Terms of Reference (TOR) for Consultancy services

Post title: Researcher Botanist

Duration: 01.09.2020 - 16.06.2022

Duty station: REC Caucasus Armenia

Project: EU BSB Joint Monitoring for Environmental

Protection in BSB countries

Supervision: REC Caucasus Director

Project Background

Project "Joint Monitoring for Environmental Protection in BSB countries" is aimed at solving common problems of nature parks and protected areas in the Black Sea Basin (BSB). The overall project objective is to contribute to increasing the level of availability of cross-border compatible environmental monitoring data and information in nature parks and protected areas in BSB. The major project outcome will be the creation of an intelligent platform for the collection, processing and analysis of environmental data via Web-based cloud service for automatic data collection from wireless sensor networks and Web-based cloud service for video content. An Online Monitoring System (OMS) for environmental data in BSB will integrate the measurement data and will serve as a platform for the dissemination of the collected information and data. The developed smart technologies and intelligent wireless sensor networks will also be used for conducting a monitoring of the condition of natural habitats and the availability of invasive species, and for distance observation of territories which are most dependent on climate change and anthropogenic influences. A cross-border team of researchers will be formed who will develop a common methodology for monitoring the condition of natural habitats and the availability of invasive species and conduct the monitoring. The methodology will guarantee the collection of compatible data and topical information about the location and size of damaged areas, the types of pressure and the evaluation of potential sources and forms of threat. We will use distance methods (satellite/drone photographs) for territories most dependent on climate change and anthropogenic influences etc. For each nature park or protected area, permanent sampling control sites will be designated in which experts and volunteers will perform annual field observations. Based on the collected monitoring information Report on the assessed existing and potential sources and forms of pressure on key areas within protected territories of the Black Sea Basin will be developed and a List of proposed measures to be undertaken towards pollution preservation and restoration of the monitored key areas.

Main duties

- To gather background information on the Dilijan National Park and these should include among others maps, historical, biological, physical and socio-economic information,
- Conduct Research to assess management of biological resources for biodiversity maintenance (including forest ecosystems) in Dilijan National Park, elaborate subsequent report including recommendations on sustainable use of plant resources
- Conduct research to reveal most threatened, endemic and rare plants species in surrounding areas of selected communities and identify possible conservation measures,

- Develop methodology for monitoring the state of natural habitats and the presence of invasive species in Dilijan National Park.
- Ensure collection of compatible data, up to date information on location
- Analysis and description of the size of damaged areas and types of pressures,
- Identify key or exceptional values of the area,
- The assessment of potential sources and forms of threats.
- The collected information will be updated with remote sensing data through the developed smart technologies and it will be accessible (ensure accessibility of collected data in collaboration with project team and experts)
- In collaboration with smart eco monitoring expert to ensure use of smart technologies and conducting joint monitoring of the Dilijan National Park
- Regular participation in the meetings, cross border discussions and events within the project
- Conduct necessary field trips to collect data and perform analysis of necessary information at spot,
- Prepare project field reports regularly, after each visit,
- Prepare progress reports and final report with results of activities, analysis of compatible data, description of actions, assessment of potential sources and forms of pressures
- Represent the project and give presentations at conferences and workshops, when necessary;
- Lead development and implementation of technical aspects of activities nationally;
- Lead the conceptualization, development and implementation of analytical methodology in collaboration with project team,

Required Qualifications:

- Advanced degree in Biology, Botany, Ecology or equivalent, or an MBA with at least five years
 relevant experience; A relevant university degree in combination with qualifying experience in
 the area may be accepted in lieu of the advanced university degree.
- Good knowledge on biology and botany,
- At least five years of experience in relevant field, experience working in biodiversity management planning, sustainable use and conservation, demonstrated experience in team work. Experience working with international donor funded projects is an asset.
- Knowledge of sustainable use of biological resources, biodiversity conservation and sustainable use technical regulations and institutional international set-up at national and community levels;
- Experience performing cost-benefit analyses, planning, management and conservation techniques, scenario testing;
- Good analytical skills, and application of qualitative methods to measures of biodiversity planning and conservation,
- Demonstrated experience in liaising and co-operating with government, local administration, donors, NGOs and other relevant stakeholders;
- Good analytical skills, ability to express ideas clearly and concisely both orally and in writing.
- Excellent oral and written communication skills, with an ability to communicate with a wide range of audiences;
- Strong ability to work in a team setting within multi-cultural environment with sensitivity and respect to diversity
- Fully proficient computer skills, especially in word processing, Internet and database utilization

Outputs, Terms and Conditions for provision of services

- Report on background information on the Dilijan National Park and these should include among others maps, historical, biological, physical and socio-economic information,
- Report on results of Research to assess management of biological resources for biodiversity
 maintenance (including forest ecosystems) in Dilijan National Park, including recommendations
 on sustainable use of plant resources, research to reveal most threatened, endemic and rare plants
 species in surrounding areas of selected communities and identify possible conservation measures,
- Report on plants biodiversity including information on most threatened, rare, endemic species, on trends and dynamics of changes in plants diversity, possible conservation measures, existing state of management of biological resources for biodiversity maintenance (including forest ecosystems) and sustainable use.
- Methodology for monitoring the state of natural habitats and the presence of invasive species in Dilijan National Park.
- Analysis and description of the size of damaged areas and types of pressures,
- Identify key or exceptional values of the area,
- The assessment of potential sources and forms of threats.
- The collected information will be updated with remote sensing data through the developed smart technologies and it will be accessible (ensure accessibility of collected data in collaboration with project team and experts)
- In collaboration with smart eco monitoring expert to ensure use of smart technologies and conducting joint monitoring of the Dilijan National Park
- Regular participation in the meetings, cross border discussions and events within the project
- Conduct necessary field trips to collect data and perform analysis of necessary information at spot,
- Prepare project field reports regularly, after each visit,
- Prepare progress reports and final report with results of activities, analysis of compatible data, description of actions, assessment of potential sources and forms of pressures
- Represent the project and give presentations at conferences and workshops, when necessary;
- Lead development and implementation of technical aspects of activities nationally;
- Lead the conceptualization, development and implementation of analytical methodology in collaboration with project team,
- Participation in preparation of final package of documents and reports
- Reports on field trips targeting implementation of above mentioned tasks in a team with the national and international experts.

<u>Languages:</u> Fluency in Armenian (writing, reading, speaking) is necessary. Proficiency in English (writing, reading, speaking) is also necessary.