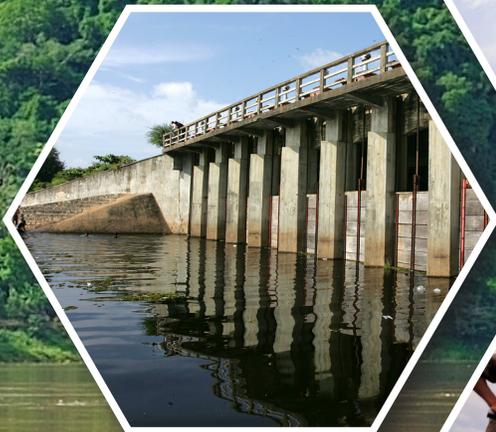




Mekong River Commission Secretariat
MRC Initiative for Sustainable Hydropower

National-to-Local Benefit Sharing Options for Hydropower on Mekong Tributaries



Regional Synthesis Paper
Draft Annex



Mekong River Commission Secretariat

**Regional Synthesis Paper
Activity ISH13**

**“National-to-Local benefit sharing options
for hydropower on Mekong tributaries
evaluated and reported by 2014”**

**Main Paper – Draft Final
Annex**

MRC Initiative on Sustainable Hydropower (ISH)
January 2014

Preface

This is the Annex Volume of the Regional Synthesis Paper that reports on Activity ISH13. The Main Regional Paper builds on the four National Discussion Papers that were prepared in a step-wise, collaborative process led by the four National Mekong Committee Secretariats (NMCS) in 2012-2013.

The MRC Initiative on Sustainable Hydropower (ISH) provided the coordination, conceptual and technical guidance as well as the financial resources for the work.

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Annex 1: ISH13 Evaluation Framework and Techniques

This Annex summarizes the methods used for the selection and preliminary evaluation of BSM options for Mekong tributary hydropower.¹

Multi-criterion Evaluation Framework

A simple qualitative approach was needed for ISH13 so that all stakeholders could understand. It had to be robust, reflect IWRM-based thinking, and be something that all NMC Stakeholders from different disciplines were comfortable to use.

(i) To achieve this, the ISH13 evaluation was done along two main dimensions:

1. Value Added - a qualitative indication of the potential contribution that the option has as part of an "options mix", or a package of measures, in order to advance sustainable hydropower, and by extension of the sustainable development of the tributary/sub-basin and the Mekong River basin overall.

2. Stakeholder Preference – a qualitative indication of the views that the different NMC Stakeholder interests have of the option, in terms of the relative preference and suitability of each option for their national situation.

(ii) The sub-criteria and scoring system for each dimension give details on how value and preference are defined. At this stage it was important to use all the sub-criteria that stakeholders wanted to use to evaluate value and preference.

(iii) Sub-criteria can also be weighted to

reflect what people considered to be the most significant criterion, or all sub-criteria could be given equal weight.

(iv) Each option was qualitatively scored against sub-criteria using a simple high, low, medium score. For example to measure value, a 0, 1, 2 or 3 score was used, where 0 means that the stakeholder felt the option offers no value, and 3 means the option offers high value for the particular sub-criterion, like social advancement or environment protection.

(v) Similarly, the preference indicator, or measure, was based on the weighted averages of views of the representatives of government at different levels (e.g., national, provincial and municipal in unofficial capacities), and representatives of RBO/RBCs, civil society, hydropower developers/operators, etc.

(vi) The qualitative "scores" for each option were then plotted on a chart in the form of a value and preference matrix for each generic type. That way they are easy to understand visually. Options scoring highest in value and preference appeared in the upper right of the result plot. Options scoring the lowest fell in the lower left part of the result plot.

The Working Groups decided to use the criteria offered in the ISH13 Guidance Note 1 and apply equal weight to these criteria. This meant the following criteria were used:

¹ This is elaborated in the ISH13 Guidance Note 1

For the Value Dimension:

Meaning the **value** of the mechanisms or consideration (option) in terms of potential contribution to sustainable development of the tributary and wider Mekong River Basin (1995 Agreement), as well as sustainable hydropower development and management. From the legal definition of sustainable development, value needs to consider the harmonious advancement of economic, so-cial and environmental aspects, as well as poverty reduction and intergenerational equity (i.e., flexibility to modify operation over long periods of time as values and conditions in the basin evolve and also Government priorities evolve).

Five sub-criterion applied to all options to evaluate value were:

1. **Social advancement:** contribution to poverty reduction and social advancement in the sub-basin (consistent Government policies) – 20% weight
2. **Environmental protection:** contribution to environmental protection aims in the sub-basin (consistent Government policies) – 20% weight
3. **Economic stimulus:** help to economic stimulus of the sub-basin and local areas (consistent Government policies) – 20% weight
4. **Intergenerational equity/flexibility:** flexibility to adapt/modify the measure over time to ad-just to values of society – 20% weight
5. **Practicality and capacity to implement** – 20% weight

For the Preference Dimension:

Meaning the relative **preference** for the mechanism or consideration (option) expressed by the different NMC Stakeholder interests, including the view representing people living in the tributary. This includes stakeholders at different levels of government (i.e. national, provincial and local lev-els), as well as river basin organizations, representatives of civil society and the private sector and those with an interest in hydropower and local development issues.

The five sub-criteria applied to evaluate the preference dimension were:

1. **National Level Government Line Agencies:** a non - representative sample – 20% weight
2. **Provincial Level Government:** a non - representative sample – 20% weight
3. **A River Basin Organization** – 20% weight
4. **Civil Society:** a non - representative sample – 20% weight
5. **Hydropower Developers/Operators:** a non - representative sample – 20% weight

The following tables indicate the scoring system applied to score each criterion.

Scoring for the Value Added Sub-criteria:

- 0 - **Does not add value** – This option definitely does not add value for this sub-criterion in terms of a potential contribution to sustainable development in the tributary and the wider Mekong River Basin situation.
- 1 - **Potentially adds value** - This option may add some value for this sub-criterion; however, more information is needed to assess the potential contribution of the measure to sustainable development in the tributary and cooperation on sustainable development of the wider Mekong River Basin.
- 2 - **Does add some value** – This option does add some value for this sub-criterion and may be part of the “options mix” in a comprehensive approach to sustainable development in the tributary and cooperation on sustainable development of the wider Mekong River Basin.
- 3 - **Definitely adds measurable value** - This option clearly adds measurable value for this sub-criterion as part of the “options mix” in a comprehensive approach to sustainable development in the tributary and cooperation on sustainable development of the wider Mekong River Basin.

Scoring for Stakeholder Preference Sub-criteria:

- 0 - **Not relevant and not preferred** – From the perspective of this evaluator (stakeholder interest) this option is not needed in the country policy framework, nor is it appropriate in the Mekong situation at this time.
- 1 - **Likely relevant** – This option and some generic measures of this type may be appropriate for Mekong tributary hydropower in the country. However, more information on the option is needed to properly evaluate the relative preference.
- 2 - **Moderately relevant** – This option (and measures of this generic type) is appropriate for Mekong tributary hydropower in the country, and can be part of a comprehensive approach to BSM. Examples need to be shown to NMC Stakeholders.
- 3 - **Definitely relevant and preferred** - This option (and measures of this generic type) is definitely appropriate for Mekong tributary hydropower in the country. It is a preferred option in a comprehensive approach to benefit sharing.

The following overview summarizes the NMC Stakeholder discussion about the ISH13 process and methods:

▪ **Most NMC Stakeholders agreed with the general thrust of the preliminary evaluation of options done by their respective National Working Groups. And while most, but not all NMC Stakeholders accepted the results in the draft ISH13 National Discussion Papers:**

- Some Workshop Breakout Groups offered suggestions (i) on revising the priorities for individual (options) mechanisms, or (ii) on additional options to consider. A few Breakout Groups in some countries offered their own scoring of options to compare with the scoring done by the National Working Group.
- Most NMC Stakeholders felt the grouping of options by the National Working Groups in the three categories was appropriate, i.e., either:
 - i. to exclude from further evaluation (e.g. often the “do nothing more” option),
 - ii. to include in future policy evaluations, or
 - iii. to do more study to decide whether to include or drop in future evaluations.
- Many NMC Stakeholders said they needed more time to study the options scores that the National Working Group members proposed. They needed more time to reflect and offer more detailed comment. However they were (as noted) in general agreement with the thinking of the Working Group.
- Some NMC Stakeholders said they had no time to read the ISH13 materials before the National Workshop, or they had concerns because they did not

received the full version of the draft National Discussion Paper and Annex Volume.

- In a few workshops, some, but not many NMC Stakeholders said they rejected the evaluation done by the National Working Group. While they accepted an evaluation was a valid thing to do, they preferred to do it on their own using similar or different evaluation methods and criteria.

▪ **Many NMC Stakeholders understood the qualitative nature of the multi-criteria evaluation method, its purpose and its limitations.**

Some NMC Stakeholders also appreciated that the multi-criteria evaluation approach:

- Is recognised as a standard option evaluation approach world-wide and is used routinely in all professional disciplines (as many options assessment tools are).
- Is recommended and used by international bodies in many development fields, including UN Organisations, International Financing Institutions and Development Agencies, the World Commission on Dams, etc.
- Is recommended specifically in the evaluation of hydropower policy and practices by the World Commission on Dams and international professional bodies like the International Hydropower Association, RAMSAR, WWF and the IUCN.
- Offers an effective learning tool (a heuristic evaluation process) that is easily understood by stakeholders because it is not overly complex or academic.
- Enables stakeholders with diverse interests and backgrounds to interact

- and have more constructive dialogue.²
- Offers features similar to a "scoping" level exercise in an EIA where high, medium and low are used to qualitatively assess factors. Moreover, the actual scoring of options is relative and is used only to help group options.
 - Is, for these and other reasons, appropriate for the ISH work. At the same time, it is always expected that there is an ongoing process of refinement and improvement in the data base, indicators, analysis, and the number of people preparing evaluations.
 - Needs periodic updates to "benchmark" or compare national practices with emerging good practice. Improvements in the evaluation may be introduced.
- **Most NMC Stakeholders understood and appreciated the "value" and "preference" dimensions in the ISH13 evaluation. Most agreed with the sub-criteria to qualitatively measure the relative contribution each option makes to sustainability, and to measure stakeholder preference. Most accepted the logic and need for transparent sub-criteria.**
 - Most NMC Stakeholders appreciated that the "value" sub-criteria were component parts of sustainable development (by legal definition).
 - There were qualitative indicators or measures of the expected, relative contribution a particular mechanism (option) can make toward more sustainable forms of hydropower management and development. i.e.
 - Qualitatively measuring the balance and contribution to economic and social advancement, to environmental protection, and intergenerational equity by way of flexibility for adaptive management.
 - Whether it is significant or not? (e.g., high, med, low, or zero/not applicable).
 - The weight placed on each sub-criterion could be adjusted by the Working Group (or any group) performing the evaluation.
 - The "value" sub-criterion embodies the mandate of the MRC for "cooperation on sustainable development" of the Mekong River Basin.
 - Most NMC Stakeholders also understood that the "preference" dimension of the sub-criteria captured the participation aspect:
 - The dimension was a qualitative way to measure the degree of stakeholder consensus/opinion about each option (mechanism) across different stakeholder interests involved in the evaluation.
 - Preferences of key stakeholder interests could be transparently balanced (i.e. representatives of different Line Ministries & Departments at different levels of government (national, provincial and local), civil society and the private sector);
 - The preferences could be averaged, or the weight placed on each sub-criterion could be adjusted by the Working Group (or any group) performing the evaluation to bring out different viewpoints.
 - Most NMC Stakeholders appreciated that each ISH13 National Working Group was encouraged to select and

² For example stakeholders from different policy fields, government Line Ministries and Departments at national and provincial levels, and from civil society and the private sectors.

modify the options, as well as the evaluation sub-criteria, the sub-criteria weights and the scoring systems provided in the Guidance Package to match the country considerations that were relevant.

▪ **Some NMC Stakeholders accepted the ISH13 evaluation methods explained in the National Discussion Papers, but stressed that a more rigorous evaluation and further additional analysis must be built into subsequent studies of BSM policy regimes, when advising Government.**

- Some, but not many NMC Stakeholders felt that a more rigorous and detailed options evaluation was needed using a different set of indicators, and therefore comparisons should be made with different evaluation techniques. A small number of NMC Stakeholders did not understand the multi-criteria evaluation method.
- Other NMC Stakeholders explained they were not actually worried by the options evaluation technique, which at best can only be qualitative and they recognised that multi-criteria evaluation was a well-proven technique.
- Their main interest was the further additional analysis, specifically to quantify the costs of each option (mechanism); furthermore to go on to assess the distribution of benefits and costs among the different stakeholder groups and sectors, and to show potentially significant impacts that are of interest to all stakeholders. These include the impact of revenue sharing proposals on short and longer-term consumer electricity tariffs, and so forth.

For example:

- Clarifying who pays and exactly how much? What impact would a 2%, 3% or 5% revenue sharing formula have on the different electricity consumer tariff blocks at the national level? How significant is it? How does the impact compare with past or projected electricity tariff increases?
- What would happen to existing commitments or practices around hydropower revenue management in each sector, if, for example, revenue sharing mechanisms with provincial, RBO or local levels were introduced (where hydropower was located)?
- Who would gain and who would lose from having a local revenue sharing mechanism introduced? Who would participate in local revenue sharing?
- How would river basin communities gain/lose, if revenue sharing was provided through that province as opposed to a RBO?

Note: It is important to say that answers to many of these questions, and others, are found in the BSM Knowledge Base (120 documents). There are questions addressed in other countries, which have adopted revenue sharing policy (e.g., in Thailand’s Power Development Fund (PDF) that was introduced in Law in 2007 but has yet to be implemented on Thailand’s Mekong hydropower projects – see Thailand’s ISH13 National Discussion Paper).

- Other NMC Stakeholders agreed with the above, but felt that emphasis was needed on studies about sharing risks. They agreed the need to visibly weigh the merits of sharing not only development benefits (or opportunities) but also sharing development risks. Moreover,

the costs of minimising or avoiding risks should be embodied in revenue sharing formula, as appropriate, with due consideration of the following residual impacts:

- i. To better identify, quantify and value all the impacts of hydropower construction and operations on the environment, ecosystems and other economic sectors and the environment.
 - ii. To assess and value the residual impacts (risks that cannot be avoided or mitigated) or otherwise offset by the existing benefit.
 - iii. To assess the amount and the timing of investment needed for people to take advantage of the local, or sub-regional development opportunity that is created by hydropower, because if there was no money available then the "benefit" would not be realized, and thus could not be expected or counted.
- **Most ISH13 National Working Groups highlighted the importance of having an accurate translation of the existing BSM material that was being offered by the MRCS only in English into the other national languages.**

A frequent comment of the ISH National Working Group members was:

- They had worked on translations of the English versions of the National Discussion Papers and ISH13 Guidance material for the paper that was presented in the Workshop.³
- Sufficient time and resources should be made available to ensure an accurate translation of the final version

of the National Discussion Papers after the Workshop. This will improve understanding and avoid unnecessary confusion and delay later.

- There were many documents in the BSM Knowledge Base (120 Documents) that could be translated from English into the national languages. These can be identified.
 - It is also possible that laws and documents available in Member Countries on their own policies (currently not available in English) could be translated into English and shared with other Member Countries (and possibly some translated into other national languages where it was appropriate to do so).
 - There were other opportunities to translate relevant material on BSM yet to be explored, such as the laws and procedures on benefit sharing in China, and the laws and experiences in Latin America, which are only available in Spanish or Portuguese.⁴
 - Support may be sought from MRC Development Partners for translations that are not originating in Member Country languages or English.
- **Many, if not most NMC Stakeholders saw ISH13 as a chance to learn about recent advances and experiences with BSM in other countries; and to have constructive dialogue on the lessons to draw to improve practices in their county.**
 - Some, but fortunately not many NMC Stakeholders saw the ISH13 process as a new battleground or opportunity to fight ideological battles either for, or against hydropower, and ad-vance polarised positions.

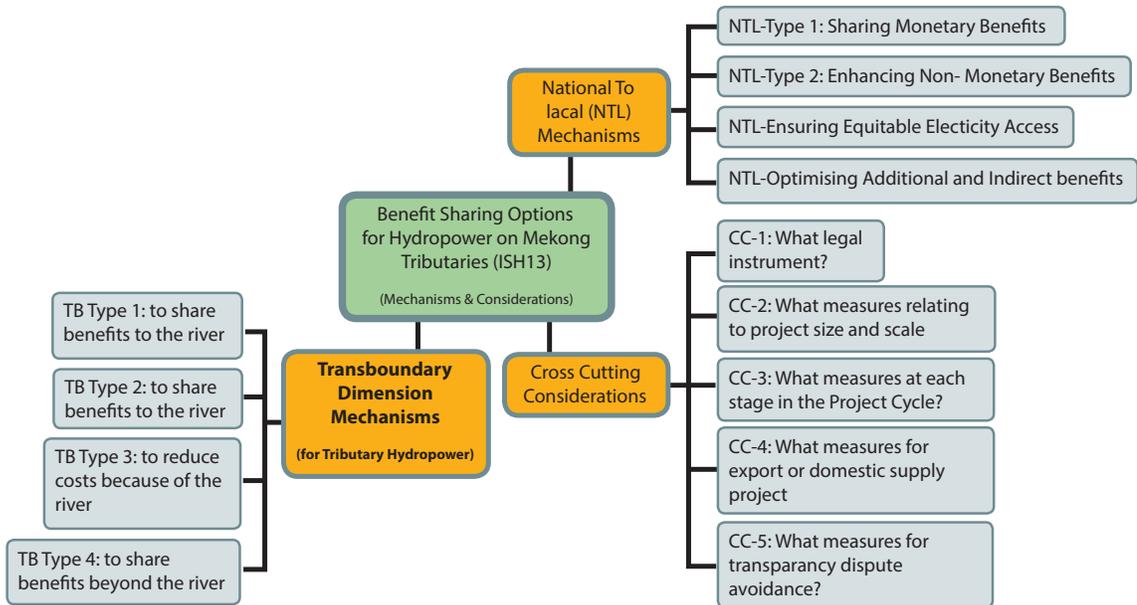
³ Some said the English version was acceptable but the translated version confused things somewhat. Most agreed it depended on who did the translations. Thus, if a lot of material were to be translated, care in the selection of the people was needed and there should be supervision/checking.

⁴The ISH has had initial discussions with ESCIR in 2009 and 2010 on these opportunities.

- Some even saw benefit sharing as a way to promote hydropower and make it seem less impactful and this concept should therefore that should be resisted and avoided.
- At the other end of the spectrum, some saw BSM as totally impractical in the Mekong setting.

