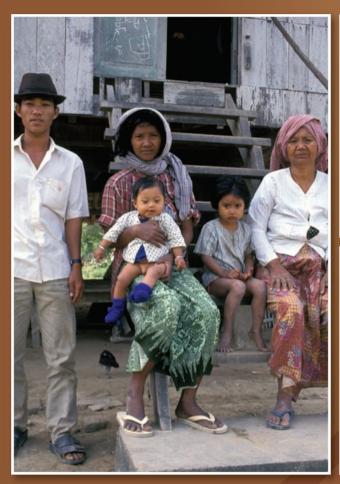


### **Mekong River Commission**







Stakeholder Consultation on MRC's Basin Development Plan Phase 2 (BDP2) and its Incaption Report

12-13 March 2003, Vientiane, Leo PDR

Working with the MRC for Sustainable Development of the Mekong River Basin



The Stakeholder Consultation on the MRC's Basin Development Plan Phase 2 (BDP2) and its Inception Report

### Consultation Proceedings

12-13 March 2008, Vientiane, Lao PDR

### **Acknowledgments**

The Mekong River Commission and the Basin Development Plan Programme Phase 2 would like to thank participants from the National Mekong Committees and the national line agencies of the four member countries; partner organisations; research institutes and civil society organisations for their active participation in the BDP Stakeholder Consultation and for their valuable input into the Basin Development Programme Phase 2 and to the MRC. The MRC would also like to thank all those who made presentations at the Consultation and to the MRC partner organisations and to those who facilitated sessions and sat on panels. Finally, the MRC expresses its gratitude for the generous support of our Development Partners: the Danish International Development Agency (Danida), the Swedish International Development Cooperation Agency (Sida) and the Australian Agency for International Development (AusAID).

The opinions and interpretations expressed within are those of the authors and presenters and do not necessarily reflect the views of the Mekong River Commission.

### TABLE OF CONTENTS

Forew	ord			7	
Execu	tive Sun	nmary		8	
1. Ba	ckgroun	d		13	
1.1	The M	RC Bas	in Development Plan Programme	13	
1.2	Import	tance of	Stakeholder Consultations and Participation in the BDP Process	14	
1.3	The 1s	t Stakeh	nolder Consultation on BDP2 and Inception Report	15	
	1.3.1	Object	tives	16	
	1.3.2	Expec	ted Results	16	
	1.3.3	Theme	es and Structure	17	
2. Rol	e of the	MRC a	nd Partners in Sustainable Development	18	
2.1	Unders	standing	the MRC as an Inter-Governmental River Basin Organisation	18	
2.2	The Bl	DP Prog	gramme and the Joint Planning Function of the MRC	19	
2.3		Role of Civil Society Organisations: a Case Study from the Sala Phoum Research			
	tainable he Basin		pment Opportunities and Challenges: National Priorities Context	22	
3.1	Unders	standing	Water Resources Development: Drivers, Opportunities and Challenges	22	
	3.1.1		rs of Change in Water Resources Development in ekong River Basin	23	
	3.1.2	Oppor	tunities and Challenges	24	
3.2	National Priorities in the Basin Wide Context				
		3.2.1	Cambodia	27	
		3.2.2	Lao PDR	28	
		3.2.3	Thailand	28	
		3.2.4	Viet Nam	29	
			tive Tools and Assessment Criteria for Basin		
Dev	elopmei			30	
4.1	Scenarios in Basin Development Planning				
4.2	The Hydrology of the Lower Mekong Basin and the Decision Support Framework (DSF)				
	4.2.1	Hydro	logy of the Lower Mekong Basin	33	
	4.2.2	The Do	ecision Support Framework (DSF)	33	

4.3	Integra (E-Fl	35			
	4.3.1	IBFM	35		
	4.3.2	Environmental Flows (E-Flows)	36		
4.4		sking Scenarios and Progressive Tools	38		
4.5	BDP Project Assessment Criteria				
4.6	Consideration for Sustainable Hydropower Development in the Mekong				
4.7	Feedback from Stakeholders				
•• /	4.7.1	Scenarios	42 42		
	4.7.2	Projects: Long-list, short-list and criteria for assessment	43		
	4.7.3	IBFM	44		
5. IV	VRM – F	From Global Principles to Regional Strategies and Local Actions	45		
5.1	An IW	RM strategy for Basin Development and Management	45		
5.2	Feedback from Stakeholders				
6. Sta	keholde	r Participation in MRC Basin Development Planning	48		
6.1	Understanding stakeholders roles and expectations 48				
6.2	BDP2 Stakeholder Participation and Communications Plan 49				
6.3	Feedb	ck from Stakeholders			
	6.3.1	Institutional Structure	51		
	6.3.2	Significance of Stakeholder Participation	52		
	6.3.3	Engaging the Private Sector	53		
	6.3.4	Building on Local Knowledge and Experiences of other Organisations	53		
7. Lo	7. Looking forward				
Anne	xes				
I. Pr	I. Programme Agenda				
II. Li	II. List of Participants				
III. Participant Feedback					

### **Foreword**

This report aims to be a source of information about the BDP2 for those people who participated in the March 2008 Stakeholder Consultation and for a wider group of people who are interested in the work of the BDP and the critically important water management and development issues related to the Mekong River Basin.

One of the key functions of the MRC is to facilitate joint planning for water and related resources development that will contribute to poverty reduction and sustainable development in the Lower Mekong Basin. The MRC plays a central role in facilitating the basin planning along with its partners: the National Mekong Committees, national line agencies, research institutions in member countries, regional organisations, development partners, civil society organisations and, most importantly, the millions of people who live in communities dependent on the resources of Basin.

Building a shared vision is a challenging process. There are divergent stakeholder groups with different opinions on the direction of basin development and co-management of the Basins' resources and the distribution of benefits, lively debates on the technical aspects of the planning tools used, and active discussion about the final product – the Basin Development Plan.

Effective and meaningful stakeholder participation is essential to a shared vision. The BDP2 is determined that participation will be integral to the BDP process. This first Stakeholder Consultation on the BDP2 and its Inception Report represents an important first step. The March 2008 Consultation achieved its objectives: it has introduced the BDP2, engaged stakeholders and facilitated frank and open discussions on a range of important topics including in the scope and approach of basin development planning. But it is only a first step and we need to institutionalise such participation into the overall process.

On behalf of the MRC, I would like to thank all those who participated in this forum for their frank opinions, thoughtful views and recommendations shared at this two day event and look forward to the continued active engagement of basin stakeholders in the BDP process.

Jeremy Bird

Chief Executive Officer

Mekong River Commission Secretariat

### **Executive Summary**

The Mekong River Commission convened a Basin Development Plan (BDP) Stakeholder Consultation in Vientiane on 12-13 March 2008. Participants represented a wide range of stakeholder groups from state and non-state agencies in the four Lower Mekong Basin (LMB) countries, civil society organisations, academia, partner organisations, the private sector and concerned individuals. The consultation was intended to renew and further enhance partnerships between the MRC and the stakeholder groups involved in the BDP process.

The second phase of the MRC's Basin Development Plan Programme was presented and participants asked for their inputs. Issues on the agenda included the sharing of water resources for domestic use, hydropower, navigation and fisheries, plus preservation of the riverine ecosystem, and promotion of regional cooperation. The MRC sees the Plan as a step to alleviating poverty. The Basin Development Plan process is designed to include different views so that the MRC can assist Member States in developing a shared vision to move forward and take coherent actions for the development of the basin in a sustainable and transparent manner.

Economic growth will lead to significant changes in the annual flows of rivers in the Mekong Basin, and the use of water, complicating the task of development planning, and making it vital that decision-making processes become more inclusive to accommodate the interests of all relevant sector of interests.

The meeting did not seek to produce agreement on the issues discussed, but rather to provide a platform for decision-makers and researchers from governmental, international, non-governmental, and private organisations to share information and express their views on basin development. Some participants called on the MRC to use the second phase of the Basin Development Plan to bring more stakeholders into the planning process. Officials from the Member States of the MRC - Cambodia, the Lao PDR, Thailand and Viet Nam – stressed the need for cooperation in planning for the use of the rich resources of the Mekong and to improve living conditions across the basin.

Participants expressed their appreciation for the MRC's new spirit of willingness to allow more involvement in the planning process, and emphasised that now is the time to accelerate this involvement, when decisions are taken that will affect water and water use in the Lower Mekong Basin.

The MRC acknowledged the contributions of participating partner organisations including but not limited to International Water Management Institute (IWMI), WorldFish, M-POWER and World Wildlife Fund (WWF). They provided support for the preparation of the consultation and for excellent facilitation during the sessions. The reputation of the participating organisations, as well respected knowledge-based research and advisory bodies to state and non-state actors, helped strengthen the credibility of the outputs of the Consultation.

### **Key Messages from the BDP Stakeholder Consultation**

1. Basin Development Plan Stakeholder Consultations are an opportunity for open discussion about the challenges, visions and approaches to development and management of the Lower Mekong River Basin (LMB).

Stakeholders expect strong leadership from the MRC in bringing together government agencies, civil society and private groups and the media to exchange views on development opportunities and constraints within the LMB. This first Consultation demonstrated that the MRC can be an influential actor in facilitating such a process and in delivering key messages to MRC member countries. Comments from the Consultation indicate that through an open BDP process the MRC has earned greater trust and confidence from stakeholders and is committed to building ownership through genuine participation.

2. The challenge for MRC is to ensure its relevance in the changing context of the Basin and demonstrate the impact of an MRC Strategic Plan at both Basin and national levels.

Several concerns have become critical: How the Mekong region will respond to the emerging challenges of food security and high prices of food, oil and gas; how MRC member countries will work together to address issues of water availability in the context of global climate change; and how the MRC will ensure its continued relevance. Cooperation with upstream countries and MRC's role in this regard need to be addressed.

A representative from an international organisation commented that the 1995 Mekong Agreement may need to be revised to adapt to the new context. There is already a shift within the MRC from rules and procedures, as outlined in the 2000-2005 Strategic Plan cycle, toward facilitating more effective use of water resources, as outlined in the Strategic Plan 2006-2010. This shift supports riparian country efforts to generate growth and reduce poverty while preserving riverine ecosystems.

3. The BDP process and the IWRM-based Basin Development Plan should be relevant to the rapidly changing development context at national, regional and global levels. The time-bound production of the Plan should not jeopardise a scientifically sound and participatory planning process.

The BDP process must keep pace with and influence national development within the Mekong River Basin. BDP2 needs to include significant national water resources development projects on the mainstream in the basin planning process in line with the 1995 Mekong Agreement; reinforce guidelines for these projects; and more broadly, complement national poverty reduction efforts.

The BDP scenarios should cover broad development opportunities, not just hydrological changes. The MRC needs to decide if the long-term IWRM-based Basin Development Plan should address basin development and management or just development. The BDP process should provide a framework for national actions with guidelines and technical support from the MRCS.

Developing workable participatory processes is more important than delivery of a Basin Development Plan at a specific point in time, which could lead to trade-offs in the quality of the process and engagement of stakeholders. MRC and BDP2 should understand the big picture of development in the Basin and communicate this understanding to all key players to bring them together and help inform decision-making processes. There should be a simple and transparent approval process for the IWRM-based Basin Development Plan. This will help build stakeholder confidence in the commitments of the four member countries to the Plan and its implementation.

## 4. The BDP process should be grounded in knowledge of drivers, opportunities and challenges about current and anticipated water resources development in the Basin.

There is a general understanding of the potential for water resources development in the Basin given the hydrological conditions of the river, the relatively low amount of water storage-per-head compared to other river basins, and the potential increase of flow during the dry season due to the construction of upstream dams. Emerging drivers that will affect water resources development in the Lower Mekong include the increasing global energy demand, high oil and gas prices, developments in the region, and national socio-economic dynamics. These factors will lead to increased use of water resources to serve economic growth and poverty reduction. Additional factors such as the increase of storage capacity in the Upper Mekong will contribute to the acceleration of water resources development, which should take into account issues of global climate change and impacts on water resources availability.

A shared view emerged that water resources development must be made sustainable through a comprehensive planning process that addresses sectoral concerns in an integrated manner. The key challenges for sustainable water resource development in the Basin are outlined below.

**Hydropower development and fisheries** are the main trade-offs in water resources development. Fisheries are essential for sustaining the livelihoods of millions of the poorest people. The impacts of hydropower development on fisheries are well known, if not always accepted by all. The risks include loss of nutrients and the fragile link between Mekong fisheries and external markets. There will be winners and losers in this process and the poor are mostly likely to lose. The question is how to formulate an equitable solution and implement mitigation measures based on a careful risk analysis. Sustainability of both hydropower and fisheries is possible. Good planning is the key. Mitigating measures include the careful location and design of hydropower dams so that they do not block fish migration routes.

Coping with global trends will be a great challenge for planners. The influence of distorted global markets for food and agriculture and industrial products will lead to significant changes in the use of land and water resources and are likely to impact heavily on the poor. The value of the ecosystem as a whole should be considered, not only fish catches. Although wetlands were mentioned, it should be made clearer how ecosystem and cultural values can be integrated into scenarios assessment and the planning process as a whole.

5. Planning for sustainable development of the LMB is the business of all stakeholders. BDP2 should elaborate on how it will define stakeholders and how it will incorporate their interests and concerns to ensure genuine participation.

There is a strong interest in developing closer collaborations and partnerships with BDP2. The following concerns need to be addressed:

- How will BDP2 identify stakeholders, their interests and concerns and involve them, especially local communities, in each stage of the planning process?
- Will BDP2 include private sector organisations as stakeholders and how?
- How will BDP2 define the roles and authority levels of different stakeholders within the MRC governance structure (Council, Joint Committee, NMCs, MRC Programmes)?
- How will agencies and stakeholders be involved in the scenarios? Will the results of scenarios be made public and should stakeholders be informed regularly on the BDP process rather than waiting for meetings?
- How can the BDP process build on local knowledge and involve local communities in ways that protect the most vulnerable stakeholder groups from the negative impacts of development?
- There are large gaps in basin development planning when it comes to common understandings and interests between local stakeholders and national and regional planners. MRC should go beyond bureaucratic governance and reach out to communities working in IWRM for sustainability of the basin. Participation can be improved by: 1) building partnerships with research institutions and regional bodies to develop basin wide development scenarios based on existing experience; 2) using existing networks and forums in the region and using the MRC website for open forums.

The BDP2 team should organise stakeholder consultations at national level to respond to country specific issues and to avoid language barriers. The involvement of the private sector is important in the BDP process and BDP2 can help the private sector develop collaborations with stakeholder groups in the planning process. The MRC/BDP2 should understand stakeholders' perceptions and expectations of the MRC in the sustainable development of the LMB. BDP2 should communicate clearly with stakeholders on what it can and cannot do in terms of stakeholder involvement given the Commission's legal status and institutional structure.

6. Credible tools for basin development planning are important. There is a need to fill the considerable gap in common understanding of the use of scenarios and tools and to ensure transparency and access to information.

More sharing of technical analysis and data is needed to convince stakeholders that BDP2 outputs will be formulated in a participatory manner. There is a need to define clearly what a baseline scenario is and what it is for. The MRC countries have agreed to use 1985-2000 as the baseline, a period with limited development. Inclusion of development interventions during the 2000-2007 period to the baseline would significantly influence impact assessments of newly proposed development interventions. Other issues, such as including Chinese dams in the baseline scenarios or calling scenarios "realistic" or "not realistic" should be further discussed. BDP scenarios should be built on the work of other organisations and should take into account impacts of global climate change. The Swedish Environmental Institute (SEI), offered scenarios it has developed and M-POWER confirmed its offer to provide independent inputs to the scenarios formulation and assessment and to test the processes.

