MRC Basin Development Plan, Phase 2 Inception Report

April 2008





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MRC Basin Development Programme, Phase 2 Draft Inception Report

Contents Amendment Record

This report has been issued and amended as follows:

Issue	Revision	Description	Date	Approved
1	0	Draft report for MRCS internal review	24 March 2007	MFW
2	1	Revised draft to MRCS for circulation to NMCs	23 April 2007	MFW
3	2	Additional ideas by the BDP regional team for reference	6 September 2007	PTH
4	3	Revised draft, building on strong points of 23 April, developed in September 2007	29 November 2007	PTH
5	4	Revised draft incorporating comments received from regional consultation on 7 December 2007	28 December 2007	PTH
6	5	Final draft for Stakeholder consultation on BDP2, incorporating minor changes made at 3 rd Coordination meting, 12-13 February 2008	14 February 2008	PTH
7	6	Final Inception Report, finalized after the Regional Stakeholder Consultation on MRC's Basin Development Plan Phase 2 and its Inception Report, 12-13 March 2008	18 April 2008	PTH

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Glossary

Acronyms and abbreviations

ADB Asian Development Bank

AIFP Agriculture, Irrigation and Forestry Programme

ASEAN Association of Southeast Asian Nations

AusAID Australian Aid

BDP1/BDP2 Basin Development Plan Phase 1/Phase 2 Danida Danish International Development Assistance

DSF Decision Support Framework
EIA Environmental Impact Assessment

EP Environment Programme

FMMP Flood Management and Mitigation Programme

FP Fisheries Programme

GIS Geographic Information System
GMS Greater Mekong Sub-region
HP Hydropower Programme
HRS Human Resources Section

IBFM Integrated Basin Flow Management Process ICBP Integrated Capacity Building Programme

ICCS International Cooperation and Communications Section IKMP Information and Knowledge Management Programme

IRBP Integrated River Basin Plan

IUCN International Union for the Conservation of Nature

IWRM Integrated Water Resource Management

JC Joint Committee
LF Legal Framework
LMB Lower Mekong Basin

MWRAP Mekong Water Resources Assistance Programme

MDBC Murray Darling Basin Commission MDG Millennium Development Goal

MITSP Mekong River Commission Integrated Training Strategy and Programme

MRB Mekong River Basin

MRC/MRCS Mekong River Commission/MRC Secretariat

NMC National Mekong Committees

NAP Navigation Programme
PIN Project Identification Note
RAM Resource Allocation Model
RBOs River Basin Organisations

SA Sub-area

SEA Strategic Environmental Assessment

SIA Social Impact Assessment SoB State of the Basin Report TNA Training Needs Assessment

TOR Terms of Reference TOT Training of trainers

USAID United States Agency for International Development

VA Vulnerability Assessment

WB World Bank WG Working Group WUP Water Utilisation Programme

Terminology

Where terms in this Report are drawn from definitions in the 1995 Agreement and subsequent MRC Council decisions, they are assumed to have the same meaning as in the Agreement or in the subsequent decisions, e.g. subject to notification, prior consultation, water use/utilisation etc. Other terms are specifically defined below due to their utmost relevance in the report:

• Aquatic ecosystem:	The living and non-living natural components of a stream or other water resource
Basin development potential	The maximum level of socio-economic development that can be obtained within the basin with a defined set of infrastructure and management practices, within the limits imposed by the prevailing flow management rules and without contravening any other requirements of the 1995 Agreement
Development scenario	A hypothetical combination of possible changes in hydrological conditions and/or multi-sector water demands and/or proposed interventions, describing a possible future situation. The results of the assessment of development scenarios will inform the preparation of the IWRM-based basin strategy
• Enabling developments	Improvements to resource management practices and regulatory and trading conditions and the like
Infrastructure developme	nts Civil, mechanical or electrical engineering-based developments
Integrated Water Resource Management	development and management of water, land and related resources, in order to maximise economic and social welfare in a balanced way without compromising the sustainability of vital ecosystems
 IWRM-based basin strategy 	A broad statement of how it is intended to develop and manage the basin in the long-term in order to fulfil a defined set of mutually shared development objectives
• Monitoring	Monitoring is the systematic and continuous collection and processing of data for planning, enforcement, and decision-making purposes.
 Non-structural developments 	Investments in developments other than infrastructure, e.g. extension programmes, flood preparedness, etc.
• Plan	A more detailed description of the projects and programmes that have to be implemented to operationalise a certain strategy. Any plan should be practical and technically and financially feasible.
• Policy	A water policy is a general direction to the development of water resources towards specific high-level development objectives, based on certain fundamental principles.
 Projects or programmes of basin-wide significance 	Projects or programmes that contribute to raising the development potential of the basin, whether notifiable

that contribute directly to raising the development potential of the basin and/or safeguarding to environment, and are transboundary in nature • Rolling Plan A management document that sets out, in both a should be and medium term horizon and consistent with the long-term directions in the IWRM-based base strategy, the specific actions agreed by the MRC develop and manage the basin's resources and the means for effective monitoring of these • Short, medium and long Respectively, the next five years, the following			
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	•	Rolling Plan	A management document that sets out, in both a short and medium term horizon and consistent with the long-term directions in the IWRM-based basin strategy, the specific actions agreed by the MRC to develop and manage the basin's resources and the means for effective monitoring of these
term years and 20-50 years from now	•	•	Respectively, the next five years, the following 15 years and 20-50 years from now
• Strategy, vision A strategy describes the tactical approach to achie (a) certain policy objective(s).	•	Strategy, vision	A strategy describes the tactical approach to achieve (a) certain policy objective(s).
programmes impacts (positive or negative) in more than count	•	• • •	Projects or programmes that create significant impacts (positive or negative) in more than country and/or require the participation of more than country
• Water governance The range of political, social, economic, a administrative systems that are in place to devel	•	Water governance	The range of political, social, economic, and administrative systems that are in place to develop and manage water resources and the delivery of water
• Watershed The total area above a given point on a watercound that contributes water to its flow	•	Watershed	The total area above a given point on a watercourse that contributes water to its flow
• Wetlands Areas that are inundated or saturated by surface ground water at a frequency and duration sufficient	•	Wetlands	Areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do

