-days over a period of 8 months

### 1. Background

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.

As grazing remains socially and economically critical to rural livelihoods, high priority should be given to the sustainable management of the natural resources base that supports them. Indeed, grazing animals are a major practical method of exploiting natural vegetation and pastoralism and is considered an important economically, culturally and socially appropriate strategy for maintaining the well-being of rural communities, as it can simultaneously provide secure livelihoods, conserve ecosystem services, promote wildlife conservation and honor cultural values and traditions. Thus, the basis for action at the local level requires the implementation of national measures to manage rangelands and restore and rehabilitate rangelands identified in the districts of West Bekaa and Rachaya so as to ensure the sustainability of available resources.

In this context, the project is seeking to procure the services of a rangeland management expert to work under the guidance and supervision of the Project Manager (PM) to support the Project Team in the development of Management plans for Rangelands outside Forests (RMP) in the districts of West Bekaa and Rachaya including the establishment of their underlying elements in the Project Area.

This exercise will be done in close collaboration with an International Consultant contracted by the Project and whose main tasks is to develop the National Guidelines for the Management of Rangelands Outside Forests and in coordination with the MoA and MoE as well as local communities including municipalities, land owners, herders etc. to ensure the sustainability of the implemented measures.

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

### **Objective**

The herder's main impacts on natural resources are intrinsically related to their use of trails and resources during their seasonal migration (transhumance) through the region. By documenting the livestock systems, transhumance routes and the natural resource management (NRM) upon these routes, this consultancy gives the information necessary to negotiate and collaborate with local stakeholders to introduce sustainable development and conservation into this region.

The objective of this consultancy is therefore to establish the basis for the development of Management Plans for Rangelands Outside Forests and to develop locally adapted management plans in the districts of West Bekaa and Rachaya.

The RMPs will ultimately lead to the improvement in the management of rangelands in the area and an increase in rangeland productivity as well as contribute to an improvement of local livelihoods by a more sustainable and equitable use of rangelands outside forests. Furthermore, the RMP shall constitute a working plan for the Ministry of Agriculture, as well as other public-sector authorities such as municipalities and other concerned stakeholders for the implementation and monitoring of RMP.

This consultancy is divided into the following tasks:

- Task 1: Desk review of existing local rangelands management initiatives
- Task 2: Validation of the National Guidelines for Management of Rangelands Outside Forests and editing of the Arabic version
- Task 3: Assessment of rangelands management elements in the districts of Zahle, West Bekaa, and Rachaya
  - 3.1 - Assessment of small ruminants' systems
  - 3.2 - Analysis of productive potential and stocking capacity of rangelands
  - 3.3 - Study of space use patterns by small ruminants
- Task 4: Development of management plans for rangelands outside forests for the districts of West Bekaa and Rachaya
- Task 5: Execution of targeted trainings for the adoption of RMPs

### **Scope of Work**

The tasks mentioned above shall be performed in close cooperation with the UNDP/SLMQ team ensuring linkages with both the Ministries of Agriculture and Environment and other concerned stakeholders. It is understood that the Consultant shall perform all the services/work as necessary to fulfill the objectives of the Consultancy Contract.

Also, the Consultant is expected to support an International Consultant contracted in parallel by the Project for the development of National Guidelines for the Management of Rangelands Outside Forests and methodologies for the assessment of rangelands elements for (i) the review and validation of the National Guidelines and (ii) integration of and provision of data about the local context. Additionally, the Consultant is expected to implement these methodologies and generate subsequent management

plans in conformity with the National Guidelines taking into account local specificities and participatory approaches.

The Tasks involved will cover the following:

**Task 1:** Review and analysis of rangelands management initiatives in Lebanon

The review shall summarize all trials and projects related to rangeland management and herders' organization in Lebanon highlighting the lessons learned and the obstacles encountered in each tentative. An analysis of the review should also be undertaken to develop a set of recommendations for use by the project and the international rangelands consultant.

The review shall exhaustively cover local initiatives, whether academic or research-based activities, centrally piloted activities by the concerned institutions, or locally implemented by other actors (municipalities, NGOs, cooperatives, etc.). Available documentation shall be delivered to the Project team along with the desk review report, including a compilation of actors and their contacts.