There is a need to improve understanding of how scenarios represent 'possible futures' and that there will always be different opinions in the process of scenario development. Water resources development is complex because both "facts" and "values" can be disputed. Therefore, BDP scenarios should be presented as 'drafts' and corrections of facts or reprioritising values should be both expected and permitted. One of the problems with the release of BDP1 scenarios was filtering due a misperception that scenarios had to be "right" before they could be shared. The draft scenarios do not need endorsement for consultation with other stakeholders. Openness, testing, brainstorming, challenging and improving efforts are required in the BDP scenario development process.

How will scenarios and assessment tools be used by the member countries and other stakeholders and how could they help integrate social and governance issues into the BDP process? The BDP2 team is expected to respond appropriately to stakeholders on the following questions:

- What is BDP2's role in assessing the viability of mainstream dam projects and in raising concerns about those projects that do not meet the criteria?
- How will BDP2 fill in the missing data on those projects and deal with accuracy issues of the basin wide scenarios if countries fail to provide sufficient information?

## 7. A thorough understanding of IWRM in the LMB is required for an IWRM-based Basin Strategy to be relevant.

The BDP2 team presented preliminary thoughts on the concept and outline of an IWRM-based basin strategy which aims to provide a framework for basin development and basin management. A key question was raised: What is IWRM in the Lower Mekong Basin? Preparation of the Strategy should start with a participatory review of IWRM in the four LMB member countries and national strategies and policies for IWRM. These would then be synthesised into the Strategy. In this process, the long experience of Thailand in developing river basin organisations and implementing IWRM should be shared with other countries.

National sovereignty is an issue with respect to aligning national water policies with the IWRM-based basin strategy. Thailand and Viet Nam have smaller land areas in the basin and, consequently, to a large extent, their national policies take into account other river basins in their respective countries. A comprehensive strategy that clearly elaborates the link in implementing IWRM at regional, national and local levels to which all four member countries would agree and adhere to was recognised as a great challenge. The Strategy should be seen as a broad planning framework to allow flexibility for implementation by member countries. Given the 20-year framework of the IWRM-based Basin Development Plan, it was suggested that the Strategy should have a longer vision. It should perhaps also include an action plan with a monitoring and evaluation mechanism to reinforce implementation. The need for a transparent and participatory process in the preparation of the Strategy is also important.

### 1. Background

### **Synopsis**

**Key Message 1:** Basin Development Plan Stakeholder Consultations are an opportunity for open discussion about the challenges, visions and approaches to development and management of the Mekong River Basin

**Session Objective:** To reach a common understanding of objectives and expected outcomes of the Stakeholder Consultation.

**This section contains:** Vision and objectives of the MRC Basin Development Plan and planning processes; the importance of stakeholder consultations; and objectives, expected results and structure of the consultation. The whole detail is taken from the Concept Note of the Consultation that jointly developed with partner's organisations as M-POWER, IWMI and WWF.

### 1.1 The MRC Basin Development Plan Programme

The 1995 Mekong Agreement mandates the MRC Joint Committee with the formulation of a Basin Development Plan to promote, support, co-operate and co-ordinate the development of the full potential of sustainable benefits to all riparian states and the prevention of wasteful use of the Mekong River Basin waters with an emphasis on joint basin wide development projects and basin programmes. The Basin Development Plan Programme Phase 1 (BDP1) together with the Water Utilisation Programme (WUP), the Environment Programme and various sector programmes have been instrumental in pursuing the MRC's mandate according to the 1995 Mekong Agreement and the MRC Strategic Plan 2001-2005.

The vision of BDP1 (2001-2006) was to contribute to the acceleration of inter-dependent sub-regional growth by establishing a process and framework conducive to investment and sustainable development. Two main outputs were produced: the establishment of a more participatory form of basin planning than has previously existed in the LMB, and an agreed short-list of high priority structural and non-structural development projects with basin wide or transboundary significance, with benefits that transcend national borders. Financial support to BDP1 was provided by Australia, Denmark, Japan, Sweden, and Switzerland, in addition to the resources allocated by each member country.

The Basin Development Plan Programme Phase 2 (BDP2), 2007-2010 was launched in January 2007, following the approval of the revised programme document by the MRC Joint Committee in its twenty-fourth meeting on August 2006. The BDP2 is designed to build on the achievements of BDP1 to further enhance the BDP planning process and produce a rolling Basin Development Plan based on IWRM principles.

The rolling IWRM-based Basin Development Plan consists of three main elements:

1) Development scenarios, which provide the information that governments and stakeholders need to develop a common understanding of the acceptable balance between resource development and resource protection in the Lower Mekong Basin;

- 2) An IWRM-based basin strategy, which provides a long-term view of how the LMB can be developed in a sustainable manner for economic growth and poverty reduction;
- 3) A Project Portfolio of water resources development projects and supporting non-structural projects that will continue to develop some of the LMB's water and related resources and minimise harmful effects that might result from natural occurrences and human-made activities.

The preparation of the IWRM-based Basin Development Plan will bring together the significant existing and planned water and related resources development projects in the planning process. This will constitute a platform for the MRC to engage in transboundary assessment and help to ensure that large structural projects minimise transboundary impacts. The Project Portfolio will include a category for smaller projects that can alleviate poverty and can be implemented in a short time frame with the support of the MRC.

The Plan will be implemented by the member countries with support from the MRC, development banks, involved stakeholders, the private sector and other actors. The MRC would provide coordination and technical assistance to support project preparation and implementation by reviewing terms of reference, feasibility studies, and environmental and social impact assessment studies, transboundary assessments, and through mediation and facilitation. It is envisioned that many of the non-structural projects will be implemented by the MRC within the existing programme frameworks.

## 1.2 Importance of Stakeholder Consultations and Participation in the BDP Process

Planning for development often requires considerable effort in building participatory processes and mechanisms and forging strong partnerships with stakeholders. Simultaneously, planners should take into account the reliance of riparian communities, particularly the poor, on the natural ecosystems of the river basin and take steps to conserve its rich riverine ecology and a significant inland water fishery.

This is a challenging process given the different perceptions amongst stakeholder groups about what constitutes sustainable development and the multiple uses of basin waters and related resources. Discussing these different views and moving towards shared visions and coherent action for development is often challenged by insufficient information – information that should be available to stakeholders in a transparent manner.

The basin development planning process has generated considerable interest amongst diverse stakeholder groups including governments of the MRC member countries and their development partners, academics, civil society groups and the private sector, because each of the development options put forward by the BDP has different impacts on the different groups. However, it has been observed that many stakeholders are sceptical, as they see evidence of basin development proceeding without MRC involvement and are unsure as to how the BDP2 will actually influence the large number of uncoordinated development projects already in progress.

BDP is based on IWRM, a process that emphasis stakeholder participation. Late in the BDP1, processes were created for local stakeholder participation in the basin planning process. These processes require further consolidation. BDP2 will improve on these efforts to engage stakeholders in a strengthened national, transboundary and regional participatory planning process with a particular focus on

expanding the engagement of concerned NGOs and civil society representatives. Strong engagement and meaningful participation of stakeholders is crucial to ensure a transparent and more informed BDP process and for the Plan to be accepted, owned and implemented by the member countries together with their development partners and the wider society within the Basin.

The MRC Strategic Plan 2006-2010 highlights the importance of stakeholder participation: "Given the significant potential of water resource developments to affect the lives of the people of LMB, it is essential to build in processes for public involvement and input into MRC activities. Consideration of public opinion and preference is essential for ensuring that identified development options are both appropriate and socially acceptable". The MRC would like the principles of transparency and openness to be seen as, "key characteristics for the way the MRC will operate. Transparency and openness will be improved through proactive efforts in communication with the MRC's stakeholders...and are a key element of the strategy for promoting regional cooperation and conflict prevention."

BDP2 is the overarching Programme of the MRC and serves as the planning component of the Mekong Programme (or Mekong Partnership Programme), which aims to bring all water and related resources development initiatives in the LMB into an MRC-facilitated coordination framework between the member countries, the development partner community, and other working partners.

### 1.3 The 1st Stakeholder Consultation on BDP2 and Inception Report

This 1st Stakeholder Consultation, held early in the implementation phase of BDP2, aims to renew the involvement and commitment of stakeholders and the public in the MRC and the BDP process. The Consultation, the first in a series of similar MRC initiatives, will provide an open forum for a public consultation and dialogue amongst stakeholder and interest groups on the development opportunities and constraints of the Lower Mekong Basin, on what should be a common IWRM-based Basin Development Plan to guide basin development, and how all concerned stakeholders can work together toward the common goal of poverty reduction and sustainable development of the Basin. The Consultation will also help the MRC in constructing processes to build partnerships with stakeholder groups and to maintain their engagement in the BDP process.

This Stakeholder Consultation is in line with the 1995 Agreement and with the interests of the development partners supporting the BDP2, which calls for consultations for public comment and feedback on the Draft Inception Report of the programme with line agencies, academia, NGOs, the private sector and other concerned actors.

The Stakeholder Consultation addresses concerns and recommendations to the MRC and its Draft Strategic Plan 2006-2010 made at the Mekong Region Waters Dialogue. The Waters Dialogue was co-convened by IUCN, Thailand Environment Institute (TEI), International Water Management Institute (IWMI) and the M-POWER Water Governance Network on 6-7 July 2006 in Vientiane, Lao PDR. It is the MRC's intention to organise annual consultations with stakeholders in the LMB. As a result of this and similar initiatives, long-term partnerships and technical capacity will be built and strengthened

-

<sup>&</sup>lt;sup>1</sup> MRC Strategic Plan 2006-2010

between the BDP Programme and civil society groups to facilitate open and constructive dialogue for sustainable development of the Basin.

### 1.3.1 Objectives

The objectives of the 1st Stakeholder Consultation on the BDP2 and Inception Report are:

- To introduce the MRC Basin Development Plan Programme Phase 2 to stakeholder groups and seek their inputs to complement the Draft BDP 2 Inception Report, as well as to enhance their engagement in the BDP process and in the work of the MRC in general.
- To initiate discussions and share views on development opportunities in the LMB, aiming at
  mobilising countries and stakeholders in preparing a Basin Development Plan as called for in
  the 1995 Agreement. Discussions will focus on:
  - (i) Understanding the socio-economic development in the Mekong River Basin and implications for water and related resources;
  - (ii) Discussing the opportunities and constraints of further development of Mekong water resources and their potential contribution to poverty reduction in the Basin;
  - (iii) The role of development scenarios in Basin development planning and the process to formulate, assess and build consensus on basin wide development scenarios;
  - (iv) Use of assessment and management tools in BDP (Decision Support Framework (DSF), Integrated Basin Flow Management Process (IBFM) and others); and
  - (v) Moving toward a shared IWRM-based strategy to guide Basin development.
- To build partnerships between the MRC/BDP Programme and stakeholder groups for a fruitful BDP process and sustainable development of the Basin.

### 1.3.2 Expected Results

This consultation brings together experts and concerned individuals from international, regional and national NGOs, academia and research institutes and includes organisations that have development, management and research interests in the region. The expected results are:

- A better understanding of the MRC and BDP2 including its expected outputs, the planning process and the tools used in the planning process.
- Inputs to the implementation of BDP2 and its Inception Report, especially related to 1) the planning cycle and tools to be used; 2) directions for an IWRM-based Basin Development Plan for Basin development and management; and 3) ways in which BDP2 can proactively engage stakeholders in the BDP planning process.

#### 1.3.3 Themes and Structure

This Consultation is the first exchange with stakeholder groups and should provide sufficient information about the BDP programme and the intended IWRM-based Basin Development Plan. This information is essential as the planning process evolves. Therefore, the Stakeholder Consultation was structured around important issues for the formulation of the IWRM-based Basin Development Plan and for the MRC in general. These issues, which are emphasised in the BDP2 Programme document and its Inception Report, include:

- The need to build a common understanding of potential and constraints for the development of the Lower Mekong Basin;
- Ways of enhancing information sharing and transparency in the use of tools for assessing these development options;
- Building common strategies based on IWRM to guide basin development and management; and
- Establishing processes to ensure that the concerns of different stakeholder groups are taken into consideration by governments of the member countries and those who will implement the Basin Development Plan.

These processes are crucial to creating a strong sense of ownership and for the Plan to be accepted by concerned stakeholders who will support its implementation.

The Consultation was divided into five main sessions and three parallel sessions during the two-day event. All sessions included a plenary or round-table discussion. Discussions were intended to create opportunities for participants to provide their inputs, suggestions and comments, and to promote open dialogue. Discussions were an opportunity for the MRC and BDP2 to provide explanations of their roles and activities that may be unclear to the public. The following topics were covered in the sessions.

**Session 1:** MRC's role in sustainable development in the Mekong River Basin and an introduction to the BDP Programme.

**Session 2:** Basin development for poverty alleviation and sustainable development in the Lower Mekong Basin – potential and constraints; national priorities in a basin wide context.

Session 3: Innovative tools to inform basin development planning and decision making.

- Parallel session 3.1: A Decision Support Framework for understanding hydrological impacts of water and related resources development.
- Parallel session 3.2: Integrated Basin Flow Management (IBFM) as a framework for understanding the environmental, social and economic impacts of water and related resources development.
- Parallel session 3.3: Assessment of projects and a common approach to sustainable projects for basin development.

Session 4: IWRM - from global principles to regional strategies and local actions.

Session 5: Stakeholder participation in Basin Development Planning.

# 2. Role of the MRC and Partners in Sustainable Development

### **Synopsis**

**Key Message 2:** The challenge for the MRC is to ensure its relevance in the changing context of the Basin and demonstrate the impact of an MRC Strategic Plan at both Basin and National levels.

**Session Objectives:** To enhance understanding of the MRC and its role in sustainable development of the Mekong River Basin and to provide an update on the implementation of the MRC Strategic Plan 2006-2010. To provide an overview of the goals, objectives and expected outputs of the BDP Programme and Inception Report of BDP Phase 2.

#### This section contains:

- A brief review of water resources in the Mekong River; the 1995 Mekong Agreement and MRC structure;
- The MRC strategic planning cycle and MRC Programmes; a rationale for a Basin Development Plan;
- An overview of the BDP2 Inception Report;
- Comments and questions on the timing of BDP2 in relation to the speed with which changes are taking place in the Basin;
- How research organisations will be involved;
- How stakeholder participation will be put into operation;
- How BDP2 will ensure that its vision for IWRM will be taken up by member countries; a
  Civil Society Organisation (CSO) presentation on Building on Local Knowledge for a
  Basin Development Plan (the Sala Phoum research project).

## 2.1 Understanding the MRC as an Inter-Governmental River Basin Organisation

Mr. Te Navuth, Officer in Charge of the MRC Secretariat, gave a presentation entitled "The Mekong River Commission: The 1995 Mekong Agreement, Organisation and Programmes". The presentation covered four areas: 1) water resources in the Mekong River; 2) the 1995 Mekong Agreement and MRC structure; 3) the MRC strategic planning cycle; and 4) MRC Programmes.

Mr. Navuth provided information on the water resources situation in the MRB including the seasonal variation in flow, the high volume of available water resources, and the low volume of water stored in reservoirs compared to other river basins in the world. He introduced the participants to the 1995 Mekong Agreement, which constitutes the organisational structure of the MRC and its core mandate as a knowledge-based inter-governmental river basin organisation

(IRBO) As an IRBO, the MRC seeks to achieve a common vision for, "An economically prosperous, socially just and environmentally sound Mekong River Basin". The MRC is a cooperation and integration platform. In recent years, there has been increased cooperation among member countries, increased dialogue with upstream countries, and increased transparency on water resources developments.

