**TOR – Develop a framework for ecosystem-based climate change mitigation and adaptation in protected areas to reduce climate change impact on biodiversity and enhance nature-based solutions**

**Project Background**

The number of and area covered by protected areas (PAs) in the country is way below international standards, currently at 2.18%[[1]](#footnote-1) from the 17% target for terrestrial and freshwater ecosystems by 2020[[2]](#footnote-2). Moreover, some existing PAs cannot ensure effective biodiversity conservation due to insufficient resources for management and enforcement, and inadequate engagement of local populations. The current economic crisis is also having serious impacts on biodiversity. The scarcity of State’s human and financial resources are undermining PA management, so that basic managerial activities have to be undertaken by NGOs and local stakeholder themselves such as in *Himas*. In addition to little protection coverage and insufficient management, pressures to insufficiently protected and undermanaged biodiversity are escalating. Widespread economic needs are pushing plenty of Lebanese people to make a living, and even survive, out of exploiting the country’s natural resources such as berries, mushrooms or fuelwood, cultivating new areas which worsens land clearing, soil erosion and water use, and increasing wildlife fishing and hunting. As a result, the status of Lebanese biodiversity is deteriorating, with serious consequences for species, ecosystems and humans20. Biodiversity conservation is especially challenging in Southern Lebanon, given its critical geo-strategic importance between Israel and Syria, its demographic diversity, and its sensitive socioeconomic context. Thus, conservation efforts are particularly needed in this region.

The proposed Action within BioConnect project seeks to address this challenging situation to the greatest possible extent, in line with the Call’s objectives and priorities. Actually, the **Action’s Overall objectives** align fully with the overall aim of Lot 1: *“To protect biodiversity and ecosystems through enhancing the management and governance of sites of ecological importance and encouraging the creation of Protected Areas (Local)”.* Thus, the **two Overall objectives** of the proposed Action are:

1) **Enhancing the management and governance of sites of ecological importance in southern Lebanon**; and **2) Creation of new Protected Areas and OECMs[[3]](#footnote-3) for broader landscape conservation in southern Lebanon**.

The Action’s **Specific objectives** develop the overall Lot 1’s objectives in a comprehensive and coherent manner in 10 protected areas (PAs) or Sites of Ecological Importance in Southern Lebanon[[4]](#footnote-4) while addressing the major objective of Lot 1: *“Tackling the root causes of threats to diversity and forest ecosystems in regions classified as natural sites of national interest*”. **Four Specific objectives linked to the Overall objective 1** **are proposed:** 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**. **Three Specific objectives linked to the Overall objective 2** **are proposed:** 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 will address nature reserves (Chouf Nature reserve, Tyre nature reserve), and 7 Himas in specific; namely: Hammana, Ras Al matn, Kherbet Anafar, Ain Zebdeh, Qoleileh, Mansouri, and Ebel es-Saqi. **Thus, the need to develop a framework for ecosystem-based climate change mitigation and adaptation in protected areas (nature reserves and Himas) to reduce climate change impact on biodiversity and enhance nature-based solutions**

1. **Tasks to be performed by the Consultant/Contractor – Framework and Methodology**

**The framework** developed should outline the set of principles, rules, guidelines, and standards required to conduct ecosystem-based climate change mitigation and adaptation in protected areas and Himas.

The development of the framework should be done with relevant stakeholders in the country, particularly, the Ministry of Environment climate change team in order to verify the framework applicability against Lebanese legislation, existing frameworks, and standards.

The framework should outline the following:

* The process for identifying and monitoring the impacts of climate change on protected areas.
* The process to model mid- and long-term impacts of climate change on protected areas.
* The process to address these impacts.
* The process for developing a climate mitigation and adaptation action plan.
* The process for developing disaster risk reduction plan in natural area.
* The process to report on climate change action to the national designated authority to include in the national communication, biennial reports, NDCs, and LEDS.
* The institutional structure for the framework.
* The linkages between the framework and international climate related agreements, structures, and processes.
* The expertise required to conduct the above work.
* The costs associated with the above processes for the PAs and Himas associated with the BioConnect project.
* How to integrate the framework into the work of protected areas and Himas management structures.
* Required policies for the operation of the effective Framework.

The impacts of climate change on ecosystems considered should also include primary and secondary impacts:

Primary impacts include: Changes in precipitations, temperature changes, phenology, fire risks, water resources, carbon balance, invasive species, etc.

Secondary impacts include: Seasonal life-cycle impacts, range shifts, food web disruptions, threshold effects, pathogens/parasites/diseases, extinction risks, etc.

The framework should also:

1. Cover the range of ecosystems, habitats, and species existing in Lebanon. It should also cover the primary protected areas, as well as their buffer zone (biospheres), including eco-system services, agriculture, and socio-economic situation of local community.
2. Outline and describe all possible nature-based solutions to climate change that can be applied in protected areas and their buffer zone.
3. Define the process for the qualitative and quantitative verification of impacts of climate mitigation and adaptation measures.
4. Include potential sources of financing nature-based solutions through carbon credits, carbon pricing, and other market mechanisms.

**Method of work:**

This assignment includes a mixture of various methods of work including:

* Literature review
* Engagement with relevant authorities
* Meeting with protected areas and Himas management teams
* Meetings with relevant national and international stakeholders
* Field visits
* Discussion workshops (2) with relevant stakeholders
* Monthly updates on progress of work with SPNL
* Quarterly progress report

**Deliverables:**

1. Plan of work and outline of framework – 1 month after contract signature
2. Literature review – 2 months after contract signature
3. Progress report 1 – 3 months after contract signature
4. Draft technical elements of the framework – 5 months after contract signature
5. Progress report 2 – 6 months after contract signature
6. 1st workshop on technical elements of the framework – 7 months after contract signature
7. Draft institutional elements of the framework – 8 months after contract signature
8. Progress report 3 – 9 months after contract signature
9. 2nd workshop on institutional elements of the framework – 10 months after contract signature
10. Submission of final draft of the framework for revision – 11 months after contract signature
11. Final report of the assignment – 12 months after contract signature

1. **Material to be provided by SPNL**

-Access to SPNL’s GIS online account

-Hima maps (boundaries, land use, land cover).

-Data, contacts for focal points and stakeholders

1. **Qualifications**

1-At least 10 years’ experience in climate policy analysis and development

2-At least 5 years’ experience in NbS for climate change

3-Strong understanding of climate science

For this consultancy, we require:

1.A brief portfolio/CV showing experience in similar work, especially with EU projects

2.A detailed technical proposal.

3.A price quotation for the above services for a period of 12 months

Kindly send the above documents to Stephanie Ferando sferando@spnl.org and Bassima Khatib bkhatib@spnl.org by maximum 31 July 2024.

1. Protected Planet. Lebanon (2021) [↑](#footnote-ref-1)
2. Strategic Plan for Biodiversity 2011-2020. CBD (2010) [↑](#footnote-ref-2)
3. Other Effective Area-Based Conservation Measures. IUCN (2019) [↑](#footnote-ref-3)
4. Please refer to the Action’s location map in the Summary Table of the Concept note. [↑](#footnote-ref-4)