**Task 2:** Validation of the National Guidelines for Management of Rangelands Outside Forests and editing of the Arabic version

The Consultant is expected to support the Project Team and the International Consultant in the validation and adaptation of the National Guidelines for Management of Rangelands Outside Forests. He is also expected to review and edit the Arabic version of the guidelines to reflect technical terminology and legal requirements.

**Task 3:** Assessment of rangelands management elements in the three (3) districts of Zahle, West Bekaa, and Rachaya

The purpose of Management Plans for Rangelands Outside Forests (RMP) is to provide direction and guidance for the proper management of rangelands resources.

As such, a solid assessment of the rangelands resources (water and nutrient requirements, plant productivity, native vegetation and vegetative cover, forage reserves, livestock, wildlife habitat, etc.) shall be undertaken to build robust rangeland management plans within the project area.

The methodologies for the establishment of these elements will be set by an International Consultant contracted through the SLMQ Project. However, under this assignment, the Consultant is expected to provide the necessary support to ensure an understanding of the local context to allow locally adapted assessments.

**Task 3.1 - Assessment of small ruminants' systems**

An assessment of rangelands animal resources shall be undertaken by the Consultant. This assessment should include at least the following:

- Validation of the Project's database related to small ruminants' herders through a representative sampling methodology to be set by the Consultant
- Description of the local small ruminants' breeds and their respective geographical distribution
- Nutrient requirements for locally available breeds of goats and sheep

### **Task 3.2 - Analysis of productive potential and stocking capacity of rangelands outside forests**

The Consultant is expected to review and analyze the key factors regulating vegetation productivity in range and pasture environments, the ways in which animal production may be quantified from these lands, the role of feedbacks between herbivory and plant production.

This assessment shall include at least the following:

- Vegetation Productivity: Above-ground net primary production (ANPP), annual growth (CAG) and impacts of herbivory on plant community productivity and sustainability.
- Animal Productivity: commodity (i.e. meat) production or growth in animal numbers, Animal Impacts (Stocking Rate).
- Carrying Capacity

### **Task 3.3 - Study of space use patterns by small ruminants**

The Consultant shall implement an assessment of small ruminants' space use in the districts of Zahle, West Bekaa and Rachaya. The assessment shall account for seasonal variation (Summer vs Winter) in terrain use reflecting the main transhumance routes and shall include at least the following:

- Establishment of grazing behavior for sheep and goat under a methodology to be set by the Project and will tend to be relying on GIS-based tools;
- Water, drinking points and salt-licks requirements;
- Geo-localization of milk collection points per major collector. These collectors shall be identified by the Consultant in close collaboration with the Project Team. It is worthwhile noting that a GIS/mapping expert is available at the Project level to support in the implementation of this activity.

### **Task 4: Development of Management Plans for Rangelands Outside Forests in the two (2) districts of West Bekaa and Rachaya.**

The management plans shall cover a total of 20,000 ha of rangelands (outside forests) in the districts of Rachaya and West Bekaa addressing the main rangelands types (Grassland, shrubland/scrubland). Priority areas will be provided at a later stage by the project based on the land degradation mapping exercise currently implemented by the Project.

The management plans shall be prepared upon coordination with the Project Team and the International Consultant contracted by the project to ensure that these reflect essentially the National Management Guidelines for Rangelands Outside Forests.

The Management Plans shall include also recommendations to engage the herders in the adoption and implementation of the management plans. The recommendations should be as much as possible plan-specific covering the management modality, economic and financial considerations, phasing, etc.

**Task 5: Execution of targeted trainings**

The Consultant shall prepare a Training Plan and Material addressed mainly to local actors including mainly forest rangers, municipalities, and herders. A minimum of four trainings shall be organized and implemented to guarantee a full understanding of the developed management plans developed in Task 4 above. Management plans and their respective stakeholders can therefore be grouped based on management specificities, possible synergies and complementarities, geographic areas, etc.

Furthermore, the necessary training material (reports and presentations) in both English and Arabic should be developed as necessary. These can be adapted in coordination with the trainers of the Ministry of Agriculture based on the training modules on the National Guidelines. Trainings however should be delivered in Arabic and supplemented by English where needed.