Annex 2: BSM Options Evaluated in the ISH13 Process by Country

Figure 1: Three Categories and the Generic Types of Options Evaluated in the ISH13 Process



<p>Cambodia</p> <ul style="list-style-type: none"> ▪ NTL Mechanisms: 10,8,8,7 = 33 options ▪ TB Mechanisms: 7,8,4,5 = 24 options ▪ CC Considerations: 8,5,5,2,4 = 24 options <p>81 options in total</p>	<p>Lao PDR</p> <ul style="list-style-type: none"> ▪ NTL Mechanisms: 10,8,8,8 = 34 options ▪ CC Considerations: 8,5,5,2,4 = 24 options <p>58 options in total</p>
<p>Thailand</p> <ul style="list-style-type: none"> ▪ NTL Mechanisms: 7,8, 7, 7 = 29 options <p>29 options in total</p>	<p>Viet Nam</p> <ul style="list-style-type: none"> ▪ NTL Mechanisms: 10,8,8,8 = 34 options ▪ TB Mechanisms: 7,8,4,8 = 27 options ▪ CC Considerations: 5,4,7,3,4 = 23 options <p>84 options in total</p>

Table 1: Number and Type of BSM Options Considered in Each National ISH13 Process

Mechanisms and Considerations		Number of BSM Options considered			
		Cambodia	Lao PDR	Thailand	Viet Nam
National-to-Local Mechanisms					
NTL Type- 1	to share monetary benefits	10	10	7	10
NTL Type- 2	to facilitate non-monetary sharing	8	8	8	8
NTL Type- 3	to equitably share electricity services (access & reliability)	8	8	7	8
NTL Type- 4	to optimize the spread of additional and indirect benefits	7	8	7	8
Transboundary Dimension Mechanisms (1)					
TB Type- 1	to share benefits to the river	7	-	-	7
TB Type- 2	to share benefits from the river	8	-	-	8
TB Type- 3	to reduce costs due to the river	4	-	-	4
TB Type- 4	to share benefits beyond the river	5	-	-	8
Cross-cutting Considerations					
CC Type- 1:	Legal instruments and arrangements to consider?	8	8	-	5
CC Type- 2:	Measures relating to the size and scale of hydropower projects?	5	5	-	4
CC Type- 3:	Measures at each stage of planning and the project cycle?	5	5	-	7
CC Type- 4:	Measures for power export or national supply projects?	2	2	-	3
CC Type- 5:	Measures for transparency, dispute avoidance and settlement?	4	4	-	4
All	Total options considered	81	58	29	84
(1) For tributary hydropower on shared tributary basins or significant mainstream impacts.					

Cambodia

Cambodia NTL Type- 1:

- 1-1 No revenue sharing mechanism is needed to spread monetary benefits of existing or proposed hydropower in Mekong tributaries.
- 1-2 Introduce local revenue sharing using new local development funds (social and environmental fund).
- 1-3 Introduce local revenue sharing by increasing the existing commune investment program (local development budgets).
- 1-4 Introduce revenue sharing at district/provincial levels through development fund mechanisms.
- 1-5 Introduce revenue sharing at district/provincial levels by increasing the existing provincial development budgets.
- 1-6 Introduce revenue sharing at the tributary scale using a river basin entity (RBC/RBO).
- 1-7 Provincial/municipal authorities collect taxes and fees for land or water used by hydropower projects on tributaries.
- 1-8 Introduce Payment for Ecological Services (PES), which is also referred to as environmental services.
- 1-9 Set targets for local income improvement for people living in the vicinity of projects linked to poverty alleviation targets for the tributary/province.
- 1-10 Coordinate among sector funds that hydropower sales contribute revenue to (as stipulated by legislation) so as to ensure that synergies for benefit sharing are identified and optimised.

Cambodia NTL Type- 2:

- 2-1 No steps beyond existing practices are needed concerning local resource access for project area communities/ river communities on tributary hydropower projects (e.g. to enhance or remove barriers to forest, land, water, biophysical and cultural resource access).
- 2-2 Introduce procedures to evaluate opportunities to optimize local resource access and non-monetary benefits around existing tributary hydropower projects, engaging with local communities.
- 2-3 Systematically assess the scope to optimize local resource access in project studies for proposed (new) tributary hydropower, engaging with local communities to identify and prioritize opportunities.
- 2-4 Identify and remove legal constraints to enhance local resource access (forestry, land or water) at national, provincial or local levels, and implement them.
- 2-5 Involve river basin entities in assessing opportunities to enhance local resource access in the tributary in relation to the development opportunities and risks of hydropower in the tributary.
- 2-6 Assess ways to combine long-term financial support from hydropower revenue sharing with measures to improve local resource access.
- 2-7 Extend vocational training for new livelihoods, job skills, and income diversification based on natural resource access changes due to hydropower.
- 2-8 Ensure women, youth, vulnerable groups and ethnic groups can actively participate in training activities and decisions regarding local resource access.

Cambodia NTL Type- 3:

- 3-1 Current practices are adequate to improve or spread electricity access in the tributary related to existing or proposed hydropower projects.
- 3-2 Introduce a requirement to electrify all resettled households in new tributary hydropower projects (public + IPP).
- 3-3 Introduce a requirement for connection, refurbishment and strengthening of electrical supply for the resettlement host community of existing tributary hydropower projects.
- 3-4 Prioritize extending/improving the electricity supply to communities in the area of tributary hydro-power projects within existing rural electrification programmes.
- 3-5 Provide targeted assistance for electrification of the poorest households living in the project vicinity.
- 3-6 Establish a requirement to assess off-grid supply in areas, which are too costly to connect to the grid as part of project preparation studies.
- 3-7 Provide a tariff subsidy for communities in the area of hydropower projects for a given period of time.
- 3-8 Provide financial incentives (e.g. investment capital, loan interest and preferential tax support) for individuals/organizations seeking to invest in an alternative electrical supply in rural localities where a grid connection is costly.

Cambodia NTL Type- 4:

- 4-1 Current practices are adequate to spread additional benefits deriving from existing or proposed tributary hydropower projects.
- 4-2 Introduce guidance to optimize the local use and socio-economic benefits from project access roads (e.g. in selecting road alignments and road surfacing, road construction standards).
- 4-3 Introduce guidance to maximize local/sub-regional employment opportunities during construction of tributary hydropower projects.
- 4-4 Introduce guidance to maximize local/sub-regional employment benefits during the operation of tributary hydropower projects.
- 4-5 Introduce guidance for local training and job skills enhancement to optimize local/provincial employment during construction and operation.
- 4-6 Provide additional budget allocations (e.g., from the national budget or project capital) for the construction of public infrastructure in provinces with tributary hydropower projects.
- 4-7 Provide additional budget allocations (e.g., from the national budget or project capital) for the operation and maintenance of public infrastructure in the province/tributary with the hydropower project.

Cambodia TB Type- 1:

- 1-1 Assume that additional measures beyond current practices are not essential for benefit sharing on transboundary dimensions of tributary hydropower.

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| <p>1-2 Provide guidelines for the explicit evaluation of BSM options on transboundary dimensions of tributary hydropower in MRC Programmes and MRC Procedures.</p> <p>1-3 Require and provide guidelines for the explicit evaluation of BSM options on transboundary dimensions of tributary hydropower in strategic plans and strategies developed by tributary RBC/RBOs.</p> <p>1-4 Coordinate/align BSM-related provisions for watershed management in tributary basins with hydropower shared by two or more countries.</p> <p>1-5 Expand available financing for measures to protect/enhance water resource quality using hydro-power revenue in tributary basins shared by two or more countries.</p> <p>1-6 Enhance riparian cooperation in preparing environment flow assessment and provisions in reservoir operation/management strategies in tributaries shared by two or more countries.</p> <p>1-7 Highlight/incorporate the explicit evaluation of establishing a "Mekong Fund" to facilitate benefit sharing on the transboundary dimensions of tributary hydropower and potentially LMB, UMB mainstream hydropower.</p> | <p>2-3 Assess the scope to optimize operation of existing and planned tributary reservoirs for multi-purpose functionality, giving due consideration to the transboundary dimensions.</p> <p>2-4 Assess the scope to optimize reservoir operations for downstream benefit/risk balance concerning transboundary dimensions of tributary hydropower on tributaries shared by two or more countries.</p> <p>2-5 Introduce national regulatory provisions for new or retrofit hydropower design to routinely build-in the flexibility to modify operations and bring in new technology over the life span of the hydropower assets.</p> <p>2-6 Assess the scope to improve coordination of reservoir operations on aspects such as flood management, sediment management/fish passage in multi-reservoir cascades (existing and new) on tributaries shared by two or more countries.</p> <p>2-7 Prepare guidance to factor the explicit valuation of ecosystem services into project preparation studies and decisions about hydropower and related infrastructure development and management on shared Mekong tributaries.</p> <p>2-8 Prepare guidance to routinely assess opportunities to optimize other grid-connected renewable energy (RE) and power system benefits presented by tributary hydropower and factor these into discussions of transboundary dimensions (e.g., to include rural electricity plan).</p> |
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Cambodia TB Type- 2:

- 2-1 Current practice is adequate - additional measures to increase benefits from the river are not essential for benefit sharing around transboundary aspects of tributary hydropower.
- 2-2 Ensure strategies for infrastructure provision (proposed projects) and operation (existing projects) on Mekong tributaries conform to the MRC Basin Development Strategy and IWRM/sustainability principles.

Cambodia TB Type- 3:

- 3-1 BSM measures to avoid or reduce costs because of the river are not essential for benefit sharing around the transboundary dimensions of tributary hydropower.
- 3-2 Explicitly assess opportunities to reduce the costs of sustainable development on shared tributaries via BSM as part of the MRC Basin Development Strategy process.
- 3-3 Consider linking and having planning/ technical exchanges between RBC/ RBOs in shared tributaries facilitated by the MRC as the main regional RBO.
- 3-4 Enhance cooperation between upper and lower riparian countries on shared tributaries for drought and flood management.

Cambodia TB Type- 4:

- 4-1 No explicit provision for this form of benefit sharing on the transboundary dimensions of tributary hydropower is needed in the current situation.
- 4-2 Riparian governments need to examine trade cooperation and add free trade zones in hydropower project areas to help overcome negotiation hurdles on valuing and sharing benefits and costs of hydropower on shared tributaries.
- 4-3 Riparian governments should consider promoting direct or indirect industrial offsets and countering trade to help overcome negotiation hurdles on valuing and sharing benefits and costs of hydropower on shared tributaries.
- 4-4 Riparian governments should consider the scope for cooperation on strategic infrastructure agreements, (related to transport integration such as for road, rail, air or water transport facilities).
- 4-5 Riparian governments should consider

the scope for concession rates on export power trade, or ar-rangements at the utility level (power trade agreements) to help overcome negotiation hurdles on valuing and sharing benefits and costs of hydropower on shared tributaries.

Cambodia CC Type- 1:

- 1-1 Re-examine benefit sharing in national legislation and the country’s legal framework (e.g., a policy review of water law, electricity law, environmental law or a new decree law specific to BSM).
- 1-2 Involve RBOs in delivery of BSM.
- 1-3 Incorporate official poverty reduction targets in BSM planning and implementation arrangements in the vicinity of tributary hydropower projects. This is relevant in situations where communities in the project vicinity live well below national/ provincial income averages.
- 1-4 Include provinces that have hydropower projects in their tributary in revenue sharing, where prov-inces feel either the positive or negative development impacts of hydropower.
- 1-5 Incorporate benefit sharing provisions related to transboundary dimensions of significant Mekong tributary developments in MRC Procedures conditional on successful negotiation under the Basin Development Strategy and MRC Framework.
- 1-6 The Ministry of Industry, Mines and Energy (MIME) should become the lead Ministry to sponsor or be responsible for BSM regulations or law.
- 1-7 Cambodia’s Ministry of Water Resources and Meteorology (MOWRAM) should become the lead Ministry to sponsor or

be responsible for BSM regulations or law.

- 1-8 The ministerial responsibility or sponsorship of BSM law or regulations should be shared (e.g. Government Decree or MEF, MOE, MIME and MOWRAM).

Cambodia CC Type- 2:

- 2-1 Apply BSM policy equally to all grid-connected hydropower projects making environmental impact assessments (EIA) a legal requirement.
- 2-2 Projects over 1 MW: BSM policy applies equally to all grid-connected hydropower projects above a specified installed capacity as defined in regulations (e.g. 1.0 MW).
- 2-3 Projects over 10 MW: BSM policy applies equally to all grid-connected hydropower projects above a specified installed capacity as defined in regulations (e.g. 10 MW).
- 2-4 Have a different percent and regulations for revenue sharing for hydropower projects of different size categories (e.g. based on MW installed capacity or energy production (GWh)).
- 2-5 Have the same percent and regulations for revenue sharing for all hydropower projects of different size categories.

Cambodia CC Type- 3:

- 3-1 Planning Stage: Consider benefit sharing in basin planning studies, SEAs and hydropower ranking for the identification of new tributary hydropower projects (it was acknowledged that BSM should be considered from this stage).
- 3-2 Project Preparation Stage: Consider benefit sharing in project preparation

studies (feasibility and EIA/SIA studies, resettlement plans etc.) for new tributary hydropower projects.

- 3-3 Detailed Design Stage: Consider the scope to improve the physical design of hydropower projects for greater flexibility for adaptive management and optimize how benefits and costs (direct and indirect) are distributed in the tributary to different stakeholder/development interests.
- 3-4 Construction Stage: Assess the opportunities to optimize benefit sharing during the construction phases of tributary hydropower projects.
- 3-5 Operation Stage: Assess the opportunities to optimize benefit sharing in the operational phase of tributary hydropower projects.

Cambodia CC Type- 4:

- 4-1 New tributary hydropower projects supplying domestic and export markets are treated equally in BSM regulations for revenue sharing.
- 4-2 Existing tributary hydropower projects supplying domestic and export markets are treated equally in BSM regulations for revenue sharing.

Cambodia CC Type- 5:

- 5-1 Include steps to strengthen transparency and dispute settlement mechanisms in BSM laws or agreements.
- 5-2 Prepare transparency and accountability measures for all fund mechanisms used to collect or distribute money for revenue sharing on tributary hydropower.
- 5-3 Prepare social accountability plans for all local area/local development funds established for benefit sharing on tributary hydropower.

- 5-4 Clarify how disputes and appeals will be handled in the administration of money related to financial management of revenue sharing on tributary hydro-power at different levels.

Lao PDR

Lao PDR NTL Type- 1:

- 1-1 Existing revenue sharing mechanisms are adequate. No new revenue sharing mechanism is needed for both existing or proposed hydropower projects.
- 1-2 New local development fund: Introduce local revenue sharing using local development fund mechanisms in area of project.
- 1-3 Contribute to local development budgets: Introduce local revenue sharing by increasing existing development budgets of local authorities of existing/new projects.
- 1-4 New provincial development fund: Introduce revenue sharing fund for provinces with projects.
- 1-5 Contribute to provincial development budget: Introduce revenue sharing for provinces with projects by increasing existing provincial development budgets.
- 1-6 Increase budget or create special fund of RBO: Introduce revenue sharing at the tributary scale using the river basin entity (RBC/RBO)

- 1-7 Municipal/provincial authorities collect or receive taxes, fees, etc. for land or water used by hydropower projects.
- 1-8 Enhance and introduce Payments for Ecological Services/Payments for Environmental Services (PES).
- 1-9 Enhance and set finance targets for local income improvement for people living in the area of projects.
- 1-10 Coordinate and optimise different funds (e.g. Environment Protection Fund, Water Resource Protection Fund, PES fund, etc.) that hydropower revenue contributes to ensure synergies for benefit sharing.

Lao PDR NTL Type- 2:

- 2-1 Existing practices are adequate for local resource access for project area communities/river communities on tributary hydropower projects (e.g. to enhance or remove barriers to forest, land, water, bio-physical, and cultural resource access).
- 2-2 Introduce procedures/requirements to evaluate opportunities to optimize local resource access and non-monetary benefits around existing projects, engaging with local communities.

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| <p>2-3 Introduce procedures/requirements to identify opportunities to optimize local resource access in project studies for proposed projects engaging with local communities.</p> <p>2-4 Identify legal and implementation obstacles to enhance local resource access (forestry, land or water) at national, provincial or local levels and address them.</p> <p>2-5 Involve river basin entities in assessing opportunities to enhance local resource access in the tributary on the development opportunities and risks of hydropower.</p> <p>2-6 Guidelines to combine long-term financial support from hydropower revenue sharing with measures to improve local resource access.</p> <p>2-7 Vocational training for new livelihoods, job skills, and income diversification based on natural resource access changes due to hydropower.</p> <p>2-8 Ensure training for women, youth, vulnerable groups and ethnic groups regarding local resource access.</p> <p>2-9 Tributary river basin community and project area residents to participate in resource management activities and programmes to be established by government – or connected to the project (forest, water, land).</p> | <p>communities of existing tributary hydropower.</p> <p>3-4 Prioritize extending/improving electricity supply to communities in the area of tributary hydropower projects within existing rural electrification programmes.</p> <p>3-5 Provide targeted assistance for electrification of the poorest households living in the project vicinity.</p> <p>3-6 Establish a requirement to assess off-grid supply in areas too costly to connect to the grid as part of project preparation studies.</p> <p>3-7 Provide tariff subsidy for communities in the area of hydropower projects for a given period of time.</p> <p>3-8 Provide financial incentives (e.g. investment capital, loan interest and preferential tax support) for individuals/ organizations seeking to invest in alternative electrical supply in rural locales where grid connection is costly.</p> |
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Lao PDR NTL Type- 4:

Lao PDR NTL Type- 3:

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| <p>3-1 Current practices are adequate to improve or spread electricity access in the tributary related to existing or proposed hydropower.</p> <p>3-2 Introduce a requirement to electrify all resettled households in new tributary hydropower.</p> <p>3-3 Introduce a requirement for connection, refurbishment and strengthening of electrical supply for resettlement host</p> | <p>4-1 Current practices are adequate in spreading additional benefits deriving from existing or proposed tributary hydropower.</p> <p>4-2 Introduce guidance to optimize local use and socio-economic benefit from project access roads (e.g. in selecting road alignments and road surfacing, road construction standards).</p> <p>4-3 Introduce guidance to maximize local/ sub-regional employment opportunities during construction of tributary hydropower projects.</p> <p>4-4 Introduce guidance to maximize local/ sub-regional employment benefits during the operation of tributary hydropower projects.</p> <p>4-5 Introduce guidance for local training and job skills enhancement to optimize</p> |
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- local/provincial employment during construction and operation.
- 4-6 Provide additional budget allocations (e.g., from national budget or project capital) for public infrastructure construction in provinces with tributary hydropower.
- 4-7 Provide additional budget allocations (e.g., from national budget or project capital) for public infrastructure operation and maintenance in the province/tributary with hydropower.
- 4-8 Provide programmes to deal with boom-bust-cycles after hydropower construction on tributaries.

Lao PDR CC Type- 1:

- 1-1 Incorporate benefit sharing in national legislation and country legal framework (e.g. within existing water or electricity laws and acts or in new decree laws).
- 1-2 Involve RBCs/RBOs in delivery of BSM.
- 1-3 Incorporate official poverty reduction targets in BSM planning and implementation arrangements in the vicinity of tributary hydropower. Relevant in situations, where communities in the project vicinity live well below national/provincial income averages.
- 1-4 Give some revenue sharing to provinces that have hydropower in their tributary (e.g. for river community or to help watershed management).
- 1-5 /
- 1-6 Lead Ministry: Have Ministry of Energy & Mines (MEM, Lao PDR) as sponsor or be responsible for BSM regulation or law.
- 1-7 Lead Ministry: Have Ministry of Natural Resources and Environment (MoNRE, Lao PDR) as sponsor or be responsible for BSM regulation or law.

- 1-8 Lead Ministry: Have joint Ministry sponsorship of BSM law or regulation (e.g. Government Decree or MPI, MOF, MonRE, MEM).

Lao PDR CC Type- 2:

- 2-1 BSM policy applies equally to all grid-connected hydropower projects with a legal requirement for an environment impact assessment (EIA).
- 2-2 BSM policy applies equally to all grid-connected hydropower projects above a specified installed capacity as defined in regulation (e.g. 1.0 MW).
- 2-3 BSM policy applies equally to all grid-connected hydropower projects above a specified installed capacity as defined in regulation (e.g. 10 MW).
- 2-4 Different percent and regulations for revenue sharing for hydropower projects of different size categories (e.g. based on MW installed).
- 2-5 Same percent and regulations for revenue sharing for all hydropower projects of different size categories (e.g. based on MW installed).

