



# Request for Proposals (RfP)

## ***Fostering Water and Environmental Security in the Ma and Neun/Ca Transboundary River Basins and Related Coastal Areas:***

### **Preparation of a Transboundary Diagnostic Analysis (TDA) and associated studies in Lao PDR and Viet Nam**

**IUCN Viet Nam**

**RfP Reference: IUCN-23-12-P03794-1**

*Welcome to this Procurement by IUCN. You are hereby invited to submit a Proposal. Please read the information and instructions carefully because non-compliance with the instructions may result in disqualification of your Proposal from this Procurement.*

#### **1. REQUIREMENTS**

- 1.1. A detailed description of the services and/or goods to be provided can be found in Attachment 1.

#### **2. CONTACT DETAILS**

- 2.1. During the course of this procurement, i.e., from the publication of this RfP to the award of a contract, you may not discuss this procurement with any IUCN employee or representative other than the following contact. You must address all correspondence and questions to the contact, including your Proposal.

**IUCN contact:** Dr. Rien Dam, Chief Technical Advisor, Fostering Water and Environmental Security in the Ma and Neun/Ca Transboundary River Basins and Related Coastal Areas, [rien.dam@iucn.org](mailto:rien.dam@iucn.org)

#### **3. PROCUREMENT TIMETABLE**

- 3.1. This timetable is indicative and may be changed by IUCN at any time. If IUCN decides that changes to any of the deadlines are necessary, we will publish this on our website.

<b>DATE</b>	<b>ACTIVITY</b>
8/1/2024	Publication of the Request for Proposals
18/1/2024	Deadline for submission of questions
25/1/2024	Planned publication of responses to questions
1/2/2024	Deadline for submission of Proposals to IUCN (" <b>Submission Deadline</b> ")
8/2/2024	Evaluation and clarification of Proposals
19-21/2/2024	Interviews
12/3/2024	Planned date for contract award
1/4/2024	Expected contract start date

#### 4. COMPLETING AND SUBMITTING A PROPOSAL

4.1. Your Proposal must consist of the following four separate documents:

- Signed Declaration of Undertaking (see Attachment 2)
- Pre-Qualification Information (see Section 4.3 below)
- Technical Proposal (see Section 4.4 below)
- Financial Proposal (see Section 4.5 below)

Proposals must be prepared in English.

4.2. Your Proposal must be submitted by email to the IUCN Contact (see Section 2). The subject heading of the email shall be [RfP Reference – bidder name]. The bidder’s name is the name of the company/organisation on whose behalf you are submitting the Proposal, or your own surname if you are bidding as a self-employed consultant. Your Proposal must be submitted in PDF format. You may submit multiple emails suitably annotated, e.g., Email 1 of 3, if attached files are too large to suit a single email transmission. You may not submit your Proposal by uploading it to a file-sharing tool.

**IMPORTANT:** Submitted documents must be password-protected so that they cannot be opened and read before the submission deadline. Please use the same password for all submitted documents. After the deadline has passed and within 12 hours, please send the password to the IUCN Contact. This will ensure a secure bid submission and opening process. Please DO NOT email the password before the deadline for Proposal submission.

#### 4.3. Pre-Qualification Criteria

IUCN will use the following Pre-Qualification Criteria to determine whether you have the capacity to provide the required goods and/or services to IUCN. Please provide the necessary information in a single, separate document.

Pre-Qualification Criteria	
1	3 relevant references of clients like IUCN
2	Confirm that you have all the necessary legal registrations to perform the work
3	State your annual turnover for each of the past 3 years

#### 4.4. Technical Proposal

The Technical Proposal must address each of the criteria stated below explicitly and separately, quoting the relevant criteria reference number (left-hand column).

Proposals in any other format will significantly increase the time it takes to evaluate, and such Proposals may therefore be rejected at IUCN’s discretion.

The selection of the bidder will be made in consultation with counterpart government agencies in Viet Nam and Lao PDR.

The team leader and experts will be collectively referred to as the Consultants.

