TERMS OF REFERENCE

FOR CONSULTANCY FIRM, CIVIL SOCIETY ORGANIZATION OR OTHER ELIGIBLE ENTITY

POST TITLE: Consultancy to undertake Analysis of Ecosystem Services Values and a Costs and Benefits Analysis of Production Systems within the Dry Dipterocarp Forest Landscape of Savannakhet Province

AGENCY/PROJECT NAME: United Nations Development Programme (UNDP) / Sustainable Forest and Land Management in the Dry Dipterocarp Forest Ecosystems of Southern Lao PDR

LOCATION OF ASSIGNMENT: Project sites 5 districts: Xonnabuly, Thapanthong, Songkhone, Phalanxay, Phine of Savannakhet, Lao PDR

PLACE OF ASSIGNMENT: 40% Vientiane; 60% in Savannakhet Province and five target districts (Phalanxay, Phin, Songkhone, Thapanthong, Xonnabouly)

DURATION OF ASSIGNMENT: 60 days (over a 3-month period)

STARTING DATE: December 2019 (as soon as possible)

1) GENERAL BACKGROUND

The SAFE Ecosystems Project

The UNDP-GEF Sustainable Forest and Land Management in the Dry Dipterocarp Forest Ecosystems of Southern Lao PDR Project (SAFE Ecosystems Project) aims to support the government of Lao PDR to facilitate a transformative shift towards sustainable land and forest management in the forested landscape of Savannakhet Province. This sustainable management will help to secure critical wildlife habitats, conserve biodiversity and maintain a continuous flow of multiple services such as the provision of quality water and flood prevention. The project will be implemented over a period of six-years from May 2016 to May 2022 by the Department of Forestry (DOF) under the Ministry of Agriculture and Forestry.

The Dry Dipterocarp Forest (DDF) ecosystems located in Savannakhet Province are recognized for being globally important as habitat for a number of globally significant and threatened species, and nationally important for their provision of numerous ecosystem services that benefit the people of Lao PDR. In recent decades, DDF ecosystems and the species within them have come under increasing threat from large-scale conversion of forest, degradation of forest ecosystem services, and species loss.

Recognizing their global and national importance, the Government of Lao PDR (GoL) has prioritized the conservation and sustainable management of the Dry Dipterocarp Forests landscape of Savannakhet province. As a measure of the GoL’s commitment to the DDF landscape, it has selected this area to be the site of the newest National Protected Area in the country, and as a demonstration site for testing the implementation of new national policies and processes related to Strategic Environmental Assessment, Integrated Spatial Planning, and High Conservation Value Forests. The GoL has also identified this landscape as suitable for the development and implementation of innovative financing mechanisms for sustainable forest management and protected area management, as well as community participation in protected areas management, ecotourism programs, and livelihoods programs linked to conservation outcomes through formal Conservation Agreement mechanisms.

This SAFE Ecosystems Project will seek to strengthen land and resource use planning capacities and procedures, and the policies and regulations that govern them, while simultaneously expanding and strengthening the management of resources on the ground by government agencies, local communities and private sector actors. Furthermore, the project is developing innovative financing mechanisms and programs (including ecotourism and livelihoods programs) that can ensure the sustainability of improved land use and resource management approaches.
Increased and More Strategic Funding for Sustainable Forest Management

The project will undertake a suite of activities to increase the funding amounts and sources for sustainable forest management in Savannakhet Province, and to ensure that the allocation / use of such funds is targeted towards the highest priority and cost effective actions. Project activities on SFM financing will encompass strategies for all forest areas in the province, including Protection and Conservation forests as well as Production Forests and village forests in unclassified lands.