The MRC Strategic Plan for 2006-2010 was presented. The goal of the Plan is, "More effective use of the Mekong's water and related resources to alleviate poverty while protecting the environment". This goal is supported by an integrated programme approach which includes sector programmes such as Navigation and Fisheries, and cross-cutting programmes such as the BDP and the Environment Programme.

Discussion following the presentation suggested that the role of the MRC was changing because of the increasing number of actors in the region. The MRC needs to fully understand the interests of different stakeholder groups and the impacts that development in the basin will have on them. The challenge is to ensure the relevance of the MRC in a dynamic regional context and in the face of global challenges such as increasing food demand and changes in water availability linked to climate change. It is also important for the MRC to show how its Strategic Plan impacts development at basin and national levels.

A representative from IWMI commented that stakeholders may be expecting too much from the MRC. Each organisation has advantages and disadvantages. The MRC has a formal institutional structure, which many civil organisations lack. The 1995 Agreement appears, to some, to be no longer relevant in the rapidly changing development context of the LMB. Countries may want to review policies and the Agreement every five years to see whether the Agreement needs to be revised and if a more 'robust' Agreement is needed. The IWMI representative also emphasised that stakeholders need to be kept up-to-date on what is happening in BDP2, which will require more than one consultation every one or two years.

It was pointed out that the MRC will be fully riparianised within the next four years. The MRC will have to prepare for this change within the organisation by making sure that riparian staff can manage efficiently.

### 2.2 The BDP Programme and the Joint Planning Function of the MRC

The presentations on the BDP Programme highlighted the rationale of a Basin Development Plan for the Lower Mekong Basin. Based on achievements and lessons learned during BDP1, the objectives of BDP2 have been defined as:

- 1) Preparation of a rolling IWRM-based Basin Development Plan.
- 2) Development and use of knowledge bases and assessment tools.
- 3) Capacity building at the MRC and NMC levels for IWRM planning and facilitation in situations where trade-off management is required.

The rolling IWRM-based Basin Development Plan will comprise three elements: development scenarios; an IWRM-based basin strategy and a project portfolio. Given the impacts of the Plan on

the 56 million people who live in the LMB and their diverse range of interests and concerns, the BDP2 emphasises the importance of stakeholder participation. Stakeholder participation also offers opportunities to build on local knowledge and experience and gain support from stakeholder groups.

An overview of the BDP2 Inception Report was also provided. The Inception report includes five chapters: Chapter 1 is an introduction, Chapters 2 to 5 comprise the body of the Inception Report, and Chapter 6 is the Programme Implementation Plan (PIP).

Participants suggested that the publication of the rolling IWRM-based Basin Development Plan may be late as changes are occurring rapidly in the Basin. Scenarios were perceived as an important topic for participants and clarification was sought on whether the BDP scenarios would include what is happening in the member countries. The representative from M-POWER felt that stakeholders should recognise limits to the relevance and impact of the BDP2 on decision-making on land and water development. Land and water resources in the basin have been and will likely continue to be developed without BDP2 involvement.

WWF suggested both during the Consultation, and via email after the event, that whilst it is a requirement to deliver a Plan, WWF and other participants feel that developing a sound planning process is more important than delivering a plan at a specific time. Other comments, including one from a representative from WorldFish, suggested that the BDP should consider planning foremost as a process to deal with development and water resources challenges.

Questions were raised about how BDP2 and the MRC will involve stakeholders, and how BDP2 will define civil society roles. One participant asked whether the BDP scenarios will be made public, whilst another suggested that the scenarios should include all water related sectors. It was suggested that new ways need to be found to feed information into and get information out of the MRC Secretariat.

A number of comments and questions were offered on the BDP2 draft Inception Report. They covered a range of topics including, the timing of BDP2 in relation to the speed with which changes are taking place in the Basin; how research organisations will be involved, how stakeholder participation will be operationalised, and how BDP2 will ensure that its vision for IWRM will be taken up by member countries.

Questions were also raised on how the rolling process will work: When will the Plan be reviewed and updated? How does the approval process for the Plan work? Participants suggested that stakeholder participation and communication should be integrated into all aspects of BDP2 work, recognising that different stakeholders would be involved in different components.

There were requests for clarification of the process by which BDP2 will ensure stakeholder participation. Questions were raised regarding how BDP2 will build on local knowledge; involve and support grassroots communities; draw on knowledge and experience and involve other partners in scenarios and research; define genuine stakeholders and analyse their interests and concerns; and how stakeholders will participate in the process of scenario analysis. It was suggested that involvement of the private sector is essential in the BDP process.

It is not clear what contingencies the BDP2 can pursue if information and data sharing by member countries are not sufficient and if national development takes place outside the BDP process, despite the existence of an agreed IWRM-Basin Development Plan and the Strategy.

The BDP team responded that the IWRM-based Basin Strategy will be approved by the member countries and thus would demonstrate their commitment. BDP2 is also about to launch sector reviews, which will be used to update all existing national developments in the MRC knowledge database. This will help the formulation and assessment of basin wide development scenarios and the preparation of a comprehensive project portfolio. Issues on stakeholder participation are covered in section six of this report.

## 2.3 Role of Civil Society Organisations: a Case Study from the Sala Phoum Research

A representative from the Culture and Environment Preservation Association (CEPA) – a Cambodian NGO concerned with sustainable livelihoods, advocacy for sustainable water resource management and human resource development - made a presentation on Building on Local Knowledge for a Basin Development Plan. The presentation offered an NGO perspective on how MRC and civil society groups can support each other. The Sala Phoum project in Cambodia was used as an example. CEPA has been working on the Sala Phoum project since 2005. The project involved a number of local researchers in four villages in a Ramsar site and five research assistants from CEPA to help document and coordinate the research. The initial Sala Phoum research focused on fisheries, flooded forest vegetation and herbal medicines, and sub-ecosystems. The objectives of the project are to empower villagers and increase their awareness of their natural resources; and train village research teams to work as a network and exchange information and knowledge within and between villages. The research process was participatory and included resource mapping, group discussions, interviews, questionnaires, observation and documentation. A number of important research findings, including differences in fishing gear used in the wet and dry seasons, types of fish habitats, the number of migrating and non-migrating fish species, and the types of plant species available in the villages.

The research provided evidence that villagers now have more formal knowledge of their natural resources and can use the finding data to plan and manage natural resource conservation. Villagers are able to do research by themselves and their increased knowledge gives them more ownership and control over their resources. An example was given on how the villagers confidently discussed aquatic resources with staff from the Fisheries Administration in the project. Key messages from the presentation were that civil society groups have unique expertise in connecting various stakeholders, which MRC may find difficult due to its institutional system. Civil society organisations can provide alternative options or mechanisms to enhance results. Further comments on the roles of civil society organisations can be found in section 6 of this report.

# 3. Sustainable Development Opportunities and Challenges: National Priorities in the Basin wide Context

### **Synopsis**

**Key Message 3:** The BDP process and the IWRM-based Basin Development Plan should be relevant to the rapidly changing development context at national, regional and global levels. The time-bound production of the IWRM-based Basin Development Plan should not jeopardise a scientifically sound and participatory planning process.

### **Session Objectives:**

- 1) To discuss socio-economic development trends in the Mekong basin, and broader regional trends that have implications for the Mekong, options for sustainable development and how the water and related resources development features in this broader context and contribute to economic prosperity, environmental health and good governance.
- 2) To provide an overview of MRC member states' national priorities in a basin wide context; national perspectives on the Basin development for poverty reduction and expectations from the BDP.
- 3) To share lessons learned from successes and failures on the impacts of water resources development schemes on poverty.

**This section contains:** Discussion of drivers of change; a WWF presentation on their recent study on agriculture drivers in the LMB, with recommendations and lessons learned; opportunities and challenges, with a focus on hydropower development and fisheries; a brief overview of national development priorities.

## 3.1 Understanding Water Resources Development: Drivers, Opportunities and Challenges

A common comment from many participants was that the Basin development planning process needs to facilitate multi-sector and multi-stakeholder platforms to plan for the development and management of the MRB. It was recommended that BDP2 should understand the 'big picture' of how water resources development in the Mekong region has and will evolve. The planning process should build on a solid background and knowledge of the dynamic developments at the local, national, regional, and global levels.

### 3.1.1 Drivers of Change in Water Resources Development in the Mekong River Basin

A presentation by the BDP2 team highlighted drivers perceived as having significant impact on water resources development. These are rapid developments at the global, basin and national levels and developments initiated by partners. Global developments include high energy prices, global market trends in basin export industries and climate change.

A WWF presentation on its recent study on agriculture drivers in the LMB outlined the impacts of global trends on the supply and demand of agricultural products and the influence of key players on the supply chain in agriculture, resulting in changes in water resource development in the Mekong region. The study focused on rice, sugar, rubber and bio-fuel crops such as jatropha and palm oil.

WWF recommended that people need to understand the bigger picture of the global, national and local market system of these crops if they are to understand how they can create investment opportunities as a means for poverty alleviation. Decisions and investment in these crops is highly distorted by international markets, especially sugar and rubber. The much higher food and bio-fuel demand for crops in the world market, especially from China, India and the EU, has caught the interest of many investors. Lao PDR and Cambodia are attractive in this sense due to the fact that the potential for agriculture development is still high in these countries compared to Thailand and Viet Nam, where most of the arable land is already under cultivation. Thailand and Viet Nam are the biggest rice exporters; and Thailand alone is a leading exporter of sugar and rubber.

There are also important social and environmental considerations. As an agent that informs decision making processes, the BDP needs to have good understanding of opportunities and constraints of agriculture and irrigation in the region. Examples of such opportunities and constraints are plans for more irrigated rice in Thailand, the potentially severe impacts of large-scale conversion of forest areas to plantations, especially in the catchments of the Sesan, Sekong and Srepok Rivers, wetland conversion and its impact on fisheries, and bio-fuel agriculture and its impact on food prices. Bio-fuel production may create many new jobs due to its labour intensity, but that may require trade-offs with local livelihoods.

WWF commented that these forms of agriculture can potentially contribute to poverty alleviation. However, national governments need to support smallholders to enable them to take advantage of the opportunities through various credit schemes, training and extension services, farming negotiations and the creation of marketing cooperatives. They need to ensure that impacts on local people are minimised in terms of access to non-timber forest products (NTFP) and wetland resources.

Lessons learned from many cases of concession allocations showed that this form of agriculture can create conflicts between business investors and local people over access to NTFPs and wetland resources. The BDP process should consider the role of agriculture in different sub-basins and its future implications. Support for capacity building for integrated sub-basin management is essential if we are to address the issues of conversion of forest catchments, pollution of water courses by agricultural chemicals and demand for irrigation. WWF called for BDP2 to take urgent action in critical sub-basins undergoing rapid change, such as the Xe Bang Hien, Xekon, Sesan and Srepok. WWF and BDP2 can combine efforts in this regard. A participant commented that BDP2 should also consider a study on Eucalyptus plantations, which have expanded greatly over the last decade.

Eucalyptus is considered an important income earner for local communities, but it can have serious implications for the environment and wetlands.

### 3.1.2 Opportunities and Challenges

There is a general understanding of the potential for water resources development in the Mekong River Basin. According to MRC data, the existing storage of water resources corresponds to about 2% of the average annual flow. A presentation from a Lao PDR representative noted that only 673 Megawatts (MW) or 2% of the potential 30,000 MW of hydroelectricity in Laos had been installed by the end of 2005. Tapping this potential would present the Lao government with opportunities to develop hydroelectricity for national income generation, rural development and poverty reduction. Given the people's high reliance on the river's natural system, this development must be undertaken with equal consideration to conserve the riverine ecology.

### **Hydropower Development**

The BDP2 team suggested that hydropower activities in the upper Mekong will have both immediate and cumulative impacts downstream. Many questions have not yet been answered scientifically. There is a need for a sound understanding of the possible impacts, such as drastic loss of fisheries, loss of sediment or opportunities for more irrigated agriculture in Thailand and flood protection in Viet Nam with the potential increased dry season flow to the downstream region.

Hydropower development in the LMB was a dominant topic of discussion during the Consultation. Hydropower is seen as an investment opportunity by some and as a threat to the environment and rural livelihoods by others. The role of private investors in hydropower development in the LMB has become much more dominant in the last few years. This presents a considerable challenge in designing a process and activities that include the private sector and other stakeholders in the BDP planning process.

A representative from AusAID suggested that stakeholders should remember the 'triple bottom line' of corporate social responsibility and that some development realities do exist. Basin development planning should bear in mind the possible benefits from hydropower development to help address poverty reduction and the development challenges in Laos. At the same time, the World Commission on Dams (WCD) report, well-being strategic priorities and Guidelines (2000) provides stakeholders and project developers with useful strategies for dealing with the challenges of hydropower development.

An Italian-Thai company representative commented that development in the MRB is unavoidable and in fact, the private sector is already leading water resources development. Some private companies, especially Italian-Thai, do care about community consultation and take measures to mitigate negative impacts. NGOs are not being helpful when they do not communicate directly with the private sector but rather wait for reports and look for weaknesses to criticise through the media. He urged NGOs to approach the private sector and offer feedback on projects and reports before they are finalised and announced in the media.

It was suggested by a representative from WorldFish that the pace of development has picked up in the last 12 months during the BDP2 Inception period. If so, it is essential for the BDP2 to address

these accelerated developments. Many of the participants found the trend toward mainstream dam development extremely worrying. The potential socio-economic and environmental implications are serious and it is essential to develop a process for accurate prediction, assessment and management of impacts at local, national and regional levels.

#### **Fisheries**

Participants paid a great deal of attention to fisheries in the LMB in the context of accelerated water resources development. The presentation from the MRC Fisheries Programme highlighted how important capture fisheries are for people in terms of food security, livelihoods and income. Capture fisheries are virtually free of cost and renewable every year. The volume of the fish catch is estimated at 2-3 million tons per year and the first-sale value is estimated to be in excess of US\$ 2,000 million. Fish consumption accounts for 47-80% of the total animal protein consumed by people living in the Basin. Since the LMB has so much potential for hydropower, fisheries, irrigation, navigation and tourism, there is no doubt that the region is facing a considerable challenge in balancing economic use or resources and conservation and thus, development tradeoffs will become crucial.

There were a number of questions and concerns about fisheries. Will mainstream dams block migratory routes? How can this be assessed? What mitigation measures are there? How can project developers compensate for the loss of fisheries and local livelihoods? Do we really understand the potential loss of fisheries from water resources development and their significance? The risk to fisheries seems to be clear. Are we equally clear about how dams contribute to this risk? Do we have any good experiences of assessment and mitigation to learn from?

In relation to mainstream dams, a representative from WorldFish commented that it was surprising to see that stakeholders are still talking about the same issues. Plans for mainstream run-of-river dams were first assessed by the Interim Committee for Coordination of Investigations of the Lower Mekong Basin in the 1960s. Even these early assessments showed that mainstream dams would have significant impacts on fisheries. A representative of the MRC responded that mainstream dams were identified in the 1970 Indicative Basin Development Plan (updated in 1987). However, up until now, a proper assessment of the positive and negative cumulative impacts of mainstream dams has not been made.

A representative from Australia's Commonwealth Scientific and Industrial Research Organisation (CSIRO) raised an important question about the amount of fish required to maintain current levels of consumption in the Mekong. He further commented that it is hard to maintain this through capture fisheries especially since a large proportion of this catch is for export and is leading to over-fishing and extinction problems. This is not sustainable.

The MRC Fisheries Programme presented a more positive assessment and said that win-win situations of hydropower development and sustainable fisheries would be possible. What is required is for decision-makers to recognise and understand the following trade-offs: food production versus food security, living standards versus livelihoods and government revenue versus ecological function. They also need to understand the economic value of ecosystem services, such as wetlands, free flowing water and biodiversity before taking major decisions. The Fisheries Programme also stressed that getting the best from both hydropower development and fisheries is possible if proper planning processes are in place.

