

United Nations Development Programme



TERMS OF REFERENCE National Consultant

Assignment Title	Update Boundary Demarcation and Ecosystem Services Mapping of Inle Lake Region
Project	Governance for Resilience and Sustainability Project
Type of Contract	Individual Contract (National)
Contract Period	40 days between October 2019 and April 2020
Supervisor	Project Manager & CTA, Governance for Resilience and Sustainability Project
Location	Home based (with travel to Nyaung Shwe, Shan State)
Country	Myanmar

A. BACKGROUND

UNDP Myanmar is implementing its Country Programme for 2018-2022. Integrated programming has guided the design of the new programme in order to better address the inter-linkages between peace-building, governance, natural resource management and disaster resilience, inclusive growth, and the vertical linkages between subnational and national governance levels.

The Governance for Resilience and Sustainability Project (GRSP), within the Sustainable & Inclusive Growth (SIG) portfolio, leverages existing vertical funding and links up to horizontally and vertically with UNDP Country Programme key priority areas working at national and sub-national levels. GRSP is designed to help the Government of Myanmar (GoM) implement recent policy reforms related to environmental governance, climate change and disaster risk reduction (DRR), to ensure that economic growth in Myanmar is more inclusive, resilient and sustainable. The project recognizes that environmental degradation, when combined with natural disasters and effects of climate change, undermines the attainment of inclusive and sustainable growth

GRSP also operates as an 'umbrella' project for integrating other key environment, climate and DRR related projects within UNDP's portfolio. A dedicated project to support strengthened management of Inle Lake in Shan State is integrated into the management of GRSP.

The Inle lake is renowned for a number of traditional cultural and livelihood practices, which have made it one of the main attractions for Myanmar's booming tourism industry. The lake is, however,

suffering environmental degradation from the combined effects of unsustainable resource use, increasing population pressures, climate variability and rapid tourism development.

The Government of Myanmar (GOM) implemented a number of initiatives to develop and conserve the Inle Lake in recent years. These initiatives were done in collaboration with a number of development partners including UNDP, UNEP, UNESCO, IUCN, IFC, Government of Norway, and UN-Habitat.

UNDP implemented the Inle Lake Conservation and Rehabilitation project in 2012, in collaboration with MOECF, and with financial support from the Royal Norwegian Government and in partnership with the United Nations Educational, Scientific and Cultural Organization (UNESCO). The objective of this initiative was to restore the environmental stability of the lake and improve the quality of life of local communities through the implementation of environmental conservation and environmentally friendly community development activities.

In 2015, the GOM prepared the Inle Lake Conservation 5-Year Action Plan (2015/16 to 2019/2020) which identifies nine priority issues, including setting up an institutional framework for Inle Lake conservation management, developing baseline data on the natural and social environment for future conservation and development of Inle Lake, and promoting sustainable tourism practices, including improvement in infrastructure, training and capacity building for the local community.

The conservation and management of Inle Lake are long-term and ongoing processes, which are crucially needed to practice an integrated approach focusing on biodiversity conservation, integrity of the lake environment and improvement of the livelihoods of local communities. The Inle Lake Conservation plans aim at ensuring a balanced approach between conservation and development of Inle Lake through the active participation of local communities and key stakeholders. The estimated overall budget required to implement the Action Plan is USD33.3 million. The plan will also include monitoring and management systems to evaluate progress of conservation efforts.

Despite the overall achievements of projects and initiatives by the GOM so far, there are limitations in terms of strong mechanism to lead the necessary planning, decision-making, and coordination of different stakeholders and the necessary funding to support the implementation of the Inle Lake Conservation 5-Year Action Plan (2015/16 to 2019/2020).

In the effort to provide continuing support to the GOM in promoting inclusive, resilient and sustainable development and environmental management (under Outcome 2: UNDP Myanmar CPD 2018-2022), UNDP Myanmar with the funding support from Government of Norway, is implementing a 2-year project on *Strengthening the Inle Lake Management Authority to Improve Development and Conservation*.

The project's main aim is to support the implementation of the Inle Lake Conservation 5-Year Action Plan (2015/16 to 2019/2020) by strengthening the Inle Lake Management Authority, to coordinate, manage and develop the Inle Lake effectively. This will require strong leadership and coordinated efforts of all stakeholders involved – government, non-governmental organisations and local communities. As such, it is vital to strengthen the governance of Inle Lake to rally private, civil and government actors at various levels and defines various roles. It is also equally important to develop local capacities to collect and monitor the information of the lake's ecosystem and establish a baseline and central database to measure, assess and use data to support the roles of the stakeholders.