A key project activity will be to undertake an analysis of ecosystem services values in the Dry Dipterocarp Forest landscape and a related costs and benefits analysis of different production systems and SFM practices as they relate to economic productivity, ecosystem functioning and livelihoods. Financing for a range of management activities and interventions in the landscape mainly depend on central government allocations and donor funding for the foreseeable future; valuation and cost/benefit analyses can build the case for such funding allocations by showing how given levels of investment may generate substantial economic benefits that otherwise are not sustained by market dynamics. The following ecosystem services in the DDF landscape have been identified as likely candidates for valuation during the project:

- **NTFPs:** These are known to have a high value for both household use and for income generation in the DDF landscape, including various species of mushrooms, frogs, and insects, as well as wild vegetables, rattan, bamboo shoots, khisi resin, fuelwood/charcoal, fish, etc.
- **Rice Cultivation and Livestock Raising:** The principal economic activities for most residents in the project area are rice cultivation and livestock raising, and the project will assess the ways in which ecosystem services sustain these activities, as well as trade-offs that may exist between these activities and forest maintenance in terms of impacts on ecosystem services.
- **Ecotourism:** Assessing the value of ecotourism will bolster the case for investing in management of protected areas and offer concrete arguments for the value of biodiversity.
- **Carbon Sequestration:** Although the DDF landscape holds relatively low amounts of above ground carbon compared to other forest types, below ground carbon may be significant and amenable to inclusion in REDD+ carbon strategies in the future. In addition, reforestation activities may offer additional carbon sequestration potential.
- **Watershed Services:** Water supplies for household consumption, water supplies for irrigation, livestock and wildlife, services related to erosion control and flood management, and hydroelectric potential are all important ecosystem services in the DDF landscape.

Critical inputs for analysis and valuation of ecosystem services will need to include the extent of various land cover types (linked to ecosystem stocks, particularly of various provisioning services) and spatial relationships between them (linked to ecosystem service flows, as in the case of watershed services or core protected zones serving as reservoirs for animals hunted elsewhere). Therefore, the project will utilize mapping and modelling tools to complete this activity.

2) OBJECTIVES OF THE ASSIGNMENT

Expertise is required for a Consultancy Firm / Civil Society Organization / Eligible Entity (CF/CSO/EE) to conduct an Analysis of Ecosystem Services Values and Costs and Benefits Analysis of Production Systems within the Dry Dipterocarp Forest Landscape of Savannakhet Province. The CF/CSO/EE may be either International or National. The Consultancy Team must consist of a Team Leader and a maximum of 3 Team Members. At least 2 people within the Consultancy Team must be Lao Nationals.

The overall objective of the consultancy is to assist the SAFE Ecosystems Project and Provincial Government Authorities – mainly PAFO and DAFO – for (i) collecting and collating data on ecosystem services into mapping and modelling tools to be used effectively by stakeholders; and (ii) conducting analysis and valuation of ecosystem services with a high likelihood of significant value, such as NTFPs to local communities; ecosystem services that are amenable to credible measurement of value, such as traded products (provisioning services); and ecosystem services that are of known interest to stakeholders (e.g. ecotourism, which is a provincial priority).

For this assignment, the SAFE Ecosystems Project is seeking a **CF/CSO/EE** to work in close consultation with the UNDP Lao PDR Country Office and relevant agencies of the Government of Lao PDR (Savannakhet Province PAFO, DAFOs, and District Offices of Industry and Commerce of the 5 target districts). The National Consultant will also be expected to work closely with and support of a **CF/CSO/EE**, as well as the Project Livelihoods Specialist, Ecotourism Specialist and provincial project team who are tasked with assessing existing livelihood activities.

Additionally, the CF/CSO/EE will coordinate workplans and activities with the Center for Development and Environment, another Service Provider for the SAFE Ecosystems Project developing a Decision Support System for Savannakhet Province.
3) SCOPE OF WORK

Under supervision of the UNDP Technical Specialist and the SAFE Ecosystems Project National Project Director supported by the Project Manager and Assistant Project Manager, the CF/CSO/EE will be required to undertake the following duties:

