

The 6th Regional Stakeholder Forum

Second Regional Information Sharing on Pak Lay Prior Consultation Process

17 January 2019

Luang Prabang, Lao PDR



Recap of 1st Regional Stakeholder Information Sharing on PNP Prior Consultation Process for Pak Lay Hydropower Project

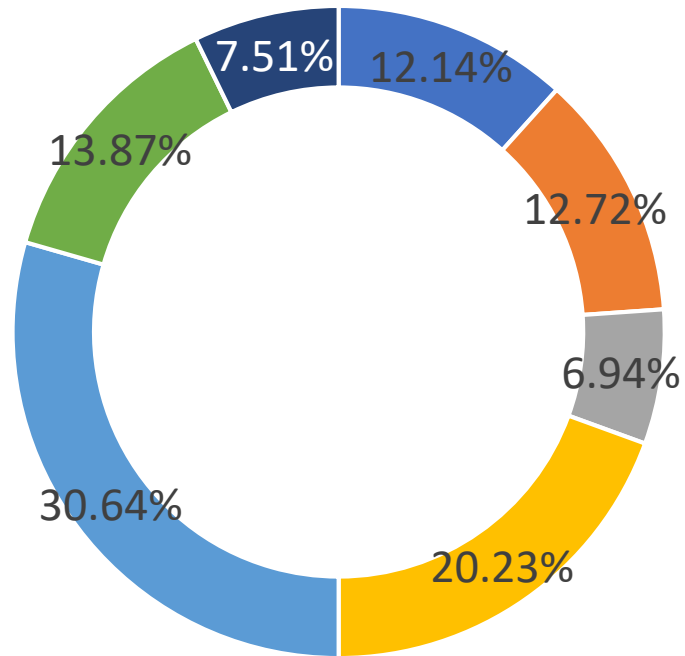
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I. Background

- Uni Institute Researchers
- Development Partners
- NGOs
- Private Sector & Consultants
- Member Countries
- MRC Secretariat
- Media

160 participants



II. Snapshot of Forum proceeding



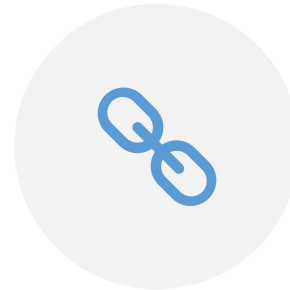
05 technical aspects:
hydrology & hydraulics,
sediment transport,
environment & fisheries,
navigation, dam safety, and
Social-economic issues.



Concerns on ***transboundary impacts*** and ***cascade and standardize procedures*** for quality control during construction and operation of the dams.



Questions on ***fish related issues, social economic impacts & dam safety.***



Progress and status of the ***Joint Action Plan for Pak Beng hydropower project*** and the ***Xayaburi design changes review***, as well as its linkage to the prior consultation process of the Pak Lay project.

III. Forum's follow-ups

The 5th MRC Regional Stakeholder Forum

1st Regional Information Sharing for Pak Lay Hydropower Project
and
Prioritised Works on Basin Planning and Environmental
Management

20–21 September 2018
Vientiane, Lao PDR

1. 1st Forum on PLHPP PC process

- Comment matrix with questions, concerns and comments in Forum Report

2. JCWG meeting

- Presented & shared comment matrix to the Member Countries

3. Clarification from GoL

- 18 Nov 2018 Lao PDR sent clarification (fisheries, dam safety, socio-economic issues)

4. Update comment matrix

- Update responses as Annex 4 of the Forum Report

5. Draft TRR

- Consider comment matrix during drafting of TRR

6. 2nd Forum on PLHPP PC process

- Preliminary findings and comments follow-ups

Annex 4. Further clarification by the Government of Lao (GoL) and the Power China Resources (PCR) as Pak Lay's developer on quest comments made at the 1st Regional Stakeholder Information Sharing Meeting on PNPCA for Pak Lay Hydropower Project held on 20 Sept. Comments from stakeholders as well as initial responses at the forum were documented in the forum report, page 6-12. During the techn project's submitted documents, the MRC's specialists and experts will consider the suggestions and recommendation provided by the stake On 18 November 2018, the MRC received further written clarification from the Government of Lao and PCR on some questions and com below table:

	Questions? Comments/Suggestions	Responses and follow-ups	Further clarification provided by Governme
Knowledge related	The submitted documents indicate intended export to Thailand. Will EGAT agree to purchase the power?	Acknowledge the issue of the power market that Lao PDR is facing, EGAT and Lao Government are coordinating to update the power development plan, priority projects include those that serve the 5000MW MCL. This should be confirmed by MRC. Following internal process, Lao Government has to approve each stage of each study before submission to the MRC to undertake the technical review; however, comments from riparian countries will be taken into consideration for detailed design and may re-optimization occur. E.g. for Xayaburi a lot was changed (new spillway design-bottom outlet, improved fish-pass etc.), under such circumstance the project cost has increased, and Lao Government has	Follow up by the hydropower strategy update of th Government will coordinate in updating the power plan
Knowledge related	Request to confirm whether the FS and EA reports are already approved by the Lao Government? In case other MRC have concerns, how to go about in case the documents are already approved?		The MRC may include these concerns in their report Government will complete the internal process