The 2 key results of the project are:

1. Result 1: *The Inle Lake Management Authority (ILMA) operates effectively and efficiently with adequate managerial, technical and financial resources and with the support from lake stakeholders.*
2. Result 2: *Progress in implementing the Inle Lake Conservation 5-Year Action Plan (2015/16 to 2019/2020) is systematically and transparently reviewed through a monitoring and evaluation framework and supported through institutionalised information collection, tracking and sharing mechanisms.*

UNDP has engaged an NGO, the Myanmar Institute for Integrated Development (MIID), to provide technical assistance to the project.

B. OBJECTIVE AND SCOPE OF THE ASSIGNMENT

The objective of this assignment is to validate and update the boundary demarcation of Inle Lake Man and Biosphere Reserve (MAB) and to produce the ecosystem service map/s of the whole Inle Lake region to inform ILMA on the conservation activities and successful implementation of the Inle Lake Conservation 5-Year Action Plan (2015/16).

With the technical guidance of Project Manager and Chief Technical Advisor (GRSP) from UNDP Country Office, UNDP plans to conduct the assignment with the following objectives:

- to confirm and update the existing Inle Lake MAB boundary and zoning
- to validate and produce a comprehensive and update the Inle Lake MAB map including boundary demarcation, zoning, land-use and different ecosystem services
- to support the development of communications and educational materials, especially as the resource person for mapping and GIS tool
- to support the capacity building of the key government staff on ecosystem services mapping

This work will be led by an international specialist. UNDP is seeking to engage a national consultant to support this work.

During this assignment the consultant is expected to:

- support the international expert/s in identifying, accessing and reviewing the existing data, information and maps of Inle Lake
- coordinate and facilitate workshop/consultation meeting with line departments for initial discussion on the administrative boundary (of Inle Lake MAB, townships, village tracts and villages of the watershed areas) and land-use of the Inle Lake MAB Reserve
- work together with the international expert/s to update and validate the boundary (of Inle Lake MAB, townships, village tracts of the watershed areas), land-use, zoning of the Inle Lake MAB Reserve in close coordination with line departments
- coordinate with key departments to gather the data and information of Inle Lake region in order to produce maps of different ecosystem services of Inle Lake region in order to inform the decision-making processes for conservation and sustainable development planning
- support in developing communications and educational materials for various purposes by producing customized maps

- work closely with the project team in order to support the links between the mapping work and the separate development of the socio-economic and environmental database of ILMA
- support the international expert/s in writing the narrative reports linked to the mapping to describe Inle Lake region's natural capital and ecosystem services, and identified priority areas for long-term conservation, reforestation and restoration to inform future planning and decision-making processes
- review and guide the translation of all written materials produced under the assignment into Myanmar language
- facilitate training/s and meetings with key government staff and stakeholders

C. EXPERTISE AND QUALIFICATIONS REQUIRED

Academic Qualifications/Education:

- A bachelor's degree, preferably in geography, GIS or the equivalent combination of a university degree and appropriate experience;

Experience:

- At least 4 years of relevant work experience in GIS and information management, or similar fields
- Good knowledge of the natural resource management particularly lake and watershed management
- Demonstrated knowledge of geographic information system design and development, remote sensing processing and analysis, (ArcGIS, QGIS, Erdas Imagine, Envi) and ecosystem services mapping tools (such as InVEST, RIOS, OPAL)
- Ability to advocate and provide technical advice on the relevant sector/theme
- Experience working with government agencies, INGOs, UN agencies and civil society will be an advantage

Language skills:

- Excellent command of written and spoken English

D. MANAGEMENT AND IMPLEMENTATION ARRANGEMENTS

- The consultant will report to the Project Manager/CTA, Governance for Resilience and Sustainability Project, of the UNDP Country Office in Myanmar.
- The consultant is also required to comply with the UN security directives set forth under <http://dss.un.org>
- The consultant will be given access to relevant information necessary for execution of the tasks under this assignment;
- The consultant is responsible for providing their own laptop computers and mobile phones for use during this assignment; the consultant must have access to reliable internet connection
- Payments will be made upon submission of a detailed time sheet and certification of payment form, and acceptance and confirmation by the supervisor

E. DUTY STATION

- The consultant will be home-based with frequent travel to Nyaung Shwe, Shan State, Myanmar.
- The consultant will be prepared to communicate via video or teleconference facilities with the Project Team based in Myanmar and with the international expert/s.
- Any necessary missions must be approved in advance and in writing by the supervisor.