Lao PDR CC Type- 3:

- 3-1 Planning Stage: Consider benefit sharing in basin planning studies, SEAs and hydropower ranking for identification of new tributary hydropower projects.
- 3-2 Project Preparation Stage: Consider benefit sharing in project preparation studies (feasibility and EIA/SIA studies, resettlement plans etc.) for new tributary hydropower projects.
- 3-3 Design Stage: Consider scope to improve physical design of hydropower projects for greater flexibility for adaptive management and optimize how benefits and costs (direct and

indirect) are distributed in the tributary to different stakeholder/development interests.

- 3-4 Construction Stage: Assess opportunities to optimize benefit sharing during the construction phases of tributary hydropower projects.
- 3-5 Operation Stage: Assess opportunities to optimize benefit sharing in the operation phase of tributary hydropower projects.

Lao PDR CC Type- 4:

- 4-1 New tributary hydropower projects supplying domestic and export markets are treated equally in BSM regulation for revenue sharing.
- 4-2 Existing tributary hydropower projects supplying domestic and export markets are treated equally in BSM regulation for revenue sharing.

Lao PDR CC Type- 5:

- 5-1 Include steps to strengthen transparency and dispute settlement mechanisms in BSM laws or agreements.
- 5-2 Prepare transparency and accountability measures for all fund mechanisms (or community projects) used to collect or distribute money for revenue sharing on tributary hydropower.
- 5-3 Prepare social accountability plans for all local area/local development funds established for benefit sharing on tributary hydropower.
- 5-4 Make clear how disputes and appeals will be handled in the administration of money related to revenue sharing on tributary hydropower at different levels.

Thailand

Thailand NTL Type- 1:

- 1-1 Prioritize on the implementation of the Power Development Fund for a given hydropower project: Introduce local revenue sharing using the local development fund mechanisms in the area of the project.
- 1-2 Contribute to local development budgets: Introduce local revenue sharing

by increasing the existing development budgets of local authorities for existing and new projects.

- 1-3 New provincial development fund: introduce a revenue sharing fund for provinces with projects.
- 1-4 Contribute to a provincial development budget: Introduce revenue sharing for provinces with projects by increasing the existing provincial development budgets.
- 1-5 Increase the budget or create a special fund for RBOs: Introduce revenue

sharing at the tributary scale through the use of the river basin entity (RBC/RBO).

- 1-6 Municipal/provincial authorities collect or receive taxes and fees for land or water used by hydropower projects.
- 1-7 Set targets for local income improvement of people living in the area of projects and lend financial support.

Thailand NTL Type- 2:

- 2-1 Through engagement with local communities introduce procedures/requirements to evaluate opportunities that can optimize local resource access and non-monetary benefits around existing projects.
- 2-2 Through engagement with local communities introduce procedures/requirements to identify opportunities to optimize local resource access in project studies for proposed projects.
- 2-3 Identify and address legal and implementation obstacles to enhance local resource access (forestry, land or water) at national, provincial or local levels.
- 2-4 Involve river basin entities in assessing opportunities to enhance local resource access in the tributary on the development opportunities and risks of hydropower.
- 2-5 Draw up guidelines to combine long-term financial support from hydropower revenue sharing with measures to improve local resource access.
- 2-6 Set up vocational training for new livelihoods and job skills as well as income diversification based on the natural resource access changes resulting from hydropower.
- 2-7 Provide training for women, youth, vulnerable groups and ethnic groups regarding local resource access.

- 2-8 Ensure that the local people have priority in accessing resources.

Thailand NTL Type- 3:

- 3-1 Introduce a requirement for either new or proposed tributary hydropower projects to electrify all resettled households.
- 3-2 Introduce a requirement for existing tributary hydropower projects to connect, refurbish and strengthen the electrical supply for the resettled host community.
- 3-3 Prioritize on extending and improving the electricity supply to communities in the area of tributary hydropower projects within existing rural electrification programmes.
- 3-4 Provide targeted assistance to provide electricity to the poorest households living in the project vicinity.
- 3-5 Establish a requirement to assess the off-grid supply in areas, which are too costly to connect to the grid as part of project preparation studies.
- 3-6 Provide a tariff subsidy for communities in the surrounding areas of hydropower projects for a given period of time.
- 3-7 Provide financial incentives (e.g. investment capital, interest loans and preferential tax support) for individuals/organizations seeking to invest in an alternative electricity supply in rural localities where a grid connection is costly.

Thailand NTL Type- 4:

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| <p>4-1 Introduce guidance to optimize the local use and socio-economic benefits from project access roads (e.g. in selecting road alignments and road surfacing, road construction standards).</p> <p>4-2 Introduce guidance to maximize local/sub-regional employment opportunities during construction of tributary hydropower projects.</p> <p>4-3 Introduce guidance to maximize local/sub-regional employment benefits during the operation of tributary hydropower projects.</p> <p>4-4 Introduce guidance for local training</p> | <p>and job skills enhancement to optimize local/provincial employment during construction and operation.</p> <p>4-5 Provide additional budget allocations (e.g. from national budget or project capital) for public infrastructure construction in provinces with tributary hydropower.</p> <p>4-6 Provide additional budget allocations (e.g. from the national budget or project capital) for the construction of public infrastructure in provinces with tributary hydropower projects.</p> <p>4-7 Provide programmes to deal with the boom-bust-cycles after hydropower construction on tributaries has been completed.</p> |
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Viet Nam

Viet Nam NTL Type- 1:

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| <p>1-1 Existing revenue sharing mechanisms are adequate. No new revenue sharing mechanism is needed for both existing or proposed hydropower projects.</p> <p>1-2 New local development fund: Introduce local revenue sharing using local development fund mechanisms in area of project.</p> <p>1-3 Contribute to local development budgets: Introduce local revenue sharing by increasing existing de-velopment budgets of local authorities of existing/new projects.</p> <p>1-4 New provincial development fund: Introduce revenue sharing fund for provinces with projects.</p> <p>1-5 Contribute to provincial development budget: Introduce revenue sharing for</p> | <p>provinces with projects by increasing existing provincial development budgets.</p> <p>1-6 Increase budget or create special fund of RBO: Introduce revenue sharing at the tributary scale using the river basin entity (RBC/RBO).</p> <p>1-7 Municipal/provincial authorities collect or receive taxes, fees, etc., for land or water used by hydropower projects.</p> <p>1-8 Introduce Payments for Ecological Services or Payments for Environmental Services (PES).</p> <p>1-9 Set and finance targets for local income improvement for people living in the area of projects.</p> <p>1-10 Coordinate and optimise different funds (e.g. Environment Protection Fund, Water Resource Protection Fund, PES fund, etc) that hydropower revenue contributes to ensure synergies for benefit sharing.</p> |
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Viet Nam NTL Type- 2:

- 2-1 Existing practices are adequate for local resource access for project area communities/river communities on tributary hydropower projects (e.g. to enhance or remove barriers to forest, land, water, bio-physical and cultural resource access).
- 2-2 Introduce procedures/requirements to evaluate opportunities to optimize local resource access and non-monetary benefits around existing projects, engaging with local communities.
- 2-3 Introduce procedures/requirements to identify opportunities to optimize local resource access in project studies for proposed projects engaging with local communities.
- 2-4 Identify legal and implementation obstacles to enhance local resource access (forestry, land or water) at national, provincial or local levels and address them.
- 2-5 Involve river basin entities in assessing opportunities to enhance local resource access in the tributary on the development opportunities and risks of hydropower.
- 2-6 Guidelines to combine long-term financial support from hydropower revenue sharing with measures to improve local resource access.
- 2-7 Vocational training for new livelihoods, job skills, and income diversification based on natural resource access changes due to hydropower.
- 2-8 Ensure training for women, youth, vulnerable groups and ethnic groups regarding local resource access.

Viet Nam NTL Type- 3:

- 3-1 Current practices are adequate to improve or spread electricity access in the tributary related to existing or proposed hydropower.
- 3-2 Introduce a requirement to electrify all resettled households in new tributary hydropower.
- 3-3 Introduce a requirement for connection, refurbishment and strengthening of electrical supply for re-settlement host community.
- 3-4 Prioritize extending/improving electricity supply to communities in the area of tributary hydropower projects within existing rural electrification programmes.
- 3-5 Provide targeted assistance for the poorest households living in the project vicinity.
- 3-6 Establish a requirement to assess off-grid supply in areas uneconomical to connect to the grid as part of project preparation studies.
- 3-7 Provided tariff subsidy for communities in the vicinity of hydropower projects for a given period of time.
- 3-8 Provided financial incentives (e.g. investment capital, loan interest and preferential tax support) for individuals/ organizations seeking to invest in alternative electrical supply in rural locales where grid connection is costly.

Viet Nam NTL Type- 4:

- 4-1 Current practices are adequate in spreading additional benefits deriving from existing or proposed tributary hydropower.
- 4-2 Introduce guidance to optimize local use and socio-economic benefit from project access roads (e.g. in selecting

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| <p>road alignments and road surfacing, road construction standards).</p> <p>4-3 Introduce guidance to maximize local/sub-regional employment opportunities during construction of tributary hydropower projects.</p> <p>4-4 Introduce guidance to maximize local/sub-regional employment benefits during the operation of tributary hydropower projects.</p> <p>4-5 Introduce guidance for local training and job skills enhancement to optimize local/provincial employment impacts in construction and operation.</p> <p>4-6 Provide additional budget allocations (e.g. from national budget or project capital) for public infrastructure construction in provinces with tributary hydropower.</p> <p>4-7 Provide additional budget allocations (e.g. from national budget or project capital) for public infrastructure operation and maintenance in the province/tributary with hydropower.</p> <p>4-8 Provide programmes to deal with boom-bust-cycles after hydropower construction on tributaries.</p> | <p>transboundary dimensions of tributary hydropower in strategic plans and strategies developed by tributary RBC / RBOs.</p> <p>1-4 Coordinate/align BSM-related provisions for catchment management in tributary basins with hydropower shared by two or more countries.</p> <p>1-5 Expand available financing for measures to protect/enhance water resource quality using hydropower revenue in tributary basins shared by two or more countries.</p> <p>1-6 Enhance riparian cooperation in preparing environment flow assessment and provision in reservoir operation/management strategies in tributaries shared by two or more countries.</p> <p>1-7 Highlight/incorporate the explicit evaluation of establishing a “Mekong Fund” to facilitate benefit sharing on the transboundary dimensions of tributary hydropower and potentially LBM, UMB mainstream hydropower.</p> |
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Viet Nam TB Type- 1:

- 1-1 Assume that additional measures beyond current practices are not essential for benefit sharing on transboundary dimensions of tributary hydropower (i.e. do nothing more option).
- 1-2 Provide guidelines for explicit evaluation of BSM options on transboundary dimensions of tributary hydropower in MRC Programmes and MRC Procedures.
- 1-3 Require and provide guidelines for explicit evaluation of BSM options on

Viet Nam TB Type- 2:

- 2-1 Additional measures to increase benefits from the river are not essential for benefit sharing around the transboundary dimensions of tributary hydropower.
- 2-2 Ensure strategies for infrastructure provision and operation on Mekong tributaries conform to the MRC Basin Development Strategy and IWRM/ sustainability principles.
- 2-3 Assess the scope to optimize operation of existing and planned tributary reservoirs for multi-purpose functionality, giving due consideration to the transboundary dimensions.
- 2-4 Assess the scope to optimizing reservoir

operations for downstream benefit/risk balance concerning transboundary dimensions of tributary hydropower on tributaries shared by two or more countries.

- 2-5 Introduce national regulatory provisions for new or retrofit hydropower design to routinely build-in the flexibility to modify operations over the life of hydropower assets.
- 2-6 Assess scope to improve coordination of reservoir operations on aspects such as flood management, sediment management/fish passage in multi-reservoir cascades (existing and new) on tributaries shared by two or more countries.
- 2-7 Prepare guidance to factor the explicit valuation of ecosystem services into project preparation studies and decisions about hydropower and related infrastructure development and management on Mekong tributaries.
- 2-8 Prepare guidance to routinely assess opportunities to optimize other grid-connected renewable energy (RE) and power system benefits presented by tributary hydropower and factor these into discussions of transboundary dimensions.

Viet Nam TB Type- 3:

- 3-1 Measures to avoid or reduce cost because of the river are not essential for benefit sharing around the transboundary dimensions of tributary hydropower.
- 3-2 Explicitly assess opportunities to reduce costs of sustainable development on shared tributaries as part of the MRC Basin Development Strategy Process.
- 3-3 Consider linking and having planning/technical exchanges between RBC/RBOs in shared tributaries facilitated by

the MRC as the main regional RBO.

- 3-4 Enhance cooperation between Upper and Lower Riparian on shared tributaries for drought and flood management.

Viet Nam TB Type- 4:

- 4-1 No explicit provision for this form of benefit sharing on transboundary dimensions of tributary hydropower is needed in the current situation.
- 4-2 Riparian governments explore the scope to enhance cooperation in trade of goods and services to help overcome negotiation hurdles on valuing and sharing benefits and costs of hydropower on shared tributaries.
- 4-3 Riparian governments consider the scope for direct or indirect industrial offsets and counter trade to help overcome negotiation hurdles on valuing and sharing benefits and costs of hydropower on shared tributaries.
- 4-4 Riparian governments consider the scope for cooperation on strategic infrastructure agreements (e.g. agreements on transport integration such as for road, rail, air or water transport facilities).
- 4-5 Riparian governments consider the scope for concessional rates on export power trade, or arrangements at the utility level (power trade agreements) to help overcome negotiation hurdles on valuing and sharing benefits and costs of hydropower on shared tributaries.

Viet Nam CC Type- 1:

- 1-1 Incorporate requirements for benefit sharing on tributary hydropower projects in appropriate national legislation and the country legal

framework (e.g. within existing water or electricity laws and acts, or in new decree laws specific to BSM).

- 1-2 Articulate BSM policy at the national level, and direct the national electricity utility and/or concerned line Ministry to introduce BSM in tributary hydropower Project Agreements.
- 1-3 Incorporate official poverty reduction targets in BSM planning and implementation arrangements in the vicinity of tributary hydropower. Relevant in situations, where communities in the project vicinity live well below national/provincial income averages.
- 1-4 Clarify the proportional share of revenue sharing that provinces in the tributary catchment would be entitled to receive hydropower in their tributary.
- 1-5 Incorporate benefit sharing provisions related to transboundary dimensions of significant Mekong tributaries in MRC Procedures conditional on successful negotiation under the Basin Development Strategy and MRC Framework.

Viet Nam CC Type- 2:

- 2-1 BSM policy applies equally to all grid-connected hydropower projects with a legal requirement for an environment impact assessment (EIA).
- 2-2 BSM policy applies equally to all grid-connected hydropower projects above a specified installed capacity as defined in regulation (e.g. 1.0 MW).
- 2-3 Separate regulations for revenue sharing for hydropower projects of different size categories (e.g. MW installed).
- 2-4 BSM policy applies equally to all grid-connected hydropower projects with multi-purpose functions that have a hydropower component.

Viet Nam CC Type- 3:

- 3-1 Include assessments of benefit sharing in strategic studies that form the basis for the identification and selection and operation of tributary hydropower projects.
- 3-2 Consider benefit sharing in project feasibility and EIA studies that form the basis for national approvals of tributary hydropower projects by the competent authorities.
- 3-3 Incorporate concise assessments of potential benefit sharing measures in project EIAs linked to the identification of social/environmental impacts of construction/operation phases of hydropower.
- 3-4 Explicitly identify and report on local preferences for resource access entitlements, permissions or rights in discussions with local communities during project preparation studies.
- 3-5 Assess the scope to enhance the physical design of hydropower projects to provide greater flexibility for adaptive management and optimize how benefits and costs (direct and indirect) are distributed in the tributary to different stakeholder/development interests.
- 3-6 Assess opportunities to optimize benefit sharing during the construction phases of tributary hydro-power projects.
- 3-7 Assess opportunities to optimize benefit sharing in the operation phase of tributary hydropower projects.

Viet Nam CC Type- 4:

- 4-1 All tributary hydropower projects supplying domestic and export markets are treated equally in national-to-local BSM regulation.
- 4-2 New/proposed tributary hydropower projects supplying domestic and export markets are treated equally in national-to-local BSM regulation with respect to revenue sharing.
- 4-3 Existing tributary hydropower projects supplying domestic and export markets are treated equally in national-to-local BSM regulation with respect to revenue sharing.

Viet Nam CC Type- 5:

- 5-1 Steps to strengthen transparency and dispute settlement mechanisms are clearly set out in BSM laws or agreements.
- 5-2 Prepare transparency (Governance Improvement Plans (GIP)) for all development funds mechanisms (or projects) used to collect or distribute money for revenue sharing on tributary hydropower.
- 5-3 Prepare social accountability plans for all local development funds established for benefit sharing on tributary hydropower.
- 5-4 Clarify how disputes and appeals will be handled in the administration of money related to revenue sharing on tributary hydropower at different levels.

Annex 3: Next Steps - Policy Review & Survey Approach

Section 4 of the Synthesis Paper Notes:

Policy Review, Survey and NMC Stakeholder Assessment

This responds to the views NMC Stakeholders expressed in all four countries that clear documentation of existing national policies and practices was helpful in understanding the gaps and opportunities in BSM. Some countries (notably Lao PDR and Vietnam) felt that a survey of hydropower projects in the country would help to identify current best practice.

Moreover, a survey would provide essential input for a policy review and a design of a BSM pilot project, which would aim to demonstrate and evaluate a collection of the most promising mechanisms for benefit sharing. An update of NMC Stakeholder views may be based on the existing BSM Survey prepared in the 2011 BSM Knowledge Base.

- In the ISH13 dialogue, NMC Stakeholders felt that a policy review was a good starting point to cut through misconceptions and reach a consensus on concrete action – recognizing also that provincial and river basin authorities may have different views than the representatives of national line Ministries on some key aspects. Ultimately government would be well-informed in order to make decisions.
- The policy review would enable NMC Stakeholders to better understand how

the existing regulations and practices help share benefits (the four NTL types in the ISH13 National Discussion Papers). An in-depth policy review accompanied by an evaluation of the effectiveness of existing measures, as seen through provincial, basin and local eyes would inform government decisions.

- It was envisaged that MRC, through ISH Output 4.1c, could financially support NMCS in the hiring of an appropriate national consultant(s) so as to undertake the policy review and any related studies.
- The policy review may be based on existing models (such as the Viet Nam BSM Policy Review done in 2007-2008 under an ADB TA with ERAV. VNMC provincial stakeholders requested the existing TA BSM Policy Review (2007) to be updated to 2013.⁵
- The good practice survey may primarily apply in Lao PDR and Viet Nam, where there are a large number of existing hydropower projects and those under construction. As noted in the ISH13 National Discussion Papers, each country already has some aspects of the four generic types of NTL benefit sharing, but what is actually done varies from project-to-project. It is envisaged that this information could be shared with other Mekong countries.
- The NMC Stakeholder assessment has value in capturing both convergent and divergent views on BSM arising from the ISH13 process. It would be done at an appropriate time, possibly by updating

⁵ Included in the BSM Knowledge Base compiled by ISH in May 2011.

(repeating and expanding) the BSM Survey and Questionnaire that was completed in 2011 by national consultants hired by the ISH for the preparation phase of the BSM Knowledge Base. This survey is on the MRC website, as an Annex of the Knowledge Base document.⁶

The approach to the three activities in each country is noted below. A decision will need to be made as to how comprehensive the policy review needs to be in each country.