Economic assessment of the losses and benefits gained from hydropower is critical. Critical questions such as, "Will the projects provide benefits to the vulnerable or the well-off?" must be assessed and answered. There are a number of project reports, assessment studies and data that the Fisheries programme can contribute to the BDP process. These include the on-going estimate of the value of fish production, developing hydropower-fisheries production models and monitoring of fish abundance and diversity. In addition, the development of a long-term catch database is ongoing, including the *dai* fishery in Cambodia and gill net and fish traps in Lao PDR. Other data include fish larvae monitoring and identification of critical habitats, deep pools and spawning habitats.

One participant said that the further dams are situated from a river mouth the better. Ideally, dams will be situated in tributaries and not on the mainstream. Cascades of dams would be better, both in terms of hydropower production benefit and less adverse impacts on fish. The design and operation of dams must consider the natural flow system and aeration in dams. Most importantly, the triple bottom line of social, environmental and economic impacts must be fully analysed.

### **Poverty**

Some participants were disappointed that there was no in-depth analysis of drivers of poverty or assessment of options for poverty reduction. A representative from WorldFish noted that the challenge of poverty reduction in the LMB is both real and serious. Without a comprehensive assessment on poverty, the BDP is less likely to be able to help member countries meet their poverty reduction targets through water resources development and this will affect its credibility. WorldFish added that current thinking on poverty is based on a wide range of approaches and analyses beyond income, assets and employment as many current indicators of poverty are. There is the need for a more thorough assessment of poverty, drawing on current approaches and methodologies. WorldFish suggested that there are possible links with the MRC Vulnerability Assessment that is being planned by the MRC Environment Programme. There is considerable expertise within the Basin, within governments, UNDP, and numerous NGOs and research institutions. In these assessments, food security and nutrition issues (including aquatic resources) should be central. Even so, these factors still do not capture the diverse causes and characteristics of poverty, or reflect the aspirations and expectations of people living within the Basin. Such indicators merit attention.

#### Wetlands

The representative from Wetlands International was concerned that agricultural needs for water are going to increasingly drive water scarcity in the LMB. For genuine IWRM solutions to these problems, wetlands must be included in the planning. Too often, IWRM is taken to mean water for agriculture, drinking water and hydropower and the environment and wetlands are left out. One or more demonstration projects addressing the implications for wetlands and their role in supporting livelihoods may be useful.

He added that the role for wetlands in local livelihoods is mentioned in the BDP2, but there is insufficient detail. BDP2 must take wetlands seriously. The MRC programmes refer to environmental management, but this seems more about environmental monitoring for water quality than about understanding the role of the environment in development. The Fisheries Programme

acknowledges the link to flooding, but the link between fisheries and wetland management needs to be strengthened.

### 3.2 National Priorities in the Basin Wide Context

The Consultation facilitated a session for member countries to provide information on their national policies and priorities for water resources development and their expectations of the BDP. The MRC is an intergovernmental organisation. The MRC's Strategic Plan and its implementation are expected to be complementary to the national priorities of the member countries. Regional cooperation must ensure a balance of economic development, environmental conservation and social sustainability.

#### 3.2.1 Cambodia

The presentation from the Cambodian National Mekong Committee (CNMC) focused on the Cambodian National Strategic Development Plan 2006-2010. The plan highlights economic development, food security, poverty alleviation in towns and rural areas, rural livelihood consolidation and development, environment protection, and international competitiveness. The Cambodian government developed a National IWRM Strategies and Roadmap in 2005. This plan emphasises promotion of agriculture, fisheries, tourism, hydropower, navigation and good governance. Strategies within the plan recognise the importance of planning activities for sustainable livelihoods that integrate all sectors and administration levels, including communes. The strategies also pay considerable attention to fisheries and ecosystem maintenance in the Tonle Sap.

More than 13% of the population in Cambodia live below the poverty line. The country aims to reduce it to 10% by 2015. National IWRM will contribute to poverty reduction by developing human resources, enhancing genuine participatory governance, developing environmentally and socially sustainable plans and ensuring gender equity. Cambodia also sees solutions to poverty by maintaining macroeconomic stability and promoting improvement of rural livelihoods.

The presentation indicated that BDP1 played a significant role and had led to planning significant IWRM projects in Cambodia. BDP1 was more progressive than the implementation of IWRM in national sectors. Even though the projects are now in the early development stages, it was the first time that the decentralisation policy of the government had been put into action at sub-area, multisectoral, and regional scales.

The Cambodian government expects that the BDP process will ensure a well coordinated and transparent planning process resulting in mutual benefits for all riparian states and function in a way that will: 1) strengthen national capacity in planning and cooperation between the MRC riparian countries; 2) ensure sustainable and fundable national and regional water and related resources development plans; and 3) contribute to the government's Rectangular Strategy for Growth (employment, equity and efficiency) and Cambodia's progress toward achieving the Millennium Development Goals (MDGs).

#### 3.2.2 Lao PDR

The presentation from the representative of Lao PDR emphasised the main aim for poverty alleviation in the Lao National Socio-economic Development Strategic Plan 2006-2020. The Plan promotes food production and commercial and rural development and makes hydropower, irrigation, water supply and sanitation key sectors in implementing the plan. Water resources in Lao PDR are abundant. The country contributes the highest flow amount to the Mekong mainstream (35%) but has the lowest GDP per capita per person (\$1,200 to 1,500). The plan aims to achieve provision of basic services (water supply, sanitation and electricity) to at least 90% of the population and eradicate mass poverty by the year 2020.

Laos has considerable potential for hydropower production for both export and for domestic use. Only 2% or 673 MW of the total 30,000 MW hydropower potential in Laos had been installed by 2005. Hydropower development has become the priority of the Lao government, which has no plans for nuclear, solar or wind power energy. The plan also aims to develop and enhance the legal and regulatory framework to direct and facilitate power sector development including an electricity law, water law, environmental law, and reformed institutions.

A representative from the Cambodian NGO Fisheries Action Coalition Team (FACT), sought clarification on the Lao government position on social and livelihood issues since the presentation on the plan did not spell this out clearly. There was also a question from a representative from the Viet Nam National Mekong Committee (VNMC) about how Lao hydropower plans will be transparently shared with and integrated into the Basin Development Plan.

The Lao presenter responded that hydropower development is focused on tributaries. Currently, 18-20,000 MW of feasible projects have been studied. Lao plans and policies for water supply and sanitation address equity in social infrastructure provision, support rural development and stimulate economic growth in small towns. The plans and policies focus on poor districts and small urban centres to ensure that economic growth and modernisation benefit the poor. It was reported that 47 districts in Laos had been selected for priority investment in this direction.

The Lao government has the following expectations of the BDP process: 1) develop a common framework for regional corporation among the riparian countries to develop the LMB; 2) integrate national planning into regional planning for sustainable development; 3) apply development scenarios, tools and planning processes to national planning; 4) build capacity for IWRM planning at the national level; and 5) coordinate and share data and information on water resources among riparian countries.

### 3.2.3 Thailand

Thailand has been moving toward the implementation of IWRM through multi-sectoral groups and various administrative levels of government for almost 20 years. The IWRM Strategic Plan for Thailand was initiated in 1989 but implementation only began in 1999. Thailand has established 25 River Basin Organisation Committees (RBC), including a Mekong River Basin Committee. The RBCs are comprised of a wide range of representatives from all sectors and water resources user groups (15-18 representatives from governmental agencies dealing with water, 15-18 water users and local administrations and 3-6 academic, researchers and NGOs). However, Thailand still faces problems due to inadequate policies, national plans and legal frameworks, inadequate information,

fragmentation and a complex structure of agencies. Low participation by stakeholders and lack of proper management and rolling mechanisms was also mentioned.

The Thai National Water Vision has a clear goal: By 2025, Thailand will have sufficient water of good quality for all users through efficient management, and a legal system in place that will ensure equitable and sustainable use of its water resources with due consideration to the quality of life and participation of all stakeholders.

Thailand has been trying to promulgate the Water Law and strengthen organisations at national and river basin levels. A clear road map for water resources development and flood, drought, and wastewater management has been developed. By 2012, flood management will cover 70% of all vulnerable areas in Thailand. For drought management, the country will have sufficient water supply for all sectors, especially for irrigation.

### 3.2.4 Viet Nam

Since Viet Nam has promulgated a National Water Law in 1998, the implementation plans resulted from the law are well managed and River Basin Organisations (RBO) are actively playing their roles. The Vietnamese National Water Resources Strategy Towards the Year 2020, implemented since 2006, is to protect, use, develop, strengthen institutional capacity, and protect water resources from harmful practices. It is recognised in the Vietnamese context that water resources are owned by the people and managed by the state. Everyone bears responsibility for protecting national water resources.

The strategies outlined in the Law call for implementation measures including developing human resources, public awareness and community participation, investment, international cooperation, and renovation of financial mechanisms.

In terms of transboundary water governance and bilateral cooperation, Viet Nam promotes exchange of information. Viet Nam has signed several Memoranda of Understanding at ministerial level to strengthen collaboration with the LNMC and the CNMC. Vietnamese line agencies are also contributing to the formulation of joint projects in the Sesan, Sekong and Srepok river sub-basins with technical support from ADB.

Viet Nam expects BDP2 to strengthen regional development opportunities, to enhance collaboration and cooperation, and to improve national integration. There are high expectations of the scenarios and IWRM-based Basin Development Plan that will promote development and regional environmental protection. Following the basin development planning process, it is envisaged that the application of standard assessment tools, development of human resources capacity and promotion of public involvement will help to further improve water resources planning in Viet Nam.

# 4. Developing Innovative Tools and Assessment Criteria for Basin Development Planning

### **Synopsis**

**Key Message 5**: Planning for sustainable development of the LMB is the business of all stakeholders. BDP2 should elaborate on how it will define stakeholders and how it will incorporate their interests and concerns to ensure genuine participation.

**Key Message 6**: Credible tools for basin development planning are important. There is a need to fill the considerable gap in common understanding of the use of scenarios and tools and to ensure transparency and access to information.

**Session Objectives:** 1) To build a common understanding of the role of development scenarios and modelling and assessment tools used in the BDP process. 2) To discuss how to improve transparency in the use of these tools to build confidence and acceptance of stakeholders in the Basin Development Plan.

This Section Contains: a description of the principles and elements in the scenarios work of BDP2; an overview of the hydrological functions of the LMB; a presentation on the Decision Support Framework; a presentation on Integrated Basin Flow Management (IBFM); an introduction to the E-Flows approach and how it relates to IBFM; a presentation from M-POWER describing the tools, criteria and guidelines that have been produced; BDP project assessment criteria; a presentation on WWF's approach to sustainable hydropower development; feedback from stakeholders on scenarios, long- and short-list criteria for assessment and IBFM.

### 4.1 Scenarios in Basin Development Planning

Amongst the main outputs of BDP2 are scenarios, assessment tools and criteria for basin development planning. These tools will assist member countries and stakeholders in understanding the water resources development opportunities and constraints, and conduct assessments of impacts and inform decision making. It is up to the BDP2 team to build the confidence of member countries and stakeholders in how the BDP process uses scenarios, tools and criteria to produce the IWRM-based Basin Development Plan. The draft BDP2 Inception Report requires that the development of these tools and criteria is transparent and includes stakeholder involvement. Member countries and stakeholders should be given the opportunity to be part of this process and to use the tools.

The presentation by the BDP2 team on the proposed approach to formulate and assess basin wide development scenarios focused on key principles and elements in the scenarios work of BDP2. Scenarios are "what if" cases of water resources development in the BDP context. There are a number of development assumptions that people use to predict results of water resources development in terms of changes and impacts, both positive (benefits) and negative (losses). For example: What are the impacts if dams are constructed on the mainstream? What are the benefits and losses if the flow regime changes? What interventions would result in the most overall benefits?

The formulation of BDP basin wide development scenarios will consider all existing and significant planned and proposed water and related resources development projects, including national projects, over the next 20 years. In the BDP context, assessment of these water resources development scenarios will focus on transboundary implications of hydrological changes and the environmental and social benefits or losses across administrative boundaries.

The BDP basin wide scenarios will look specifically at the development challenges highlighted in the MRC Strategic Plan 2006-2010 including: 1) increased food security; 2) appropriate development of the basin; 3) maintaining the production of fisheries; 4) enhancing aquaculture; 5) more active efficient transportation and freedom of navigation; and 6) avoiding losses from flood and drought and protection of the environment and ecology.

Figure 1 illustrates the BDP planning cycle and shows the link between scenarios and other stages in the planning process while Figure 2 depicts the proposed process for scenario formulation and assessment. Table 1 contains examples of the types of scenarios to be formulated and assessed.

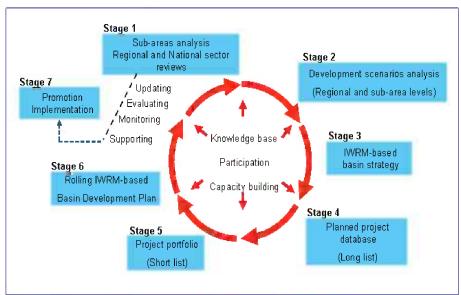
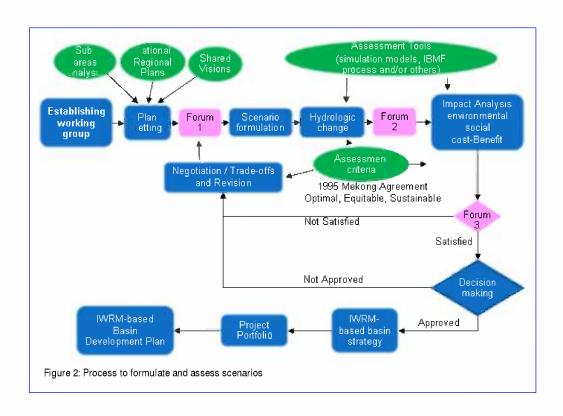


Figure 1: BDP Planning Cycle showing when are scenarios used.

Table 1: Types of scenarios

Scenario	Purpose
Baseline scenario	A reference for comparison with other scenarios
0-year development scenario (most realistic case)	Illustrates the impacts of significant development projects (national and regional) in the next 20 years
Alternative development scenarios (options)	To identify appropriate development alternatives by maximising regional benefit and minimising harmful effects on society and the environment
Potential development scenarios (opportunities)	To determine development opportunities within basin limitations
Climate Change scenario	To analyse the impact of climate change on basin development plans



## **4.2** The Hydrology of the Lower Mekong Basin and the Decision Support Framework (DSF)

### 4.2.1 Hydrology of the Lower Mekong Basin

The MRC hydrologist presented an overview of the hydrological functions of the LMB. Data analysis shows that the hydrological distribution varies from slight to significant from place to place. The MRC has hydrological data of the mean annual flow from 1960 to 2004.

The presentation reviewed the MRC procedures for data and information exchange and distribution of data; and how they are available to non-MRC users. The only requirement for obtaining data is to state the identity of the person or agency making the request and the intended use of the data. The MRC hydrologist concluded that the 15 hydrological stations along the mainstream and the 35 stations planned for various tributaries will be extremely useful for BDP analysis. He added that upgrading the data reading interval at these stations should be more frequent (e.g. hourly) to allow more detailed flow regime analysis. Sediment and water quality monitoring at the MRC stations should be incorporated into the monitoring of discharge.