Executive Summary

The 1995 Mekong Agreement calls for the Joint Committee (JC) to formulate a Basin Development Plan (BDP), and to promote, support, cooperate and coordinate the development of the full potential of sustainable benefits to all member countries, and to prevent wasteful use of the Mekong River Basin (MRB) waters, with emphasis and preference on joint and/or basin-wide development projects.

In 2006, drawing amongst others on the findings of BDP Phase 1 (BDP1), the Mekong River Commission (MRC) established a Strategic Plan for 2006-2010 to guide the activities of the organisation over this period. The centre piece of these activities is to create a "rolling" plan for developing and managing the Basin's water resources, founded on integrated water resources management (IWRM) principles, and with a socially and environmentally sound agenda to promote regional cooperation.

The BDP Phase 2 (BDP2) (2007-2010) was launched in January 2007, following the approval of the revised Programme Document by the JC in its twenty-fourth meeting in August 2006. Phase 2 is designed to produce a rolling IWRM-based BDP, building on the achievements of Phase 1 (2002-2006), including the established participatory planning processes and the developed knowledge base and assessment tools.

Programme Objectives

The BDP Programme development objective is stated as "The water resources of the MRB managed and developed in an integrated, sustainable and equitable manner for the mutual benefit of the basin countries". Three immediate objectives of Phase 2 are defined as follows:

- A rolling IWRM-based Basin Development Plan produced in support of sustainable development in the Mekong Basin;
- Knowledge base and assessment tools further developed and utilised effectively in MRC and selected national agencies; and
- Capacity built at the national and sub-basin levels for IWRM planning and in the MRC for facilitation/mediation in areas where trade-off management is required.

Programme Structure and Outputs

The table below shows the programme components and their key outputs, which collectively will achieve the immediate objectives. The outputs are accurately defined and ascribed a verifiable indicator. The responsibilities for the timely development of quality outputs are assigned to specific BDP staff members, who have identified and described some fifty activities that are found necessary to produce the outputs.

BDP2 programme structure and key outputs

Component 1	Component 2	Component 3	Component 4
Programme management and communication	Rolling IWRM- based Basin Development Plan	Knowledge base and assessment tools	IWRM-based planning capacity
Output 1.1 – Enhanced stakeholder involvement and communication Output 1.2 - BDP2 well managed	Output 2.1 – Basinwide development scenarios Output 2.2 - IWRM-based basin strategy Output 2.3 - Project database	Output 3.1 - Updated knowledge base, including a published planning atlas, and updated state-of-basin report Output 3.2 - Upgraded assessment tools	Output 4.1 – IWRM-based planning guides Output 4.2 – Staff at basin and national levels skilled in the use of assessment tools Output 4.3 –
	Output 2.4 – Project portfolio Output 2.5 - Rolling IWRM-based BDP		Knowledge based decision support capacity enhanced in MRC
	Output 2.6 - Lessons learned from implemented projects and programmes		Output 4.4 – IWRM planning principles and approaches internalized in MRC
			Output 4.5 – Capacity built within MRC to assess the value of water and cost/benefits sharing
			Output 4.6 – Capacity built in MRC in tradeoff facilitation and mediation

IWRM-Based Basin Development Plan

In one way or another, all activities and outputs support the formulation of the IWRM-based Basin Development Plan. The Plan comprises three elements that will be prepared with support from the National Mekong Committees (NMCs), national line agencies, MRC Programmes and others. Given the people's high reliance on the river's natural system, the planning process requires a strong partnership of the basin's societies. The three Plan elements can be summarised as follows:

• <u>Development Scenarios</u>, which will provide the information that governments and other stakeholders need to develop a common understanding of the acceptable balance between resource development and resource protection in the various

parts of the Lower Mekong Basin (LMB). The results will guide the formulation of the IWRM-based basin strategy.

- An IWRM-based Basin Strategy, which provides a long-term view of how the LMB will be developed in a sustainable manner for economic growth and poverty reduction. The strategy will guide the design of the project portfolio and the implementation of a coherent and consistent IWRM framework throughout the LMB, which will assist the line agencies in the preparation of plans and projects that are sensitive to the resource protection issues.
- A <u>Project Portfolio</u> of water resources development projects and supporting nonstructural projects that would continue to develop some of the LMB's water and related resources, and minimise harmful effects that might result from natural occurrences and man-made activities, as envisioned in the 1995 Mekong Agreement.

The preparation of the IWRM-based Mekong Basin Development Plan will bring all existing and planned significant water and related resources development projects in the planning process. This will offer a platform for MRC to engage in transboundary assessment and help ensure that large structural projects are free of transboundary conflict. The project portfolio will also include a category for smaller projects that can alleviate poverty and can be implemented in a short time frame with support of MRC/BDP.