Policy Review, Good Practice Survey and NMC Stakeholder Assessment Approach

Cambodia Approach	Lao PDR Approach
<ul style="list-style-type: none"> ▪ The ISH13 National Discussion Paper has a policy review section. ▪ A TOR for an expanded policy review may be prepared based on the existing Lao PDR information and Viet Nam policy review in the BSM Knowledge Base. ▪ Cambodia has no need for a survey of best practice on dams in the country because it has no existing large tributary projects. ▪ The CNMC Stakeholder Assessment may be up-dated by a national consultant after ISH13 is completed using the same forms as in 2011 which are available as an Annex in the BSM Knowledge Base on the MRC Website (or these may be updated). 	<ul style="list-style-type: none"> ▪ The ISH13 National Discussion Paper has a policy review section and a small annex on the policy. ▪ A TOR for an expanded policy review may be prepared based on the existing Lao PDR information and Viet Nam policy review in the BSM Knowledge Base. ▪ The survey of best practice can be similarly prepared by a national BSM consultant. This would be based on the Lao ISH13 National Discussion Paper – with a check list approach; and reviewing the standard Concession Agreement annexes. ▪ The LNMC Stakeholder Assessment may be updated by a national consultant after ISH13 is completed using the same forms as in 2011, which are available as an Annex in the BSM Knowledge Base on the MRC Website.

⁶ <http://www.mrcmekong.org/publications/topic/sustainable-hydropower>

Thailand Approach	Viet Nam Approach
<ul style="list-style-type: none">▪ Thailand has a policy on revenue sharing (PDF) and the ISH13 National Discussion Paper policy review.▪ The aspects that policy review may focus on possibly the status of RBOs and their potential role.▪ The survey of best practice can be oriented to be a case study of the implementation of the PDF on the 7 Mekong tributary hydropower projects, done at an appropriate time and prepared by a national BSM consultant.▪ The TNMC Stakeholder Assessment may be updated using the same forms as in 2011, which are available as an Annex in the BSM Knowledge Base on the MRC Website.	<ul style="list-style-type: none">▪ A comprehensive policy review was prepared by the ADB TA in 2007; a copy is in the BSM Knowledge Base.▪ The VNMC Workshop participants asked this be updated so as to capture 2008-2013.▪ A TOR may be issued for a national consultant to do that using the same model.▪ The survey of best practice can be prepared by a national BSM consultant. This would be based on the ISH13 National Discussion Paper – assessing for options that have been evaluated and compare them to the approaches in the Draft Decree Law.▪ The VNMC Stakeholder Assessment may be up-dated using the same forms as in 2011, which are available as an Annex in the BSM Knowledge Base on the MRC Website.

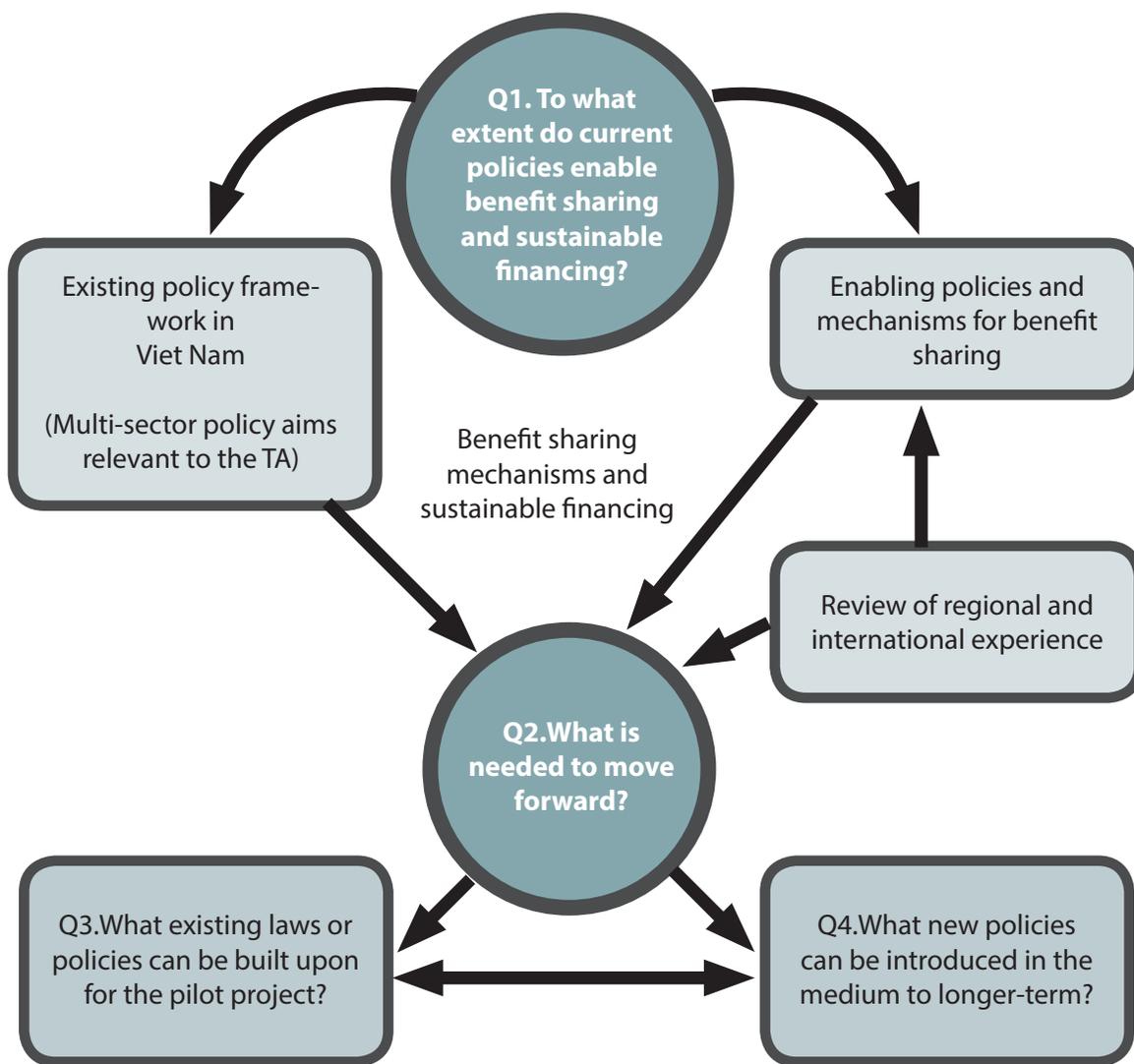
The policy review model (a 100 page example) from Viet Nam is provided in the ISH BSM Knowledge Base:

Technical Note 2:

A review of Viet Nam’s legislation and policies impacting on benefit sharing

Enabling conditions and mechanisms for local benefit sharing, the management of ecosystem services and sustainable financing

How the analytical framework used to examine Viet Nam’s legislation and policy is illustrated in the figure below.⁷ The policy review is noted in the box on the left “Existing policy framework in Viet Nam”.



⁷ Taken from the TA Inception Report. Technical Note 6 looks at international experience in creating laws and mechanisms that enable benefit sharing.

<p>A hierarchy of legislation and decree-laws in different sectors establish the wider policy and legal environment for benefit sharing on hydropower projects.</p>	<p>This sector-by-sector review is presented in the following 9 sections:</p>
<p>In order to consider these aspects, this technical note is structured in two parts:</p>	<ul style="list-style-type: none"> 1.1 The State Constitution 1.2 The Power Sector 1.3 The Water Resources Sector 1.4 The Environment Sector 1.5 The Forest Sector 1.6 The Fisheries Sector 1.7 The Finance Sector including Land Administration 1.8 The Social Sectors including Ethnic Minorities 1.9 International Conventions and Agreements Ratified by Viet Nam
<p>Part 1: Provides a sector-by-sector review of existing legislation and policies. This looks at the primary legislation and key secondary legal instruments.</p>	
<p>Part 2: Provides an integrated analysis of the policy environment using the SWOT analysis format (strengths, weaknesses, opportunities and threats).</p>	
<p>These analyses are to support the discussion by a Steering Committee and stakeholders about the possible content of the draft guidelines and pilot project design, and contribute to the consideration of where policies on benefit sharing may best fit into Viet Nam’s future legal framework.</p>	<p>The model would reflect the analysis.</p>

Annex 4: Next Steps – Pilot Project Approach

Section 5 of the Synthesis Paper noted:

1. Use the MRC developed Rapid Sustainability Assessment Tool (RSAT) to help identify and design one BSM pilot project in each Member Country.
2. Implement the pilot project programme.

A model TOR for a BSM pilot project for the 210 MW A'Vuong Pilot Project in Viet Nam is

provided in the Knowledge Base on benefit sharing. This provides a reference for a TOR and Project Implementation Plan (PIP) for the pilot project.

The approach to the pilot project in each country is noted below. It should also be highlighted that the selection of the hydropower project is wholly a government decision.

Approach to the Design of a BSM Pilot Project in each Member Country

Cambodia Approach

- Presently Cambodia has no large tributary hydropower projects.
- Lower Sesan is currently the only tributary project provisionally proceeding to be implemented.
- RSAT is a tool developed for multiple purposes and may be used to identify a potential BSM pilot project and develop its TOR and Project Implementation Plan (PIP).
- Discussions may then start with partners on the pilot project's financing.

Lao PDR Approach

- Lao PDR has many existing hydropower projects and several in the preparation stage.
- There are several prospective projects, and selection may be linked to RSAT assessments.
- RSAT is a tool developed for multiple purposes and may be used to identify a potential BSM pilot project and develop its TOR and Project Implementation Plan (PIP).
- Discussions may then start with partners on the pilot project's financing.

Thailand Approach

- Thailand has 7 existing tributary projects and the Power Development Fund is expected to be implemented in the near future (law was in place in 2007, and regulations have been since 2010).
- Any one of these 7 tributary projects may be used as a pilot project to share experiences with other Member Countries.
- The National Workshop that was primarily attended by participants from Leoi sub-basin, and there was an interest in benefit sharing in other sectors (e.g. irrigation).
- RSAT is a tool developed for multiple purposes and may be used to identify a potential BSM pilot project and develop its TOR and Project Implementation Plan (PIP).
- Discussions may then start with partners on the pilot project financing.

Viet Nam Approach

- Viet Nam already has undertaken a BSM pilot project.
- The pilot project proposal, design and completion reports are available in the BSM Knowledge Base.
- RSAT is a tool developed for multiple purposes and may be used to identify a potential BSM pilot project and develop its TOR and Project Implementation Plan (PIP).
- Alternatively discussions may start on phase 2 of the A’Vuong pilot, but as this is not a Mekong tributary the MRC may not be able to participate financially.
- Discussions may then start with partners on the pilot project’s financing.

Use the MRC developed Rapid Sustainability Assessment Tool (RSAT) to help identify and design one BSM pilot project in each Member Country.

- Some NMC Stakeholders felt the Rapid Sustainability Assessment Tool (RSAT) that MRCS had developed in collaboration with NMCS was the best tool to identify a suitable hydropower project for a BSM pilot project in each country and to explore the arrangements for its im-plementation.⁸
- RSAT now has 10 topics, where one topic assesses the adequacy of existing benefit sharing arrangements on hydropower projects in a river basin IWRM context (the purpose of RSAT being to identify topics for in-depth action).

- An initial scoping could be done under RSAT, using national consultants and possibly a regional or international consultant. Models exist to develop a TOR and Project Implementation Plan (PIP) for any BSM pilot projects (e.g. the A’Vuong pilot project in Viet Nam has a series of design and operational reports).
- The TOR/PIP for a pilot project in each country may be used to seek the necessary funds from MRC Development Partners if they are needed, and to organize a partnership for its imple-mentation (consisting of national and regional partners, including project owners).
- One key aspect will be to decide what BSM to test and evaluate in the pilot. In Viet Nam, the approach from 2006-

⁸ <http://www.mrcmekong.org/about-the-mrc/programmes/initiative-on-sustainable-hydropower/>

2009 was to formulate a draft Decree Law, then design the pilot project to progressively demonstrate and evaluate the mechanisms that had been proposed for the Decree Law.

Implementation of the Pilot Project Programme

- Many NMC Stakeholders felt a pilot project would help to trial and demonstrate the BSM in each country setting, which fit the respective legal systems and stakeholder expectations.
- Thailand is perhaps in the best position of the four countries to lead with a pilot project to demonstrate Type 1 local revenue sharing. A pilot project, implementing the Thailand Power Development Fund (PDF) mechanism on one or more of Thailand’s seven Mekong tributary hydropower projects, may be considered.
- The first stage of a 2-stage BSM pilot project was previously implemented in Viet Nam from 2009-2010 (the TOR, details and reports are available in the ISH BSM Knowledge Base CD). There has been no follow-up to fund the second stage of the pilot project for reasons noted in the Viet Nam ISH13 National Discussion Paper.
- It is conceivable also that BSM pilot projects in each country can be done in a coordinated and cooperative manner. The MRC could facilitate a regular sharing of information and progress among the NMCS and also the implementation actors, including exchange visits.

Annex 5: Update of Key Messages from the BSM Knowledge Base

14 Key Messages

1. Benefit sharing is a practical way to spread benefits of water resource utilization across the economy, catalyse broader-based economic growth and support social equity policies.

- Experience with benefit sharing is growing world-wide, not only applied in the water resource sector on hydropower, but also in other natural resource sectors like forestry, mining, agriculture and eco-tourism.
- Benefit sharing is one of the seven strategic priorities for basin development set out in the MRC Basin Development Strategy, endorsed by Member Countries in 2011.⁹ It is imbedded in MRC Programme work including the Initiative on Sustainable Hydropower (ISH).
- Benefit sharing is the key to improving the sustainability of hydropower, and also a MRC strategic priority for basin development. It otherwise underpins Member Country efforts to place decisions about hydropower development and management in an IWRM river basin perspective.¹⁰

2. Benefit sharing may be pursued at different scales (i.e. at regional, national, tributary or sub-basin and local scales).

- The two main categories of benefit sharing found in international practice are national-to-local benefit sharing mechanisms (NTL-BSM), sometimes called project-level BSM, and transboundary benefit sharing mechanisms (TB-BSM).
- NTL BSM types aim to share benefits that normally accrue at national levels with river basin residents at provincial, distinct/municipal and local levels where hydropower projects are located. Appropriate measures are typically set out enabling legislation with supporting regulations.
- TB BSM are based on principles embodied in IWRM practice, which are negotiated outcomes and agreements among countries that share an international river.
- MRC's Basin Development Strategy (2011) calls for Mekong Countries to cooperate in; "exploring mutually beneficial options, including benefit and impact sharing agreements that go beyond the project level" to balance development opportunities and risks of hydropower across sectors, and at the regional scale.

⁹ Strategic Priority 5, "Seek options for sharing the potential benefits and risks of development opportunities", and also connected to Strategic Priority 3, "Improve the sustainability of hydropower development."

¹⁰ The MRC's Rapid Sustainability Assessment Tool (RSAT) uses benefit sharing as a criterion to evaluate progress toward hydropower sustainability and placing decisions about hydropower in a river basin perspective.

3. Governments may choose a range of mechanisms (BSM) to share the benefits of hydropower with local communities, river basin residents and provinces.

- Common types of national-to-local BSM around the world include:¹¹
 - (i) Sharing monetary benefits from national-to-local levels according to an approach stipulated in law, recognizing that the financial benefits of hydropower mainly accrue at the national economy level, or flow to national electricity consumers, many of which may live outside the river basin.
 - (ii) Facilitating non-monetary benefits by recognizing that most rural, riverine communities need help to remove barriers that impede their access to natural resources (forest, water, or land) to help offset access loss due to hydropower, plus to take advantage of the local development opportunities that have been created.¹²
 - (iii) Equitably sharing project services by ensuring that communities in project areas receive first-time electricity connection, or a more reliable electricity supply – so they are among the first, and not the last to benefit from electrical services generated by hydropower in their area.
 - (iv) Optimizing additional benefits by recognising the considerable scope to systematically optimize development benefits of project-related investments and procurement, such as in roads,

public infrastructure and jobs which serve as a local/sub-regional development stimulus.

- Modern approaches incorporate all types of benefit sharing in a systematic and coherent way. It views benefit sharing as a package of measures, not a single mechanism.
- It is also important to make BSM flexible so that they can adapt to the changing development priorities of people, as these priorities evolve over time in the project area and river basin. For example, certain forms of benefit sharing can be targeted to help achieve poverty reduction targets in the first years.

4. All MRC Member Countries have some experience with sharing the benefits of hydropower, which they can build on, and share experience with other Member Countries.

- Benefit sharing is not actually new in the Mekong. All MRC Member Countries have experience with one or more types of benefits, especially with optimizing additional benefits of hydropower. In the past, people may not have labelled measures as sharing benefits. The 1995 Mekong Agreement aims to provide for mutually beneficial utilization of the Mekong River and related resources.
- Among the steps MRC Member Countries have recently taken to advance benefit sharing thinking and practices related to hydropower include:

¹¹ In previous reports, 5 types of NTL BSM were discussed. Indirect and additional benefits are considered in the same category as “additional benefits” to streamline things. Indirect and additional benefits are actually distinguished by the fact that indirect benefits arise from project-related investments (access roads, jobs, public infrastructure) and additional benefits are investments additional to project-related investments (commitments for public infrastructure including roads beyond what is required for the project), but otherwise only possible because of the project. It is because the actual impacts are similar that these categories are merged.

¹² Encompassing the steps governments (at all levels) may take to give local communities better access to natural resources (such as issuing permits and removing unnecessary barriers that impede access to land or forest resources locally); and also the permission to unlock the development opportunities that resource transformations of hydropower may provide.

- NMCS and national Line Agencies in **Cambodia and Lao PDR** have sought to draw lessons from international experience to help them formulate national policies for benefit sharing.
- **Lao PDR** has experience with revenue management, where a portion of hydropower revenue is allocated to poverty alleviation programmes at national and sub-national (e.g., from NT2, which has a major power export component). Lao PDR has experience with innovative measures to raise local incomes of people living in the vicinity of hydropower projects. The Government and EDL take equity stakes in projects, which generate dividends. Lao PDR also has policy provisions for hydropower revenue to help finance river basin, forest, and environmental protection funds, which are yet to be fully defined or made operational. In a highly positive step, Lao PDR recently formed an inter-ministry committee to consider a way to introduce BSM more systematically in national policy.
- **Thailand** passed laws in 2007 to establish revenue sharing on existing and new power projects, through the mechanisms of Community Development Funds (CDFs) and Power Development Funds (PDFs). These apply to all power generation projects, not just hydropower. As yet no funds have been established on hydropower projects (although these processes are reportedly underway). EGAT said 102 thermal power plants in 39 provinces, including 26 power plants of EGAT established local "funds" in 2009. The PDFs, which may take over from CDFs as the primary institutional arrangement for local revenue sharing, aim to finance improvements in: "the environment, socio-economic conditions and quality of life of people living in the vicinity of power projects".¹³ As stipulated in the Energy Industry Act (2007): "contributions sent to the fund [...] shall be deducted from the (electricity) tariffs".
- In **Viet Nam**, from 2007 the Electricity Regulatory Authority of Viet Nam (ERAV) developed a draft decree Law for benefit sharing with local communities affected by hydropower. The draft contains provisions for revenue sharing, facilitation of non-monetary benefits, equitable access to electricity and optimizing additional benefits. The provisions were pilot tested by ERAV in cooperation with Quang Nam province in 2010 on the 210 MW A'Vuong Project.¹⁴ Viet Nam also collects water use fees from hydropower revenues allocated to provinces where the projects are located. Viet Nam's laws also have provisions for environmental protection funds and payment for ecological services (PES) that hydropower revenue must be allocated to, which have yet to be fully defined, or made operational.
- **China** allocates a portion of revenue from hydropower to local development reconstruction funds in reservoir areas and to pay for longer-term (20-year) compensation. These are also applied to hydropower projects in the Lancang-Mekong River cascade.
- MRC Member Countries have a critical mass of experience with BSM to share with

¹³ Defined as people living within 5 kilometres in some cases, though regulations are under development for the sizes and types of power projects.