IUCN will evaluate Technical Proposals with regards to each of the following technical criteria and their relative importance:

	Description	Information to provide	Weight
1	<b>Methodology and workplan</b>		<b>20%</b>
1.1	Clarity and completeness of methodology and workplan	Methodology and workplan (max. 10 pages)	20%
2	<b>Qualifications of consultants</b>		<b>30%</b>
2.1	Team leader	CV	20%
2.2	Experts	CV	10%
3	<b>Track record</b>		<b>50%</b>
3.1	Experience in transboundary river basin analysis including hydrological, fisheries, environmental,	Project references & profiles	40%

	sediment, social-economic, and climate change impacts		
3.2	Familiarity with project area and experience working with Viet Nam and Lao PDR governments	Project references & profiles	10%
	<b>Total</b>		<b>100%</b>

4.5. *Financial Proposal*

4.5.1. The Financial Proposal must be a fixed and firm price for the provision of the goods/services stated in the RfP in their entirety.

4.5.2. **The maximum price that will be considered is 1,000,000 USD. Bidders proposing more than 1,000,000 USD will not be considered.**

4.5.3. *Prices include all costs*

Submitted rates and prices are deemed to include all costs, insurances, taxes (except VAT, see below), fees, expenses, liabilities, obligations, risk and other things necessary for the performance of the Terms of Reference or Specification of Requirements. IUCN will not accept charges beyond those clearly stated in the Financial Proposal. This includes applicable withholding taxes and similar. It is your responsibility to determine whether such taxes apply to your organisation and to include them in your Financial Proposal.

4.5.4. *Applicable Goods and Services Taxes*

Proposal rates and prices shall be exclusive of Value Added Tax.

4.5.5. *Currency of proposed rates and prices*

All rates and prices submitted by Proposers shall be in USD.

4.5.6. *Breakdown of rates and prices*

For information only, the price needs to be broken down as follows:

	Description	Quantity	Unit Price	Total Price
1				
2				
3				
4				
5				
6				
	TOTAL			

4.6. Additional information not requested by IUCN should not be included in your Proposal and will not be considered in the evaluation.

4.7. Your Proposal must remain valid and capable of acceptance by IUCN for a period of 90 calendar days following the submission deadline.

4.8. *Withdrawals and changes*

You may freely withdraw or change your Proposal at any time prior to the submission deadline by written notice to the IUCN Contact. However, to reduce the risk of fraud, no changes or withdrawals will be accepted after the submission deadline.

**5. EVALUATION OF PROPOSALS**

5.1. *Completeness*

IUCN will firstly check your Proposal for completeness. Incomplete Proposals will not be considered further.

5.2. *Pre-Qualification Criteria*

Only Proposals that meet all the pre-qualification criteria will be evaluated.

### 5.3. *Technical Evaluation*

#### 5.3.1. *Scoring Method*

Your Proposal will be assigned a score from 0 to 10 for each of the technical evaluation criteria, such that 0 is low and 10 is high.

#### 5.3.2. *Minimum Quality Thresholds*

Proposals that receive a score of 0 for any of the criteria will not be considered further.

#### 5.3.3. *Technical Score*

Your score for each technical evaluation criterion will be multiplied with the respective relative weight (see Section 3.4) and these weighted scores added together to give your Proposal's overall technical score.

4.3.4 Only Technical Proposals scoring 75% and above will be considered further.

### 5.4. *Financial Evaluation and Financial Scores*

The maximum price that will be considered is 1,000,000 USD. Bidders proposing more than 1,000,000 USD will not be considered.

The financial evaluation will be based upon the full total price you submit. Your Financial Proposal will receive a score calculated by dividing the lowest Financial Proposal that has passed the minimum quality thresholds (see Section 5.3.2) by the total price of your Financial Proposal.

Thus, for example, if your Financial Proposal is for a total of 100 USD and the lowest Financial Proposal is 80 USD, you will receive a financial score of  $80/100 = 80\%$

### 5.5. *Combined Score*

Your Proposal's combined score will be calculated as the weighted sum of your technical score and your financial score.

The relative weights will be:

**Technical: 70%**  
**Financial: 30%**

Thus, for example, if your technical score is 83% and your financial score is 77%, you will receive a combined score of  $83 \times 70\% + 77 \times 30\% = 58.1\% + 23.1\% = 81.2\%$ .

### 4.6 *Interviews*

The three highest scoring bidders will be invited for interviews. Based on the interviews an additional score out of 20 will be recorded and added to the combined score to give a total score out of 120.

Subject to the requirements in Sections 4 and 7, IUCN will award the contract to the bidder whose Proposal achieves the highest total score.

## 6. **EXPLANATION OF PROCUREMENT PROCEDURE**

6.1. IUCN is using the Open Procedure for this procurement. This means that the contracting opportunity is published on IUCN's website and open to all interested parties to take part, subject to the conditions in Section 7 below.