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

Programme Implementation Plan

The work plan for BDP2 through 2010 is ambitious but feasible if the anticipated inputs from the four countries and MRC programmes are well coordinated. In 2008, a first draft of the three elements of the IWRM-based BDP will be prepared. The subsequent basin-wide discussions with the various interest groups will guide the preparation of the draft IWRM-based BDP in 2009. A draft planning atlas will be available mid-2008 and a published atlas in 2010. The 1993 State-of-Basin Report will be updated in 2009.

The regional BDP Programme Coordinator at MRCS will be responsible for managing the BDP2 and its many interfaces, and for the overall delivery of BDP outputs and products as planned. The Chief Technical Advisor will be responsible for the technical direction of the BDP and the quality assurance of its main outputs, in particular the IWRM-based BDP. The delivery of key outputs will be managed as individual 'projects' by the responsible BDP staff. These 'project managers' will coordinate the required inputs from other MRC programmes and the four countries.

The regional and national BDP teams will work together as a team to produce the key BDP outputs. Each national BDP team is responsible for the implementation of BDP activities in their country, such as the preparation of sub-area strategies and consultations with stakeholders. The national BDP Coordinator will facilitate the active participation and

contribution of relevant line agencies in the planning process, and ensure that the emerging IWRM-based BDP is in agreement with national interests and priorities.

Considerations

Changes to the river associated with development will inevitably affect the river's ecosystems. The knowledge and tools are available to produce the information that the four countries need to make decisions on an optimal balance between economic, environmental, and social outcomes in the LMB. The challenge is to make the IWRM-based Basin Development Plan relevant by actively engaging the various stakeholder groups in the planning process, including senior government officials, and achieving a common understanding of how the LMB will be developed and managed to the mutual benefit of the countries and their people.

Current knowledge suggests that the large storages that are being created for hydropower production on the Lancang in China will have a larger effect on the flow regime in the mainstream than the planned and considered projects in the LMB combined. Coordination with China is essential to refine the assumptions on the operation of the hydropower cascade on the Lancang to provide a useful baseline scenario for the assessment of alternative development scenarios of the LMB.

1. Introduction

1.1 Rationale for undertaking BDP2

The 1995 Agreement charges the JC with the formulation of a BDP to promote, support, cooperate and coordinate in the development of the full potential of sustainable benefits to all member countries and the prevention of wasteful use of the MRB waters, with emphasis and preference on joint and/or basin-wide development projects. The BDP would be used to identify, categorise and prioritise the projects to seek assistance for and to implement at the basin level.

The Phase 1 of the BDP Programme (BDP1) achieved much in terms of establishing processes and creating a framework for participatory planning. It made good progress in the improvement of the knowledge base and tools for water resources development planning. Also, a project database was established that contains screened and shortlisted projects, some of which are being implemented or prepared for implementation.

In 2006, drawing amongst others on findings of BDP1, the MRC established a Strategic Plan for 2006-2010 to guide the activities of the organisation over this period. The centre piece of these activities is to create a 'rolling' plan for developing and managing the Basin's water resources, founded on integrated water resources management (IWRM) principles, and with a socially and environmentally sound agenda to promote regional cooperation.

In line with its strategy, the MRC decided to proceed with a second phase for BDP to assist in realising the central objectives set by the strategy. The BDP2 Programme Document was appraised in September 2006 (Danida, September 2006). In December 2006, an agreement was reached with Danida to provide financial assistance to both the BDP2 and the Environment Programme (EP).

The BDP2 (2006-2010) was launched in January 2007, following the approval of the revised Programme Document by the JC in its twenty-fourth meeting in August 2006. The BDP2 is designed to institutionalise the participatory planning process established during BDP1 and further develop the tools and IWRM planning capacity to produce a rolling IWRM-based BDP.

1.2 BDP2 mandate

The mandate for the BDP2 is to use and further enhance the planning process to prepare the IWRM-based BDP as envisioned by the 1995 Agreement; contribute to the achievement of the goal and outputs of the MRC Strategic Plan 2006–2010; and contribute to the establishment of clearer role of the MRC as an inter-governmental organisation in managing the basin's water and related resources for the sustainable development of the basin.

The key reference documents for the BDP2 Programme are:

- Agreement on the Cooperation for the Sustainable Development of the MRB signed by the Governments of the Kingdom of Cambodia, the Lao People's Democratic Republic (Lao PDR), the Kingdom of Thailand, and the Socialist Republic of Viet Nam on 5 April 1995 at Chiang Rai, Thailand.
- MRC Strategic Plan 2006-2010, December 2006.

- BDP Programme Phase 2, 2006-2010, August 2006.
- Agreement between the MRC and Danida on support to the MRC BDP2 and the EP, December 2006.
- Appraisal Report for Danish Assistance to the BDP2, 2006-2010, Danida, September 2006.
- Strategic Directions for IWRM in the LMB, MRC Final draft, September 2005.
- Strategic Framework for the BDP discussion paper, March 2004.

1.3 Purpose of the report

The purpose of this report is to describe the current understanding of how the BDP2 should be implemented. Since the Programme Document was prepared more than a year ago, earlier agreed approaches are reviewed against recent changes in the development context within which the programme must be implemented. The Inception Report confirms the relevance of earlier agreed objectives, outputs and structure of the BDP2. The report attempts to clearly define the outputs and proposes only a few useful changes in the programme structure, in accordance with the comments and suggestions received during meetings with national stakeholders and MRC programmes.

