

Terms of Reference (TOR)

1. Project BioConnect

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 European Union

**Shouf Biosphere Reserve
seeks
Senior Biodiversity Expert
to conduct a biodiversity inventory**

Location: Shouf Biosphere Reserve and Mount Hermon Protected Area

Duration of consultancy: 18 months, till June 2025

Collaboration beginning: January 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 objectives:

1. Linked to the Overall objective 1 1.1) Design and implement rigorous, regular and consistent monitoring and evaluation schemes for key biodiversity (endangered species/ecosystems) and pressures; 1.2) Ensure effective, equitable site management, including appropriate management plans/guidelines for the sites; 1.3) Abate the main pressures on key biodiversity; and 1.4) Enhance sites' regulation enforcement.
2. Linked to the Overall objective 2: 2.1) Identify and assess suitable new PAs or OECMs; 2.2) Ensure sound management plans/guidelines for the new sites; and 2.3) Improve landscape connectivity among existing and new PAs/OECMs.

The project activities will be implemented mainly in 10 locations in the Southern part of Lebanon:

Shouf Biosphere Reserve (Shouf and West Bekaa), Caza of Jezzine, Mount Hermon, Tyre Coastal Nature Reserve, and villages in Metn.

The lead manager of the project is **Al-Shouf Cedar Society** in partnership with: ADR (Association for the Development of Rural Capacities); ACE (Association for Community and Environment), and SPNL (The Society for the Protection of Nature in Lebanon). It is supported by the local authorities, and local communities, in addition to the Ministries of Environment and Agriculture.

The geographical scope of the consultancy

The scope of work covers two separate areas: The Shouf Biosphere Reserve and Mount Hermon Protected Area.

The Shouf Biosphere Reserve (SBR) lies between longitude 35° 28' - 35° 47' East and latitude 33° 32' - 35° 48' North at an altitude ranging from 1200 to 1980 meters. It is located along a mountain range known as the Barouk Mountain, which is a southern extension of the Mount Lebanon Range. The SBR covers an area of about 500 square km. which is equivalent to about 5% of Lebanon. It includes and is bounded by twenty-eight villages. It also includes two protected areas, Al-Shouf Cedar Reserve and Ammiq Wetland, which are fast becoming a major natural attraction for Lebanon and the region. The reserve's most famous attractions are its three magnificent cedar forests of Maasser Al-Shouf, Barouk and Ain Zhalta – Bmohary. These Cedar forests account for a quarter of the remaining cedar forest in Lebanon. The

Reserve is a popular destination for hiking and trekking, with trails matching all levels of interests and ages. It includes:

- a. The Core Zone (161 sq. km) of the SBR consists of the protected areas of Al-Shouf Cedar Reserve (Law 532), Ammiq Wetland, and private lands.
- b. The Buffer Zone (54 sq. km) consists of municipal lands incorporated into the Al-Shouf Cedar Reserve (Law 532), and private lands.
- c. The Development (Transition) Zone (233 sq. km) consists mostly of private lands, municipal lands, and religious trusts (Awqaf).

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 at protecting natural resources (ground and surface waters) and ecosystems, preserving landscapes, and conserving biodiversity, especially endangered species with extinction. The area is rich in oaks, mallow, and other perennial trees, in addition to 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 the next 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 coordinator, , the selected consultant is expected to:

Preparatory work:

A. Desk research:

1. Establish an execution plan for the development of the Biodiversity Inventory Assessment in Mt. Hermon and another to update the biodiversity inventory in the Shouf Biosphere Reserve.
2. Conduct a literature review on the articles and studies on biodiversity of both reserves
3. Compile the available data and identify the data that should be gathered to complete this task.
4. Perform habitat mapping including identification of legally protected and internationally recognized areas, critical habitats, sensitive habitats and ecologically critical areas based on government declaration, IUCN Red list or any other national or internationally recognized data sources
5. Arrange two workshops/ meetings (in both sites) to finalize the i) Inception Report and ii) Biodiversity Management Plan in order to incorporate and address feedback and comments.
6. Designate conservation methods and programs that focus on the threatened and endangered species in both sites

7. Compile the field results in both sites and develop two final inventories, for each respectively, of the flora and faunal diversity as the reserve's biodiversity resource inventory assessment.

B. Field work:

1. Complete all field surveys and data collection based on the ecosystem, priority transects, and site characterization (Biodiversity survey needs to cover biologically important periods (breeding, migratory seasons, wet and dry seasons).
2. Conduct geo-referenced sampling on selected sites/ zones
3. Conduct statistical analysis and computation of data in both sites

C. Other:

1. Participate in the meetings of the BioConnect scientific committee when needed
2. Cooperate with all experts involved in the project and in the sites (SBR and MH) i.e (Fauna, Flora experts, management plans subcontractors, grazing plan developers, etc)

The whole Action is built upon strengthening local capacity in order to promote the conservation and sustainable use of biodiversity. Key Biodiversity monitoring (threatened/endemic species and/or habitats) will be performed at the action's sites. This requires the engagement of experts on flora (plants and trees), and fauna (herps, birds, insects, mammals).

Expected Outputs and Deliverables:

At the end of this consultancy, the expert will be expected to have submitted the following key deliverables:

Deliverables/ Outputs	Estimated Duration to Complete Target	Due Dates	Review and Approvals Required
Deliverable 1: Inception report explaining the detailed work plan and methodology in SBR and MH	3 weeks	2 weeks from the contract signature	Project Coordinator (ACS and MH)
Deliverable 2: literature review results in SBR and MH	6 weeks	3 weeks from the contract signature	Project Coordinator (ACS and MH)

Deliverable 3: Workshop number 1 report	3 months	3 months from the contract signature	Project Coordinator (ACS and MH)
Deliverable 4: Baseline biodiversity survey report in SBR and MH	1 year	1 year from the contract signature	Project Coordinator (ACS and MH)
Deliverable 5: workshop number 2 report	16 months	16 months after the contract signature	Project Coordinator (ACS and MH)
Deliverable 6: a final inventory of the flora and faunal diversity in SBR and MH	18 months	18 months after the contract signature	Project Coordinator (ACS and MH)

Applicants:

Applications can be submitted by institutions or by individual applicants and teams (a consortium of experts, universities, NGOs...etc.) with the appropriate expertise and experience.

TOR activities period: 18 months

Financial Information: we recommend that the offer does not exceed the amount of 160,000 EUR (or its equivalent in national currency) for both sites

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 Botany, Ecology, Biodiversity, and Environmental planning and management.

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

2. Project implementation reporting:

Reporting to ACS should be conducted on a monthly basis (summary monthly report) with inception, midterm and final comprehensive reports