¹⁴ Clarification of the next steps so as to take the draft decree law forward in Viet Nam is still pending. Discussion at the first national BSM workshop co-sponsored by VNMC and MRCS in Sept 2011 suggested that while additional TAs from the ADB are reportedly under preparation linked to trial implementation of the PES Decree Law of 2010, there is no active consideration of the draft BSM Decree Law in ERAV at present. However it remains a good starting point to pick up discussion.

each other, and this can therefore inform their thinking and decisions on both existing and emerging BSM policies.

5. Revenue sharing is a well-recognized and common approach many governments use to share the monetary benefits of hydropower within society.

- Mechanisms for sharing monetary benefits of hydropower take many forms (including revenue sharing, equity sharing, taxes, royalties, preferential electricity tariffs for local communities, and new innovative financing sources such as payment for ecological services (PES) and carbon financing).
- Revenue sharing is perhaps most common and visible mechanism. Countries typically choose a mix of mechanisms to spread monetary benefits from national-to-local levels and river basin entities where hydropower is located, not just a single measure.
- Governments need to balance several factors in deciding the amount of revenue sharing (as a percentage of gross revenue). Among these considerations include:
 - i. ensuring that revenue sharing is a meaningful amount, as otherwise why is it necessary to even bother;
 - ii. ensuring that the impact on consumer electricity tariffs is acceptable;
 - iii. taking account of other uses for hydropower revenue (e.g. environmental protection funds);
 - iv. the presence of alternative means of sharing monetary benefits, such as royalties, and
 - v. political and public perceptions of what is fair.
- In developing economies, an allocation to benefit sharing of 1-3 % equivalent of gross revenue is common. Overall

the percentage of hydropower revenue shared in total (i.e. for other water and environment protection funds as well as benefit sharing) may be higher. The total ultimately depends on the government policy on hydropower revenue management and what is sustainable in the tariff.

6. Benefit sharing is positive from all view points, when introduced in a systematic way with genuine participation of beneficiaries and stakeholders.

- Benefit sharing, properly conceived and implemented:
 - Allows **project-affected people** and traditional river users, as well as river basin residents involved in catchment management to become partners in projects. Otherwise, it provides them with a stronger voice in decisions that affect them, and an opportunity to be the first among project beneficiaries, and not the last.
 - From the **government’s perspective**, benefit sharing is a practical policy tool to achieve greater social inclusiveness and balance social, economic and environmental factors in planning, design, implementation and operation of hydropower projects.
 - From the **hydropower developer’s and operator’s perspective**, benefit sharing increases the capacity to work effectively with local communities. Good community relations are important for many reasons, ranging from the reduced risk of project delays on new projects, to improved prospects for local cooperation in catchment management and implementing environment mitigation measures the operator is responsible for as prescribed by law. Reducing the risk of a loss of

reputation is also a major factor.

- From the perspective of **investors and financial institutions**, the presence of an explicit policy framework with realistic provisions for local benefit sharing is an indicator that locally affected communities and general public are more likely to support a project – all things considered. As a result, the investor's risk exposure is reduced and investors are more inclined to become financing partners. This can reduce the cost a society pays for hydropower investments (regardless of whether public or private sector borrowing is used, e.g. reductions in interest rates on debt financing).
 - From the **electricity consumer's perspective** (including households, as well as consumers in the services and industrial sectors) it means that the government can reach decisions to optimally develop water resources and provide what are potentially more stable tariffs, a reliable power supply and ultimately less expensive water and energy services.
 - Overall benefit sharing is a tool to manage development risks and enhance development opportunities for all, and not only for some.
- 7. It is important for government authorities leading dialogue processes on BSM to have a clear understanding of different mechanisms (BSM) and how they work in practice.**
- Despite the prominence of benefit sharing, the concept is not always clearly defined. In part, this is due to many different objectives and ways to share benefits in

different sectors. It is also because people have different points of emphasis and expectations about benefit sharing.

- Even for countries that have practiced some forms of monetary benefit sharing, experience shows that people still have many different pre-conceptions as well as views and ideas when the topic is discussed in multi-stakeholder venues – especially around water and energy infrastructure like hydropower and large dams.
- It is important for government officials leading internal and public dialogue processes on BSM to have a clear understanding of the different types of BSM and how to respond to the different arguments of stakeholders.¹⁵

8. Misconceptions about benefit sharing that slow or frustrate consensus need to be addressed early, both in inter-ministry discussions and in public dialogue with stakeholders, including the media.

- A clear strategy to raise awareness on how benefit sharing helps to overcome real and perceived shortcomings of hydropower is helpful.
- It is important that people understand what benefit sharing is, and what it is not, especially those participating in multi-stakeholder dialogue processes and the media. For instance, it is helpful to have clarity on the following points:
 - The distinction between short-term resettlement compensation and longer-term benefit sharing.
 - That benefit sharing is not only for resettlement communities, but for all communities in the project area and basin residents more generally.

¹⁵ Because Mekong countries are at different stages in introducing and implementing benefit sharing for hydropower, different emphasis and support may be necessary in each country. However, the mechanisms are essentially the same.

- Revenue sharing is not part of the project capital budget or the same as profit sharing. It derives from the revenue stream the project generates, and thus is ultimately reflected in the consumers’ electricity tariff.
- Similarly, revenue sharing is not something to be negotiated between local communities and hydropower companies. In the Mekong context, it is set out in government regulations.
- Revenue sharing is not something only for rich developed countries, or too complex for developing countries.
- Benefit sharing applies to both existing and new projects, and not just new projects.
- International non-government organizations from the social and environment fields all pro-actively support benefit sharing around natural resource use and extraction, including hydropower.
- BSM also underpin the sort of partnerships needed to genuinely involve people in development decisions that affect them.

10. Benefit sharing is not to be confused with hydropower-related resettlement compensation measures, which are one-time or short term, because benefit sharing is long term.

9. Benefit sharing is not a new ground to fight ideological battles on hydropower.

- Some voices argued that benefit sharing is only something proponents of new hydropower want. It is a way to “green up” hydropower, or “white wash” concerns about the impacts of hydropower. Experience from around the world suggests otherwise.
- As set out in the Basin Development Strategy (2011), MRC’s view is broadly:
 - Decisions about hydropower need to take place in a basin-wide perspective, accounting fully for all three dimensions of sustainable development (economic, social and environmental) and have flexibility for intergenerational equity.
 - Benefit sharing is a crucial component of sustainability, but not a deciding factor about whether governments should pursue new hydropower, or not.
 - Benefit sharing is a way to improve the sustainable management of existing hydropower.
- Resettlement compensation is a short-term measure governed by national regulations. It is part of the project cost financed by the hydropower developer (public or private).
- Benefit sharing goes beyond resettlement compensation. It recognizes that hydropower development and operation affects many other people in the project vicinity and riverine communities, not only people who may be resettled. It may provide both development risks and development opportunities for them.
- By definition, benefit sharing means that the communities, municipalities and provinces who “host “ hydropower projects (subject to national agreement) are entitled to share a portion of the benefits arising from development of water resources in their locale and river basin, which they depend on.
- Hydropower projects are long-life structures that provide a stream of benefits over the economic life of the project, which is often 50-100 years or more. Thus sharing these benefits is a long-term endeavour.

11. Benefit sharing stems from government policy and regulation; it is not something for hydropower developers and operators to negotiate.

- Benefit sharing is a long-term relationship, on one hand, between the main consumers of electricity services in towns, cities and industry, and on the other hand, the local communities and residents of the river basin who host the project in their locale or basin.
- Benefit sharing is not a negotiation, or relationship between hydropower companies and local communities and provinces. Hydropower developers/operators are not the drivers of benefit sharing arrangements or entities who set "rules" for BSM, or negotiate profit sharing deals project-by-project.
- The Government's role is to set out a regulatory framework. This is especially important if there is a mix of IPP and public sector hydropower projects, as in the Mekong.¹⁶ This includes the rules and provisions for revenue management, which includes measures like royalties and revenue sharing.
- Revenue sharing is a tariff-based measure. Experiences show that the public will support an increase in electricity tariffs of a reasonable amount if (i) the money is used to fairly distribute benefits, especially to poor rural areas where projects are built, and (ii) the information is conveyed in a consistent and transparent way, bringing in supportive voices from civil society.

12.A systematic, collaborative approach is best to introduce comprehensive forms of benefit sharing, to reflect good practice and meet stakeholder expectations.

- Steps that countries take systematically to introduce comprehensive arrangements for benefit sharing include:
 - i. starting with awareness raising, engaging with all stakeholders;
 - ii. undertaking pilot projects to build confidence and seek stakeholder consensus on approaches and mechanisms most suited for the delivery of benefits;
 - iii. introducing appropriate enabling policies and legislation based on accepted good practice;
 - iv. adequate consideration of actions needed at all stages of the infrastructure project cycle;
 - v. carefully choosing the sources of finance (or mix) to share monetary benefits;
 - vi. selecting appropriate mechanisms for the delivery of benefits, regardless of financing sources;
 - vii. introducing the appropriate institutional arrangements, minimizing the need for new structures; and
 - viii. ensuring effective two-way communication, as well as encouraging partnership approaches.
- Among the main challenges in introducing benefit sharing are the complexity of some mechanisms and investments in capacity building. More specific challenges relate to addressing:
 - Misconceptions about benefit sharing that may hinder, slow or frustrate progress;
 - Ensuring bottom-up processes

¹⁶ This does not preclude hydropower developers and owners from playing a role, either to help fund or implement agreed BSM. However, any such agreements need to be reflected in Project Concession Agreements.

are being used to decide on local mechanisms for the delivery of benefits and beneficiary choice of benefits (within the framework of regulations set by government);

- Ensuring that benefit delivery mechanisms are properly integrated with existing local, governance and development systems so they complement efforts and add value, and
- Ensuring open and transparent implementation arrangements for BSM.

13. Benefit sharing applies to other resource sectors in the Mekong, and not only to hydro-power.

- World-wide experience with benefit sharing in all sectors is growing such as with mining, forestry, petroleum, eco-tourism and genetic resources harvesting (i.e. harvesting plants for medicines funded by the pharmaceutical industry).
- At the same time, there is a mix of experiences with some remarkable successes as well as some clear failures. The pool of experience nevertheless creates opportunities for the cross-fertilization of ideas and the sharing of lessons among sectors to help identify best practice, and critically, to minimize missteps.
- Opportunities exist to link sector-based strategies for BSM to challenges that many emergent river basin organizations face in coordinating sustainable management of land-water resources at basin and sub-basin scales (such as in the mining, forestry, agriculture, ecotourism and hydropower sectors).

14. It is important for Governments to coordinate all funds for water resource and environmental protection that hydropower is required by law to support, including revenue sharing.

- Acts and Decree Laws in Member Countries increasingly call for hydropower revenue to help finance funds for water use and water resource protection, environmental protection, Payment for Ecological Services (PES), funding for RBOs, and benefit sharing.
- While these funds have been introduced in enabling legislation recently in the Mekong, most funds have yet to be fully coordinated, defined or established. One reason is limited institutional capacity. Another complexity is different Ministries may be responsible for the funds for their sector, where the common element is that they all look to receive revenue from hydropower sales.
- While many opportunities exist to exploit development synergies among these different fund mechanisms, it is also essential to avoid confusion about what the various funds do and how they link, which could lead to implementation delay, or duplication of effort.¹⁷
- Opportunities to integrate the delivery of benefits from such funds are often present. These opportunities can be explored to make the funds more effective, have less stakeholder confusion and respond to situations where there is limited implementation capacity. Sometimes a rationalization of funds is advisable.

¹⁷ Hydropower in many Mekong countries increasingly makes revenue contributions to these development funds. While payment or fees may depend on project size or generated output.

Annex 6: Summaries of National Discussion Papers

Cambodia National Discussion Paper Summary

The collaborative evaluation of benefit sharing options for hydropower on tributaries of the Mekong River is identified in the MRC Basin Development Strategy endorsed at the MRC Council level in January 2011. ISH13 is undertaken by the four NMCS with MRC support from the Initiative on Sustainable Hydropower (ISH).

ISH13 is part of a group of activities that all MRC Programmes and Initiatives were assigned to undertake as input to on-going discussions under the MRC Framework to implement the Basin Development Strategy (BDS) and the 1995 Mekong Agreement more generally. ISH13 may also inform national policy dialogue processes in each Member Country on this topic.

The Background

Benefit sharing has been a recurrent theme in international and national debates about hydropower and sustainable management of water and other natural resources for decades. Today it is increasingly seen to be a powerful, practical way to spread natural resource utilization benefits across the economy, catalyse broader-based growth and support social equity policies.

The potential for benefit sharing mechanisms (BSM) to foster sustainable forms of

hydropower development and management and implement the 1995 Mekong Agreement is explicitly recognized in MRC Programme work and the MRC Basin Development Strategy.

National-to-local forms of BSM are of a group of measures applied in a systematic, consistent, and transparent manner:

- (i) To equitably and reasonably share a portion of the monetary benefits that arise from hydropower from the national level (where such benefits normally accrue) with provincial, sub-basin or local levels where the projects are located;
- (ii) To optimize non-monetary benefits, especially natural resource access for people living in project areas and river communities in tributary basins (i.e. forest, land, and reservoir access, etc.), in part to help offset resource transformations due to hydropower in the locality;
- (iii) To provide equitable access to electricity services for people living near hydropower projects and in tributary basins with hydropower projects, so they are among the first to benefit and not the last, and
- (iv) To enhance and optimize additional benefits derived from national investments in hydropower and related public infrastructure in the river basin, such as various economic benefits arising from improved access roads, local employment, and the economic stimulus the project may bring to local or district/provincial economies.

There are also transboundary dimensions of BSM arising from hydropower on Mekong

tributary basins shared by two or more countries, as described in the MRC Basin Development Plan (BDP) and analysis supporting the BDS work.

The proposed hydropower developments on Cambodia’s Mekong tributary basin which include the portion of the Sesan and Srepok rivers are used to focus this preliminary multi-criterion evaluation of BSM policy options for hydropower, but the evaluation results apply equally to hydropower in other river basins in Cambodia. The Cambodia National Paper does not discuss mechanisms on specific hydropower projects.

These tributaries form part of the 3-S tributary system, which contributes 25% to the dry season Mekong flow at Stung Treng and 17% of the overall Mekong flow. They are significant from hydrological, socio-economic, river morphology (including sediment balance), natural resource management, ecosystem services (including fisheries) and hydropower generation perspectives.

The ISH13 Tasks

ISH13, “Benefit-sharing options for hydropower on tributaries evaluated and reported” by 2013 responds to requests by MRC Member Countries for support:

- To improve awareness and understanding of National-To-Local BSM options and strategies and help draw lessons on concepts and practices from the growing body of Mekong region and international experience; and
- To enable Member Countries to prepare for discussions on benefit sharing envisaged under the MRC framework, as set out in the Basin Development Strategy.

These needs were confirmed in the first Cambodia national BSM workshop held 10-11 October 2011 in Siem Reap Province.¹⁸ Over 50 participants from the CNMC Secretariat, national Line Agencies, provincial and municipal government levels and MRCS attended the workshop.

The ISH Guidance Package on which the format and evaluation method of the National Paper is based was prepared by the ISH. This offered a consistent approach for all four countries and describes the three main activities for ISH13 in detail, namely:

- (1) Preparation of National Papers on BSM options for hydropower on tributary systems in NMCS-led processes;
- (2) Holding 2-day national BSM options workshops in each Country to enable multi-stakeholder comment on draft versions of each National Paper; and
- (3) Preparation of a Regional Synthesis Paper by MRCS, which bring together the four Member Country Papers.

To assist the NMCS in the evaluation a small National Working Group (WG) consisting representatives of the main NMCS stakeholder interests was formed. The WG undertook the initial evaluation. That result was captured in the draft Working Paper, which was circulated to CNMC stakeholders who participated in the national-level workshop noted in (2) above. The National Discussion Paper now incorporates the National Workshop discussions and outcomes.

¹⁸ The BSM workshops held in each Member Countries, as well as the preparation and follow-up was a first step to implement the BDS activity designated as ISH13, “Benefit-sharing options for hydropower on tributaries evaluated and reported” approved by the MRC Council level. ISH13 is to be completed by 2013 and for practical purposes ISH13 will be implemented as a core part of the ISH 2012-2013 work plan under Output 4.1c.

Approach to the Options Evaluation

The preliminary evaluation shows there is scope to consider various BSM options for Cambodia's Mekong tributary hydropower, namely:

National-To-Local Types (NTL):

- **NTL Type- 1:** Sharing of monetary benefits - 10 options evaluated
- **NTL Type- 2:** Facilitating non-monetary benefits - 8 options evaluated
- **NTL Type- 3:** Equitable access to project services – 8 options evaluated
- **NTL Type- 4:** Optimizing indirect and additional benefits – 8 options evaluated

Transboundary dimension Types (TB) relating to tributary hydropower:

- **TB Type- 1:** Increasing benefits "to the river" – 7 options evaluated
- **TB Type- 2:** Increasing benefits "from the river" - 10 options evaluated
- **TB Type- 3:** Reducing costs "because of the river" - 5 options evaluated
- **TB Type- 4:** Increasing benefits "beyond the river" – 7 options evaluated

In addition, a number of Cross-Cutting Considerations were evaluated using five questions:

- **CC Type- 1:** What legal instruments may be considered to introduce BSM? - 5 considerations evaluated.
- **CC Type- 2:** What measures may be considered relating to the size and scale of hydropower projects in tributaries? - 4 considerations evaluated.
- **CC Type- 3:** What measures may be considered to imbed benefit sharing considerations in hydropower planning and at each stage of the Project Cycle? - 7 considerations evaluated.

- **CC Type- 4:** What measures may be considered for hydropower projects for power export or national supply? - 3 considerations evaluated.
- **CC Type- 5:** What measures may be considered for transparency, dispute avoidance and settlement? - 4 considerations evaluated.

In total 61 BSM NTL and TB Dimension options as well as 23 Cross-Cutting Considerations were qualitatively scored and ranked by National Working Group members for two main dimensions of **Value** and **Preference**, using the qualitative sub-criteria explained in the National Paper and in this Regional Synthesis Paper's Annex Volume (Annex 1).

The **Value** dimension has five sustainability sub-criteria that qualitatively measure the value of each BSM (option or consideration) in terms of its potential value-added contribution to sustainable development of hydropower and the tributary basin more generally (i.e., sub-criteria for environment, economic, social, the flexibility to adapt operation over time and practicality).

The **Preference** dimension is a measure, or indicator, of the relative preference for each BSM (option or consideration) by different NMCS stakeholder interests (e.g., environment sector organizations, power sector organizations, river basin entities, civil society, the private sector and others).

After completing the multi-criteria scoring and ranking, all options with moderate to high scores were placed into one of two categories, namely: options recommended for consideration in a comprehensive BSM

approach, and options recommended for further study to help decide whether to keep or drop them from further consideration, and where more information is needed.

The National Discussion Paper has two parts (i) the short Main Paper, and (ii) the larger Annex Volume. Sections 4 and 5 of the Main Paper offer comment on the results of this preliminary BSM options evaluation and Next Steps. The Annex Volume shows the detailed multi-criteria scores for each BSM mechanism (option or consideration; Annex 3) and a summary bullet point description of each option type (Annex 2).