A more detailed description is provided of the key programme outputs and the activities that will lead to the outputs. The logical framework analysis is updated with baseline and results indicators to monitor the implementation progress and the achievement of outputs and objectives. The Inception Report will be used as the baseline to measure the programme progress towards its mid-term (with a mid-term review report) and its completion (with a Programme completion report).

The report provides a Project Implementation Plan (PIP) for the whole programme. The PIP may be updated, as proposed in annual work plans and half-yearly progress reports, in accordance with new requirements as the development context evolves.

1.4 Process for preparing the report

The first draft of the Inception Report of April 2007 was prepared by short-term consultants. The preparation was based on consultations with the NMCs in February and March 2007, and with each of the MRC programmes.

Due to the slower than expected recruitment of an entire new regional BDP team at the Mekong River Commission Secretariat (MRCS), the finalisation of the Inception Report has been delayed. The current version of the Inception Report is prepared by the new regional BDP team. Its contents builds on the BDP2 Programme Document of August 2006, the draft Inception Report of April 2007, and the recommendations from line agencies, research institutions, MRC programmes, and other stakeholders. The report has also benefited from a clearer vision within the MRCS of the concept of the main aim of BDP2 – the rolling IWRM based BDP.

On 12-13 March 2008, the Final Draft Inception Report was discussed in a regional stakeholder consultation with representatives of sate and non-state agencies, development partners, civil society organizations, academia, the private sector, and other stakeholders. The

consultation meeting did not seek agreement among the various stakeholder groups on the many issues discussed. Rather, the consultation provided a platform for these stakeholder groups to share information and express their differing views on basin planning and development.

The participants emphasised that planning for sustainable development of the LMB is the business of all stakeholders and they expressed their appreciation of MRC's new spirit to engage in transboundary assessment and multi-stakeholder consultation to facilitate a broad and informed dialogue on sustainable water resources development and management. Clearly, there is a strong interest in developing closer collaboration and partnerships with BDP2. The preparation of a stakeholder participation and communication plan later in 2008 should define how the various stakeholder groups can participate in a genuine joint basin planning process.

1.5 Structure of the report

Besides the Executive Summary, the report includes three parts, as follows:

- Part 1 Introduction, comprising of Chapter 1
- Part 2 Inception Report, comprising of Chapter 2 through Chapter 5 and Appendices A through E.
- Part 3 PIP, comprising of Chapter 6 and Appendices F through I.

The Inception Report is a core document for the PIP. Chapter 2 summarises recent developments, identifies the main water related issues, and summarises earlier agreed planning approaches for the BDP2. The objectives and structure of are summarised in Chapter 3. Chapter 4 describes the concept of the main aim of BDP2: the rolling IWRM-based BDP. Chapter 5 provides a detailed appreciation of the Programme outputs and the process and activities leading to the outputs.

The PIP describes the BDP2 implementation process, the work plan 2007-2010, the implementation arrangements, the plan for stakeholder participation and communication, and a revised budget. The PIP also supplies the monitoring, evaluation, quality assurance, and reporting requirements, and concludes with a summary of the perceived risks to achieving a successful outcome of the Programme, and how these risks will be managed.

2. BDP2 Approaches

The BDP2 Programme Document identified the following issues and principles for basin development planning:

- Water resources issues: focus on those basin relevant issues that the riparian countries see as high priorities, and address the issues by applying a basin-wide perspective;
- Cross-cutting issues: address poverty alleviation and gender issues; and
- Guiding principles: use IWRM principles to guide the planning process in LMB to achieve the eight key result areas in IWRM, adopted in the Strategic Directions for IWRM in the LMB (December 2005).

In this Chapter, these issues and principles are described and where necessary updated to take stock of recent insights and developments in the Mekong Basin. In Section 2.1 some useful basin characteristics and developments are summarised. Ongoing water resources developments and emerging issues are briefly discussed in Section 2.2. Section 2.3 provides the planning guidance that follows from the eight result areas for the implementation of IWRM in the LMB. Important cross cutting issues are summarised in Section 2.4. Finally, in Section 2.5 the role of the MRC/BDP in project implementation is clarified.

2.1 Water resources and socio-economic profile

Current development of the Mekong is limited compared to almost all large river basins in the world. Diversions from the mainstream above the Mekong Delta in Viet Nam are so far negligible. Existing storage of water resources behind dams corresponds to about 2% of the average annual flow, and does not significantly redistribute water between seasons. The Lao PDR and Cambodia hardly divert 1% of their annual water resources. Therefore, the Mekong retains most of its natural flow characteristics upstream of the Mekong Delta. Water quality is generally in agreement with international standards.

The most downstream end of the Mekong Basin, the delta, is by far the largest water using area in the basin with about 1.5 million hectares of irrigated land (the total irrigated area in the basin is less than 3 million hectares). Dams built in northeast Thailand in the 1960s for irrigation already divert the wet-season flow and the very low dry-season flow of the country's Mekong tributaries. The downstream effect on the mainstream could not be measured. Other irrigation developments in the Mekong Basin are of a smaller scale.

The main environmental impact of water related development to date is salt water intrusion in the delta, local drainage and salinity problems in northeast Thailand, and emerging local water quality problems caused by increasing urbanization, mining and other industrial activities. Salinity intrusion is becoming less of a problem because of the tidal gates on some of the waterways and the success of Viet Nam's rice breeders in shortening the growth period of rice.