6.2. You are welcome to ask questions or seek clarification regarding this procurement. Please email the IUCN Contact (see Section 2), taking note of the deadline for submission of questions in Section 3.1.

- 6.3. All Proposals must be received by the submission deadline in Section 3.1 above. Late Proposals will not be considered. All Proposals received by the submission deadline will be evaluated by a team of three or more evaluators in accordance with the evaluation criteria stated in this RfP. No other criteria will be used to evaluate Proposals. The contract will be awarded to the bidder whose Proposal received the highest Total Score. IUCN does, however, reserve the right to cancel the procurement and not award a contract at all.
- 6.4. IUCN will contact the bidder with the highest-scoring Proposal to finalise the contract. We will contact unsuccessful bidders after the contract has been awarded and provide detailed feedback. The timetable in Section 3.1 gives an estimate of when we expect to have completed the contract award, but this date may change depending on how long the evaluation of Proposals takes.

## **7. CONDITIONS FOR PARTICIPATION IN THIS PROCUREMENT**

- 7.1. To participate in this procurement, you are required to submit a Proposal, which fully complies with the instructions in this RfP and the Attachments.
- 7.1.1. It is your responsibility to ensure that you have submitted a complete and fully compliant Proposal.
- 7.1.2. Any incomplete or incorrectly completed Proposal submission may be deemed non-compliant, and as a result you may be unable to proceed further in the procurement process.
- 7.1.3. IUCN will query any obvious clerical errors in your Proposal and may, at IUCN's sole discretion, allow you to correct these, but only if doing so could not be perceived as giving you an unfair advantage.
- 7.2. To participate in this procurement, you must meet the following conditions:
- Free of conflicts of interest.
  - Registered on the relevant professional or trade register of the country in which you are established (or resident, if self-employed).
  - In full compliance with your obligations relating to payment of social security contributions and of all applicable taxes
  - Not been convicted of failing to comply with environmental regulatory requirements or other legal requirements relating to sustainability and environmental protection.
  - Not bankrupt or being wound up
  - Never been guilty of an offence concerning your professional conduct.
  - Not involved in fraud, corruption, a criminal organisation, money laundering, terrorism, or any other illegal activity.
- 7.3. You must complete and sign the Declaration of Undertaking (see Attachment 2).
- 7.4. If you are participating in this procurement as a member of a joint venture, or are using sub-contractors, submit a separate Declaration of Undertaking for each member of the joint venture and sub-contractor, and be clear in your Proposal which parts of the goods/services are provided by each partner or sub-contractor.
- 7.5. Each bidder shall submit only one Proposal, either individually or as a partner in a joint venture. In case of joint venture, one company shall not be allowed to participate in two different joint ventures in the same procurement nor shall a company be allowed to submit a Proposal both on its behalf and as part of a joint venture for the same procurement. *It is permissible for national experts from Viet Nam and Lao PDR to participate in more than one Proposal.*
- 7.6. By taking part in this procurement, you accept the conditions set out in this RfP, including the following:

- It is unacceptable to give or offer any gift or consideration to an employee or other representative of IUCN as a reward or inducement in relation to the awarding of a contract. Such action will give IUCN the right to exclude you from this and any future procurements, and to terminate any contract that may have been signed with you.
- Any attempt to obtain information from an employee or other representative of IUCN concerning another bidder will result in disqualification.
- Any price fixing or collusion with other bidders in relation to this procurement shall give IUCN the right to exclude you and any other involved bidder(s) from this and any future procurements and may constitute a criminal offence.

## **8. CONFIDENTIALITY AND DATA PROTECTION**

- 8.1. IUCN follows the European Union's General Data Protection Regulation (GDPR). The information you submit to IUCN as part of this procurement will be treated as confidential and shared only as required to evaluate your Proposal in line with the procedure explained in this RfP, and for the maintenance of a clear audit trail. For audit purposes, IUCN is required to retain your Proposal in its entirety for 10 years after the end of the resulting contract and make this available to internal and external auditors and donors as and when requested.
- 8.2. In the Declaration of Undertaking (Attachment 2) you need to give IUCN express permission to use the information you submit in this way, including personal data that forms part of your Proposal. Where you include personal data of your employees (e.g., CVs) in your Proposal, you need to have written permission from those individuals to share this information with IUCN, and for IUCN to use this information as indicated in 8.1. Without these permissions, IUCN will not be able to consider your Proposal.