General Results of the ISH13 Options Evaluation

Overall the results show that benefit sharing is not a single option, but rather a group, or family of mechanisms that complement and reinforce each other – or a “package” of measures to systematically apply at different stages of planning, and hydropower development and management. This promotes cooperation on the development and sustainable management of tributary basins and locating decisions about hydropower in a river basin (IWRM) perspective.

Looking at the four National-To-Local forms of benefit sharing in turn:

For sharing monetary benefits, assuming 2% of the net revenue generated by hydropower projects in Cambodia is allocated in a revenue sharing formula, which is more or less typical for developing country situations; means about US\$12.6 million would be available each year. This assumes (i) full development of the potential 15 tributary dams on Cambodia parts, which include Sesan and Srepok rivers

(9,020.4 Gwh/year), (ii) the formula of 2% of gross energy generation GWh/yr, and (iii) the unit value of an average 7.0 US cents per KWh.¹⁹

The ISH13 preliminary evaluation suggests the preference was to share monetary benefits at provincial and local levels through Development Funds, where delivery of benefits would be arranged according to the wishes of the beneficiaries.²⁰ Normally any such Fund would have a governing body or steering committee appropriate for that level (e.g. community representatives in a Local Area Fund, provincial representatives in a Provincial-level Fund). Appropriate legal provisions would typically be required.

Given the resource dependence of rural populations in Cambodian tributaries, the **non-monetary benefits** (Type 2 NTL), particularly those to enhance access to natural resources and addressing downstream development opportunities and risks were seen to have Value and Preference as a package of BSM measures. Many of these measures or mechanisms are currently within the remit of Provincial, District and local government bodies (e.g., permissions and permits). To help organise the arrangements the idea of specified development zones or green development zones was suggested by Participants and included as an option to explore (the case of Lower Sesan 2 has proposed eco-tourism zone).

For Type 3 NTL measures concerned with **equitable access to electricity**, applying the existing Cambodia Rural Electrification Fund (REF) programme in areas around the tributary hydropower projects may be considered as the best mechanism, which is

¹⁹ See discussion in Section 4 on the revenue sharing calculation.

²⁰ For the 2% of the EVN valuation of generation (GWh) from Viet Nam's Mekong tributary hydropower projects on Sesan and Srepok river would result in \$US 11.3 million and \$US 4.9 million annually to fund benefit sharing measures in the Viet Nam's upper Sesan and Srepok basins, respectively.

actually an existing mechanism. This is not only for resettled communities but also other communities living the project area and immediate catchment.

The Rural Electrification Fund contains many NTL Type-3 measures identified in the ISH13 Guidance material from international good practice. It is currently implemented with Development Partner GEF sources. Existing GEF funds may be targeted to hydropower areas, or the actual measures that the REF Fund contains and the mechanisms to deliver them may be financed in part or wholly by revenue sharing (Type 1 measures).

There is also scope to systematically enhance the **additional and indirect benefits** of hydropower (e.g., related to improved road access, local jobs and stimulus to the local and provincial economies). One primary area where measures could be considered was to enhance skills development and trade training to maximise local employment in construction and operating phases of hydropower projects and to participating in supplying local goods and services to the project.

The working group decided to exclude option (2.1) on "existing practices are adequate", indicating there is scope to improve non-monetary forms of BSM on Cambodia's proposed tributary hydro-power beyond what is expected in current practice.

Looking at the cross cutting considerations in turn:

There are five type of Cross-Cutting Considerations on BSM. Overall, multi-stakeholder participants agreed with selected options prepared by the working group with some wording simplified. Key highlight was mostly focused on legal instruments of CC

Type-1. This means there is need to at existing laws in Cambodia that is to review all existing law that have a benefit sharing aspect and then compare this to practices elsewhere to highlight gaps and opportunities. Furthermore, MRCS will continue playing a key role in supporting RBOs; provide additional trainings to NMCs staff on related legal aspect on BSM.

Looking at the four Transboundary considerations for tributary hydropower in turn:

TB-BSM has been an outstanding discussion among the national stakeholders during the workshop. There are four types of Transboundary Benefit Sharing:

- **TB Type- 1:** Increasing benefits "to the river" – 7 options evaluated
- **TB Type- 2:** Increasing benefits "from the river" - 10 options evaluated
- **TB Type- 3:** Reducing costs "because of the river" - 5 options evaluated
- **TB Type- 4:** Increasing benefits "beyond the river" – 7 options evaluated

There is not much objection on proposed TB types. However, there are need to bring any transboundary of hydropower that cause impact on Tonle Sap basin and potential benefit sharing consideration for existing and proposed upstream hydropower development, not only on 3S basins and border areas where BSM need to be considered.

Overall, it was suggested that MRC should use this type category (TB Type- 1) in a wider process in preparing: (i) Guidelines for sustainable development and management of hydropower on Mekong mainstream and tributaries, and (ii) Guidelines to establish a MRC mechanism for monitoring and evaluation of operation on mainstream and

tributary in upstream areas.

Other Important Things to Note

The government may consider the BSM options evaluated in this ISH13 process along with other options when it decides on a policy about benefit sharing for tributary hydropower. Cambodia, like other Mekong Countries already has some aspects of all the forms of benefit sharing discussed in the National Papers, but to varying degrees. This is on top of the benefits that Cambodian society (including all electricity consumers) may derive from exploiting indigenous, renewable energy sources like hydropower for domestic and export sales.

What is important is a systematic, comprehensive approach to BSM to take advantage of all the opportunities to achieve sustainable forms of hydropower development and management, and in the current development context, to maximize the spread of the resource utilization benefits across the economy and within the tributary basins. This is while catalysing broader-based growth and supporting social equity policies.

The Next Steps

An underlying consideration in next steps is support for ongoing information sharing among CNMC stakeholders in the government, private and civil sectors on the BSM theme.

This includes information sharing with other Member Countries who present their National Papers at the Regional Workshop, as well as MRC Stakeholders and Development Partners, and in particular international practitioners of BSM who will share comments based on their lessons and experience.

For regular ISH Support (2013-2015) under Output 4.1c:

- Development plan for information workshop/studies e.g., policy review to support for key Cambodian agencies on NTL BSM awareness raising.
- Explore BSM pilot project in RSAT process and include BSM topic in the MRC RSAT assessment (RSAT work in mid 2013) (Lower Sre Pok3 project).
- Development and seek pilot project finance - if a pilot is decided by CNMC and government.
- Other ISH Support in ISH 5-year work plan (e.g. Mekong and International BSM study visits and site visits, Knowledge Based update and others).

For MRC Support (2013-2015) under the BDP-led BDS Process:

- There is need to evaluate benefit sharing under the MRC Basin Development Strategy (BDS) which includes transboundary benefits sharing on Mekong mainstream dams as well as dams significant tributaries of the Mekong and sharing in multiple sectors not only hydropower (e.g., navigation, fisheries, irrigations, as in the full BDP).
- TOR has been circulated to NMCS by the BDP to scope out MRC support for multi-sector regional benefit sharing as a strategic priority under the BDS.
- MRC Support for Guidelines
 - i. Guidelines for sustainable development and management of hydropower on the Mekong mainstream and tributaries, and
 - ii. Guidelines to establish a MRC mechanism for monitoring and evaluation of operation on mainstream and tributary in upstream areas.

- Cambodia stakeholders are interested in information on innovative finance by Public Private Partnership (PPP) models in the context of Cambodia. These may expand benefit sharing opportunities via multi-purpose projects.

Lao PDR National Discussion Paper Summary

The evaluation of benefit sharing mechanisms (BSM) (options) for existing and proposed hydropower developments on tributary systems of the Mekong (Activity ISH13) was identified in the MRC Basin Development Strategy, endorsed by MRC’s Council in January 2011.

ISH13 was subsequently undertaken in a step-wise, collaborative manner by all four NMCS involving their stakeholders. NMCS were supported by the MRC Initiative on Sustainable Hydropower (ISH), which developed a Guidance Package to offer a consistent approach for the evaluation. ISH13 is part of a group of Activities that all MRC Programmes and Initiatives were assigned to undertake in 2012-2015 to support on-going discussions under the MRC Framework to

implement the Basin Development Strategy (BDS), and 1995 Mekong Agreement more generally.

At the same time, the ISH13 offers a timely, systematic comparison of Mekong region progress on this theme, in relation to accepted international good practice. And it highlights the sort of opportunities to advance benefit sharing that Mekong governments may consider in future.

The Lao PDR National Discussion Paper is based on the Working Paper presented at the Lao PDR National ISH13 Workshop held in Khammouane Province, 31-Jan to 2-Feb 2013. It provides a preliminary evaluation of BSM for Mekong tributary hydropower in Lao PDR, prepared in a participatory process. It captures views of LNMC Stakeholders, recognizing there are different views, and aims to ground the evaluation in the Laos context.

A 10-person Lao Working Group appointed by the Government prepared the initial options

evaluation using guidance materials offered by the ISH. Over 60 representatives from various national Line Ministries, Provincial Departments and agencies then participated in the National Workshop, to offer their views on the revision, improvement and finalization of the Paper.

In the final steps of the ISH13 process, this National Discussion Paper will be presented at a Regional BSM Workshop with invited MRC Stakeholders and international practitioners of BSM. Other MRC Member Countries will similarly present their ISH13 National Papers. The aim is to enable participants to share information and ideas, and enable NMCS and their Stakeholders to compare progress and draw lessons from wider Mekong and international experience in this field.²¹

The Background

Benefit sharing has been a recurrent theme in international and national debates about hydropower and sustainable management of water and other natural resources for decades. Today it is increasingly seen as a powerful, practical way to spread natural resource utilization benefits across the economy, to catalyse broader-based growth and support social equity policies.

The potential for benefit sharing mechanisms (BSM) to foster sustainable forms of hydropower development and management and to implement the 1995 Mekong Agreement is explicitly recognized in MRC Programme work and the MRC Basin Development Strategy (BDS).

Benefit sharing may occur at different scales from regional to local levels. National-to-local (NTL) forms of BSM in the hydropower sector include a group of mutually-reinforcing measures applied in a consistent and transparent manner:

- (i) To equitably share a reasonable and agreed **portion of monetary benefits** arising from hydropower, with provincial, basin or project locality populations in rural areas where hydro-power creates both development opportunities and development risks. This recognizes the main benefits accrue at national levels (e.g., in national accounts and for national electricity consumers, who often live outside the river basin or in urban areas).
- (ii) To optimize **non-monetary benefits**, especially local natural resource access (i.e., forest, land, river and reservoir access, etc.), for people living near hydropower projects and river communities in tributary basins upstream, and particularly downstream of hydropower. This helps offset the resource transformation (losses and risks) due to hydropower, and enables rural people to take advantage of development opportunities hydropower unlocks for them.
- (iii) To provide **equitable access to electricity services** for people living near hydropower projects and in tributary basins with hydropower, beyond only resettled communities. Support may be targeted to individual families (e.g. vulnerable and poor), and to provide a local development boost with improved access and reliability of supply, and
- (iv) To **enhance and optimize various additional and indirect benefits** that arise from national investments in hydropower and related public infrastructure, such as widespread benefits of improved roads, project-related local employment, and the economic stimulus hydropower infrastructure investment can bring to local, district and provincial economies.

²¹ The Regional BSM Workshop to be organized by MRC and Development Partners provisionally in Q3 of 2013.

Lao PDR has 12 major Mekong tributaries completely or primarily within its territory and a significant number of existing and planned tributary hydropower projects. The MRC Hydropower Database indicates close to 100 hydropower sites (above 20 MW) are on these tributary systems, approximately 80% of all tributary hydropower in the Lower Mekong River Basin (LMB).

The Ministry of Energy and Mines (MEM) database indicates that by 2010, 11 large hydropower projects (above 20 MW) were in operation, 16 were under construction, and a further 27 were planned, or at the Project Development Agreements (PDA) stage. A further 31 potential hydropower sites were at various stages of study, where Memoranda of Understanding (MOUs) have been signed for potential future development of these sites to serve domestic and region power markets.

A Participatory Approach

The first National BSM Workshop sponsored jointly by LNMC and MRCS (ISH) was held 20-21 Oct 2011 in Vang Vieng, Vientiane Province.²² Concepts and practices for benefit sharing were introduced to LNMC stakeholders from line Ministries and Provinces, some for the first time.²³ The ISH13 work was also explained at the first National Workshop.

In early 2012, the ISH developed 12-Steps to implement ISH13 and prepared a comprehensive Guidance Package with notes, templates and resource documents to help NMCS undertake the evaluations using a consistent framework. Comparisons could be drawn and the exchange of views facilitated.

The 12-steps and Guidance Package (see Section 1 of the Lao PDR National Paper) were endorsed by NMCS.

Once the ISH13 work started in 2012, the Government of Lao PDR nominated the National Working Group (WG) Members to support LNMC according to an agreed Terms of Reference (TOR). WG Members from concerned Line Ministries and Agencies had initial orientation meetings to familiarize themselves with the ISH13 objectives and Guidance Package. The WG held their first seminar in Xiengkouang Province 6-7 Dec 2012, where they did an initial identification (selection) and evaluation of BSM options using the structured, qualitative multi-criteria approach explained in the National Paper (see Section 4.1). The WG seminar outcome was the basis for preparing the draft Working Paper circulated for information and comment to LNMC Stakeholders.

The wider group of LMCS stakeholders that participated in the National Workshop held 31-Jan to 2-Feb 2013 used the Working Paper as a basis to discuss the ISH13 evaluation, and generally, have their say on the overall approach, emerging issues and next steps.

Readers can refer to the list of participants in the Annex Volume of the Lao PDR National Paper (see National Workshop Minutes, Annex 8).²⁴

²² The BSM workshops held in each Member Country were initial steps to implement ISH13. For practical purposes ISH13 was implemented as a core part of the ISH 2012-2013 work plan under ISH Output 4.1c.

²³ Over 50 participants from the LNMC Secretariat, national line agencies, provincial and municipal government levels and MRCS attended the first Lao PDR BSM workshop in 2011. The recommendations for follow-up BSM policy development that emerged from the first Workshop are noted on the Annex Volume of this Paper.

²⁴ The 60 Workshop Participants came from national levels (including LNMC and representatives of concerned line ministries); provincial and district levels (including representatives from northern to southern parts of the country) and government, civil society and power sector bodies, such as Research Institutions, RBOs, and Electricity de Laos (EdL).

The Option Evaluation Approach

National-To-Local (NTL) BSM for existing and proposed hydropower on tributaries, namely:

- **NTL Type- 1:** Sharing of monetary benefits - 10 options evaluated
- **NTL Type- 2:** Facilitating non-monetary benefits (resource access)- 8 options evaluated
- **NTL Type- 3:** Equitable access to project services (electricity) – 8 options evaluated
- **NTL Type- 4:** Optimizing indirect and additional benefits – 8 options evaluated

Cross-Cutting Considerations:

- **CC Type- 1:** What legal instruments may be considered to introduce BSM? 8 considerations evaluated.
- **CC Type- 2:** What measures may be considered relating to the size and scale of hydropower projects in tributaries? 5 considerations evaluated.
- **CC Type- 3:** What measures may be considered to imbed benefit sharing considerations in hydropower planning and at each stage of the Project Cycle? 5 considerations evaluated.
- **CC Type- 4:** What measures may be considered for hydropower projects for power export or national supply? 2 considerations evaluated.
- **CC Type- 5:** What measures may be considered for transparency, dispute avoidance and settlement? 4 considerations evaluated.

In total the Working Group qualitatively scored and ranked 34 NTL-Type BSM (options) and 24 Cross-Cutting Considerations (options) along two dimensions of **Value and Preference**, using the sub-criteria explained in the National Papers (Section 4.1) and in this Regional Synthesis Paper’s Annex Volume (Annex 1):

The **Value** dimension, meaning value added in terms of promoting sustainable development in the tributary and sustainable hydropower, as measured with five sub-criteria relating to sustainability and MRC’s objectives (i.e., environment, economic and social advancement, flexibility to adapt over time, and practicality).

The **Preference** dimension, meaning preference for individual mechanisms and considerations (options) in the eyes of representatives of different LNMC stakeholder interests (e.g., environment sector organizations, power sector organizations, river basin entities, civil society, the private sector and others, etc.).

After completing the multi-criteria scoring and ranking, the various mechanisms and considerations (options) with moderate to high scores were placed into one of two categories (i) options recommended for consideration in a comprehensive BSM approach, and (ii) options recommended for further study to decide whether to keep, or drop them from further consideration. Study was also needed to resolve situations where options were mutually exclusive.

Sections 4 and 5 of the Lao PDR National Discussion Paper summarize the outcome of the preliminary evaluation done by the Working Group (at its Seminar) modified by the observations of the wider group of LNMC stakeholders in the National Workshop (both in Plenary and Breakout sessions).

In the Annex Volume of the Lao PDR National Paper, Annex 3 shows the detailed multi-criteria scores for each option considered. Annex 2 provides a summary description of each option type, and Annex 8 the Minutes

reporting on the LNMCS stakeholder discussions in the National Workshop.

The General Results of the ISH13 Evaluation

The ISH13 exercise highlights consensus among LNMC stakeholders that benefit sharing is not a single option, rather it is a group, or family of measures. They complement and reinforce each other. In effect, benefit sharing can be thought of as “package” of measures that have permanent or long term effect, systematically introduced at different stages of hydropower development and management from planning to operation.

As noted in the ISH13 National Workshop discussions:

- There is an important opportunity to work towards national standards and consistent approaches to spread the water resource utilization benefits arising from hydropower, which is central to Lao PDR’s development and poverty reduction.
- There is a good base of experience in Lao PDR with various forms of project benefit sharing, and some good project models to build on, but as yet there is no consistent approach on projects around the country. What happens varies from project-to-project.
- Standard approaches provide both clarity and a level playing field, not only for potential investors in hydropower, but also for Provinces, basins and communities where hydropower projects operate. All interested and affected parties will have a clearer understanding of what is expected of them, what they can expect, and plan accordingly.
- Laos can aim in the direction of appropriate legal instruments to ensure consistent approaches and seek to continuously improve practices. And to achieve this now, Lao PDR may move ahead with collecting

information, conducting the studies and multi-stakeholder dialogue identified in the ISH13 process, for which the MRC has offered on-going support.

- These studies and activities can also be linked to related work that Lao PDR has underway with other Development Partners.

While Laos can continue to draw from the experiences of other countries in the Mekong, wider Asian and other regions of the world concerning benefit sharing policy and practice, it is recognized that Lao PDR cannot just copy directly from others, but rather adapt experiences and draw lessons that best suite the Lao PDR situation.

National-To-Local BSM Options

The following highlights results on the ISH13 evaluation of the four generic NTL BSM Types.

Sharing monetary benefits (NTL Type 1):

Various mechanisms may be used in combination. LNMC stakeholders generally preferred revenue sharing mechanisms to share monetary benefits that arise from existing and proposed hydropower. Revenue sharing in the Lao PDR context may be seen as a “targeted” form of revenue management. A simple calculation suggests that over \$US 50 million/year would be available for revenue sharing from 36,265 GWh/yr of hydropower potential on the four tributary river basins in Lao PDR illustrated in this Paper. This represents about half of Lao PDR’s tributary hydropower generation potential (GWh/yr), as indicated in the MRC hydropower database. The accompanying table shows the breakdown of money (revenue sharing potential) by tributary profiled in the Annex Volume of the Paper (i.e., The Nam Ou, Nam Ngum, Nam Theun-Kading and Nam Sekong tributary systems). The simplified calculation assumes (i) full development of currently

identified hydropower in each tributary, (ii) the formula of 1% of gross energy generation GWH/yr applied to revenue sharing, and (iii) the unit value of an average 6.5US cents/KWh.