One of the important features of the Mekong is the very large difference in wet and dry season flow. The seasonal cycle of changing water levels at Phnom Penh results in the unique 'flow reversal' of water into and out of the Great Lake via the Tonle Sap River. Another important feature is the Mekong Basin's rich riverine ecology. The biodiversity of the

Mekong is the second only to that of the Amazon, and the basin supports the world's largest fresh water fishery, at about 2.5 million tonnes per year.

Despite impressive economic growth over the past decade within the basin countries, much of the Mekong Basin itself remains among the world's poorest areas, where many parts of the basin have poverty rates ranging up to 40% of the population. Millions of people rely on the goods and services provided by the Mekong river system for their food security and livelihoods.

2.2 Water and related resources developments issues

Several hydropower projects are under construction, and more are being planned in China, the Lao PDR and Viet Nam. In particular the completion during the next ten years of the Xiaowan and the Nuozhadu hydropower projects on the mainstream in China, with 9,800 and 12,400 million m³ of active storage, respectively, are likely to cause the most significant seasonal redistribution of flow of any of the foreseeable water resources developments in the Mekong Basin. These dams and the planned dams on tributaries in the LMB may add around 1,500 m³/s to the mainstream flow in the dry season, when the contribution of the Great Lake to the flow into the Mekong Delta recedes.

The opportunities to economically use the increased dry season flow in the basin are limited by natural conditions, such as topography and the existence of suitable soils in the riverine areas. There remains scope for upgrading of existing schemes and the development of new schemes in Thailand, the Lao PDR and particularly in Cambodia. Water transfers from the Mekong have been considered for a long time by Thailand to complement national approaches to alleviate droughts in the northeast of the country. However, it is expected that the additional water demand for irrigation in the foreseeable future will be less than the anticipated increase in dry season flows caused by the hydropower developments. This cursory assessment suggests that the Mekong Basin may not face serious water shortages in the foreseeable future. Therefore a significant part of the anticipated increase in dry season flows will provide a good safety factor against salinity intrusion in the Delta.

On the mainstream in the LMB, the scale of resettlement due to population growth in the reservoir areas rules out the large storage dams considered in the 1960s, such as the Pa Mong and Stung Treng. However, several run-of-river mainstream dams, which were marginally attractive a few decades ago when they were conceived, have recently attracted the interest of governments and private project developers. Apparently, the current high energy prices and the large increase in dry season flows in the near future (the flow will almost double in northern Laos) make these dams financially attractive. Although the studied mainstream dams in the LMB will cause relative small changes in the mainstream flow regime, they may have significant adverse effects, in particular on fish migration.

In all basin countries, land use has been changing during the last several decades. The Delta has little natural vegetation left. Forest cover in the Thai areas of the Basin was reduced from about 40% in 1960 to 10% at present. Although most of Cambodia and the Lao PDR remains covered with natural vegetation, forest cover has been steadily reduced during the last few decades. Shifting cultivation is common in the Lao uplands and is reported to account for as much as 30% of the total land under rice cultivation. It is still unclear, however, how much impact land use changes have had on the hydrological regime of the Mekong.

Several other water related developments are relevant to the BDP planning process, such as climate change, flood control, road development, navigation, and mining activities. Also the implications of population and economic growth, investments and trade, poverty reduction, and other issues in national policies and plans need to be considered in the planning process. This requires cooperation and data and information exchange with many entities, including the other MRC programmes, NMCs, national line agencies, research institutes, and regional initiatives, such as those of Association of the Southeast Asian Nations (ASEAN), the Greater Mekong Sub-region (GMS) and the International Union for the Conservation of Nature and Natural Resources (IUCN).

The above assessment may demonstrate that the ongoing developments pose both an opportunity and a threat to the integrity of the Mekong Basin. The future increases of dry season flows (through the re-regulation of river flows by large storage reservoirs) may offset increased water use by realistic levels of irrigation development and water transfers. Nevertheless, the hydropower and other developments in the LMB may have adverse economic, environmental and social effects in some parts of the Basin, including a cut-off of fish migration routes, changes in the flow reversal of water into and out of the Great Lake, and frequent water level fluctuations on some of the tributaries.

To maximise the socio-economic benefits from the further development of some of the Mekong's water resources for all basin countries, and minimise the adverse effects of projects in one country on any other country, requires a basin-wide planning process and a strong partnership of the basin's stakeholders, which can effectively link development and natural resource conservation. The BDP2 must be designed to cover both these requirements.

2.3 Guiding principles

In 2005, the MRC Council approved the Strategic Directions for IWRM in the LMB, prepared under the BDP1. The directions provide eight key result areas in IWRM of most relevance to the Mekong Basin at this time, recognising that later, other areas might become dominant. The key result areas are:

- Economic development and poverty alleviation;
- Environment protection;
- Social development and equity;
- Dealing with climate variability;
- Integration through basin planning;
- Information based management;
- Regional cooperation; and
- Governance.

Some important aspects of these key result areas are described briefly in the following, with a view to provide direction to the design of the BDP2.

Economic development and poverty alleviation

The most pressing requirement for all the countries of the Mekong Basin is to realise economic and social development through the use of water and related resources. This drive must be balanced by two considerations: 1) protection of the water resource base to ensure

environmental sustainability and 2) equitable distribution of the benefits from development, to ensure social sustainability and cooperation.