## **9. COMPLAINTS PROCEDURE**

If you have a complaint or concern regarding the propriety of how a competitive process is or has been executed, then please contact [procurement@iucn.org](mailto:procurement@iucn.org). Such complaints or concerns will be treated as confidential and are not considered in breach of the above restrictions on communication (Section 2.1).

## **10. CONTRACT**

The contract will be based on IUCN's template in Attachment 3, the terms of which are not negotiable. They may, however, be amended by IUCN to reflect particular requirements from the donor funding this particular procurement.

## **11. ABOUT IUCN**

IUCN is a membership Union uniquely composed of both government and civil society organisations. It provides public, private and non-governmental organisations with the knowledge and tools that enable human progress, economic development and nature conservation to take place together.

Headquartered in Switzerland, IUCN Secretariat comprises around 1,000 staff with offices in more than 50 countries.

Created in 1948, IUCN is now the world's largest and most diverse environmental network, harnessing the knowledge, resources and reach of more than 1,300 Member organisations and some 10,000 experts. It is a leading provider of conservation data, assessments and analysis. Its broad membership enables IUCN to fill the role of incubator and trusted repository of best practices, tools and international standards.

IUCN provides a neutral space in which diverse stakeholders including governments, NGOs, scientists, businesses, local communities, indigenous peoples' organisations and others can work together to forge and implement solutions to environmental challenges and achieve sustainable development.

Working with many partners and supporters, IUCN implements a large and diverse portfolio of conservation projects worldwide. Combining the latest science with the traditional knowledge of local communities, these projects work to reverse habitat loss, restore ecosystems and improve people's well-being.

[www.iucn.org](http://www.iucn.org) / <https://twitter.com/IUCN/>

## 12. ATTACHMENTS

### Attachment 1 *Specification of Requirements/Terms of Reference*

#### Introduction

The GEF International Waters (IW) *Fostering Water and Environmental Security in the Ma and Neun/Ca Transboundary River Basins and Related Coastal Areas* is the first bi-lateral GEF project between Lao PDR and Viet Nam. These two transboundary rivers are adjacent, with similar-sized basins with similar characteristics and water and environmental management challenges. Key challenges include hydropower reservoirs causing significant changes in tributaries flows in both basins; deforestation and changes to forest cover impacting flows and sediment loads; agricultural expansion; increasing water withdrawals associated with demographic growth and rapid economic development affecting environmental flows; and emergency releases from dams during extreme water events contributing to flooding. The total budget is about 74 million USD of which the GEF contribution is 8 million USD.

Climate change is expected to be one of the biggest drivers of hydrological transformation, affecting rainfall, temperature, evaporation, and water quality. Future water scenarios show that flows through the system will tend to increase sharply, especially towards the end of the century. The greatest increase will be in wet season flows, signaling the possibility of major floods severely impacting economic development.

Continuing development in the two basins, combined with climate change, is affecting the coastal areas of the East Sea due to the degradation of surface and shallow marine waters quality, increasing frequency and magnitude of floods and droughts, seawater intrusion in coastal aquifers caused by groundwater over-extraction and sea-level rise. These trends pose serious threats to water supply for the rapidly expanding coastal populations. and to coastal habitats, such as mangroves, wetlands, fish refugia, and livelihoods (e.g., fisheries).

The project objective is: "To enable Viet Nam and Lao PDR to address freshwater resource management and ecosystem health in the transboundary Ma and Neun/Ca river basins and coastal zones by creating an enabling environment for transboundary cooperation and action".

Outcomes planned under this project are:

**Outcome 1.** Consensus among countries on key transboundary concerns, including climate change and variability - reached through joint fact-finding - strengthens transboundary cooperation and opens the way to coordinated remedial actions.

**Outcome 2.** Enhanced water security, environmental sustainability and forecasting capabilities in both basins and their coastal areas achieved through the establishment of transboundary cooperation and information exchange frameworks and mechanisms.

**Outcome 3.** Countries resolve to joint actions reinforced by testing on the ground environmentally sound land/water management approaches, policies, practices, and technologies, and share results and experiences.

**Outcome 4.** The process of reversing degradation trends in the two basins galvanized as countries commit to sustain joint cooperation mechanisms and to undertake priority reforms and investments.

**Outcome 5.1.** The sustainability of project outcomes enhanced by the reinforcement of capacities of relevant national entities and of the interim transboundary cooperation body established as part of the project.