### 4.2.2 The Decision Support Framework (DSF)

The MRC modelling team made a presentation on the Decision Support Framework (DSF). The DSF is a modelling system consisting of a knowledge base, simulation models and analysis tools that work through a common interface. Each can be used independently and have already been installed in the four member countries. The DSF (Figures 4 and 5) is comprised of the following components:

**Soil and Water Assessment Tool (SWAT)**: SWAT is basically a model that estimated the runoff from catchments, given rainfall, evaporation, catchment area and other relevant data. The main output of SWAT is the flow model (hydrological model) at the outlet of each sub-basin. There are now more than 500 sub-basins on the Mekong model. The data is comprised of rainfall, temperature and other meteorological data.

Integrated Quantity and Quality Model (IQQM): IQQM is a basin simulation model that route catchment flows through the river system, making allowance for control structures such as dams and irrigation abstractions. Information on daily discharges is generated throughout the system and particularly at the primary outfalls of Kratie on the mainstream and the Great Lake in the Tonle Sap Basin. The IQQM software also draws from data in the Knowledge Base to estimate irrigation demands throughout the Lower Mekong Basin in a consistent manner. The main output of IQQM is to model the water demand and intra- and inter-basin diversions such as irrigation demand based on cropping, models and reservoir operation. More than 1000 nodes in the Mekong have been modelled.

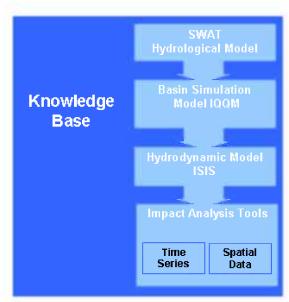


Figure 3: Decision Support Framework

Hydrodynamic Model (ISIS): ISIS is used to simulate the river system downstream of Kratie, including the Tonle Sap and the East Vai Co in Viet Nam where wet season flooding extends beyond the LMB boundary. The hydrodynamic model represents the complex interactions caused by tidal influences, flow reversal in the Tonle Sap River and over-bank flow in the flood season with the varying inflows from upstream.

The main function of ISIS is to model water levels, discharge and salinity intrusion. Input is derived from inflow from IQQM, SWAT and tidal fluctuations at sea boundaries. The model is applied to the downstream portion of the Basin (Kratie for the Cambodian plains and the Delta) to model backwater effects from tides.

The DSF Simulates Hydrological Regime for a Range of Scenarios: The above simulation models of the DSF will be used to support the assessment of the hydrological impacts of the development scenarios. The assessment includes:

- Basin development scenario analysis (effects of dams, irrigation, diversion, crops, etc.).
- Transboundary impact assessment (embankments, regulation, hydropower).
- Impact of climate and land use changes on flows.
- Salinity intrusion in the Delta.
- Sediment transport analysis.
- Technical input to formulate rules for water use.
- Baseline information (water contribution maps).



• DSF is mainly a hydrological impact assessment tool.

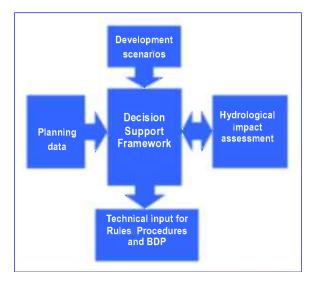


Figure 4: How the DSF is used

- DSF is a regional model and not all details can be modelled or taken into account.
- Currently only limited environmental modelling capabilities exist besides hydrology.
- DSF is used for planning and not for operational purposes.
- DSF does not have capacity for water allocation priorities (e.g. water supply, industry, irrigation or estimation of hydropower generation).

The DSF is complemented by a sophisticated set of 2-D or 3-D hydraulic modelling programs and analysis tools development water the WUP-FIN project models and tools, including water quality and ecosystem models, socio-economic and policy analysis tools, and methods to assess environmental and social impacts under different flow regimes and development scenarios<sup>2</sup>.

## **4.3 Integrated Basin Flow Management (IBFM) and Environmental Flows (E-Flows)**

#### 4.3.1 IBFM

The MRC IBFM specialist from the Environment Programme noted that the MRC Strategic Plan 2006-2010 indicates that, "IBFM is a set of multidisciplinary activities providing information and knowledge to decision-makers on cost and economic benefits of water resources development in the LMB, including environmental and social impacts of development as related to changes in the flow regime." The role of IBFM is to facilitate the generation of appropriate information on the flow requirements to sustain ecosystem functions and livelihoods. IBFM addresses impacts of flow changes and various levels of livelihood implications.

The IBFM project has been through 3 phases:

- 1) IBFM 1: Hydrological assessment of the LMB.
- 2) IBFM 2: Introduction of a holistic approach to flow management and demonstrated outcomes.
- 3) IBFM 3: A 3-year programme development approach and tool that allows predictions to be made by using the following activities:
  - Develop and assess three flow regime development scenarios;

\_

<sup>&</sup>lt;sup>2</sup> For more information, please see MRCS/WUP-FIN (2007) Final Report- Part 2: Research Findings and Recommendations. WUP-FIN Phase 2: Hydrological, Environmental and Socio-economic Modelling Tools for the Lower Mekong Basin Impact Assessment, Mekong River Commission and Finnish Environment Institute Consultancy Consortium, Vientiane, Lao PDR, available on the MRC website at http://www.mrcmekong.org/download/programmes/wup-fin2\_final-report\_part2.pdf

- Undertake holistic flow assessment of river hydrology, hydraulics, vegetation, fisheries and wetland products;
- Undertake studies on six zones of the LMB; collate information related to hydrology, hydraulics, vegetation, fisheries, river banks, water use and resource use; and
- Use expert opinion on severity of changes from the baseline.

IBFM 3 also developed predictive tools to assess the changes of flow regimes through a series of steps:

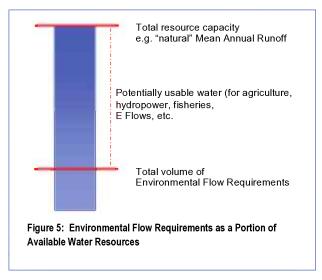
- Step 1: Scenario description (country scenarios or basin wide scenarios).
- Step 2: Simulate new flow regimes.
- **Step 3:** Predict physical and chemical changes.
- **Step 4:** Use Step 3 results and the biological module to predict changes in the living parts of the ecosystem.
- **Step 5:** Use the socio-economic module to predict impacts of river changes.

The predictive tools can respond to any water management scenario query from the member countries and produce a flow response relationship that shows the links between ecology, social factors and resource/economic predictions of flow related change. The predictive tools can also be queried in several different ways, for example, the social and environmental impacts of a proposed water management activity or calculation of the flows needed to maintain a specific level of riverine resources. The benefits of water resource development are quantified through economic valuations of hydropower, irrigation, wetlands and fisheries. However, the final value placed on resources will be assessed by stakeholders.

The contribution of IBFM to the BDP process can take two forms: 1) IBFM processes and predictive tools are used in scenario assessment to identify biophysical, economic and livelihood impacts; and 2) IBFM processes and predictive tools provide knowledge base for stakeholders to verify results of scenarios assessments, and dialogue on identifying values, negotiation and trade off.

#### 4.3.2 Environmental Flows (E-Flows)

Environmental flows is a generic concept that concerned with balancing the water requirements necessary to maintain aquatic life and biodiversity and demands for development. It was adopted to suit the Mekong Region into the IBFM approach outlined in section 4.3.1. As the competition for water and other pressures grow, environmental water requirements need to be appropriately accounted for, even before other uses. The



presenter noted that the LMB is different from other rivers in many aspects where IWMI has conducted E-Flows studies, such as the high political and socio-economic demands, and complex and bio-diversified ecosystems within the river basin.

The IWMI approach on E-Flows sets Environmental Management Classes (EMC) to identify types of river conditions and suitable management strategies in six categories: A) natural, B) slightly modified, C) moderately modified, D) largely modified, E) seriously modified and F) critically modified. The more pristine the desired management class, the higher the requirements. For example class C, moderately modified river, is considered a "fair" condition for which the low flow requirement is set at 90% of the time on flow duration.

IWMI noted that in the board sense, global environmental flow assessment is too superficial on environmental concern but weights much toward only pure knowledge of hydrological science for water allocation planning. With that in mind, alternative estimation techniques are required. They may still be primarily hydrology-based, but should include time series analysis and have an environmentally acceptable flow regime as an output.

IWMI has adopted the E-Flows to specific studies in some river basins in Asia. Recent basin specific applications include: simplified range of variability approach in Nepal and Sri Lanka; shifting of a major flow duration curve along the probability axis in several major river basins in India; and monthly time series.

IWMI has produced a number of research project publications on E-Flows such as An "Assessment of Environmental Flow Requirements of Indian River Basins; Developing Procedures for Assessment of Ecological Status of Indian River Basins in the Context of Environmental Water Requirements"; and "Hydrological and Environmental Issues of Inter-basin Water Transfer in India: A case study of Krishna River Basin". Sedimentation and water quality have not yet been included in any IWMI E-Flows studies.

#### IWMI Conclusions from E-Flows Studies are:

- Hydrology-based methods of E-Flow assessment can provide initial crude estimates of environmental water requirements at different scales: from global to small river catchments.
- Application of such methods (as opposed to more complex techniques) may be an important first step towards E-Flow management in Asian countries.
- A requirement for better ecological justification of hydrological methods represents an
  opportunity to initiate comprehensive E-Flows assessment studies and feed their more
  sound ecological outputs into hydrological (desktop) methods.
- Actual E-Flows provisions are not the same as environmental water demand estimates. No
  matter how advanced and accurate an E-Flows assessment is, its output will remain on
  paper if the results are not tested and the limitation of water resource exploitation is
  violated.

### 4.4. Unpacking Scenarios and Progressive Tools

The representative from M-POWER gave a presentation describing the many progressive tools, criteria and guidelines that have been produced. These include scenarios and modelling which draw on previous work of the MRC IBFM and other works in the Mekong region on E-Flows, i.e. the translation of the IUCN book "FLOW" into Khmer, Vietnamese, Burmese, Chinese, Thai, and Lao languages. Tools include Strategic Environmental Assessment (SEA), cumulative impact assessment, multi-stakeholder dialogues, and consensus-building negotiations. Currently, M-POWER, with support from the CGIAR Challenge Program on Water and Food, is implementing a project titled, "Improving Mekong Region water sharing and allocation: Examining progressive approaches, techniques and tools." He added that this work may be of assistance to BDP2 in the near future. He also assured MRC of M-POWER's full cooperation whereby the BDP2 team can join that project and the M-POWER team will assist the BDP2 scenarios work when invited.

It was noted that these tools are essential for BDP processes and have substantial unfulfilled potential to drive improved water sharing and allocation in the Mekong and elsewhere by focusing options and impacts and fostering higher quality debate between stakeholders. Planning is important, but only focusing on producing the IWRM-based Basin Development Plan may not be enough to have measurable impacts. BDP2 and stakeholders need to focus on getting tools used as a regular part of decision-making at different levels in all six Mekong countries, including for transboundary developments.

For this to happen, these tools should a have standard minimum of quality and credibility. The MRC and BDP2 should pursue further discussions on how stakeholders can better use these tools and put results into wider use in the BDP process as well as how the use of tools can be harmonised better within the MRC itself and in partnership with other actors. The following suggestions, comments and questions were offered:

### The DSF:

- Modelling should make scenarios more explicit, quantified and transparent.
- Assumptions and formulas need to be declared, for example, there are doubts that the DSF hydrograph was widely used in 2006.
- Models need to be publicly understood. Peer review and publishing of results in scientific
  journals should be considered.
- WUP modelling with the Finland Team and the University of Washington is another good foundation for BDP2

<sup>&</sup>lt;sup>3</sup> CPWF Project Number 67

### **Scenarios:**

- BDP1 scenarios were never released. Why?
- IBFM scenarios also had problems in getting released. Why?
- BDP2 scenarios should be jointly developed. Will release again be a problem?
- Possible parallel processes, for example, SEI and M-POWER joint scenarios work will continue but should inform BDP2 work.
- Will a parallel scenarios process still be required to avoid censorship and to speed up the process of "exploring water futures together?"
- Good scenario work uses other tools and is interactive.
- People can learn from scenarios.
- Process and methodologies are important.

### Informing the Negotiation on Flow Regimes:

- Establishing water flow regimes that recognise ecosystem needs whilst trying to satisfy social and economic demands requires integration of engineering, law, ecology, economy, hydrology, political science and communication.
- Negotiation and decisions must be more informed.

### **Strategic Environmental Assessment (SEA):**

- Will BDP2 and the MRC Hydropower Programme make use of ADB experience and collaborate with the ADB Greater Mekong Subregion Pilot Project 2006-2009, which includes three SEA pilots:
  - (i) Hydropower Master Plan in Viet Nam;
  - (ii) Tourism Sector in Cambodia; and
  - (iii) North-South Economic Corridor (Transport, Trade and Spatial Planning).

### **Cumulative Impact Assessment (CIA):**

- Move beyond single project EIA analysis.
- What can be learned from the CIAs undertaken for Nam Theun II and Nam Ngum?

**Multi-Stakeholder Dialogues:** M-POWER is aiming to institutionalise high-quality deliberation and dialogue between governments, developers, regulators, business and civil society groups.

Dialogues will be large and small meetings and roundtables on focused issues. Examples include: the finance industry's commitment to transnational codes of conduct such as the Equator

Principles; discussion on why fisheries issues are still marginalised in national energy policy in the Lower Mekong, and how best to deal with water pricing in Mekong Region irrigation systems.

Key organisations that convene and facilitate these dialogues include M-POWER (including IWMI, IUCN, CEDAC, Yunnan University), Thailand Environment Institute, and Viet Nam Water Partnership. Conveners are advised to "do dialogues well, or don't do them at all".

### 4.5 BDP Project Assessment Criteria

The BDP project database will contain information on all significant existing, planned and proposed water and related resources development projects in the LMB. The database uses data provided by the member countries and will serve as the basis to screen and prioritise projects to be included in the Project Portfolio, an element of the IWRM-based Basin Development Plan.

The MRC Strategic Plan 2006-2010 has classified projects into 3 types: 1) joint projects and programmes of the four riparian countries; 2) transboundary projects, or sets of complementary projects between two or more riparian states; and 3) national projects or sets of projects with significant or cumulative basin wide implications. The implementation of these projects will promote basin development while contributing to improvements in resource management practices.

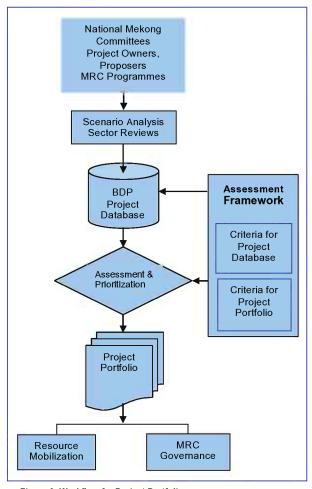


Figure 6: Workflow for Project Portfolio

Significant projects that are likely to have both positive and negative impacts will be identified and used in the BDP scenarios formulation and impact assessments. The projects, either planned by member countries or identified through the BDP process, will be assessed according to a set of criteria that will be agreed by the member countries and other stakeholders. The indicative criteria provided in the BDP2 programme document are:

- Harmony with the strategic directions for IWRM in the LMB;
- National priority and support from the member countries;
- Potential value, costs, side effect, risks;
- Completeness of decision-making in terms of costs and benefits and involving public participation; and
- Implementation aspects in terms of institutional frameworks, resources, and interfaces with national planning.

The criteria will ensure that projects brought forward through the BDP process meet with the triple bottom line principles (economically and socially beneficial and environmentally sound) and contribute to regional cooperation. Compliance with the emerging IWRM-based basin strategy will be an important criterion for short-listing projects in the Project Portfolio. As such, the Project Portfolio includes both for seeking assistance as in Article 2, the 1995 agreement but also for transboundary governance (i.e. Procedure for Notification, Prior Consultation and Agreement (PNPCA) and compliance with other procedures).

