Terms of Reference (TOR)

BioConnect Project

Ref: EuropeAid/171337/DD/ACT/LB

Ensuring effective management and governance in Sites of Ecological Importance and expanding biodiversity protection in Southern Lebanon.

A project funded by the European Union.

Shouf Biosphere Reserve

seeks

Mammologist and Botanist

Mount Hermon Nature Reserve, Lebanon

Location: Mount Hermon Nature Reserve

Duration of consultancy: 8 months

Collaboration beginning: May 15, 2023

The proposed Action seeks to address the important socio-economic challenges that jeopardize conservation and sustainable development in Lebanon to the greatest possible extent, in line with the Call's objectives and priorities through the following overall objectives:

1. Enhancing the management and governance of sites of ecological importance in southern Lebanon
2. Creation of new Protected Areas and OECMs for broader landscape conservation in southern Lebanon.

It focuses on the following specific objective:

Overall objective 1: Enhancing the management and governance of sites of ecological importance

Specific objective 1.1: Design and implement rigorous, regular, consistent monitoring and evaluation schemes for key biodiversity (endangered species/ecosystems) and pressures.

Activity 1.1.4: Assessing the effects of current livestock management on biodiversity, especially of wild edible plants in MH

The geographical scope of the consultancy:

The scope of work covers Mount Hermon Nature Reserve.

Mount Hermon Protected area, established on property No. 5851 (Amiri) of the Rashaya Al-Wadi real estate area, Rashaya District - Bekaa Governorate covers an area of 1260 hectares. It is located in the eastern Lebanon mountain range, specifically in Mount Hermon, also known as Jabal al-Sheikh, which is one of the important areas in terms of biological diversity in the Mediterranean region. It aims to protect natural resources (ground and surface waters) and ecosystems, preserve landscapes, and conserve biodiversity, especially endangered species with extinction. The area is rich in oaks, mallow, other perennial trees, and Hawthorn and wild almonds. It is characterized by the presence of a large number of plants, of which 100 species are medicinal. There are also endemic species of mammals in Lebanon, such as wolves, hyenas and wild cats. Moreover, this site is a sub-crossing for migratory birds, especially the steppe eagle.

The tasks mentioned in this section shall be performed in close cooperation with the BioConnect team and in close coordination with the BioConnect scientific committee, and in consultation with the Ministry of Environment.

Overall Scope of work:

Under the direct supervision of the project manager, the selected consultant's scope of work is:

Desk Research:

1. Conduct a literature review on the history of grazing, livestock management practices and production in MH
2. Contact and communicate with key people, MH team members, municipalities, rangers and shepherds in the villages of MH to assist with the data collection
3. Assess the effect of the implementation of sustainable grazing practices (rotation-resting system and transhumance during summer and winter) on the quality and quantity of pastures.
4. Prepare and fill in structured questionnaires with shepherds of the region that include information on local knowledge on flocks and their management, the grazing trajectory of the herd, herding practices, ownership, types of fodder, transhumance movement, livestock production, processing, and marketing, etc.
5. Compile data on rangeland stocking rate, rangelands carrying capacity and vegetation cover and water in rangelands in MH
6. Deliver a needs assessment for the shepherds (in terms of vaccines, fodder, and other essentials) laying emphasis on the health statuses of their livestock.
7. Identify the water sources in MH that can be used by the shepherds for grazing practices.
8. Compare the impact of sustainable and unsustainable management practices on biodiversity with a special focus on wild edible plants.
9. Study the effect of livestock management practices on the wild edible species of MH.
10. Conduct a workshop to train the local communities of MH on the conservation of endangered wild edible plant species
11. Choose the ultimate grazing system to be implemented in the region with recommendations for each zone.
12. Train and strengthen the workers, MH team members, and other relevant stakeholder's knowledge on nursery techniques for the conservation and diffusion of native trees and aromatic plants.

Field Work:

1. Set a detailed work plan of the fieldwork and visits to be conducted to the area and shepherds including a timeframe for each activity
2. Guide the field team during their missions to the rangelands for data collection and accompany them when needed
3. Monitor the condition of the livestock in MH and report any violations if spotted.
4. Site and map (KMZ/GIS) the pasture and rangelands in MH zones with maladaptive grazing practices
5. Gather and use scientific information to evaluate and improve management decisions and practices on the ground.

Others:

1. Integrate the grazing assessment within the MH management plan (the MH management plan is currently being developed).
2. Participate in the meeting of the BioConnect committees when compulsory.

All deliverables must be submitted in English language and are under the ownership of ACS.

The whole action is built upon a Wild self-sustaining population in SBR and a functional reproduction facility. ACS aims at releasing 30 individuals in the wild and upgrading functional fences able to host 20 individuals for reproduction and environmental awareness.

Expected Outputs and Deliverables:

Deliverables/ Outputs	Estimated Duration to Complete Target	Due Dates	Review and Approvals Required
Deliverable 1: Methodology of work	2 weeks	2 weeks from the contract signature	Project Coordinator (ACS and MH)
Deliverable 2: a literature review	4 weeks	4 weeks from the contract signature	Project Coordinator (ACS and MH)
Deliverable 3: a structured questionnaire	5 weeks	5 weeks from the contract signature	Project Coordinator (ACS and MH)
Deliverable 4: results and analysis of the questionnaires	3 months	3 months from the contract signature	Project Coordinator (ACS and MH)
Deliverable 5: needs assessment of shepherds	4 months	4 months after the contract signature	Project Coordinator (ACS and MH)
Deliverable 6: a draft of the sustainable grazing assessment in MH	6 months	6 months after the contract signature	Project Coordinator (ACS and MH)
Deliverable 7: KMZ maps of the rangelands	7 months	7 months after the contract signature	Project Coordinator (ACS and MH)
Deliverable 8: final assessment of the effect of livestock management practices on the wild edible species in MH with recommendations on the ultimate management practices	8 months	8 months after the contract signature	Project Coordinator (ACS and MH)

All deliverables must be submitted in English language and are under the ownership of ACS

Project implementation reporting:

Reporting to ACS should be conducted in accordance with the table of deliverables above.

Applicants:

Applications can be submitted by institutions or by teams of individual applicants (a consortium of experts, universities, NGOs…etc.) with the appropriate expertise and experience. Two experts are requested to fulfill this task: a mammologist and a botanist.

TOR activities period: 8 months

Qualification Requirements:

The expert/team wishing to be considered for the services described herein should have the following qualifications:

1. at least a Master's degree in a related field. If a team, then the CVs of its main members should be qualified (PHD is a plus)
2. A minimum of 8 years of relevant experience in animal production, ruminants and veterinary work.

All communication and requested reports/deliverables shall be written in English.

Budget: the budget must not exceed 25,000 euros.