F. TIMEFRAME

- The consultancy will be carried out for 40 days between November 2019 and May 2020.

G. PAYMENT SCHEDULE

Interested persons are requested to submit their financial proposals quoting their **daily fees** noting the following conditions:

- a) Payments will be made upon submission of certification of payment form, and acceptance and confirmation by the supervisor

Deliverable No.	Description of deliverables	Timeline	Payment
Deliverable 1	Upon satisfactory submission (jointly with the international specialist) of: <ul style="list-style-type: none">- A brief inception report including the review and analysis of the existing data, information and maps for the Inle Lake Region and summary of a workshop/consultation meeting with relevant line departments- Summary of proposed mapping work and outputs to achieve the objectives of the assignment	15 December 2019	30 %
Deliverable 2	Upon satisfactory completion (jointly with the international specialist) of: <ul style="list-style-type: none">- the initial maps of Inle Lake region, including updated boundary demarcation, land-use, zoning and different ecosystem services of Inle Lake Man and Biosphere Reserve- one training session on mapping and ecosystem services for relevant stakeholders	31 January 2020	40 %
Deliverable 3	Upon satisfactory completion (jointly with the international specialist) of: <ul style="list-style-type: none">- a final validation workshop with the line departments	30 April 2020	30 %

	<ul style="list-style-type: none"> - final maps of Inle Lake region, including updated and validated boundary demarcation (of Inle Lake MAB, townships, village tracts and villages of the watershed areas), land-use, zoning and different ecosystem services of Inle Lake MAB Reserve - the narrative report linked to the mapping which describes; <ul style="list-style-type: none"> o Inle Lake's natural capital and ecosystem services, o Hotspots and recommendations for long-term priority areas reforestation, restoration and conservation to inform the future planning and decision-making of Inle Lake region - presentation of maps in a systematic manner, with all different layers of Inle Lake region maps produced and all the data utilised able to be incorporated into the socio-economic and environmental database of ILMA (under separate development) 		
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H. RECOMMENDED PRESENTATION OF OFFER

Interested persons are requested to submit the following documents as part of their application:

- 1) **Brief description/ cover letter** of why the individual considers him/herself as the most suitable for the assignment. Please paste the letter into the 'Resume and Motivation' section of the electronic application
- 2) Duly accomplished **Letter of Confirmation of Interest and Availability** using the template provided by UNDP
- 3) **P11 Form** indicating all relevant experience as well as the contact details (email and telephone number) of the candidate and at least three (3) professional references. Please use the P11 form provided by UNDP
- 4) **Financial Proposal** that indicates the daily fees as per the template provided by UNDP

I. CRITERIA FOR SELECTION OF THE BEST OFFER

The following criteria shall serve as basis for evaluating offers:

Combined Scoring Method:

- Where the qualifications and methodology will be weighted a maximum of 70% and combined with the price offer which will be weighted a maximum of 30%

Technical Evaluation of Proposals:

- All applications comprising the information/documentation provided will be evaluated to ascertain the suitability of the applicants to carry out the assignment. Candidates who obtain the minimum of 49 points of the full mark (70 points) will be considered technically compliant and their financial evaluations will be evaluated thereafter. Applications will be scored as per the following breakdown (Total 70 points):
 - Educational background: 10 points
 - A bachelor's degree, preferably in geography, GIS or the equivalent combination of a university degree and appropriate experience;
 - Relevant Experience: 55 points
 - At least 4 years of relevant work experience in GIS and information management, or similar fields (20 points)
 - Good knowledge of the natural resource management particularly lake and watershed management (10 points)
 - Demonstrated knowledge of geographic information system design and development, remote sensing processing and analysis, (ArcGIS, QGIS, Erdas Imagine, Envi) and ecosystem services mapping tools (such as InVEST, RIOS, OPAL) (15 points)
 - Ability to advocate and provide technical advice on the relevant sector/theme (5 points)
 - Experience working with government agencies, INGOs, UN agencies and civil society will be an advantage (5 points)
 - English language skills: 5 points
 - Excellent command of written and spoken English

Financial Evaluation of Proposals:

- The financial proposals of all the applicants who pass the technical evaluation will be scored. The maximum 30 points will be allotted to the lowest financial bid, and all other bids shall receive points in inverse proportion to the lowest fee e.g. $[30 \text{ Points}] \times [\text{USD lowest}] / [\text{USD other}] = \text{points for other proposer's fees}$

The contract shall be awarded to the applicant who receives the highest cumulative score.