**TERMS OF REFERENCE**

**Consultancy service to produce an analysis of and lessons learned on sand and gravel extraction/management policies, regulations and practices in other international river basins**

***Project code: 40001883/402576***

**Supervised by:** IKI SMP Project Director

**Work location:** Home-based

**Duration:** February 4th 2021 to March 20th 2021

WWF Viet Nam is looking for an expert (consultant) to conduct a desk assessment of existing regulations and practices for sustainable sand and gravel extraction in fluvial systems worldwide.

# Background

Covering an area of about 40,548 km² in 13 provinces[[1]](#footnote-1), the Vietnamese Mekong Delta is home to some 17.804 million people[[2]](#footnote-2) and accounts for about 18% of national GDP. The size of the area covered by water depends on the season. With an extremely low mean elevation of ~0.8 m above sea level, the delta also is among the region’s most vulnerable to climate change-driven sea level rise (SLR)[[3]](#footnote-3). The construction of hydropower dams and extraction of sediments for a booming construction sector have already reduced sediment transport to the delta by about 77% between 1992 (160 Mt) and 2014 (75 Mt)[[4]](#footnote-4). Regarding sand mining specifically, excessive extraction concessions , illegal sand mining and a lack of awareness have resulted in extraction rates far beyond the replenishment capacity of the Mekong River[[5]](#footnote-5). Especially along the Mekong’s main branches, the Hau and Tien rivers, the consequences have become increasingly apparent, exposing millions of riparians to river bank erosion, salt water intrusion and higher tidal amplitudes[[6]](#footnote-6).

**The project: Drifting Sands: Mitigating the impacts of climate change in the Mekong Delta through public and private sector engagement in the sand industry**

Between 2019 and 2023, the World Wide Fund for Nature (WWF), with financial support from the German Government, is working with national and provincial stakeholders to mitigate the Mekong delta’s vulnerability to SLR through an improved sediment management.

Under the project, the WWF will:

1. Establish a Delta wide sand-and-gravel-budget in consultation with stakeholders to create a uniformly agreed understanding of the scope and impact of unsustainable extraction rates;
2. Promote public awareness of the impact of unsustainable sediment exploitation in the Mekong Delta;
3. Promote the participation of and dialogue between key actors in the Vietnamese construction sector, and providing information on the risks associated with sand mining and opportunities of sustainable alternative sourcing for sand and gravel;
4. Develop and propose improved policies and practices in relation to sustainable sand and gravel mining;

The project is implemented by WWF Viet Nam and WWF’s regional hub for the Greater Mekong region, in collaboration with WWF Germany.

# Objectives

The overall objective of this consultancy is to derive and consolidate, in a structured manner, lessons learned from the review of river aggregates (sand) extraction and management regulations, mechanisms, practices or instruments from major international river basins (minimum 3) apart from, but broadly applicable to the Mekong River Basin Countries (eg. Mississippi, Rhine, Danube, Elbe, Irrawaddy, Shinano, Waikato, Po rivers). The analysis should help identify proven approaches to, and good examples of, sustainable regulation of coarse aggregates (sand) management and extraction.

# Scope of work/ Major responsibility

In particular, the Consultant will carry out the following tasks:

1. Development of an analytical framework and study structure:

* Elaborate criteria (or hypotheses) guiding the selection of the river aggregates (sand) management regimes and topics to be assessed (eg. Sand budget systems), to warrant applicability or adaptability of the findings to the context of the Viet Nam Mekong Delta, such as e.g. min. catchment size, similarity in factors influencing sediment transport.
* Include the assessment grid to be applied in the analysis of the sediment management regulation or practice (eg. Mining methods and licenses issuing and management).
* Suggest a structure for the study (Table of Contents) and finalize it based on the contracting authority’s feedback.

All of the above will be discussed with the contracting authority before finalization.

1. An information gathering and assessment phase:

* Review of best practices in river aggregates (sand) regulations worldwide (3 river basins minimum).
* Assess key lessons (successes and failures).
* Collect and document best sustainable management/regulatory framework cases and provide with a clear analysis of benefits to the river basins and inter-connected socio-economic nexuses and why these should be relevant for the Vietnamese context.

1. Documentation / Formulation and finalization of the study report:

* Document the review findings in a report according to the agreed ToC and grid.
* Document findings in a systematic manner and develop them in English for easy understanding. The draft report is to be discussed with the contracting authority and to be revised based on the latter’s feedback.
* Develop one page brief and PowerPoint presentation to support WWF VN presenting the findings to the Government Authorities in Viet Nam. Possible remote support from the consultant might be required.

**Methodology**

Data collection will be mostly based on online research, including in relevant catalogues and archives on scientific literature and legal documents. This may have to be complemented through interviews with experts/institutions relevant to the selected sediment management regimes, as need arises. Travel is not foreseen.

Weekly updates and coordination meeting with the Contracting Authority to ensure timely harmonization of the consultancy output.