Economic development is important in its own right. In addition to the macroeconomic benefits of accelerated growth, properly managed economic development can also have a significant and positive impact on poverty alleviation. The water and related resources of the Mekong Basin serve as inputs into productive activities. As a resource management organisation, the role of the MRC is to lend guidance to the development of the resources to build a favourable investment climate that is attractive to donors and private sector investors alike. Through their work, the MRC can further ensure that economic development patterns have a poverty alleviation impact while protecting the environment.

Key issues for the MRC/BDP regarding water resource development and utilisation are:

- Providing a predictable and fair resource development and management framework, as a basis for the a favourable investment climate;
- Identifying and promoting investment opportunities that are responsive to real development demands and have a favourable poverty impact;
- Linking with appropriate regional initiatives to exploit comparative advantages in pursing basin development; and
- Ensuring balanced and equitable development, between different areas and different sectors.

The BDP2 can address these issues by formulating a rolling IWRM-based Basin Development Plan that provides a strategy for the sustainable development and management of the LMB and a portfolio of water resources development projects that would continue to develop some of the basin's water resources for economic growth and poverty reduction. The formulation of the plan must employ appropriate knowledge and tools to ensure the plan achieves benefits for all four countries and projects comply with sound environmental and socioeconomic principles. The plan must be prepared in a participatory fashion with all stakeholder groups and in the context of broader regional initiatives to ensure its relevance and acceptability, which is essential to generate interest and attract investments.

Environmental protection

Protection of the water resource base is crucial both to secure human uses and to protect the natural and cultural values of the river. Potential threats include loss of wetland habitats and active flood plains, pollution, and over-harvesting of significant species. Some threats have a transboundary and/or a distinctive cumulative character. One of the key issues in environment protection in the LMB is the development of coordinated environmental planning, since coherent regulatory and planning structures and institutions are essential for effective environment protection. Protection of the water resource base falls into the four broad areas described below, all of which are covered by the 1995 Agreement.

Maintenance of flows. Procedures for Maintenance of Flow in the Mainstream (PMFM) have been negotiated under the Water Utilisation Programme (WUP), in accordance with the 1995 Agreement. They were agreed and signed in June 2006. Discussions on technical guidelines for the implementation of PMFM are ongoing. Determining acceptable limits for change from the natural regime that allow utilisation of the river without threatening vital river ecology requires a clear understanding of the links between river flows and the health of particular ecosystem components. Through the WUP and EP the MRC has instituted the

Integrated Basin Flow Management initiative (IBFM) to provide an assessment of the economic, environmental and social impacts of changes in the mainstream flow.

Maintenance of water quality. Procedures are awaiting approval by the Council. Technical guidelines for the implementation of the procedures are being drafted. The main areas of concern for water quality are: 1) diffuse pollution from agricultural inputs, due to intensification of agriculture with irrigation development (particularly in the Delta) and 2) pollution from sewage and industry downstream from major population centres and major mining operations in the rural areas (point source pollution). Integrated watershed management is the key to addressing these concerns. The existing and emerging River Basin Organisations (RBOs) potentially have an important role in this process.

<u>Protection of aquatic ecosystems and biodiversity (habitat management).</u> To maintain biodiversity, it is necessary to preserve a diverse range of habitats, and also to preserve the linkages between them – for example, migration paths and connections between river and floodplain. Particular attention should be given to identifying and preserving important or unique ecosystems, such as the Great Lake of Tonle Sap and its surrounding inundated forest areas.

<u>Protection of watershed functions (land use management).</u> Deforestation and poor agricultural practices (such as slash and burn) can significantly degrade both the quantity and quality of run-off and alter groundwater recharge. Management of watersheds must take account of the links between land use, surface water and groundwater. The ecological, economic and social functions are closely linked, and there is a need for better understanding of the links. Groundwater, now, is not properly addressed, due to general lack of information and data on groundwater development in LMB.

Changes to the river associated with development will inevitably change the river's ecosystems. A balance between development and protection will often mean trading off some degree of environmental value to gain a development benefit. Determining where the balance should lie requires understanding of the potential impacts of change, and of the value of ecosystems in terms of the total range of goods and services they provide.

In this connection, the BDP2 should produce the information that governments and other stakeholders need to develop a common understanding of the acceptable balance between resource development and resource protection in the various parts of the LMB. The BDP Programme can produce this information by bringing all existing, ongoing, planned and potential significant water and related resources developments in the process of formulating and evaluating alternative development scenarios. The scenarios must assess the likely benefits and costs of various levels of development to the four countries and their people during the next few decades. The resulting strategic development options for meeting the water needs of all sectors, and the needs of the Basin itself, must be subject to basin-wide discussions with the various interest groups.

This would offer a platform for the MRC to visibly engage in transboundary assessment, based on IWRM, and help ensure that the triple bottom line is maintained and transboundary conflicts over projects are prevented. The ultimately achieved consensus among the four countries on how the basin will be developed must then be elaborated in a sustainable development and management strategy for the LMB that complements and guides national and sub-basin planning.

Social development and equity

Social development is, along with economic development, a cornerstone of the development strategies of all MRC member countries. The quality of life of the poorest people in the basin area has improved only slowly as a result of recent economic growth in the countries. A significant share of the rural population continues to live in poverty.