# **4.6 Consideration for Sustainable Hydropower Development in the Mekong**

The presentation on WWF's approach to sustainable hydropower development in the Mekong began with an overview of energy demand at the global level as a rationale for hydropower development. There were more than 6 billion people on the planet in the year 2000 using four times as much energy as people were using 100 years ago. WWF's Global Energy Vision 2050 argues that it is possible to meet future energy needs while staying within an average global warming of 2° C. The global energy mix needed to meet these needs requires a certain amount of hydropower. Consequently, around 30% of the remaining hydropower potential will need to be developed. Much of this hydropower potential is in developing countries.

A joint ADB, MRC, WWF initiative titled, *Environmental Considerations for Sustainable Hydropower Development in the Mekong Region* (ECSHD) aims to formulate locally appropriate environmental criteria for sound and sustainable hydropower development for the benefit of countries in the Mekong region. The criteria will: 1) set guiding principles for proposed hydropower to be assessed at the early stage of sector planning; 2) provide a practical tool for applying IWRM that takes into account the complementary objectives of economic growth, poverty reduction and sustainable development; and 3) goes beyond the limitations of a conventional single sector development approach.

### Why is guidance necessary?

- The need to promote renewable sources of energy and minimise the impact.
- Current system planning and project selection focuses mainly on economic and technical aspects while the environment is considered as an add-on.
- High risk; some projects experienced major delays and additional costs.
- To identify most appropriate projects and environmentally sensitive areas.
- To improve operation of existing schemes.

The criteria for the ECSHD can be implemented at many entry points. Currently, the initial scoping stage has been completed and includes assessment of current planning processes, preliminary hydropower inventory, and stakeholder analysis and consultation process with the LMB governments. The project will be formulated by 2008 and guidance will have been developed that can be reviewed and internalised in the national systems by 2009. Specific activities as part of this process may include the establishment of a private sector focal group and links with ongoing processes related to International Hydropower Association (IHA) guidelines and other good practices. The expected result by 2010 is that the key outputs of the project's second phase will have been identified by the GMS countries and delivered, including SEAs on national hydropower plans, a comprehensive hydropower inventory, environmental criteria for hydropower in the GMS, results of stakeholder participation and the future designed programme.

WWF is still working on some of the major proposed dams in the region, including Sambor, Don Sahong and Xayaboury and Pak Lay. Each dam will be approached differently. For example detailed studies are being conducted of economic impacts of the Sambor dam on fisheries and agriculture in the Tonle Sap and the Delta. WWF is looking into the feasibility of alternative designs and locations for the Don Sahong dam, and is studying alternative options for Thai energy needs in relation to the Luang Prabang - Loei Cascade. WWF is also looking into ways to promote recognition of the value of free flowing rivers through studies and communications campaigns, and initiating management of issues in rivers which are likely to remain relatively free of hydropower, starting with the Dza Chou, Songkhram, Xe Bang Hien and Srepok rivers.

### 4.7 Feedback from Stakeholders

Feedback from stakeholders reflected a wide range of interests and many concerns were expressed about the processes to be used in developing and using tools in BDP2 and their impacts. Scenarios seemed to attract the most attention. The BDP project database and IBFM also received a great deal of attention.

### 4.7.1 Scenarios

An M-POWER representative suggested that stakeholders need to understand that scenarios are possible futures, and that personal opinion is always present. Water resources development is complex because both "facts" and "values" can be disputed. Therefore, scenarios should be announced as 'drafts' and corrections of facts or reprioritizing values should be permitted.

A representative from WWF commented that the effective use of assessment tools for scenario analysis is the key added value of the BDP programme. BDP2 should be the team that really seeks to understand the "big picture" of development in the Mekong Basin and informs decision-making processes, not just the "small picture" of MRC-led and facilitated development. These implications apply to both opportunities and constraints arising from other developments.

A participant from WorldFish commented that the baseline scenario should be discussed further, especially the debate about whether to move the baseline. The representative added that 1985-2000 was a period of limited development interventions in the MRB. There are significant implications to using the 2000 baseline, but the process of moving the baseline would perhaps only show small increments in change. An MRC Fisheries expert also requested BDP2 to further clarify whether the scenarios will include ongoing and existing projects, especially the five Chinese dams built from 2000-07.

A representative from M-POWER also noted that Chinese dams should be included since data is often much easier to obtain from the Upper Mekong/Yunnan than in the Lower Mekong. The representative also recommended that a pre-Nam Ngum, pre-biofuels scenario should be included. It was suggested that the use of the term "realistic" is problematic when applied to scenarios or mainstream dams. Many participants also added that the diagram of figure 2 – the part of scenario development should include stakeholder consultation and peer review process.

The MRCS and BDP2 team explained that, ideally, the baseline should be as current as possible. However, updating the hydrological baseline would take a year or more. What can be done relatively easily is to integrate the existing and planned dams in the Upper Mekong Basin and the ongoing hydropower developments in the LMB, since they will be fixed elements of the Mekong system a few years from now.

There was a comment that after the scenarios are assessed, they should be presented to stakeholder groups and member country government officials to ask which direction the development of the LMB should take. BDP2 expects that during the next 20 years, the main river flow and level changes in the mainstream of the LMB will originate in the Upper Mekong Basin, where major storage dams will be developed. Therefore, the main impact of water and land development projects on the mainstream in the LMB might not be flow related, but related to the barrier effect of dams for fish migration.

A private consultant recommended that there were many scenarios that other institutions use including climate change scenarios beyond 2020. BDP2 should look at the interactions of how scenarios could be affected by climate change.

### 4.7.2 Projects: Long-list, short-list and criteria for assessment

A representative from WWF expressed concerns about how the long and short project lists developed in BDP1 would influence the output of the BDP2 Project Portfolio. A large number of these projects are really just a "wish-list" and were included because people saw an opportunity for funding through the MRC. If these projects are unlikely to go ahead because the MRC cannot secure funding for them, the BDP2 team will waste time including them in their scenarios. They

will also make the scenarios very unlikely, resulting in a waste of time and resources. How will BDP2 identify the projects and make judgments to avoid the problem?

On the other hand, some countries might not include important development projects in the information they provide to the BDP2. For example, mainstream dams might not be included, especially if a country is not looking for the MRC to help find funding for these projects. In this case, information about 'real' projects will be missing from the BDP database and scenarios.

A participant sought clarification on whether the MRCS is allowed to initiate projects or could include projects in the database which are not proposed by member countries. In response, a member of the BDP indicated that the MRCS does not suggest projects or determine which projects should go ahead, but provides information to support decision-making by the member countries on what might happen if a project does go ahead.

Is the BDP Project Portfolio simply a wish list of projects or will BDP2 help member countries raise funds to implement projects? Concern was also expressed regarding the role of the MRC in assessing projects and whether the MRC is able to raise concerns with member countries on projects which do not meet the BDP criteria. The BDP2 team informed participants that the four member countries have signed the Procedures for Notification, Procedures for Maintenance of the Flow (PNPCA) while the Procedures for Water Quality (PWQ) are still in negotiation. The BDP Project Portfolio would be part of the implementation of these procedures to enable good water governance. The MRC will solicit funds for projects where possible and will help to ensure the best design and implementation of those projects so that negative transboundary impacts are minimised. MRC can only be involved in projects if requested by a member country. A representative from the Finnish Embassy said that she was eager for the MRC Hydropower Program to start. Funding has been ready since the beginning of this year. Finland is looking forward to the start up of this important programme and to enhanced collaboration between the MRC programmes. The MRC should not wait for too long to initiate these crucial and urgent projects.

### 4.7.3 **IBFM**

A number of questions were raised regarding IBFM: Will there be IBFM 4? How can IBFM work and how can it be useful? How can IBFM complement BDP2? Will IBFM work at all, and if so, at what level? Will IBFM engage stakeholders at local levels?

The MRC IBFM and BDP2 specialists responded that BDP2 would use IBFM process, predictive tools and the environmental and socio-economic indicators. BDP2 will need to develop some of the indicators that IBFM has not yet developed. IBFM 4 may happen, however, it depends on funding and agreements with the member countries. The IBFM will help BDP2 assess development scenarios in terms of biophysical and livelihood impacts. In addition, the Environment Programme will conduct a Vulnerability Assessment, which will be a study at local scales. The results of the study will provide inputs to BDP2 for scenario assessment. The BDP2 team will also use an IBFM knowledge base for sub-area studies, stakeholder consultations and trade-off discussions. This will complement the engagement of stakeholders in the BDP process.

# 5. IWRM – From Global Principles to Regional Strategies and Local Actions

### **Synopsis**

**Key Message 7:** A thorough understanding of IWRM in the LMB is required for an IWRM-based Basin Strategy to be relevant.

**Session Objectives:** 1) To discuss the purpose and scope of an IWRM-based strategy for development and management of the LMB to meet expectations of different stakeholder groups. 2) To discuss the role of sub-basin as part of a basin wide IWRM approach and learn from experience in this fields.

This section contains: An outline of the aims of the IWRM-based basin strategy; a discussion of transboundary water governance; feedback from stakeholders on the need for capacity building in IWRM planning; developing and institutionalising a sound planning processes; agricultural needs for water and the capacity of the BDP to respond to the need for notification and prior communication as defined in the 1995 Agreement.

### 5.1 An IWRM strategy for Basin Development and Management

The IWRM-based Basin Strategy forms part of the IWRM-based Basin Development Plan and is one of the most important outputs of BDP2. The BDP2 team believes that the Strategy will establish a cooperation framework among the member countries and stakeholders, and function as both a tool and a process to inform decision making and help stakeholders share visions and responsibilities.

Preliminary aims of the IWRM-based basin strategy as proposed by the BDP2 team are:

- To reconfirm and define the long-term goals and objectives of basin development and management.
- To provide a planning framework and a long-term view of how the basin's waters and related resources, including the mainstream, will be developed in a sustainable way for the equitable benefit of the riparian states and their peoples.
- To guide the strengthening of water governance for IWRM at the basin, national and subbasin levels.
- To allocate responsibilities for implementation of the Strategy.

The BDP2 team views the Strategy as an essential tool and a process to help riparian states track significant drivers of change. The Strategy is intended to help member countries seize opportunities and avoid or mitigate negative impacts.

The Strategy will be built on the current document "Strategic Directions for IWRM in the Lower Mekong Basin" (approved by the MRC Council in 2005) and development scenarios that member countries will jointly select as the best possible future for water and related resources development and management. Scenarios will help guide member country development and predict impacts and trade-offs mainly in the hydropower, irrigation and fisheries sectors. The preparation of the IWRM-based Basin Strategy builds on selected BDP scenarios and establishes a framework that provides guidance which the riparian states can use to prepare and implement national policies, strategies and plans. The member countries are not required to commit to a particular set of projects, but are identifying a development space where the countries can optimise benefits while sustaining the environment and avoiding negative social impacts.

The presentation also highlighted that transboundary water governance is a focal issue for the IWRM-based Basin Strategy. As such, there are important issues that need to be addressed for the sound development of the Strategy such as:

- Reviewing draft national policies, plans and project documents throughout the project cycle (e.g. Terms of Reference, project identification and feasibility studies, EIAs.).
- Pubic information and consultations.
- Harmonising systems, methods, procedures, standards, and tools for monitoring, planning, developing and managing water resources.
- Monitoring and reporting processes linked to the sub-basin level.
- Clarifying roles of various entities and action plans in transboundary water governance, and the data and information exchange between them.
- Defining mechanisms and responsibilities for monitoring and reporting against the milestones and targets in the action plan.

The concept and outline of the IWRM-based Basin Strategy presented at this Stakeholder Consultation was informed by a Regional Technical Working Group (TWG) on Development Scenarios. This TWG brought together seven representatives each from the member countries NMCs, national line agencies and research institutes and MRC programmes. The next step is to submit a draft outline to the MRC Joint Committee in June 2008. The preparation of the first draft strategy will be due in September 2008, and interim national and regional consultations for review and inputs by stakeholders will be held.

### 5.2 Feedback from Stakeholders

A question was raised on the understanding of IWRM issues in the Mekong River Basin. Is there a good knowledge of IWRM and national policies in each of the riparian countries, which would be synthersised into the IWRM-based strategy. The long experience of Thailand in IWRM policy formulation and in developing River Basin Committees should be shared with other riparian countries in the process of preparing the basin strategy.

National sovereignty would be a challenge in aligning national water resources management policies with the basin strategy and ensuring integrated actions at basin, national and sub-basin levels. The LMB only constitutes parts of Thailand and Viet Nam. Therefore, water resources management in the LMB in these countries should be coherent with broader national policies that cover many other rivers. The representative from the Centre for Resources Development and Environment, Viet Nam, sought clarification on whether member countries need to notify each other when a feasibility report and implementation plan are ready, as indicated in the 1995 Agreement. Would the BDP have sufficient time to assess impact and suggest action and will there be any change in the 1995 Agreement?

An important reminder from a representative from WorldFish, provided in writing, was the urgent need for capacity building in IWRM planning. The Strategy should not focus solely on developing new plans, but should support the member countries and partners to manage development initiatives that are ongoing. Most of the current development is happening outside of the BDP process and even outside of the MRC itself. It is essential that the MRC live up to the principles of the 1995 Agreement and contribute to the better management of ongoing initiatives, whether they are inside or outside the MRC.

Capacity building for IWRM is also important. The WWF representative added that BDP2 should prioritise IWRM capacity building efforts in the sub-basins where change is happening most rapidly, or where change is likely to be of the greatest magnitude, as identified BDP scenarios. National sovereignty is also an important issue, i.e. the willingness of member countries to negotiate national priorities and transboundary water policies.

# 6. Stakeholder Participation in MRC Basin Development Planning

### **Synopsis**

### **Key Messages**

- 1. Basin Development Plan Stakeholder Consultations are an opportunity for open discussion about the challenges, visions and approaches to development and management of the Mekong River Basin.
- 2. The challenge for MRC is to ensure its relevance in the changing context of the Basin and demonstrate the impact of an MRC Strategic Plan at both Basin and national levels.

**Objectives:** 1) discuss the roles of stakeholders in the MRC Basin development planning process and how the BDP Programme can facilitate stakeholder participation. 2) To share experience and lesson learned from RBOs in involving stakeholders in sub-basin planning in Mekong tributaries and update in activities for stakeholder involvement in planning processes at the sub-catchment level.

**This Section Contains:** Insights into civil society organisations (CSOs) in the Mekong Region provided by the Social Research Institute (SRI), Chulalongkorn University, Thailand; a presentation in outline form of the BDP2 Stakeholder Participation and Communications Plan and expected outcomes from the Communications Plan.

### 6.1 Understanding stakeholders roles and expectations

The Social Research Institute (SRI), Chulalongkorn University, Thailand, provided the Consultation with some insights into civil society organisations (CSOs) in the Mekong Region. CSOs believe that as a result of market-driven globalisation and emerging trends in governance, an atmosphere of partnership is essential. It has become unrealistic for any single actor to perform in isolation of other actors. In their presentation, they noted what they see as three major limitations of the MRC: a weak mandate over only a portion of the Mekong Basin, institutional distance from local communities, and the technical nature of its programmes. SRI encouraged the MRC to enhance its current partnerships and create new ones.

The MRC faces pressures of balancing sometimes conflicting interests different actors, both from within the member countries and from external donors. Civil society groups understand the vision of the MRC's sustainable development agenda, but the MRC has been conspicuously absent in situations where the interests go against its own agenda and vision. Examples mentioned were the negotiation of the Lancang-Mekong Navigation Improvement Project, Yunnan hydropower expansion, and debates about hydropower development on tributaries. There are also a number of cases waiting for MRC engagement such as the proposed Lao-Thai water transfer, inter-basin water diversions, actions on risk assessment, issues related to the Tonle Sap fisheries and, most importantly, Mekong mainstream dams. Civil society wishes to see the MRC as willing and capable of dealing with these issues.