1. Convene stakeholder workshop to agree on scope of ecosystem service valuation
   a. which ecosystem services
   b. geographical scope
   c. land-use scenarios
   d. ecosystem service mapping package to use (e.g. InVEST, TESSA, etc.)
2. Assess existing mapping resources for applicability to valuation and cost benefit analysis (CBA), and identify data gaps for application of selected ecosystem service mapping package (DOF GIS staff)
   a. MONRE mapping and land use planning products
   b. JICA-supported forest cover mapping
   c. Center for Development and Environment – Lao Decide/K4D
3. Address data gaps, if any
   a. examine valuation databases for applicable studies for benefit transfer methods
   b. execute site-based fieldwork within the 5 target districts to construct additional ecosystem service value parameters
4. Data collection on ecosystem services valuation and analysis from the 5 target districts
5. Enter data into ecosystem service mapping package and configure model(s) to generate valuation of ecosystem services under baseline (business as usual) scenario
6. Use ecosystem service mapping package to perform sensitivity analysis with respect to different land use configurations, to identify impact of habitat conversion on ecosystem service values.
7. Estimate and compare per hectare Net Present Value of Net Revenue derived from different land uses
8. Prepare communication materials targeted to specific audiences
   a. Communities
   b. Makers and implementers of policy (DONRE, PONRE, MONRE)
   c. Donors
   d. Materials to include: visual representation of data (maps), particularly for communities and local government, with summary valuation tables; technical reports, particularly for donors and high-level policy makers; illustrated case study accessible to lay audience, for wider stakeholder dissemination and non-technical policy-maker engagement

4) DURATION OF ASSIGNMENT, DUTY STATION AND EXPECTED PLACES OF TRAVEL

This is a 60-day consultancy service, starting from December 2019. The CF/CSO/EE will be required to travel to the project site (DDF Ecosystems in the five target districts in Savannakhet Province) for at least 50% of the time in close consultation with the UNDP Lao PDR Country Office and relevant agencies of the Government of Lao PDR (PAFO, the 5 DAFOs of Savannakhet and DOF). The CF/CSO/EE will work closely with UNDP Natural Resource Management, Climate Change, Disaster Risk Reduction Unit, the UNDP Technical Specialist, the SAFE Ecosystems Project Management Team and relevant Government of Lao officers at provincial and district level within the target areas.

5) FINAL PRODUCTS

Output 1: An Inception Report including a methodology and workplan to be developed within one week after signing of the contract.
   (i) The methodology and workplan should provide proposed activities, timeframe, as well as key informants and institutions or organizations to be consulted in order to complete the tasks and achieve outputs based on the activities listed within the above Scope of Work above.
   (ii) The methodology and workplan must detail the roles and responsibilities of the Team Leader and the Team Members.
   (iii) It is expected that the CF/CSO/EE is to work close coordination with PAFO, the 5 DAFOs of Savannakhet and DOF and as such, schedule at least 60% of the workplan (36 days) to be in Savannakhet Province.

Output 2: Submission of a First Report based on Activities 1-4 of the Scope of Work detailing the following:
   (i) The initial stakeholder workshop to agree on scope of ecosystem service valuation.
   (ii) Assess existing mapping resources for applicability to valuation and cost benefit analysis (CBA).
(iii) Gap analysis of ecosystem services data.
(iv) Field mission to the 5 target districts (Phalanxay, Phin, Songkhone, Thapanthong, Xonnabouly) and data collection.

Output 3: Submission of a Second Report based on Activities 5-7 of the Scope of Work detailing the following:
(i) Data entry into ecosystem service mapping package
(ii) Analysis with respect to different land use configurations.
(iii) Perform calculations of revenues and costs for different land uses.

Output 4: Facilitation of a Final Validation Workshop and submission of the Final Report based on Activity 8 of the Scope of Work, as well as detailing all findings and make recommendations on ecosystem services valuation and analysis:
(i) Preparation of communication materials targeted to specific audiences to present results of ecosystems valuation and analysis.
(ii) Facilitate a final validation workshop in Savannakhet discussing and validating the valuation and analysis of ecosystem services resulting from the mapping and modelling tools.
(iii) Based upon feed-back and comments from key stakeholders (particularly DOF, PAFO and the 5 DAFOs) at the final validation workshop, produce the Final Report detailing all findings and inputs with recommendations.
(iv) Additionally, produce an accompanying 4-page briefing note that summarizes the Final Report and Recommendations that will be disseminated for awareness raising.

6) PROVISION OF MONITORING AND PROGRESS CONTROLS

The CF/CSO/EE will report to the UNDP Technical Specialist and the SAFE Ecosystems Project - National Project Director while copying the UNDP Programme Analyst, the Project Manager and the Assistant Project Manager. The consultant is required to have regular meetings to report on the progress with the UNDP team and DOF, PAFO and 5 DAFOs (implementing partner).

