



Mekong River Commission

For Sustainable Development

TERMS OF REFERENCE

1. CONSULTANCY SUMMARY

Title:	Consultant for Fish Friendly Irrigation Guideline
Consultancy Type:	Special Service Agreement (SSA) - home based, daily rate: one-time assignment, 1 TOR, number of consultancy days within 6 calendar months
Division:	Planning Division
Duration:	20 working days, from May 2021 to October 2021
Duty Station:	Homebased
Reporting to:	Director of Planning Division through Agriculture and Irrigation Specialist
Expected Deliverables:	Guideline to Prioritizing Existing Fish Passage Barriers and Create Fish Friendly Irrigation Structures

2. INTRODUCTION AND BACKGROUND

The Mekong River Commission (MRC) was established by the 1995 Agreement on Co-operation for the Sustainable Development of the Mekong River Basin, between the governments of Cambodia, Laos, Thailand, and Viet Nam. In accordance with this Agreement, the Mission of MRC is: "To promote and coordinate sustainable management and development of water and related resources for the countries' mutual benefit and the people's well-being by implementing strategic programmes and activities and providing scientific information and policy advice".

(1) Fish friendly irrigation

In irrigation sector in the Lower Mekong Basin (LMB), there is a significant issue which should be resolved in order to make a balance between irrigation development and fish conservation. Hundreds of thousands of irrigation structures in the LMB block fish migration and impact on fish biology without proper fish passages. However, there is no indicators and guidelines to install fish passages to the irrigation structures in the LMB. Therefore, the MRC has been implementing a set of activities to promote fish friendly irrigation scheme since 2016 and is drafting the "Guideline to Prioritizing Existing Fish Passage Barriers and Create Fish Friendly Irrigation Structures" based on pilot testing in the LMB.

(2) Guideline to Prioritizing Existing Fish Passage Barriers and Create Fish Friendly Irrigation Structures

The "Guideline" is composed of two parts: Part I- Barrier Prioritization; Part II-Fishway Design, Construction, Operation, Operation, Maintenance and Adjustment.

Part I indicates how to identify potential barriers against fish migration by the GIS and prioritize them for rehabilitation by using 13 indicators. Part I is composed of six steps i.e., barrier

identification, remote assessment, field appraisal, biological assessment, socio-economic assessment and site selection.

Part II indicates fishway installation and maintenance processes after prioritization and shows how to produce high-quality fishways matching with individual conditions and keep fishway functions for long time. Part II is composed of five steps i.e., design, construction, operation, maintenance/monitoring and adjustment.

3. OBJECTIVES OF THE CONSULTANCY

The consultancy aims at reviewing and revising the “Guideline to Prioritizing Existing Fish Passage Barriers and Create Fish Friendly Irrigation Structures for practical use in the LMB.

4. EXPECTED RESULTS

- Refine the “Guideline” for practical use in the LMB.

5. DELIVERABLES AND CONCRETE TIMELINES

Deliverables and Expected Quality	Number of Days	Deadline
• Technical comments of the existing “Guideline”	5	1 st June 2021
• Revised “Guideline” based on comments from the MRC Secretariat and the member countries’ national meetings	6	1 st June 2021
• Inputs to and participation in regional meeting and revise the “Guideline” based on the comments at the MRC regional meeting	7	31 st July 2021
• Final “Guideline” based on the comments from the MRC Joint Committee	2	20 th October 2021
Total Number of Days	20	

6. REQUIRED TASKS AND RESPONSIBILITIES

The duties of International Consultant for supporting the revision of the Guideline to Prioritizing Existing Fish Passage Barriers and Create Fish Friendly Irrigation Structures to:

- Review the existing “Guideline” and provide technical advice for refining.
- Revise the “Guidance” based on the comments from the MRC Secretariat and the member countries’ national meetings. (The Consultant is required revise the “Guideline” three times as indicated in “5. DELIVERABLES AND CONCRETE TIMELINES”.)
- Provide inputs to and attend the regional meeting with Member Countries via on-line to discuss the revised draft.
- Prepare the revised draft based on comments from the regional meeting,
- Prepare final draft based on comments from the MRC Joint Committee.

7. PAYMENT MODALITY

Payment will be made based on the actual number of working days with the MRC's daily timesheet template provided by the consultant. Travel and subsistence costs will be included in the working day rate of the consultant. Tasks will be assessed and technically endorsed and approved by the PD's Agriculture and Irrigation Specialist prior to payment.

Milestone	Percent of payment	Target date
After signing of the contract and upon submitted of original invoice.	10%	June 2021
Upon the completion and submission of the revised "Guideline" under Task 2 and MRC's approval for the revision	40%	June 2021
Upon the completion and submission of the revised "Guideline" Under Task 3 ad MRC's approval for the revision	40%	August 2021
Upon the completion and submission of the revised "Guideline" under Task 4 and MRC's approval for its revision	10%	October 2021

8. INTELLECTUAL PROPERTY RIGHTS

Intellectual property rights - IPR: Information, data, database, knowledge resources in the forms of briefings, reports, proceedings, articles, essays, etc. issued by and for the MRCS will be the MRCS property.

Any utility, announcement and disclosure that are without MRCS highest levels of authority' permission is considered illegal and will be charged by relevant local and international legal procedures.

9. DECLARATION OF NON-FRAUDULENCE AND PROTECTION OF PERSONAL DATA

The Subscriber shall adhere to the MRC's relevant rules and regulations of the MRC on personal data protection, business exclusion, and fraud prevention and anti-corruption principles, and shall be under strict disciplinary measures should any violation occurs.

10. WORKING ARRANGEMENT

Communication Line: The Consultant will work under the overall managerial and technical direction of the Director of the Planning Division and Chief River Basin Planner. He/she will work directly with the Agriculture and Irrigation Specialist of Planning Division.

11. QUALIFICATIONS AND REQUIREMENTS

- Education Background: Master's degree or higher in river fish biology-ecology, hydrology, irrigation or civil engineering;
- Years of Work Experience: Minimum 15 years of experience in fishway design, construction, management and monitoring;
- Years of Experience in the Required Field: At least 10 years.
- Have a strong knowledge of river fisheries biology and ecology particular in the Lower Mekong Basin;
- Ability to communicate effectively, verbally and in writing with a wide range of people and to work in a multicultural environment;
- Practical experience with good knowledge of the Mekong riparian countries or similar tropical regions is a strong asset;
- Ability to work and cooperate in international working environments is essential;
- Excellent written and oral communication skills in English; working knowledge of riparian languages is an advantage.

12. SIGNATURE BLOCK

MRCS:

Full Name: Bountieng Sanaxonh

Incumbent's Full Name: _____

Title: Director of Planning Division

Signature: _____

Incumbent's Signature: _____

Date: _____

Date: _____