Historically, the performance of the MRC has not demonstrated either transparency or willingness to engage with civil society groups. During the past six years, the limited participation and transparency of the MRC Water Utilisation Programme (WUP), BDP1 and Fisheries Programme and the lack of engagement with non-state actors have eroded faith in the MRC. As a policy process facilitator, the MRC should be able to foster an atmosphere of dialogue and exchange of information and be open to comment and criticism from the public.

Private economic actors and market forces are presenting new challenges to the region, and the MRC cannot be the only actor in development. The MRC needs to learn to work more closely with civil society groups to address critical issues starting with sustainable development and transboundary interests. The presentation provided the following 'agenda' of expectations the MRC is encouraged to meet:

### Address Knowledge Gaps:

- Provide better platforms for policy processes.
- Bridge the gap between technical knowledge and the knowledge bases of CSOs, NGOs and community networks.

### **Regional Policy Gaps:**

- Be the "voice-of-the-voiceless".
- Recognise that national governments and other actors are going ahead with their own
  planning and implementation agendas regardless of the MRC; engage them constructively
  and proactively.

#### **MRC** and Public Policy Processes:

- Improve capacity to deal with complex issues and inter-disciplinary perspectives.
- Listen to different perspectives and be openness to counter-narratives and uncertainty.
- Engage with relevant networks, for example, research networks, regional NGOs, M-POWER, local NGOs.
- Promote participatory multi-level governance through multi-stakeholder dialogues.
- Engage with regional organisations like ASEAN, ADB-GMS and the World Bank.

### 6.2 BDP2 Stakeholder Participation and Communications Plan

The BDP2 Stakeholder Participation and Communications Plan, also referred to as the Participation Plan, was presented in outline form. Stakeholders were invited to comment on ways of participating and identify their interests. The Participation Plan builds on the achievements of BDP1, the MRC Public Participation Policy and the MRC Strategic Plan 2006-2010.

Stakeholders in the BDP context are defined as individuals or groups based in or outside the Mekong River Basin and who: 1) are directly or indirectly affected by basin development planning and developments in the LMB, 2) are involved in basin development planning processes or development in the LMB, and 3) have an interest in basin development planning or development in the LMB.

BDP Stakeholders are classified into nine groups.

- Individuals or groups of people from communities and local NGOs or community leaders.
- 2) Decision and policy makers. Mainly national governments and national agencies.
- 3) Planners and advisory bodies. MRC and national line agencies, MRCS Programmes and BDP.
- 4) Concerned international, regional and national NGOs, academia and research institutes. Includes organisations that have development, management and research interests in the region, for example, universities, IWMI, M-POWER, IRN, TERRA.
- 5) Development partners. Donors and International development organisations such as DANIDA, AusAID, ADB-GMS and the World Bank.
- 6) Public and private business investors. Investor and companies focusing on infrastructure development.
- 7) Private interests. Private consultants and individual researchers.
- 8) The media. Print and electronic.
- 9) Upstream countries. China and Myanmar and non-state groups in those countries.

This classification helps BDP2 identify target groups for planning activities and for communicating appropriate messages to those groups. The terms "MRC stakeholders" and "public stakeholders" replace the terms "internal stakeholders" and "external stakeholders" used in BDP1. MRC stakeholders are the MRC Council, Joint Committee, the MRC Secretariat, the National Mekong Committees and their Secretariats, and the principal line agencies in each member country. Public stakeholders are non-states bodies such as NGOs, implementing partners, civil society organisations, policy advocators, research institutes, individuals, the media, and other groups who have interests or who can contribute information, views and perspectives.

In the BDP2 Inception Report, the Participation Plan will be used as a policy document with principles, guidelines and a specific plan of activities to be implemented throughout BDP2. The five main activities for the Participation Plan are:

1) Establish principles and guidelines for stakeholder participation and communication in BDP2 and in the BDP process in general. This work will be done by updating the BDP1

Stakeholder Participation Guidelines and aligning them with current MRC policies for stakeholder participation and communication.

- 2) Carry out BDP2 stakeholder identification and analysis at regional, national and local levels within the broader context of MRC and public stakeholders.
- 3) Develop a detailed workplan which will integrate effective stakeholder participation activities into the formulation and development processes of the main BDP2 outputs, especially the basin wide and sub-area scenarios, IWRM-based Basin Strategy, assessment tools and updating sub-area analysis. Specific activities that can be developed include:
  - Stakeholder consultations at regional, national and sub-area levels.
  - Mechanisms such as the Regional Technical Working Group on scenarios and IWRM-based Basin Strategy for involvement and participation of different stakeholders in BDP2 activities.
  - Technical discussions that will directly contribute to the BDP process and production of BDP2 outputs.
- 4) Improve interaction between national planning line agencies and MRC programmes through the BDP process.
- 5) Design and deliver BDP2 communications packages.

The expected outcomes from the Stakeholder Participation and Communications Plan are: 1) transparency and participation with stakeholders at the most decentralised levels, 2) regional cooperation, 3) increased quality of outputs and ownership among stakeholders, 4) greater confidence in the BDP process from the member countries and the public.

### 6.3 Feedback from Stakeholders

### **6.3.1 Institutional Structure**

There were constructive comments and critical questions about the BDP2 Stakeholder Participation and Communications Plan. An important note from Chulalongkorn University reminded participants that, as framed by the 1995 Agreement, the MRC does not have any regional authority. It is a knowledge base and policy coordination body. Governments do not seem to recognise that there is a water crisis that requires cooperative action. The MRC needs to emphasise regional knowledge and to move beyond its bureaucratic structure. It is currently not grounded in the public sphere. There is a lot of interest in the MRC from stakeholders and there are open doors for more interactions. Many stakeholders believe in the potential of the MRC as an institution, but not in its present form.

IWMI also reminded BDP2 that the BDP process should define the roles and authority levels of the stakeholders within the MRC (Joint Committee and Council), MRCS and MRC Programmes), and clearly communicate these to public stakeholders.

A critical question was brought forward from an MRCS participant to the panel: When talking about the MRC as an inter-governmental organisation with four states involved, do civil society organisations think they can go through their respective governments to help strengthen Mekong governance in their countries?

### 6.3.2 Significance of Stakeholder Participation

The representative from WWF commented in writing that the Stakeholder Participation and Communications Plan is not a stand alone component but an integral part of, and fundamental to, the success of each of the other BDP2 components. Perhaps it should be treated as a cross cutting output. If the Participation Plan is seen as a separate component, BDP2 can achieve the objectives through discrete activities such as 'x' number of stakeholder workshops. If, on the other hand, it is seen as part of each of the other components, then it forces the BDP2 team to ask for every single output, "What does enhanced stakeholder involvement and communication mean in terms of this specific output and how can it best be achieved?" The answer will be different from one output to another and so will the achievements.

BDP2 will need to start by identifying the stakeholders who can contribute to the knowledge base and how the programme can engage them. There was a considerable discussion about recognising non-formal knowledge, such as Tai Baan and Sala Phoum<sup>4</sup> networks, and a lot of questioning about how BDP2 can access and make use of local knowledge in developing the BDP knowledge base. Stakeholders who can contribute to upgraded BDP assessment tools comprise different groups, such as computer modellers, scenario analysis experts, universities and research institutions. Initially, BDP2 would engage with these different groups in different ways. BDP2 may seek to encourage Tai Baan networks to share their knowledge in network workshops, while subcontracting academics or consultants to help develop assessment tools, or asking other academics to peer review the tools being developed. Perhaps even this convention could be challenged and Tai Baan networks asked to peer review documents that BDP2 produces, or employ Tai Bann researchers as consultants to synthesis their knowledge for the BDP.

The WWF representative suggested a possible area of collaboration between WWF and BDP2 in some sub-areas of the Mekong Basin, particularly in Sub-area 3-Thailand Northeast Thailand and Strung Treng - Kratie in Northeast Cambodia. WWF has a strong presence on the ground and works closely with communities and local NGOs. BDP2 may be able to facilitate the involvement of these groups in these particular sub-area assessments and dialogues.

An MRC/WWF collaboration was proposed to facilitate improved participation of local communities and capacity building on integrated basin planning in some critical sub-basins where changes are occurring rapidly and dramatically. The Xe Ba Hien, Xekong, and Sesan sub-basins were cited as examples. There should be an appreciation for certain deliverables to be provided through the programme implementation. The Stakeholder Participation and Communications Plan

<sup>&</sup>lt;sup>4</sup> More information about Tai Ban and Sala Phoum research please visit <a href="http://www.livingriversiam.org/mk/mek">http://www.livingriversiam.org/mk/mek</a> research sum en.htm, and <a href="http://www.mekongwetlands.org/Demonstration/Cambodia/our-work.htm">http://www.mekongwetlands.org/Demonstration/Cambodia/our-work.htm</a>.

should be seen as an integral and supporting element of the whole BDP process and for all BDP2 outputs.

A representative from WorldFish offered a similar comment, that stakeholders would encourage BDP2 to consider planning foremost as a process to deal with development and water resources management challenges, rather than simply the production of documents and identification of investment opportunities. Within this process approach, stakeholder consultation is recognised as fundamental, and the WorldFish representative congratulated the BDP2 team on taking these initial steps. BDP2 has taken a positive step that has raised its credibility significantly. From among the participants there appears to be widespread support for the BDP2 to continue this process. This should take several forms to engage meaningfully with the diversity of stakeholders in the basin. In particular, BDP2 is encouraged to plan a series of locally-led consultations, building on support from many local partners and ongoing initiatives including the Wetlands Alliance Programme (WAP) and WorldFish Centre. Given the concerns related to fisheries, the representative recommended a series of consultations that focus specifically on these issues. These can draw on Sala Phoum and Tai Baan experience, and could focus on some of the key areas within the BDP sub-areas, such as Siphandone-Stung Treng, the 3S river system, Tonle Sap, Mekong Delta (Cambodia and Viet Nam) and the Upper Mekong.

### 6.3.3 Engaging the Private Sector

The representative from International Rivers reminded participants that it is important to involve the private sector in the BDP process. BDP2 can help facilitate private sector collaboration with stakeholder groups. He also raised questions about how stakeholders will participate in the process of scenario analysis, and how BDP2 will integrate participation and issues at different levels such as village level, research, social and cultural values of the river. In response to these questions, the representative from the Embassy of Finland suggested that BDP2 connect with an ADB initiative on socio-economic information and assessment.

### 6.3.4 Building on Local Knowledge and Experiences of other Organisations

Engaging local communities as stakeholders in the basin planning process and drawing on local knowledge were recurrent topics during the Stakeholder consultation. It was noted that other organisations face similar challenges in engaging communities. The BDP sub-area working groups are the key to ensuring stakeholder engagement at the local level and building capacity at the community level. The BDP2 team was encouraged to work closely with partner organisations.

Organisations also made explicit requests for the BDP process to provide opportunities for engaging them and using their knowledge and experience. University and research networks would like to be the part of the basin development plan and called on the MRC to make use of university facilities for public engagement. Suggestions were also made for BDP2 to build on networks that are already available, such as the Sustainable Mekong Research Network (Sumernet), the M-POWER network and others. Members of these networks are ready to help BDP2. Participants also suggested that for this type of consultation, more time is needed for discussion and to review the documents in advance. With a difficult concept like Basin development planning and highly technical discussions like the ones at this BDP Stakeholder Consultation, BDP2 should find ways to simplify the delivery of information to ensure that all target participants can keep up and make a good contribution.

### 7. Looking forward

MRC and BDP2 acknowledge with sincere thanks and appreciation the constructive comments and suggestions provided by the stakeholders.

The BDP Stakeholder Consultation was a positive initiative and improved the overall level of stakeholder support for BDP2. There are clear expectations of the MRC BDP2 to follow up on actions to maintain interest and support to continue this useful process.

An immediate step for BDP2 team is to finalise the Stakeholder Participation and Communications Plan, which lays out a thoroughly considered process for involvement of stakeholder groups at different planning stages. This process should be at all levels, each with an appropriate mechanism. As noted in the Inception Report, it should address the challenge of balancing a quality participatory planning process that captures rapid developments in the Basin and the need for BDP2 to come up with early results in the form of new knowledge and information to facilitate discussion.

Further consultations on a Stakeholder Participation and Communications Plan and initial results of other BDP2 outputs, such as scenarios work, will be organised in appropriate ways with concerned stakeholders. The BDP2 team will discuss further with partner organisations on how the initial ideas for cooperation can be translated into practical joint activities.

An approval process is described in the Inception Report and provides stakeholders with a clear view that approval of member countries will be sought for the IWRM-based Basin Development Plan. This is important as the BDP programme is seen as the planning mechanism which the member countries will use to steer, coordinate, facilitate and monitor water related development in the Mekong River Basin. It will also help guide capacity building for IWRM and identify opportunities for sharing expertise and joint learning. This should provide the platform the MRC needs for engaging in transboundary assessment and governance in line with the 1995 Mekong Agreement.

### Annex I. Programme Agenda

### BDP Stakeholder Consultation, 12-13 March 2008, Vientiane, Lao PDR

Time	Торіс	Presenter
		Day one, 12 March 2008

08:00-08:30	Registration	
		i

### Opening Session: Welcome, Objectives of the Stakeholder Consultation and Expected Results

08:30-08:45	Welcome Remarks	Mr. Chanthavong Saignasith,
		Member of MRC Joint
		Committee
08:45-09:00	Objectives and expected outcomes of the	Mrs. Pham Thanh Hang, BDP
	Stakeholder Consultation/Adoption of the	Coordinator
	programme	

## Session 1 MRC's roles in sustainable development in the Mekong River Basin and introduction to the BDP Programme

09:00-09:05	Remarks by facilitator	Mr. John Dore, M-POWER
09:05-09:25	Roles of the MRC in Sustainable Development in the LMB and the MRC Strategic Plan 2006-2010	Director Navuth Te, Technical Support Division, MRCS
09:25-09:45	BDP Programme – Achievements of Phase 1; goal, objectives, structure and main outputs of Phase 2. The importance of Stakeholders in BDP process	Mrs. Pham Thanh Hang, BDP Coordinator
09:45-10:05	Civil society's perspectives: Practical example of local knowledge and experience in Basin planning and the roles of the MRC and BDP Programme	Mr. Tek Vannara, Culture and Environmental Preservation Association (CEPA)
10:30-11:30	Plenary discussion	

## Session 2 Basin development for poverty alleviation and sustainable development in the Lower Mekong basin – Potentials and constraints; National priorities in Basin wide context

11:30-11:35	Remarks by facilitator	Dr. Richard Friend, Scientist,
		WorldFish Centre
11:35-12:30	Some drivers of change and their implications for basin development and management	Mr. Ton Lennaerts, BDP CTA
12:30-13:30	Lunch	

13:30-15:30	National development priorities and country perspective on the Basin development and poverty reduction. Including national contribution to and expectation from BDP  - Cambodia - Lao PDR - Thailand - Vietnam	National Mekong Committee and/or Line Agency
15:30-15:50	Fisheries and sustainable livelihood in LMB: Challenges to BDP	Dr. Chris Barlow, MRC Fisheries Programme
15:50-16:10	Trends and options for agriculture and plantation options in the Lower Mekong River Basin	Dr. Robert Mather WWF, Living Mekong Initiative
16:10-17:10	Round table discussion	
18:30 -20:00	Reception dinner  Dinner Speech 'MRC's role in Asia in the coming decades and the responsibility of the stakeholders"	Dr. Noritada Morita, "Chairman and CEO, Asia Strategy Forum"