7) DEGREE OF EXPERTISE AND QUALIFICATIONS

- The CF/CSO/EE may be either International or National.
- The Consultancy Team must consist of a Team Leader and a maximum of 3 Team Members.
- At least 2 people within the Consultancy Team must be Lao Nationals.
- The Team Leader (1 pax) of the CF/CSO/EE must hold at least a Masters’ Degree with 5 years’ experience from a recognized University in the subject of Economics, Environmental Economics, Ecosystem Services, GIS, or other relevant studies.
- Team Members (3 pax) must hold at least a Masters’ Degree with 5 years’ experience from a recognized University in the subject of Economics, Environmental Economics, Ecosystem Services, GIS, or other relevant studies. However, Team Members with a Bachelor’s Degree in combination with a minimum of 7 additional years of qualifying experience may be considered in lieu of the advanced degree.
- The CF/CSO/EE must have a minimum of 5 years working experience in areas related to Economics, Environmental Economics, Ecosystem Services, GIS, or other relevant studies.
- The CF/CSO/EE must have experience working with ecosystem service mapping packages (e.g. InVEST, TESSA, or similar).
- The CF/CSO/EE must have experience working with Government counterparts is highly desirable.
- The CF/CSO/EE must have proven, in-depth knowledge and understanding of Ecosystem Services valuation and analysis across landscapes.
- The CF/CSO/EE must have proven ability to analyze complex issues, draw relevant conclusions and produce comprehensive technical reports.
- Excellent communication and consultation skills to liaise with a range of stakeholders including district and provincial authorities, local communities, private sector actors, etc. and ability and experience to conduct training.
- Ability to lead and work with teams and to achieve quality outputs under tight timelines.
- Excellent report writing skills (in English); excellent command of Lao language.
- Knowledge of UNDP and the UN system is an advantage.

8) REVIEW TIME REQUIRED

Payment schedule will be on an agreed output-basis. UNDP– SAFE Ecosystems Project require at least two weeks for review and approval of delivered outputs before issuing payments.
9) SCOPE OF BID PRICE AND SCHEDULE OF PAYMENT

This is 60 working days assignment. Fixed lump sum output-based fees will be paid as per agreed timeframe and satisfactory certification of receipt of outputs by the UNDP/GEF SAFE Ecosystems Project under the Department of Forestry, MAF. The total amount for professional service fee, DSA, air/ground transportation from Vientiane Capital to/from project site (5 target districts, Savannakhet Province) and miscellaneous, and communication cost are to be included in the lump sum amount.

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<tr>
<th>Deliverables/Description of payment</th>
<th>Deliverable timeframe</th>
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<tr>
<td><strong>25% of the professional fees shall be paid upon submission and acceptant of below outputs:</strong></td>
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<tr>
<td>1. <strong>Output 1:</strong> An Inception Report including a methodology and workplan to be developed within one week after signing of the contract.</td>
<td>1 week after signing of the contract.</td>
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<td>2. <strong>Output 2:</strong> Submission of a First Report based on Activities 1-4 of the Scope of Work</td>
<td>1 month after signing of the contract.</td>
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<td>3. <strong>Output 3:</strong> Submission of a Second Report based on Activities 5-7 of the Scope of Work</td>
<td>2 months after signing of the contract.</td>
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<td>4. <strong>Output 4:</strong> Facilitation of a Final Workshop and submission of the Final Report based on Activity 8 of the Scope of Work, as well as detailing all findings and make recommendations on ecosystem services valuation and analysis.</td>
<td>3 months after signing of the contract.</td>
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10) PRESENCE OF THE CONSULTANT ON DUTY STATION

If the assignment requires full time presence on UNDP premises, a sound justification on why a full-time presence is required.

- [ ] NONE
- [ ] PARTIAL
- [x] FULL-TIME
- [ ] INTERMITTENT

11) ANNEXES TO TOR

This TOR is approved by:

For National Project Director: ____________________________
Signature: ____________________________
Name and Designation: ____________________________
Date of Signing: ____________________________

For UNDP Programme Unit Chief: ____________________________
Signature: ____________________________
Name and Designation: ____________________________
Date of Signing: ____________________________