IV. Summary of key comments (1)

1. **Detailed hydraulic condition** should be studied carefully for further infrastructure design
2. **Baseline data and information for diversity and biology/ecology of concerned species** should be collected and fulfilled. Ensure sufficient data and appropriate approach and methodology for assessment of environment and fisheries of the Pak Lay HPP can be improved, especially **fish species**
3. Ensure the accuracy and adequate information or data in the **CIA/Transboundary ESIA**.
4. Improve the **navigation design** that should take into account **additional fish passage**
5. More research and data analysis particularly **dam safety and quality control**

IV. Summary of key comments (2)

6. **Transboundary impacts** and **benefit sharing issues** need to be addressed.
7. More specific and **in-depth socio-economic impact assessment** rather than generic socio-economic impacts
8. More **in-depth information and technical discussion at consultation meetings** and the **developer / project owner** should play an active role in the discussion.
9. **Broader engagement to open national consultation process.** The information about the Pak Lay national consultation meetings should be made available to the public
10. Having **independent parties** to **monitor** developers and to ensure the **quality assurance** during construction and operation of the dams.

V. Feedback - Fish related issues

Fish data survey → EIA part “Existing Biotic Environment in the Project Area”, fish sampling conducted **same time with water quality**, representing the two seasons (**wet 13-16 Sep 2011** and **dry seasons 3-6 Feb 2012**).

Assurance of survival rate of migrated fishes → recommended that PLHPP fish pass is compatible with the **Xayaburi fish pass**. Technically fish swim through many ways such as **fish passage, spill way, slow turbine** (environmental friendly turbine), **navigation lock**.

Fish species data adequately to design the fish passage: *(1) collection, (2) aquaculture or breeding and restocking for endangered local fish species* → fish restocking station according to the fish passing status in the operation period.

Fish passage design → fish passing conditions basically similar to the natural river course in both the construction period and the flood releasing period. Fishway is designed with resting pools.

Layout of upstream migration during construction, adequate dimension for increasing fish biomass downstream, availability of Xayaburi fish pass monitoring information → Detailed information will be provided in the next stage.

V. Feedback – *Dam safety*

Earthquake impact → in the dam design, the impact of earthquakes is considered and calculated according to Chinese standards. The Laos Pak Lay HPP Project Site Seismic Hazard Assessment Report recommends the basic seismic intensity at the dam site at degree VII

<http://www.mrcmekong.org/assets/Uploads/Technical-Review-Report/Seismic-hazard-assessment.pdf>.

ICOLD148-2010 “Selecting seismic parameters for large dams - Guidelines”. DL5180 Classification and Design Safety Standard of Hydropower Projects and DL5073-2000 Code for Seismic Design of Hydraulic Structures of Hydropower Project

Dam safety model → The developer provides a dam safety report

<http://www.mrcmekong.org/assets/Uploads/Technical-Review-Report/Dam-safety-evaluation-and-effects-of-dam-breach.pdf>

Chinese Standards for dam safety → In the Chinese standard, different design criteria are adopted according to the scale of the dam and the impact of the consequence on the lower reaches. Chinese standards with translation into English: [DL5108-1999 Design Specification for Concrete Gravity Dam](#), and [SL319-2005 Design Standard for Concrete Gravity Dams](#).

V. Feedback - *Social economic impacts & transboundary*

Good coordination between the countries and the region on flood management and mitigation, water management from upstream to downstream, prolonging the prior consultation to address all issues → identified villages in downstream area. Policy to manage, mitigate and monitor downstream villages in Lao territory in near future. **Environmental and social management committees** will set out mechanism to avoid potential impact.

Backwater effect under normal flow conditions → backwater calculation (1) schemes with floods of various frequencies & (2) corresponding water levels upstream of the dam. Calculated scheme with a water level upstream of the dam of 240m and a reservoir inflow of 16700m³/s. Details in the feasibility study report.

Transboundary social impacts and Cumulative Impact Assessment, Energy assessment and gender component → Study area divided by zoning. Upstream project area identified. **Environmental and social management committee of GoL** will plan for details by using new technology.

Community resettlement and the strategy → Resettlement Action Plan (RAP) set out preliminary livelihood restoration plan, Committees will work with the project developer and follow Decree 84, taking experiences on Nam Ou 1-7 dams & Nam Ngum 5 dam.

V. Feedback – *Standardized procedures & others*

Consideration of operation rules of other dams for Pak Lay → For the dam site at Pak Lay HPP, the effect of regulation by the HPPs at the upper cascades like Xiaowan HPP and Nuozhadu HPP has been taken into consideration.

Chinese standard and ICOLD as performance standards → if Chinese standards are equal or better than the standards applied by MRC, then they can be used

Real time data from Xayaburi project into consideration of Pak Lay design → According to the data-sharing plan, the real-time data of Xayaburi HPP will be adopted.

Strategy or plan to update information and data → All the data will be checked and updated in the detailed design

Consider methodologies on hydraulic, hydrology and sediments assessments (tools, hydraulic model, flood peak) → Developer provides hydraulic model test report

<http://www.mrcmekong.org/assets/Uploads/Technical-Review-Report/Hydraulic-model-test-report.pdf>

Thank you