The key issues of concern regarding social development are similar to the Millennium Development Goals (MDGs), including:

- Access to water for basic human needs;
- Access to water-related resources (fish, wetland products);
- Equity of access for different ethnic and social groups, particularly women and the poor;
- Protection of access for traditional lifestyles, cultural and heritage values; and
- Protection from the impacts of floods and droughts.

Issues of equity and social development can be best addressed by ensuring that all stakeholders participate in planning and management decisions. As a general precept, local communities and civil society organisation should always be consulted, although identification of stakeholders and the level at which they participate in decision will differ for different issues and areas. Planning processes, in which the maintenance of watershed functions are addressed, like land use plans, village development plans, district development plans, watershed management plans are the ideal platform for community consultation and participation.

In this connection, the BDP2 should update existing guidelines in a practical participation and communication manual, to be used in all BDP activities to ensure the integration of stakeholder consultation in the planning process. Also, the manual should provide guidance for mainstreaming gender perspectives in BDP activities to ensure that men and woman benefit equally from the BDP Programme, including its capacity building activities. The updating and improvement of previously prepared Sub-area reports would offer an excellent opportunity to engage local stakeholders in the planning process through the participatory preparation of Sub-area strategies that guide national sector planning by line agencies and area-based planning by provinces.

Dealing with climate variability

Water resource development and management takes place within the context of inherently variable climate conditions. Although the hydrology of the Mekong is one of the most regular and predictable of any river of its size, there is still significant annual variability. In addition, the possibility exists of long term changes in flow due to climate change. Dealing with variability due to floods, droughts and climate change is an integral part of water resource management and development, which impacts on all sectors. Responses must make balance between adapting the hydrological systems (for example with storage dams and flood protection works) and adapting human systems (agricultural systems and patterns of settlement) to fit better the existing conditions.

<u>Flood management and mitigation.</u> Floods are part of the natural cycle of the Mekong, and are vital to the functioning of Mekong ecosystems. The flood pulse is the engine which drives the enormous productivity of Mekong fisheries. The urgent need for improved flood

management and mitigation is reflected by the recurrent damage in the LMB. The poor are often the most adversely affected by floods. The extent of damage will increase as the population and economy develop.

<u>Drought.</u> As with flooding, drought is a natural part of the climate cycle of the region. In addition to severe problems of access to water during the months of the dry season, drought may occur due to low overall rainfall for the year, or delays or breaks in the on-set of the wet season causing short-term water shortages at crucial points in the cropping calendar. It is not uncommon for the Mekong floodplains to experience flooding and drought simultaneously, with high river levels fed by rain in the upper parts of the basin, but drought conditions away from the river. Provision of irrigation storage is an important 'drought-proofing' measure.

<u>Climate change</u>. The general conclusion from international climate change studies for the Mekong region is that the overall level of rainfall is not likely to change dramatically over the next 20-50 years, but that variability may increase, with longer, drier dry seasons and wetter, more intense monsoons. Predictions for the Western Himalaya suggest that global warming could result in increased snow melt over the next 20-50 years, with resulting higher flows in rivers, but a long term decrease as the area of snow pack declines. In the long term, more specific strategies must be developed based on an improved understanding of the likely direction and magnitude of change.

In this connection, the BDP2 could use the formulation and assessment of basin-wide development scenarios for assessing the costs and benefits of significant projects for reducing the adverse effects of floods, droughts and climate change. The projects would include the creation of additional storages, diversions and transfers of water. It would be important to identify and assess promising projects in a basin-wide approach that considers the future water needs of all sectors and the synergies between projects (in particular irrigation withdrawals and hydropower storages). Period coordination would be required with other programmes that are designed to identify smaller scale projects and other effective solutions for mitigating floods, droughts and climate change, such as the FMMP (Flood Management and Mitigation Programme) and the AIFP (Agriculture, Irrigation and Forestry Programme).

Integration through basin planning

Integration and coordination of water resources development in the LMB have many dimensions. Among these are:

- Integration between and within water use sectors to ensure maximum efficiency of resource use and economic growth;
- Integration of the concerns of different stakeholders to ensure equity;
- Integration of environmental and social concerns into development planning to ensure sustainability;
- Integration and cooperation between geographic areas (countries/trans-boundary, upstream downstream areas); and
- Integration of policy, institutional and regulatory frameworks at different levels to ensure consistency.

Basin planning provides a framework to promote integration at all levels. The MRC/BDP has initiated a scenario-based assessment of broad development options for the basin. This approach integrates both across sectors (by considering multi-sector development scenarios),

and spatially (through the delineation of watershed-based planning units, termed "sub-areas"). Potential impacts of different development scenarios are assessed in terms of the effects that planned project in one part of the basin will have on projects or natural resource systems in another part or country (using the Decision Support Framework-DSF). Impacts on the water resource are linked to environmental, social and economic values by considering the effect of hydrological change on ecology and livelihoods (using the IBFM process). Understanding of these values is fundamental to assess trade-offs between the benefits and cost associated with particular development scenarios.

Key issues emerging from the basin planning process include:

- Links between regional and national planning agencies need to be clarified and strengthened, and mechanisms developed to ensure that regional planning concerns are taken up in national plans;
- Because basin planning must take into consideration all water-related developments, not only those that are implemented at the basin level, a regional inventory of all significant of all existing, ongoing and planned water resource developments is needed, in order to assess cumulative impacts and sustainability;
- The interpretation of "all significant development" mentioned above is not trivial. Rural water supply and sanitation projects are definitely outside the scope of the BDP and the MRC. Small projects (e.g. small watershed management and small-scale irrigation schemes) may individually be below a cut-off point of significance in a basin-wide context and can be lumped together in development scenarios (small projects may, however, form a category in the project portfolio, see Section 2.5);
- The importance of a basin-wide approach to balancing withdrawals and storage of water, through negotiation between countries and integration between sectors (specifically, irrigation and hydropower); and
- Providing a strategic and rational approach to assessing trade-offs by understanding the impacts (direct, indirect and cumulative) of interventions within the context of the basin as a whole.