### Day two, 13 March 2008

08:30-09:00	Key messages of the day 1	Mrs. Pham Thanh Hang, BDP
		Coordinator

### $Session \ 3-Innovative \ tools \ to \ inform \ basin \ development \ planning \ \& \ decision \ making$

09:00-09:05	Remarks from facilitators	Dr. Andrew Noble, Director IWMI SE Asia
09:05-09:25	Development scenarios in Basin Development planning – a proposed approach	Dr. Thanapon Pitman, BDP Modeling Specialist
09:25-09:45	The relationship between scenarios and other decision making tools	Mr. John Dore, on the behalf of Chiang Mai University's Unit for Social & Environmental Research (and M-POWER).
09:45-10:45	Plenary discussion	

## Break-out sessions – Three Break-out sessions in separate rooms. Time 11:00-12:30 3.1 Track 1- Decision Support Framework

11:00-11:05	Remarks from facilitator	Dr. Chu Thai Hoanh, Senior
		Officer, IWMI SE Asia
11:05-11:25	Hydrology of the Mekong River Basin	Dr. Chusit Aperumanekul, MRCS
		Hydrologist

11:25-11:45	Practical use of DSF	Dr. John Forsius, MRCS
		Modeling specialist
11:45-12:30	Plenary discussion	

### 3.2 Track 2 - Integrated Basin Flow Management (IBFM)

11:00-11:05	Remarks from facilitator	Mr. John Dore, M-POWER
11:05-11:25	E-Flows	Dr. Peter McCornick, Director IWMI Asia
11:25-11:45	IBFM in Basin Development Planning process	Ms. Worawan Sukrareok, IBFM Project Manager, MRCS
11:45-12:30	Plenary discussion	

### 3.3 Track 3 - Assessment of projects

11:00-11:05	Remarks from facilitator	Mr. Mr. Dirk Lamberts Senior Research Ecologist, Katholieke Universiteit Leuven
11:05-11:25	BDP proposed assessment criteria for water resources development projects	Mr. Phetsamone Southalack, BDP Environment Specialist
11:25-11:45	Environmental Criteria for Hydropower Development in the Mekong Region	Dr. Robert Mather, Director, Living Mekong Initiative Programme
11:45-12:30	Plenary discussion	
12:30-13:30	Lunch	

### $Session \ 4-IWRM: From \ global \ principle \ to \ regional \ strategies \ and \ local \ actions$

13:30-13:35	Remarks from facilitator	Dr. Andrew Noble, Director SE Asia
13:35-13:55	Developing National IWRM strategies – Lessons learned for a coherent regional approach	Mr. Prasit Warnset, Director of Coordination and Basin Management, Department of Water Resources Regional Office, Thailand
13:55-14:15	Outline of an IWRM based basin strategy – Food for thought	Mr. Ton Lennaerts, CTA BDP Programme
14:30-15:30	Round table discussion	

### Session 5 - Stakeholder participation in Basin Development Planning

15:30-15:35	Remarks by facilitator	Dr. Richard Friend, Scientist,
		WorldFish Centre

15:35-15:35	BDP Phase 2 proposed scope and approach of the Stakeholder participation and communication plan	Mr. Suparerk Janprasart, BDP Programme Sociologist
15:55-16:15	Local perspective, lessons learned on stakeholder participation in BDP Phase 1 and expectation from BDP Phase 2	Mr. Nguyen Xuan Hien, BDP Sub-area in Vietnam
16:15-16:35	Building on local knowledge for Basin Development Planning	Professor Surichai Wun'gaew, Chulalongkorn University
16:35-17:45	Plenary and Roundtable discussion	

### **Closing session**

17:45-18:00	Remarks from MRCS	Mr. Do Manh Hung, OIC MRCS
18:35-18:15	MRC Joint Committee Closing remarks	Mr. Chanthavong Saignasith,
		Member of the MRC Joint
		Committee

# **Annex II. List of Participants**

### <u>Australia</u>

Dr. Mac Kirby Project Leader Australia Commonwealth Scientific and Research Organisation (CSIRO)

### **Cambodia**

Mr. Chhum Sokchann Ministry of Water Resource and Meteorology

Mr. Eric Baran Senior Scientist WorldFish Center

Ms. Estela Estoria Regional Programm Officer Mekong River Basin Management (MRBM) Programme, Oxfam America

Mr. Hoy Sithykun Deputy Director of Planning Department Ministry of Planning

Mr. Kith Seng Director of Planning Department Ministry of Agriculture, Forestry and Fishers, Cambodia

Mr. Kunthel Tonn Mekong Project Officer The NGO Forum on Cambodia

Ms. Nang Noy Nhuy Field Support Officer Sesan River Protection Network Project,

Mr. Phan Mora Programme Officer Partnership for Development in Khampuchea

H.E. Mr. Pich Dun Secretary General CNMC CNMC Secretariat Dr. Richard Friend Scientist The WorldFish Center

Dr. Robert Arthur Scientist The WorldFish Center

Mr. Seng Suon
Executive Director
Center for Development Oriented Resource
(CENTDOR)

Mr. Vannara Tek Advocacy Program Manager Culture & Environment Preservation Association (CEPA)

Mr. Watt Botkosal Director of Planning Department & National BDP Coordinator CNMCS

### China

Ms. Yin Yu Research Fellow, Green Watershed and M-POWER,

### Lao PDR

Mr. Aloun Sayavong National BDP Coordinator Lao National Mekong Committee

Ms. Amphavanh Sisouvanh Activity Manager AusAID Mekong Water Resources Unit

Mr. Anching Research Assistant Embassy of Korea

Mr. Chalern Inthavy Deputy Permanent Secretary Ministry of Energy and Mines, Alternate Member

Mr. Chansaveng Bounghong Chief of Power Sector Planning Division, Department of Electricity Ministry of Energy and Mines Mr. Chanthavong Saignasith Director General of LNMCS Lao National Mekong Committee

Ms.Chithpasong Reporter, Khaosan Pathet Lao

Dr. Edward Wronski Wronski & Associates Consulting

Dr. Erik Nielsen Programme Coordinator IUCN Laos

Mr. Franck
The Educationi for Development Fund

Mr. Joosr Foppes Netherlands Development Organisation (SNV)

Dr. Jutta Krahn Consultant

Ms. Kate Wallace Senior Environmental Specialist Earth System Lao

Mr. Keoduangchai Keokhamphui Lecturer Department of water Resources Engineering

Mr. Khamsay Phothideth Director Planning Division, Department of Planning, Ministry of Agriculture and Forestry, Alternate Member

Mr. Khamsouk Sundara Senior Advisor Oxiana-LXML

Mr. Khamthanh Vatthanatham Deputy Director Fisheries Division, Department of Livestock and Fisheries, Ministry of Agriculture and Forestry

Mr. Kongsa Douangmala Director Kongsa Factory

Mr. Luc The Education for Development Fund Mr. Mark Dubois Aquatic Ecology Specialist Earth System Lao

Mr. Mathieu Chatenet GIS & Database Officer Argonaut Resources (Laos) Co. Ltd.

Mr. Meuangkham Journalist Vientiane Time

Mr. Michael Hedemark Representative Wildlife Conservation Society

Ms. Michiko Suga Social Sector Specialist Asian Development Bank

Mr. Nanong Khotpathoum Executive Director Earth System Lao

Mr. Oula Somchanmavong The Mineral Policy Institute

Ms. Phaylin Bouakeo Water Resources Coordinating Committee

Mrs. Phengchanh Phengmuang Deputy Director General Planning and Cooperation Department, Lao National Tourism Adminstrative

Mr. Richard Taylor Manager-Strategic Analysis Oxiana-LXML

Dr. Robert Mather Senior Programme Manager WWF Greater Mekong-Living Mekong Programme

Ms. Sarah Matchett Environment Consultant Earth System Lao

Mr. Simon Buckley Manager / First Secretary AusAID, Mekong Water Resources Unit

Mr. Simon Henschel Head of Administration Unit Lao Institute for Renewable Energy Mr. Singha Ounniyom OIC-Environment Unit UNDP

Mr. Somnuk Chanthaseth Director Planning and Cooperation Division, Department of Irrigation, Ministry of Agriculture and Forestry

Mr. Souksavat
Deputy Director General
Department of Planning & Cooperation,
Ministry of Public Works & Transport

Mr. Souphanh Gnabandith
Technical Officer
Department of Inland Waterway
Transportation
Ministry of Public Work and Transport

Mr. Strung Julien Trainer Faculty of Lao & Political, National University of Lao

Ms. Vannida Dejvongsa Lane Xang Minerals Limited

Mr. Vongtavanh Sayavong Officer on Sustainable Livelihood Basin Needs

Mr. Yuichi Metoku Second SecretaryEmbassy of Japan

### **Malaysia**

Dr. Andrew Duncan Noble Head of IWMI-SEA International Water Management Institute (IWMI)

Dr. Chu Thai Hoanh Senior Water Resources Specialist International Water Management Institute (IWMI)

### **MRC** Secretariat

Mr. Aiden Glendinning Interim Communication Officer International Cooperation & Communication Section Mr. Antonius Lennaerts Chief Technical Advisor Basin Development Plan Programme

Dr. Ashley Stewart Halls Programme Coordinator Fisheries Programme

Mr. Bounphet Phommachanh Programme Officer Navigation Programme

Ms. Chansouk Souphanthavong Secretary to Chief of ICCS International Cooperation & Communication Section

Ms. Charlotte Gobin Junior Profressional Officer International Cooperation & Communication Section

Ms. Chitlatda Keomuongchanh Administrative Assistant Basin Development Plan Programme

Ms. Chitthina Misaiphon Secretary to Director Planning Division

Mr. Christoph Mor Technical Coordination Advisor Office of CEO

Dr. Christopher Barlow Programme Manager Fisheries Programme

Mr. Christrian Internship, GTZ

Dr. Chusit Apirumanikul Operational Hydrologist Technical Support Division

Mr. Do Manh Hung Director Operations Division

Dr. Hakan Berg Senior Environment Specialist Environment Programme Mr. Hiroshi Okudaira Senior Advisor

Agriculture, Irrigation and Forestry

Programme

Mr. Inthaneth Norasingh

HR Officer

**Human Resource Section** 

Ms. Iwona Colan EP Consultant

**Environment Programme** 

Mr. Jana Jinssen Intern, GTZ

Mr. John Forsius

Senior Modeling Advisor, Technical Support Division

Mr. Keu Moua

**Environmental Policy and Management** 

Specialist

**Environment Programme** 

Mr. Khoi Tran Minh Water Quality Specialist Environment Programme

Mr. Le Van Diem IKMP Coordinator

**Technical Support Division** 

Mr. Minh Ngoc Huynh Component Manager Mekong River Commission

Flood Management & Mitigation Programme

Mrs. Pham Thanh Hang Programme Coordinator Basin Development Plan

Mr. Phetsamone Southalack Environment Specialist

Basin Development Plan Programme

Ms. Rachel Cooper

Intern

Basin Development Plan

Dr. Sengamphone Chithtalath

Gender Associate HRS/MRCS

Mr. Sengkham Inthiratvongsy GIS & Data Management Specialist Basin Development Plan Programme

Ms. Somchit Luangkhot

Secretary BDP

Mr. Sompong Boonprasert

Senior Hydrologist

**Technical Support Division** 

Mr. Suparerk Janprasart Socio-economist/ Sociologist

Basin Development Plan Programme

Mr. Tatsuo Kunieda

Senior Advisor on River Management Basin Development Plan Programme

Mr. Te Navuth Director

**Technical Support Division** 

Dr. Thanapon Piman Modeling Specialist Basin Development Plan

Ms. Theresa Wong Intern, BDP

Ms. Viengvilay Sinprasith

Secretary

International Cooperation & Communication

Section

Mr. Wolf Hartman Component Manager Fisheries Programme

Mr. Wolfgang Schiefer

Chief

International Cooperation & Communication

Section

Ms. Worawan Sukraroek Programme Officer Environment Programme

### Sri Lanka

Mr. Peter Gordon McCornick

Director Asia

International Water Management Institute

(IWMI), Colombo

### **Thailand**

Dr. Adis Israngkura School of Development Economics Thailand Development Research Institute

Mr. Asae Sayaka Director

Wetlands International

Dr. Carl Middleton Mekong Programme Coordinator International Rivers

Mr. Chaiyuth Suksri Head of Water Resources Engineering, Chulalongkorn University

Dr. Chayanis Krittasudthacheewa Research Fellow Stockholm Environment Institute

Mr. Dirk Lamberts Senior Research Ecologist Katholieke Universiteit Leuven

Ms. Helena Ahola First Secretary Embassy of Finland

Mr. John Dore Director M-POWER Unit for Social and Environment Research

Ms. Kareema Wongsin
Policy and Plan Analyst and Assistant to
BDP Coordinator, DWR
Thai National Mekong Committee

Ms. Karin Isaksson First Secretary Swedish International Development Cooperation Agency (Sida), Thailand

Mr. Laowthai Ninnan Civil Society, 3 T

Dr. Noritada Mirita Chairman and CEO, Asia Strategy Forum Ms. Pakawan Chufamanee Director, Mekong Affairs Branch & Head of BDP Unit Thai National Mekong Committee

Mr. Phitsanu Voranard Senior Policy and Plan Analyst Office of the National Economics and Social Development Board

Mr. Prasit Warnset Director of Coordination and Basin Management Department of Water Resources

Mr. Ram Chandra Bastakoti M-Power, Faculty of Social Sciences Regional Research Unit

Mr. Somkhit Singsong Chairman Huai Sam Mo Sub-BasinWorking Group in upper Chi Basin Sub-Committee

Mr. Surapol Pattanee Director Bureau of Mass Promotion and Coordination

Dr. Surichai Wun'geao Director Chulalongkorn Univeristy Social Research Institute

Mr. Thanin Bumrungsap Vice President Italian-Thai Development PLC

Dr. Vitoon Viriyasakultorn Senior Governance Specialist United State Agency for International Development (USAID)

### Viet Nam

Mme. Do Hong Phan Director Centre for Resources Development and Environment

Dr. Hieu Nhue Tran
Permanent member of Viet Nam Association
for Conservation of Nature and Environment
Viet Nam Association for Conservation of
Nature and Environment (VACNE)

Mr. Lam Hung Son Head of Division Institute for Water Resources Planning

Dr. Nguyen Le Tuan Head of Division Ministry of Natural Resources and Environment

Mr. Nguyen Nhan Quang Deputy Secretary General of VNMC Viet Nam National Mekong Committee

Mr. Nguyen Xuan Hien Deputy Director Southern Institute for Water Resource Planning

Dr. To Trung Nghia Director Institute for Water Resources Planning

Mr. Tran Duc Cuong Deputy Secretary General of VNMC Viet Nam National Mekong Committee

### Annex III. Participant Feedback

The feedback questionnaire consisted of 12 questions asking participants to rank responses from 'very good' to 'poor' and an additional four open questions. Altogether 45 questionnaires were collected from the 137 participants.

The overall response was 'good' with 95% of the respondents indicating they would attend another consultation if invited.

### The questions

	Very Good	Good
Overall, how would you rate the BDP Stakeholder Consultation?	20	60
Did the Stakeholder consultation meet your expectations?	16	55
How sufficient were the information, documents and presentations to facilitate discussion?	20	40
How did the Stakeholder consultation agenda, session arrangements and facilitation support the sharing of views and provision of comments/suggestions?	16	64
How would you rate the usefulness and relevance of the sessions?		
How do you think the work and outputs of the BDP will impact your work and vice versa?	Overall positive	
Will you accept invitations to similar or relevant BDP events in the future?	Accept 95%	
How would you rate the logistical arrangements for this Stakeholder consultation?	24	71