# Knowledge/Expertise

* Postgraduate or other advanced university degree and/or professional training in governance, environmental science, legal studies, political science or other relevant field;
* Experience in reviewing, analyzing and/or developing policies related to environmental contexts (ideally with a focus on aggregates extraction);
* Sound understanding of geomorphology, hydraulics, water and natural resources management, preferably including on coarse sediment management;
* Consolidated professional experience in public policy analysis;
* Ability to write structured, systematic and understandable texts;
* English proficiency is a must.

# Timeline and deliverables

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| February 04th 2021 | Kick of call |
| February 10th 2021 | A comprehensive workplan for the technical review process indicating specific tasks, responsibilities and dates and resources required; |
| February 22nd 2021 | Key findings identified and verified during the research period to allow the expert write a draft regulations review report |
| March 1st 2021 | Written interim report |
| March 20th 2021 | Submit a comprehensive technical review report (expert paper) with the set deadlines consistent with the TORs, including collected lessons learned (Best practices and challenges) and the PPT presentation supported by the review executive summary. |

# Project Schedule

The project deliverables shall be concluded between February 4th 2021 and March 20th 2021.

# How to bid

Qualified and interested candidates are hereby requested to bid (either as a team or individually). The tender should contain the following:

* A technical proposal with brief description of why the consultant considers him/herself as the most suitable for the assignment, and a detailed clear methodology, on how they will approach and complete the assignment
* Financial proposal that indicates the all-inclusive fixed total contract price, supported by a breakdown of costs.
* The technical proposal should also contain personal CV and as well as the contact details (email and telephone number) of the candidate, a list of relevant previous assignments/contracts and at least three (3) professional references.

A soft copy of the application should be sent to [chau.nguyendiep@wwf.org.vn](mailto:chau.nguyendiep@wwf.org.vn) (Your e-mail must have the subject heading indicating **IKI SMP POLICY REVIEW CONSULTANCY**.) Deadline for applications is January 26th 2021.

Only selected candidate(s) will be contacted about the outcome of their tender.

## Award criteria

The contract will be awarded based on the most economically advantageous tender, according to the **'best price-quality ratio'** award method. The quality of the tender will be evaluated based on the following criteria. The maximum total quality score is 100 points. Tenders that receive less than 70% of the maximum possible mark for the whole quality evaluation or less than 60% for one of the quality criteria will be eliminated and their final score will not be calculated. Tenders that do not reach the minimum quality levels will be rejected and will not be ranked.

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| **Quality Criteria** | **Points** |
| **Overall approach**  This criterion assesses the quality of the approach set out in the tender, specifically with regard to order clarification, work planning, the content-related preparation of the consultations and written deliverables, and communication with the contractor and external stakeholders. | 40 point – minimum threshold 60% (24 p) |
| **Relevant work experience**  This criterion assesses the work experience of the tenderer relevant to criteria 2-5 listed above, as evidenced through a list of project references, reference publications and materials to be submitted in conjunction with the tender. | 40 points - minimum threshold 60% (24 p) |
| **Quality assurance**  This criterion assesses the quality assurance measures applied to the service foreseen in this tender specification concerning the quality of the stakeholder process and the deliverables, such as language quality checks or application of facilitation standards. | 20 points – minimum threshold 60% (12) |
| Total number of points | 100 points |

**A weighting of 70 - 30 is given to price and quality.**

After evaluation of the quality of the tenders, the evaluation committee will proceed with the financial comparison of the tenders retained for further consideration according to the following formula:

score for tender X = [(Lowest price / Price of tender X) x 70 ]+ [(Total quality score for all award criteria of tender X / 100) x 30]

# Budget

The overall budget allocated for this consultancy is of € 11.800 (VAT included).

# Terms of payment

40% will be transferred upon reception of the workplan, 40% upon reception of first draft and remaining upon completion of final report.

1. The area as of December 31, 2017 according to Decision No. 3873 / QD-BTNMT dated December 25, 2018 of the Minister of Natural Resources and Environment. [↑](#footnote-ref-1)
2. General Statistics Office of Viet Nam, 2018 [↑](#footnote-ref-2)
3. Minderhoud, P.S.J., Coumou, L., Erkens, G. et al. Mekong delta much lower than previously assumed in sea-level rise impact assessments. Nat Commun 10, 3847 (2019). https://doi.org/10.1038/s41467-019-11602-1 [↑](#footnote-ref-3)
4. [↑](#footnote-ref-4)
5. Ass.Prof. Le Manh Hung, Ass.Prof.Dinh Cong San and Dr. Nguyen Duy Khang – Southern Institute of Water Resources Research: “Studying the impact of sand mining activities on changing the river bed of Cuu Long river (Tien and Hau rivers) and proposing solutions for rational exploitation management and planning”,State-level independent scientific research projects, 2014 (Code: ĐTĐL.2010T/29). [↑](#footnote-ref-5)
6. Tuoi Tre News, 2017. Vietnam forecast to run out of construction sand by 2020. Available at: <https://tuoitrenews.vn/news/society/20170803/vietnam-forecast-torun-out-of-construction-sand-by-2020/40865.html> [↑](#footnote-ref-6)