**Outcome 5.2.** Benefits from the global to the local levels accrue through the sharing and dissemination of Project experiences and lessons learned.

Establishing binational coordination mechanisms for the long-term effective management of Ma and Neun/Ca river basins is paramount for their sustainable development, mainly involving the transboundary and conjunctive management of surface and groundwater resources enhancing synergies with biodiversity conservation (e.g., biodiversity corridors), forests and inland fisheries



management, and resolving conflicts at the food, energy, and environment nexus. The project will adopt the source-to-sea (S2S) approach, link with ongoing initiatives dealing with sectoral aspects, and directly inform the design, assessment, and planning of a range of investments in these sectors. It will represent a basis upon which to build transboundary cooperation, sound river basin management frameworks, strengthen water and environmental security and gender equality.

***Proposals are being sought to complete the five outputs that contribute to Outcome 1.***

***The price for this activity shall not exceed 1,000,000 USD.***

Under this Outcome, the main result will be the transboundary diagnostic analysis reports for each of the two shared river basins and agreed corresponding Environmental Status Indicators (ESIs) endorsed by both governments. To achieve this Outcome, the following Outputs will be delivered:

### **Output 1.1**

*Science-based assessments of the current state of freshwater resources (surface and groundwater) and of their dependent ecosystems, including technical assessments (e.g., sediments, fisheries, biodiversity, and forest fire risk), governance, and gender.*

The assessments will be conducted in the two basins and related coastal areas by the Consultants in close consultation with a Joint Technical Committee (JTC) composed of Lao and Vietnamese specialists. It will adopt a methodology harmonized across the national segments of the basin in the two project countries and will focus on the surface and groundwater resources both unconfined and confined. Adopting an S2S approach, it will aim at providing a systematic and homogenous review of the existing resource base and of its current state and utilization. The work will consist of the collection of information by national and regional expert teams. They will focus on:

- Existence and spatial distribution of aquifers (and, in the case of transboundary aquifers, their mutual recognition by countries sharing them). The imperative of making aquifers “visible” requires that each aquifer system is, to the extent possible, represented two dimensionally on a map. Such a map contains its approximate boundaries, and recharge and discharge areas including dependent ecosystems, and three dimensionally in geologic cross-sections of the subsurface, indicating the approximate geometry of the aquifer, its varying depth, its relations with aquitards and aquicludes, the major tectonic discontinuities and preferential permeability pathways and barriers.
- Current state (quality, quantity, including sedimentation and determined using best-practice water accounting approaches) of the freshwater resources (surface and groundwater) and of their dependent ecosystems (lakes, wetlands, coastal lagoons, humid zones, inland fisheries).
- Uses of water: those based on formal rights, generally held by larger users (industry, large farms, etc.); indications of the minor uses based on customary rights to abstract small quantities of water.
- Impacts at both the transboundary and the national levels of floods (including flash floods) and drought dynamics (including agricultural drought and forest fires) under current and likely future scenarios.
- Point and non-point pollution sources and hotspots, with emphasis on nutrients.
- Socio-economic assessments, including poverty, gender, and governance.
- Driving factors of deforestation.
- Status of climate change and biodiversity.
- Competing water-food-energy-ecosystems uses and nexus dimensions.

In addition to the information derived from national and regional sources and expert networks, newly collected data from satellite image processing will in some cases be utilized to fill gaps in information coverage, complementing/extrapolating available information, producing projections and scenarios, and identifying parameters to be monitored over time.

This activity can utilize relevant FAO tools and methodology, including the FAO sourcebook on water accounting and auditing (<http://www.fao.org/3/a-i5923e.pdf>), the irrigation-focused MASSCOTE method (Mapping System and Services for Canal Operation Techniques; <http://www.fao.org/land-water/news-archive/news-detail/en/c/267321/>) and the complementing MASSMUS method (<http://www.fao.org/3/i3414e/i3414e.pdf>), FAO's Collect Earth tool (<http://www.fao.org/land-water/land/land-governance/land-resources-planning-toolbox/category/details/en/c/1026549/>) for land monitoring, and the FAO model MOSAICC for the assessment of climate change impacts on agriculture (<http://www.fao.org/in-action/mosaicc/en/>).