There was considerable discussion among LNMC stakeholders about what percentage may be appropriate.

It was noted the percent is essentially a consideration that government would weigh, balancing between potential electricity tariff impacts, on the one hand (i.e. the higher the percentage the higher the tariff impacts) and on the other hand, expectations in society to equitably spread the benefits of the country’s water resource utilization in a transparent and efficient manner.

And specifically, to ensure the residents of the Province, tributary and locality (if it is decided) receive a guaranteed share of the monetary benefits from hydropower operating in their river, as they bear any development risks.²⁵

The percentage varies from country-to-country as explained in detail in the MRC ISH Knowledge Base on Benefit Sharing. The figure of 2% is used in the ISH13 illustrations because 1-3% is most common for Local Area Funds in developing countries.

The actual mechanism for revenue sharing may be a targeted form of revenue management. Or it may be another mechanism in common use elsewhere (e.g., an allocation from the existing electricity tariff revenue collection system (a financial off take) sent to the account of Development Trust or Fund, or used to provide an increment (a top-up) on the existing development budgets at provincial, basin or local levels.²⁶

No clear consensus emerged in the ISH13 process on whether revenue sharing mechanisms are best pursued at provincial, river basin or local levels – or all three.

There are different points of view among LNMC Stakeholders. Many felt revenue sharing through newly emerging river basin organizations on Mekong tributaries was most appropriate. Channelling revenue through RBOs would help establish them as functional entities and also enable the river basin community, as a whole, to participant in revenue sharing via RBO programmes. The mechanism of a Local Area Development Fund (e.g. Thailand’s Power Development Fund, common in other countries), or allocating portion of hydropower revenue to Provinces with territory in river basins with hydropower,

Tributery	No. Hydropower Projects assuming full development	Average Annual GWH/yr	Revenue Sharing Potential in the Tributary for Assumption 2% of value of gross generation \$US Million
Nam Ou	13	5420	7.6
Nam Ngum	11	7318	10.2
Nam Thuen-kading	6	11375	15.9
Nam Sekong	18	12152	17
	48	36265	50.7

Value simply calculated on US census 7.0 per kwh.

²⁵ Adverse development or livelihood impact of the resource transformations of hydropower in the tributary as well as development opportunities unlocked for them.

²⁶See Section 2.3 of the National Paper under “Revenue sharing, revenue management and power export”.

were of interest to LNMC stakeholders, but need more study.²⁷

Given the various proposals to share hydropower revenue with other economic sectors, as in Lao PDR's provisional Annex for Concession Agreements, many LNMC stakeholders from the energy sector especially, felt it was important to coordinate and optimize the contribution the hydropower sector is expected to make to other sector Funds from hydropower revenue.

Many felt this was of immediately importance, and to ensure there is clarity, efficiency and synergy with benefit sharing aims (e.g., with various environment protection Funds, water resource protection Funds, PES Funds, community development Funds, catchment management Funds, etc.) hydropower is expected to contribute to. Some felt it appropriate to consider some rationalization, or integration of Funds at the Provincial or tributary basin level, over the longer term. Many felt there are immediate opportunities to consider now and that pilot project trials would help to gain confidence and evaluate suitable mechanisms.²⁸

LNMC stakeholders agreed that MOF plays a key role in revenue management, where money from the hydropower sector helps to finance the State Budget (e.g., income taxes and duties, dividends from government equity share, and other fees, etc.). In further study, it was important to resolve misconceptions and differences between understanding about (i) government budget exercises, i.e., the State

Budget Allocations, (ii) hydropower revenue management, and (iii) hydropower revenue sharing arrangements and how these factor into equitably sharing monetary benefits.²⁹

Non-monetary benefits (NTL Type 2): Given that livelihoods of many, if not most, rural families living in Lao PDR tributaries depend on access to natural resources, non-monetary benefits showed uniformly high Value and Preference, as a package of measures. These measures and mechanisms associated with them enhance local and riverine community access (alternate access) to natural resources (e.g., to enable people to place more emphasis on forest-based livelihood strategies and community forest management, or reservoir and reservoir perimeter access for fishing, and land for aquaculture, etc).

The mechanisms are generally straightforward in concept. In practice they involve granting permissions or permits. Many approval authorities already exist at the provincial, district or local government levels. The main challenge is to identify procedures so the opportunities are systematically evaluated in a timely way, and communities may influence when and how it is done (a general preference is for a "menu of options" that people may choose). Regulation and guidelines may be helpful in this regard.

Many LNMC stakeholders noted there is scope also to link resource access and management measures to revenue sharing in ways that boost training and local development in the tributary area and multiply hydropower

²⁷ During the National Workshop, the MOF representative noted that each sector needs to have a proper plan to request additional budget from hydropower revenue. Presently there is no legal mechanisms to spend money locally, thus if local revenue sharing is considered there must be a transparent legal instrument.

²⁸ In some counties a single fund with several funding windows is considered. E.g., a basin or provincial fund with different "windows" to finance for example revenue sharing programmes, environment, water use, PES, etc.

²⁹ In particular to guarantee that either the residents of the Provinces, river basins or project localities that host hydro-power (and thus absorb all the risk) more directly and visibly share the monetary benefit (as noted in Section 2 of the Pa-per). It was also discussed there is no agreement on revenue management (such as Nam Theun 2) are thus no guarantees that the provinces, river basins and locality who actually host hydropower projects would be explicitly recognized in revenue management via State budget allocations.

benefits. The philosophy is once a new local resource access opportunity is unlocked then the local community or river community need support to realize that opportunity (e.g., where for example, a local grant system funded by revenue sharing money run by an RBO, Fund or local authority can provide targeted support).

Some suggested that funding local training via revenue sharing money to diversifying resource use skills was helpful as a priority mechanism or approach. Capacity building and training can be emphasized to ensure the communities can develop the skills to shift more easily to other natural resources based livelihoods. And to ensure follow-up mechanisms, using participatory approaches to monitor implementation of non-monetary measures and taking corrective action as needed.

Most LNMC Stakeholders agreed a mechanism that enabled the tributary river basin community and project area residents to participate more proactively in resource management activities and programmes established by government – or connected to the project was as practical way to ensure opportunities to enhance non-monetary benefits.

Equitable access to electricity (NTL Type 3): For measures concerning equitable access to electricity there was general consensus among LNMC stakeholders that Lao PDR’s Rural Electrification Programme Fund (GEF) Programme is perhaps the most appropriate mechanism to improve access and reliability of supply in areas around tributary hydropower projects, and to go beyond only considering

electrification in the resettlement areas.³⁰

The ISH13 evaluation suggests considering a “package of measures”, and systematic way to ensure that all options are explored to enhance electricity access and reliability of supply for communities in the vicinity of projects and reservoirs and imbed that in the rural electrification programme of the country. The Rural Electrification Programme (REP) Lao PDR has evolved contains many NTL Type-3 measures identified in the ISH13 Guidance and reflects international good practice.

Many LNMC stakeholders agreed the main question was how to finance RE Fund implementation around existing and new tributary hydropower beyond donor, government and EdL contributions to the existing REP that are under pressure (i.e., oversubscribed). The use of revenue sharing money is a consideration. For this a survey of the current situation would be helpful.

Enhancing additional and indirect benefits (NTL Type 4): Many LNMC Stakeholders felt there was scope to systematically enhance additional and indirect benefits of hydropower (e.g., related to improved road access, local jobs and stimulus to the local and provincial economies). This is an area where Lao PDR feels progress has been made in recent years, such as with progressive improvements in project Concession Agreements on IPP hydropower schemes and with more recent Concession Agreement model (environment and social annex).

Approaches to enhance training prior to construction and for operations were considered to be important to optimize local

³⁰ Electrifying only resettled areas is now common practice. The World Bank approved a \$1.8 million grant and \$36.6 million in co-financing to fund the second phase of the Rural Electrification Program in Lao PDR.

employment benefits. Initial training was seen as helpful to gain local knowledge for skilled and semi-skilled jobs in construction, carpentry, welding, and light and heavy equipment operation. Currently training was seen as often focused on low-grade certificates.

Many participants felt training can be better reflected in Concession Agreements and skills assessment done as part of the hydropower Project EIA, or a supplement to the EMMP. Most agreed, the earlier that relevant training takes place, the better.

Many LNMC stakeholders cited the need to bring consideration of multi-purpose hydropower projects into planning and project preparation stages to better spread of water use benefits in the tributary basin (e.g. not always pursuing single purpose hydropower projects, but also projects with an irrigation, navigation or fisheries component where site conditions permitted).

Some suggested that a survey could help identify opportunities for multi-purpose sites, and also that public-private participation (PPP) models could be explored further where opportunities exist in a particular basin and site.

Cross-Cutting Considerations

There was a high degree of consensus among LNMC stakeholders that a legal instrument and explicit regulation on BSM is helpful, even essential. Legal instruments are especially required for measures that involve money, to enable local entities to receive and spend money, and most important, they help to ensure clarity and consistent approaches.³¹

In terms of Cross-Cutting Considerations, many, if not most LNMC stakeholders felt there was preference, or value in:

- Joint sponsorship of BSM legal instruments and regulations due to the number of Ministries concerned and the overlapping policy. A policy review was recommended for immediate additional study to facilitate thinking and consensus on what to recommend to government.
- Consideration of "... Incorporating official poverty reduction targets in BSM planning and implementation arrangements..." as many areas where tributary hydropower operate now or planned in future, fall well below national and provincial income averages.
- Having a different percent for revenue sharing for different sizes of hydropower projects (e.g., energy production GWh/yr or installed capacity MW). Further study was recommended on this consideration because of the different viewpoints, and thus to assess the merits of having different size categories and thresholds versus a simple uniform calculation for energy production common elsewhere.
- Systematically factoring benefit sharing thinking into all stages of the project cycle from planning and project preparation studies, through design, construction and operation, and
- Enhancing transparency and accountability in the implementation of BSM measures, especially any Fund Mechanisms (or Community Projects) used to collect or distribute money for revenue sharing on tributary hydropower.

Nam Theun 2 Site Visit

The site visit to Nam Theun 2 was an opportunity for Workshop participants to see practice at work on what is arguably the "best" project Lao PDR has developed, regarding BSM (including revenue management). At the

³¹ Clear rules also helps maintain a level playing field for investors and communities alike, accepting that all stakeholders would like to know what to expect, what is expected of them, and the rules that apply.

same time, it highlighted some challenges.

- Participants saw how some revenue measures on NT2 extend for the life of the Concession Agreement, which contributes to long-term benefit sharing. Examples include the requirement to fund catchment management and environmental offsets.
- These arrangements bring direct and indirect “benefits” to local communities, ranging from employment opportunities to improved environmental quality in the area they live. The measures also help maintain natural resource-based livelihood opportunities, and provide enabling conditions for a range of new employment/income diversification opportunities, such as to evolve ecotourism.³²
- Arrangements for local communities (although only the resettlement communities) to derive a permanent income from reservoir fishers and sustainable timber cutting are also in place.
- One challenge to address concerns budget responsibility for long-term management of resettlement area community facilities and roads, which in the case of NT2, are now being handed over to local government to fund and maintain in the long term.³³

A number of LNMC stakeholders felt NT2 lessons, combined with lessons gleaned from other projects in Lao PDR (possibly other Mekong counties) could be systematically gathered and recommendations to government prepared. That would help to inform thinking on benefit sharing policy

overall, and possibly, on ways to enhance long-term benefit sharing considerations in the Loa PDR Model Concession Agreement, as it relates to hydropower projects.

Other Important Things to Note

Lao PDR already has elements of all four forms of benefit sharing in its national policy and practice, but to varying degrees. This is on top of the benefit that Lao society more generally derives from exploiting its indigenous, renewable energy sources like hydropower for domestic needs and revenue earning sales to regional power markets.

What is important is a systematic, comprehensive approach to BSM to take advantage of all the opportunities available to achieve sustainable forms of hydropower development and management, and in the current Lao PDR development context, to help maximize the spread of the resource utilization benefits across the economy and within the tributary basins. This is while catalysing broad-based growth and supporting social equity policies, such as closing the growing urban-rural income gap, and concretely advancing the Government’s decentralization policy.

National Workshop participants from national, provincial and sub-provincial levels essentially endorsed the evaluation undertaken by the National WG. They made suggestions for further improvements to realize the full potential of benefit sharing, and take on board Mekong, wider Asia and international experience that fits the current situation and Lao PDR policy.

³² During the workshop, it was noted that the NT2 arrangements compared favourably with the new Concession Agreement Model Annex, where measures are only proposed to last for 10 years starting from the start of construction.

³³ The question this raises was in open discussion among Workshop participants was whether local government budgets are adequate to maintain these facilities at the same standard as they are now, over the longer term; or, whether other use of other more guaranteed mechanisms like revenue sharing/revenue management are appropriate to ensure these facilities last, and are replaced when eventually needed.

Next Steps

The following were discussed as priorities for next steps in respect to (a) completing the ISH13 work, and (b) continuing on-going support (2013-2015) by the MRC's ISH in support of Lao PDR efforts to advance benefit sharing considerations in national policy.

Part 1: On completing the 12-Steps for ISH13 assigned by the MRC Council, namely: "Benefit Sharing Mechanisms for Mekong tributary hydropower evaluated and reported" by 2013.

These steps included:

1. Updating the ISH13 National Paper to reflect the National Workshop outcomes.
2. Present the National Discussion Paper at the Regional BSM Workshop, provisionally by the end of 2013. And at the workshop:
 - Exchange views, experience and lessons with Mekong counties and other international BSM practitioners from developed and developing countries, and
 - Explore arrangements for a Mekong Region and International study tour to see policy and practices in other countries.

An underlying consideration is to take advantage of information sharing initiated by the ISH13 process (i) among LNMC stakeholders in the government, private and civil society sectors, and (ii) between LNMC stakeholders and other Member Countries and international practitioners.

Part 2: On the on-going support (2013-2015) through the MRC's ISH under Output 4.1c.

The general point MRCS made was this support will be demand-responsive, or in other words it depends on needs and interests of each MRC Member Country. Next steps for Lao PDR that many, if not most LNMC Stakeholders supported included:

1. Preparing a Scoping Paper to do further study of the mechanisms recommended in the ISH13 Paper for further study. And implement a Study Programme taking account of work Lao PDR may be doing already, such as under TAs with Development Partners;
2. Holding in-depth workshops for key LNMC and Government stakeholders to go into de-tails on each of the four main types of National-To-Local BSM, as set out in the Annex Volume of the Lao PDR National Discussion Paper and documents contained in the BSM Knowledge Base the ISH assembled in 2011;
3. In parallel, preparing a concise policy review of the existing laws, policy and experience related to hydropower BSM in Lao PDR – and also looking at specific projects to identify measures (mechanisms) that may serve as models and to inform thinking;
4. As part of the BSM topic in the Rapid Sustainability Assessment Tool (RSAT) work in Lao PDR, prepare a Scoping Note for a full BSM field Pilot on a hydropower scheme in Lao, of interest also to developers/operators and MRC Development Partners;
5. Implement any agreed BSM Pilot using a partnership approach and hold a multi-stakeholder Workshop to digest the BSM Pilot results;
6. Prepare recommendations on the legal instruments for BSM based on the Pilot and Workshop outcomes noted above, as may be invited by Government.

The complete set of next steps in on-going ISH support to NMCS on the benefit sharing theme would be the subject of discussion by the ISH Advisory Group and NMCS collectively, when the annual ISH Work Plans for 2014-2015 are formulated. These types of activities

are nonetheless suggested in the ISH 5-year Framework document (2011-2015).

As a final Note it is emphasized the ISH13 process focused on the evaluation of BSM suited to hydropower projects operating or planned on Mekong tributaries. During the preparation of this ISH13 Discussion Paper, separately, the MRC Basin Development Programme (BDP) circulated a TOR on the approach that is proposed to address multi-sector benefit sharing opportunities in the entire basin, as identified in the MRC Basin Development Strategy.

Thailand National Discussion Paper Summary

The task of evaluating benefit sharing options for hydropower on tributaries of the Mekong River is identified in MRC Basin Development Strategy endorsed at the MRC Council in January 2011.

ISH13 is being undertaken in a step-wise, collaborative manner by the four NMCS. It is supported by the MRC Initiative on Sustainable Hydropower (ISH) under its outcome structure.

ISH13 is part of a group of activities that all MRC Programmes and initiatives were assigned to support as input to on-going discussions under the MRC Framework to implement the Basin Development Strategy (BDS) and to implement the 1995 Mekong Agreement, more generally.

The Background

Benefit sharing has been a recurrent theme in international and national debates about hydropower and sustainable management of water resources for decades. Today benefit sharing is increasingly seen to be a powerful, practical way to spread resource utilization benefits across the economy, catalyse broader-based growth and support social equity policies.

The potential for benefit sharing to foster sustainable forms of hydropower development and management and to help implement the 1995 Mekong Agreement is explicitly recognized in MRC Programme work and the MRC Basin Development Strategy.

National-to-local forms of benefit sharing mechanisms (BSM) consist of a group of measures applied in a systematic, consistent, and transparent manner to existing and proposed hydropower aiming:

- (i) To equitably and reasonably share a portion of the monetary benefits of hydropower from national, to provincial, to local levels and riverine communities.
- (ii) To optimize non-monetary benefits, especially natural resource access for people living in the project area and river communities in the tributary basin, in part to offset the resource transformations of hydropower.
- (iii) To provide equitable access to electricity services in the project area and tributary basin where hydropower projects are located.
- (iv) To enhance and optimize various additional benefits that may be derived from hydropower investment and the related public infrastructure investment in the basin.

The three tributary systems of Thailand that flow into the Mekong mainstream (Nam Nham, Kam and Mun) have seven existing hydropower projects. Together they account for 700 MW installed capacity ranging from the 500 MW Lam Ta Khong pumped storage project in the tributary headwaters of the Mun River to the 1.2 MW Huai Kum project on a tributary of the Nam Phrom River.

The ISH13 Tasks

ISH13, “Benefit-sharing options for hydropower on tributaries evaluated and reported” by 2013 responds to MRC Member Country requests for MRC support:

- To improve awareness and understanding of National-To-Local BSM options and strategies and draw lessons from international experience; and
- To enable Member Countries to prepare for the type of discussions on benefit sharing envisaged under the MRC framework as set out in the Basin Development Strategy.

The three main activities/outputs under ISH13 are: (1) preparation of national papers on BSM options for Mekong tributary systems in NMCS-led processes; (2) holding two-day national BSM options workshops in each country to provide multi-stakeholder comment on draft versions of the National Discussion Papers; and (3) preparation of a Regional Synthesis Paper by MRCS on BSM Options for Mekong Tributaries that brings together the work in the four Member Country National Discussion Papers.

This National Working Paper (draft) is circulated to TNMC stakeholders participating in a national-level workshop, after which, the Paper will be finalized by incorporating the workshop discussion and outcomes. This Working Paper provides a preliminary multi-criterion evaluation of policy options using the existing hydropower on Thai Mekong tributaries to illustrate the situation. It does not discuss mechanisms on specific hydropower projects.

The Approach to the Options Evaluation

The preliminary evaluation shows there is scope to consider various BSM options for Thailand’s Mekong tributary hydropower, namely:

National-To-Local Types (NTL):

- **NTL Type- 1:** Sharing of monetary benefits - 7 options evaluated
- **NTL Type- 2:** Facilitating non-monetary benefits - 8 options evaluated
- **NTL Type- 3:** Equitable access to electricity services – 7 options evaluated
- **NTL Type- 4:** Optimizing indirect and additional benefits – 7 options evaluated

The TNMC Working Group decided not to evaluate the transboundary dimension (TB) types in the ISH13 Guidelines or the cross-cutting considerations.