Based on the trainings executed, the Consultant shall develop a training report including an account of activities, recommendations for future trainings and target groups.

**3. Expected Outputs and deliverables**

ID	Deliverables	Estimated # man-days
1	Inception report including: <ul style="list-style-type: none"><li>- Methodology and work plan,</li><li>- Review and analysis report</li></ul>	10
2	Edited Arabic version of the National Guidelines	5
3	Assessment of rangelands management elements including: <ul style="list-style-type: none"><li>- Assessment of small ruminants' systems</li><li>- Analysis of productive potential and stocking capacity of rangelands</li><li>- Study of patterns space use by small ruminants'</li></ul>	35
4	<ul style="list-style-type: none"><li>- Draft Rangelands Management Plans (English)</li><li>- Training Plan and draft Training Material (English)</li></ul>	20
5	<ul style="list-style-type: none"><li>- Final Rangelands Management Plans (English and Arabic)</li><li>- Final Training Material (English and Arabic) and Training report</li></ul>	10

After submission of reports, the Consultant will receive comments from Project Management Team and relevant stakeholders within 10 working days. It is expected from the Consultant to submit an updated report within 5 working days after receiving comments.

**4. Institutional arrangements**

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

## 5. Duration of work

The overall duration of the contract covered by this ToR is 80 man-days spread over a period of 8 months from the date of contract signature.

## 6. Duty station

The assignment requires deskwork and research, field work, as well as coordination between the different concerned stakeholders (ministry officials, local authorities, experienced NGOs, selected local communities, herders, etc.). The consultant is requested to perform his duties in regular coordination meetings with the Project Team at the SLMQ offices at the Ministry of Environment in Beirut upon request.

## 7. Requirements for experience and qualifications

The consultant must present the following qualifications:

Education:	Post graduate degree (MSc and/or PhD) in natural resources related field with extensive knowledge in herd management and rangeland ecology or related field;
Experience:	<ul style="list-style-type: none"><li>▪ At least 7 years of working experience in rangeland resources management, rangeland inventory, monitoring and assessment;</li><li>▪ Experience in working with central and/or local agencies/NGOs/herders on rangeland-related assignments;</li><li>▪ Experience in GIS-based assessments of animal movements is an asset;</li><li>▪ Proven knowledge of the existing related policies, legal and regulatory frameworks;</li><li>▪ Experience in rangeland management planning at the local level;</li><li>▪ International experience in rangeland management is an asset;</li></ul>
Language Requirements:	Proficiency in English and Arabic languages. French is an asset.

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

The payments will be issued upon submission and approval of deliverables as per the following:

Task	Payment	Deliverables	Payment due date
1	10% upon approval of the inception report	Inception report including: <ul style="list-style-type: none"><li>- Methodology and work plan,</li><li>- Review and analysis report</li></ul>	3 weeks from contract
2	40% upon approval of the assessments of elements of rangelands Management Plans	Assessment of rangelands management elements: <ul style="list-style-type: none"><li>- Assessment of small ruminants' systems</li><li>- Analysis of productive potential and stocking capacity of rangelands</li><li>- Study of patterns space use by small ruminants'</li></ul>	3 months from contract signature
3	25% upon the approval of the Final study of patterns space use by small ruminants' report, draft Rangelands Management Plans and Draft Training material	<ul style="list-style-type: none"><li>- Draft Rangelands Management Plans (English)</li><li>- Training Plan and Draft Training Material (English)</li></ul>	6 months from contract signature
4	25% upon approval of the Final Rangeland Management Plans and training outputs as well as the editing of the Arabic version of the National Guidelines.	<ul style="list-style-type: none"><li>- Final Rangeland Management Plans (English)</li><li>- Final Training Material (English and Arabic) and Training report</li><li>- Edited Arabic version of the National Guidelines for Management of Rangelands outside Forests</li></ul>	8 months from contract signature

The Consultant is expected to submit a financial proposal based on a Lump Sum amount including daily fees and foreseeable expenses. Lump sum amount must be “all-inclusive”<sup>1</sup>;

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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.