## **Output 1.2**

### *Comparison analysis of current trends and projected scenarios*

Current climate change trends and existing development plans and strategies, with a particular focus on hydropower and irrigation, will be assessed against the imperatives of flood mitigation, drought preparedness and mitigation, protection of environmental values and of ecosystem services, and resolution of nexus conflicts, considering both national and transboundary implications.

Scenario development typically involves the following elements:

- (i) Characterization of the current situation, including gender issues, with a diagnosis of the starting state of the scenarios, focused on the focal issue or problem under consideration (water and climate adaptation in this case);
- (ii) Identification of major driving forces that represent the key factors, trends or processes that influence the situation, focal issue, or decisions and that propel the system forward and condition the story's outcome. Some of these forces are invariant (e.g., they apply to all scenarios) and largely predetermined. Some of the driving forces may represent critical uncertainties, the resolution of which can fundamentally alter the course of events. These driving forces (or drivers, for short) influence but do not completely determine the future. Thus, while the initial state of the drivers is the same in all scenarios, the trajectory of the system follows a different course in each one. Scenario analysis focuses on the areas of greatest uncertainty for a country or an operation, systematically develops several plausible alternative future environments in which the operation might be implemented and determines how they would affect its success.

This structured approach to thinking about the future could help countries to make strategic choices in several ways: managing risk; building consensus for change; augment understanding about the future; and monitoring progress and scanning changes in the environment. The project will strive to build capacity in the beneficiary countries in the development and use of scenarios as a water resources management tool in view of water nexus conflicts and growing climatic variability and unpredictability. It is expected that the results of this activity will provide valuable inputs to the Strategic Action Plan (SAP) preparation process.

This activity can build on the same set of FAO tools and methods as listed under Output 1.1, including FAO's MOSAICC model and FAO's Collect Earth tool.

## **Output 1.3**

### *Evaluation of environmental flows at selected sites*

Attempts to define the critical environmental flows targeting selected ecosystems of value in the basins and coastal flood plains, considering the key development challenges being faced in both basins, particularly hydropower, agricultural extension, industrial development, poverty eradication and eco-tourism. This will include, for example, analysis related to the water quality and quantity needed to sustain and restore vulnerable coastal environments.

During the project preparation phase, Lao PDR and Viet Nam emphasized their aspiration to maintain environmental flows while the economic development pressure in the upper and middle reaches of both basins is mounting to alleviate poverty levels. Consultations revealed that development strategies are likely to increase water utilization due to expansion of irrigation and hydropower investments. The

countries did not select any sites yet for the evaluation of environmental flows as it was agreed to wait for the establishment of the JTC. Lao PDR emphasized the relevance of biodiversity related indicators when conducting the environmental flow assessment in the two Lao provinces. Viet Nam highlighted similar aspirations regarding environmental flows to protect aquatic biodiversity in the middle and coastal parts of both basins.

This activity will be able to build on FAO's MASSMUT method for the improved design of irrigation schemes to enhance environmental outcomes and FAO's ecosystem approach to promote the integration and coexistence of fisheries within irrigation systems (<http://www.fao.org/3/CA2675EN/ca2675en.pdf>).

## **Output 1.4**

### *Transboundary Diagnostic Analysis (TDA)*

The process of jointly developing a TDA is important for countries so that they learn to exchange information and work together. This helps to determine the transboundary nature, magnitude, and significance of the various issues pertaining to water quality, quantity, biology, habitat degradation, or conflict. After the threat is identified, the countries can determine which issue or issues are priorities for action, relative to less significant issues and those of solely national concern. In addition, the root causes of the conflicts or degradation, and relevant social issues, are also included in the analysis so that actions to address them may be determined later. The science community from each country will be involved because the TDA is intended as a factual, technical document, and key stakeholders are expected to participate. A stakeholder identification or social analysis will be included in the TDA process. This process provides an opportunity for the countries to understand the linkages among the problems and the root causes of environmental issues in economic sectors. As a result, more holistic, comprehensive solutions may be identified to enable responding to many different conventions in a cost-effective manner. The TDA process allows complex transboundary situations to be broken up into smaller, more manageable components for action as specific sub-areas of degradation or priority "hotspots" are geographically identified (with their specific problem and root cause) within the larger, complex system.

The TDA process will be based on the scientific findings of the assessments (Outputs 1.1, 1.2, 1.3) with special consideration of the impacts of climatic variability and change. It will be led by the JTC and conducted according to the methodology developed for the IW Focal Area, through a systematic participatory and consultation process involving all stakeholders, ranging from local communities to major private sector actors. Socio-economic analysis and governance aspects will be central to the TDA process.