In total 29 BSM options were qualitatively scored and ranked by the Working Group for two main dimensions **value** and **preference**, using the sub-criteria explained in the National Paper and in this Regional Synthesis Paper’s Annex Volume (Annex 1).

The **value** dimension has five sub-criteria centred on sustainability (environmental, eco-nomic, social, flexibility to adapt over time and practicality).

The **preference** dimension measures the preference according to different stakeholder in-terests (including environmental sector organizations, power sector organizations, river ba-sin entities, civil society representatives, private sector representatives and others).

After completing the multi-criteria scoring and ranking of each option, all the options that showed moderate to high scores were placed in one of two categories, namely: (i) options recommended for consideration in a comprehensive BSM approach, and (ii) options to consider in future policy up-dates.

General Results of the ISH13 Options Evaluation

Section 4 offers comment on the main results of this preliminary BSM options evaluation. The Annex Volume of the Thailand National Discussion Paper shows the detailed multi-criteria scores for each option (Annex 3), as well as other information. Annex 2 of this Regional Synthesis Paper Annex Vol-ume provides for a bullet-point summary description of each option type.

Results suggest that benefit sharing is not a single option, but rather a group, or family of measures that complement and reinforce each other – or a “package” of measures to systematically apply in relation to sustainable management in the project locality and tributary basin.

Thailand already has a legal mechanism to share monetary benefits of power generation projects locally in the form of the Power Development Fund (PDF) that was introduced in the Energy Industry Act (2007). The subsequent PDF Regulation (issued in 2010) requires that all existing and proposed electricity generation projects set up a permanent Community Project, “to develop or rehabilitate the localities affected by the operation of power plants”. The PDF is financed by revenue from pro-jects. This requirement applies to all forms of power generation in Thailand, including conventional thermal power projects (e.g. natural gas, coal and

oil-fired) and generation projects based on renewable energy sources like hydropower, as well as intermittent wind and solar sources.

The PDF or the PDF Community Project (often called a local area development fund in other countries) is to be managed by a Community Development Committee. The committee is to seek authorisation from regional Offices of the Electricity Regulatory Commission (OERC) for annual expenditures, but is otherwise free to decide on PDF spending within the parameters of regulations.

The 2010 PDF regulations stipulate the types of local development spending that is eligible for PDF financing in what are called the "notified area", which is a circular area either 5 km, 3 km or 1 km distance from the power project, depending on the project's size (annual GWh).

- The current rate for funding the PDF (Community Projects in "notified areas") is 0.02 Baht/kWh for conventional thermal and hydropower projects, regardless of project size.
- This is roughly equivalent to 1.0 percent of Thailand's bulk generation tariff, or about 0.7% of the average consumer tariff, which recently rose to 3.02 baht/kWh (or \$US 9.7 cents /kWh).
- At this rate, the PDF will raise about Baht 18 million (\$US 600,000) annually for Community Projects around the 7 existing hydropower projects in Thailand's Mekong tributaries.
- As noted in Section 5, the amount of money for the PDF on each project varies from 8.01 million Baht/yr (\$US 258,400 / yr) for the 500 MW Lam Ta Khong pumped storage project to 0.04 million Baht/yr (\$US 1,300 /yr) for the 1.2 MW Huai Kum hydropower project.

As yet no PDF has been set up on a hydropower project in Thailand, partly because the PDF procedure is new. However, PDFs and the forerunner of the PDF called Community Development Funds (CDFs) have been in operation on the large thermal power stations since 2008.

Thailand's PDF is a Type- 1 national-to-local BSM. In addition, the ISH13 evaluation shows that there is scope to enhance the other three generic forms of national-to-local BSM in implementing the PDF on Mekong tributary hydropower in Thailand (see Section 4).

This includes, for example:

- Enhancing electricity access and electricity service (reliability) levels in notified areas, in particular by targeting low income households with various support measures regarding safe, efficient and productive electricity use.
- Enhancing natural resources access in the project areas and affected riverine area, when there is an opportunity and local preference to do so.
- Ensuring that local economic benefits arising from the project are equitably distributed to residents in the notified area, according to agreed criteria.

The Community Development Committee for the PDF can decide the criteria and prioritize all such measures, subject to approval of the regional office of the ERC.

Some of the following BSM options evaluated in ISH13 that show high value/preference scores are recommended for further study when Thailand considers a future policy update of the PDF.

- If the PDF rate is increased in future (Satang/kWh rate), consideration may be given to extend revenue sharing funding to RBCs or RBOs in the tributary basin where hydropower projects operate. This is possibly for projects over a certain MW size, or some criteria for the degree of influence of the project on the tributary water resource status.
- Municipalities may consider taxing land used by hydropower facilities and reservoirs as a mechanism to share monetary benefits locally, beyond the defined “notification area”. This recognizes that the local municipality forgoes tax revenue it would otherwise have received if the area had remained under agricultural, industrial or other uses, instead of generating electricity to supply consumers on Thailand’s national power grid.
- Similarly, consideration may be given to some amount of revenue sharing with the provinces that have tributaries where larger hydropower projects are located.

Other Important Things to Note

Because Thailand is not planning any new hydropower projects on Mekong tributaries, the ISH13 options evaluation for Thailand refers mainly to the seven existing projects that were commissioned between 12 and 50 years ago. The one exception may be the 500 MW Lam Ta Khong expansion project (a pumped storage project not involving a new dam). EGAT representatives said that is under consideration (as reported in the workshop on the Rapid Sustainability Assessment Tool (RSAT) hosted by the TNMC Secretariat in Sakon Nakhon October 11-12, 2012).³⁴

An overall conclusion based on this evaluation, which also reflects discussion

in the RSAT exercise in October 2012, is the possibility for MRC to support Thailand with a pilot trial of the PDF’s first implementation on a hydropower project in a Mekong tributary.

The aims may be to (i) develop a case study to share information with other MRC Member Countries on the implementation of a local revenue sharing mechanism, and (ii) potentially, assist in preparing draft guidelines to effectively implement the PDF on hydropower projects, such as to adjust the “notified area” based on hydropower criteria. This recognizes that the PDF was largely designed for thermal power projects, and has a 1-3 km area in which to apply the PDF. It would seek for example, to apply the provision in the existing PDF regulation that states, “the area under the notice may include sub-districts on the different criteria provided (i.e. a 3, 2 or 1 km circle area) if there is academic research on the impact of the power plant which has had a hearing from the people”.

Finally, while the TNMC Working Group decided to evaluate only national-to-local BSM options for its tributary hydropower, the Annex Volume of the Thailand National Discussion Paper presents the generic BSM options for transboundary dimensions of tributary hydropower and cross-cutting considerations from the ISH13 Guidance Package. That enables readers to see the guidance MRC offered to all Member Countries.

In addition, the two-day ISH13 National BSM Workshop on Thailand’s tributary hydropower was conducted by TNMC at Centara Grand Hotel in Udon Thani province. It was attended by 54 participants to comment on the preliminary evaluation of BSM options for

³⁴ Thai members of the MRC ISH Technical Review Group in December 2011 recommended Lam Ta Khong in the Pak Mun sub basin and Keiwkoma in the Wang sub-basin as the two priority basins for application of the RSAT.

Thailand's Mekong tributary hydropower. The results show that the participants basically agreed with the results of BSM options assessment. There is concern about the benefit sharing in particular areas since the affected stakeholders from hydropower projects can be people located upstream and downstream.

The Next Steps

An underlying consideration in the next steps is support for on-going information sharing among TNMC stakeholders in the government, private and civil sectors on the BSM theme.

This includes information sharing with other Member Countries who present their National Discussion Papers at the Regional Workshop, as well as MRC Stakeholders and Development Partners, and in particular international practitioners of BSM who will share comments based on their lessons and experience.

For regular ISH support (2013-2015) under Output 4.1c:

- Develop a BSM pilot project working along with the RSAT process and include BSM topics in the MRC RSAT assessment (RSAT work in mid 2012).
- Examine the possibility of having financial support for the pilot project from the PDF fund.

- Formulate a development plan for information workshop/studies e.g., a policy review to offer support for key agencies on NTL BSM awareness raising.
- Other ISH support in the ISH 5-year work plan (e.g. Mekong and International BSM study and site visits and an update of the Knowledge Base amongst others).

For MRC support (2013-2015) under the BDP-led Basin Development Strategy (BDS) process:

- There is need to evaluate benefit sharing under the BDS on Mekong mainstream dams as well as those dams on significant tributaries of the Mekong. This should cover benefit sharing in multiple sectors and not only hydropower (such as, navigation, fisheries and irrigation as outlined in the full BDP).
- The TOR has been circulated to NMCS by the BDP to scope out MRC support for multi-sector regional benefit sharing as a strategic priority under the BDS.
- MRC support for the following guidelines:
 - iii. Guidelines for the sustainable development and management of hydropower on the Mekong mainstream and tributaries.
 - iv. Guidelines to establish a MRC mechanism for the monitoring and evaluation of operations on the Mekong mainstream and tributaries in upstream areas.

Viet Nam National Discussion Paper Summary

The task of preparing an evaluation of benefit sharing options for hydropower on national tributaries of the Mekong River is identified in MRC Basin Development Strategy endorsed at the MRC Council level in January 2011.

This activity, called ISH13, is part of a group of activities all MRC Programmes and MRC Initiatives were assigned to undertake as input to ongoing discussions under the MRC framework to implement the Basin Development Strategy (BDS) and 1995 Mekong Agreement more broadly.

The Background

Benefit sharing has been a recurrent theme in international and national debates about hydropower and sustainable management of water resources for decades. Today benefit sharing is increasingly acknowledged to be a powerful, practical way to spread resource utilization benefits across the economy, catalyse broader-based growth and support social equity policies.

National-to-local forms of BSM consist of a group of measures applied in a systematic, consistent, and transparent manner to existing and proposed hydropower (i) to share monetary benefits of hydropower, (ii) to optimize local resource access in river systems with hydropower, (iii) to ensure equitable access to electricity service, and (iv) to optimize additional benefits that derive from hydropower and related infrastructure investment.

The potential for benefit sharing to foster sustainable forms of hydropower and to help implement the 1995 Mekong Agreement is recognized in MRC Programme work and the MRC Basin Development Strategy.

Among the Mekong tributaries that flow through Vietnam territory, Sesan and Srepok (also known as 2 of the 3 rivers of the 3S system) are the most important tributaries in every aspects, e.g. hydrological, socio-economic and hydropower potential. The 3-S system, of which Sesan and Srepok are major parts, contributes significantly to the Mekong flow (25% at Stung Treng and 17% of total Mekong flow). Hydropower potential on the portion of these river basins in Viet Nam is almost fully developed, with 14 large scale HPPs already constructed and operational and one in the planning (total 2,649 MW).

The ISH13 Tasks

The MRC assigned ISH the responsibility to lead Activity ISH13, “Benefit-sharing options for hydropower on tributaries evaluated and reported” by 2013, as input to the BDS process.

In undertaking ISH13, MRC is responding to Member Country requests for MRC support:

- To improve awareness and understanding of national-to-local BSM options and strategies and lessons from international experience; and
- To enable Member Countries to prepare for the sort of negotiations envisaged under the MRC framework, as set out in the Basin Development Strategy.

The need ISH13 responds to is described in the MRC Basin Development Strategy (endorsed in January 2011), and further confirmed in NMCS-led discussions at the multi-stakeholder national BSM workshops held in Sep-Oct 2011 timeframe (“Viet Nam National Multi-Stakeholder Workshop” was

held in Do Son on 8-9 September 2011).

The three main activities/outputs under ISH13 in 2012-2013 are: (1) Preparation of the National papers on BSM Options for Mekong Tributary systems in NMCS-led processes in each Member Country; (2) Holding 2-day national BSM Options workshops in each Member Country to provide multi-stakeholder input on the draft versions of the National Papers (Working Papers); and (3) Preparation of a Regional Synthesis paper by MRCS on BSM options for Mekong Tributaries that brings together the work in the four Country Papers.

The Viet Nam National Discussion Paper presents results of activities (1) and (2) including selection and evaluation of BSM options. A draft of ISH13 Working Paper was circulated to VNMC stakeholder participating in the national-level BSM workshop (organized in Hai Phong, 24-25 Jan. 2013), after which, the Working Paper was updated incorporating the national-level workshop discussions and outcomes. It aims to provide a preliminary multi-criterion evaluation of options for existing and pro-posed hydropower on the upper portions of Sesan and Srepok tributaries of the Mekong, focusing on policy options. It does not discuss BSM on specific projects. Discussions during the national workshop showed that many stakeholders at local level took interest in assessment of the present Vietnamese laws, regulations and their application at local level relevant to benefit sharing in hydropower.

General Results on BSM Options

The evaluation shows there is scope for the two main BSM types:

National-To-Local Types (NTL):

- **NTL Type- 1:** Sharing of monetary benefits
- **NTL Type- 2:** Facilitating non-monetary benefits
- **NTL Type- 3:** Equitable access to project services
- **NTL Type- 4:** Optimizing indirect and additional benefits

Transboundary dimension (TB):

- **TB Type- 1:** Increasing benefits "to the river"
- **TB Type- 2:** Increasing benefits "from the river"
- **TB Type- 3:** Reducing costs "because of the river"
- **TB Type- 4:** Increasing benefits "beyond the river"

In addition, ISH13 included a number of Cross-Cutting Considerations under five questions:

- **CC Type- 1:** What legal instruments may be considered to introduce BSM?
- **CC Type- 2:** What measures may be considered relating to the size and scale of hydropower projects in tributaries?
- **CC Type- 3:** What measures may be considered to imbed benefit sharing considerations in hydropower planning and at each stage of the Project Cycle?
- **CC Type- 4:** What measures may be considered for hydropower projects for power export or national supply?
- **CC Type- 5:** What measures may be considered for transparency, dispute avoidance and settlement?

In total 81 BSM options were qualitatively scored and ranked by the Working Group and the National Workshop participants for two main dimensions Value and Preference, using the sub-criteria explained in the National Discussion Paper and in this Regional Synthesis Paper's Annex Volume (Annex 1).

The Value dimension has five sustainability sub-criteria (environment, economic, social, flexibility to adapt and practicality). The Preference dimension is preference according to different interests (e.g., environment sector organizations, power sector organizations, river basin entities, civil society, the private sector and others).

After completing the multi-criteria scoring and ranking, all options were grouped in two categories, namely: (i) options recommended for a comprehensive BSM approach on basis of relative Value and Preference, and (ii) options on which to do further study in order to decide whether to keep or drop options from further consideration.

This was important because benefit sharing is not a single option, but rather a group or family of measures that complement and reinforce each other – or a “package” of measures that come in to play at different stages of planning and hydropower development and management.

Section 4 of the Viet Nam National Paper presents the main results of the options evaluation. The Annex Volume of the same shows the detailed multi-criteria scoring and has other information including a summary description of each option type.

Conclusion on BSM options

It is recognized that government may consider the options evaluated in ISH13 together with other options when it decides about a policy on benefit sharing for Mekong tributary hydropower, or nationally. Viet Nam, like other Mekong Countries already practices all the forms of benefit sharing discussed in this Paper to varying degrees, especially the additional and indirect forms of benefit sharing. This is apart from the many benefits that Vietnamese society obtains from

electricity use and exploiting indigenous renewable energy sources like hydropower.

What is important is that a systematic and comprehensive approach is considered to take advantage of all opportunities present to achieve sustainable forms of hydropower development and management, and in the present development context, to maximize the spread of resource utilization benefits across the economy, catalyse broader-based growth and support the government’s social equity policies.

An important overall conclusion is the ISH13 evaluation reported in the Viet Nam National Paper supports the approach to BSM on hydropower that was developed previously in Viet Nam by an Inter-Ministry Committee including EVN, which the Electricity Regulatory Authority (ERAV) coordinated in 2007-2010. That work was under an Asian Development Bank TA to develop a draft Decree Law on hydropower benefit sharing. The draft provisions for that Decree Law which were pilot tested by ERAV in cooperation with Quang Nam Provincial authorities in 2009-2010, are provided in the Annex Volume of the Viet Nam National Discussion Paper for the convenience of the reader.

Other Conclusions and Immediate Next Steps

Beside selection and evaluation of BSM options for the Vietnamese parts of the Sesan and Srepok river basins, there are other important conclusions.

Activities for completion of the ISH 13 Work Plan:

According to ISH13 work-plan, the National Discussion Papers will be presented at a Regional BSM Workshop, organized by MRCS, provisionally mid-2013. This workshop is an excellent opportunity to:

- Exchange views, experience and lessons with Mekong countries and other international BSM practitioners from developed and developing countries, and
- Explore arrangements for a Mekong Region and International study tour.

On the ongoing support (2013-2015) extended by the MRC's ISH under Output 4.1c:

This is to be driven by Member Country demand for support on the BSM theme. The proposed next steps as agreed by VNMC BSM Working Group members and VNMC National Workshop participants, are as follows:

1. Review results of the initial BSM pilot Phase 1 Report (ADB TA RETA 6498) in 2011.³⁵
2. Update the 2007 BSM Policy Review done under RETA 6489 in a Task Group (under the ISH13 Working Group) – it may need a BSM national consultant hired by MRCS.
3. A Workshop to be organized with Provinces to systematically assess the status and effectiveness of measures identified in the policy review noted above in 2, and more broadly to consider exist-ing practice and opportunities, namely:
 - The existing VN Laws and regulations relevant directly or indirectly to BSM on

hydropower identified in the 2007 BSM Policy review, and in any subsequent laws or regulations up to 2013;

- The proposed draft BSM Decree Law/ guidelines developed by ERAV under RETA 6489 and updated in 2011 under RETA 6498;
- The evaluation – of options for BSM mechanisms proposed in the ISH13 work for hydro-power BSM in Mekong tributaries by the Viet Nam BSM Working Group; and
- The evaluation Report on the Phase 1 Pilot BSM trials in 2009-2011 at EVN's 210 MW A'Vuong implemented by ERAV with Quang Nam Province.

4. Monitor & evaluate BSM progress in other Mekong Countries (especially any Thailand PDF imple-mentation).
5. Update the measures/mechanisms for a provisional draft decree law (based on all the above steps).
6. Design a pilot project to test the new proposed measures/BSM using the existing Phase 2 pilot design developed for RETA 6489 as a starting point.
7. Seek Development Partner financing for the pilot and implement it over (1-2 years).
8. Organize a national Workshop of the Pilot outcomes
9. Recommend to Government on BSM regulation and content in normal government processes, based on the above noted Workshop outcomes.

The above steps for ongoing ISH support were very important because:

- They will be discussed by the ISH Advisory Group and NMCS, when the

³⁵ Technical Assistance (TA) Projects supported by the ADB (2007-2010): Viet Nam has been developing and trialling BSM for local com-munities adversely affected by hydropower projects since 2006, mainly through Technical Assistance (TA) Projects supported by the ADB. A draft Decree Law on benefit sharing was prepared in 2008, though recent information indicates the draft is no longer actively advancing and is linked to the progress with overall Power Market reform in Viet Nam.

annual ISH work plans 2014-2015 are formulated.

- They will be discussed by the ISH Advisory Group and NMCS, when the annual ISH work plans 2014-2015 are formulated. It was important also to clarify the support VNMC required from the National Consultant to implement ISH13 in 2012.

**Annex 7: Please note,
this Annex will be prepared
after the Regional Workshop
in early 2014.**



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