To complete the TDA, the Consultants will carry out the following tasks:

- Training workshop: the TDA will start with a workshop on the TDA process.
- Collection of supplementary information: there will be the need to complement the information obtained through the Assessment with data on the water-food-energy-ecosystems nexus conflicts, and to pollution hotspots. Special consideration will be given to actual data on increasing climatic variability and climate related disasters, and surface/groundwater related opportunities for increased sustainability, and resilience to climatic variability.
- Stakeholder consultations and participatory processes: the technical science-based synthesis of the situation in the countries will be presented and discussed with country officials, water user groups, industry, land planners, farmers, NGOs, and other concerned entities. TDA findings will be compared with perceptions of civil society and stakeholders, and possible solutions explored and jointly analyzed.
- Preparation of the TDA report, and endorsement process: the TDA team will consolidate all findings and agreed major issues of transboundary concern into the TDA document, prepared along the lines of the many similar GEF sponsored documents.

During the project preparation phase both countries highlighted the relevance of the TDA for the design of pilot projects and the formulation of strategic actions. However, both countries acknowledged differences in data availability as substantially less data and fewer studies are available

for the Lao provinces of Huaphanh and Xieng Khouang compared to the Vietnamese provinces. During the project preparation phase, both countries emphasized the relevance of the Ma and Neun/Ca river basins for national conservation and biodiversity strategies, and the need to understand the complexity of social-ecological dynamics for developing sustainable basin development plans. Designing in this context effective strategies for responding to increasing flood and drought risks was identified of paramount importance to both countries. Addressing droughts was a topic that gained relevance for both countries if compared to the initial PIF consultations. Consequently, Lao PDR requested adding forest fire risk and forest fire management to the scope of the TDA.

This step can build on a wide range of FAO methods and tools, including MASSCOTE, MASSMUT, and the MOSAICC model. The project will aim to complete TDA early in the project, preferably by end of year 1 and at least by mid-term of the project to allow digestion of its content and then serve as the base for consultations and agreement on the Strategic Action Program (SAP). The project will ensure that the process strongly builds on available local experts/ institutional information in Viet Nam and Lao PDR. The execution agency will assemble a team of best suited local and international experts. TDA process will also be used as a process to build national capacities and for south-south cooperation between two countries.

### **Output 1.5**

#### *Agreement reached on a limited number of key Environmental Status Indicators (ESI)*

Agreement is reached for both basins among relevant governmental entities, the science community and all major stakeholders, on a limited set of indicators characterizing the status of the freshwater environment, including the baseline conditions/values as they emerge from the assessments and the TDAs, covering water quality and quantity, health of dependent ecosystems, governance and socio-economic factors including gender aspects. These indicators will allow us to assess long-term impacts of human interventions and mitigation measures and will stay in use beyond GEF- funded intervention.

Examples of ESI (from GEF, 2002):

- Improved (measurable) ecological or biological indices.
- Improved (measurable) chemical, physical (including flow regimes), or biological parameters.
- Improved recruitment classes of targeted fish species, diversity, or keystone species.
- Demonstrable reduction of persistent organic pollutants (POPs) in the food chain.
- Changes in local community income and social conditions because of improvements in environmental conditions.
- Demonstrable recovery of key flagship species or values because of changed rule (operating) curves for dams or vegetative response from wetland re-inundation.
- Increased stakeholder awareness and documented stakeholder involvement.

The Consultants will work with the JTC to discuss and prioritize issues under this Output. During the project preparation phase, stakeholders emphasized the relevance of biodiversity indicators in the context of development pressures (e.g., irrigation expansion, hydropower) and climate change (e.g., droughts). The governments of both countries agreed that this project would need to reduce habitat loss for key species. The specification of indicators can be guided by FAO's agro-ecology knowledge hub (<http://www.fao.org/agroecology/overview/our-work/en/>), the MASSMUT method, and IUCN's Key Biodiversity Area (KBA) protocol (<https://www.iucn.org/commissions/world-commission-protected-areas/our-work/biodiversity-and-protected-areas/key-biodiversity-areas>).

The project will ensure that the development of SAP makes use of these indicators to agree on quantifiable targets for stress reductions based on these indicators.

**Attachment 2** *Declaration of Undertaking (select 2a for companies or 2b for self-employed as applicable to you)*

**Attachment 3 *Contract Template***