In this connection, it will be essential for the BDP2 to collaborate with the relevant line agencies in the four countries to include the relevant data and information of all significant projects in the project database developed during BDP1. The improved data base should also contain a category for already completed and ongoing structural projects, with a view to informing the formulation of development scenarios and recording the negative and positive impacts of these projects. The existing project classification system should be reviewed and where necessary adapted to enhance the links with national planning.

The formulation of new development scenarios must take stock of the results and lessons learned under WUP and EP, which have assessed basin-wide and multi-sector development scenarios, and produced users-friendly results for planning and decision making. The aforementioned sustainable development and management strategy for the LMB (see under environmental protection) must clarify the linkages between planning at the basin, national and sub-basin levels and guide the implementation of a coherent and consistent IWRM framework throughout the LMB.

Information-based management

The importance of shared information for regional decision making was recognised in the 1995 Agreement, and in accordance with its provisions, the countries have signed:

- Procedures for Data Information Exchange and Sharing;
- Procedures for Water Use Monitoring;
- Procedures for Notification, Prior Consultation and Agreement; and
- Procedures for Maintenance of Flows on the Mainstream.

The MRC has built a shared MRC Information System, available to all countries, which provides reliable information in three key roles: 1) independent monitoring of changes in flow and water quality in the river, 2) prediction and assessment of potential impacts of different development options, through the use of scenario analysis, and 3) prior notification of proposed developments which may have trans-boundary impacts.

However, there is a general need to strengthen the information base in particular by:

- Collating information on all water related projects and programmes in the LMB to allow coordinated planning and analysis of cumulative impacts; and
- Developing an information base for the Upper Mekong Basin for issues relevant to LMB (e.g. land use information, proposed water resource developments, hydrological and climate models, particularly for snow melt and climate change issues).

Regarding the first point, all relevant data from water-related projects must be collated in the BDP project database (see under Integration through basin planning). Concerning the second point, the BDP Programme could consider inviting technical specialists from China to (training) workshops related to the formulation and evaluation of alternative development scenarios, using the DSF. In the process, the assumptions used by WUP for the operation of the hydropower cascade on the Lancang could be reviewed and improved. Other mechanisms for developing and information base for the upper Mekong Basin include the partnering with other regional programmes (see below).

Regional cooperation

The 1995 Mekong Agreement provides a clear statement of intent of the four riparian countries to cooperate in sustainable development of Mekong water and related resources to mutual advantage. It also provides a management framework for regional cooperation in the four countries of the LMB. Within the LMB, the MRC has a mandate to coordinate water resource development issues.

China and Myanmar are MRC Dialogue Partners. Both countries are cooperating in several sectors. China exchanges flow data with the MRC. Another focal area for the cooperation with China is the Navigation Programme (NAP). Given that the main flow changes in the mainstream in the LMB would originate in China (Section 2.2), liaison and coordination with the Upper Mekong Basin is a high priority. Bilaterally, China is an important economic partner for all the LMB countries, as a developing market for energy, raw materials and food; and as an exporter of manufactured goods.

The countries of the Mekong are increasingly inter-dependent in terms of trade, economic development and political cooperation. Several regional initiatives for cooperation in economic development complement the MRC's role in water resources. Of these, the most

important are the Asian Development Bank (ADB) sponsored GMS initiative (which includes Myanmar and China) and programmes under ASEAN (which includes Myanmar, but not China). In addition, there are a number of regional programmes which focus specifically on water resources and which are relevant as network partners. These include, among others:

- Global Water Partnership South East Asia which promotes and facilitates the concept of IWRM, including Network of Asian River Basin Organisations;
- The World Bank Water and Sanitation Programme, which coordinates efforts to improve access to water and sanitation in Cambodia, Lao PDR and Viet Nam;
- World Bank's (WB) Mekong Water Resource Assistance Programme (MWRAP);
- Under ASEAN, a Long-Term Strategic Plan of Action on Water Resources Management was endorsed in 2003 by the ministers responsible for environment. The ASEAN Working Group on Water Resources Management has developed ASEAN Strategic Plan of Action on Water Resources Management which is currently being considered by the ASEAN Senior Officials on the Environment; and
- The Ayeyawady-Chao Phraya-Mekong Economic Cooperation Strategy is a new cooperation framework amongst Cambodia, the Lao PDR, Myanmar and Thailand to utilise member countries' diverse strengths and to promote balanced development in the sub-region.

The MRC, supported by BDP2, should actively seek closer cooperation with these regional initiatives to make sure that the BDP process is relevant and that the rolling IWRM-based Basin Development Plan is made available to and recognised by decision makers, investment institutions, and private project developers as and essential planning component of the Mekong Partnership Programme (see Section 2.5).

Governance

Improved integration of planning and management across the various management levels is crucial to achieving IWRM in the LMB. In general, national water administration is fragmented, with responsibility for water spread between different line agencies and between national, provincial and district levels of administration. In the past, national planning has often been sector-driven, with little consideration given to cross-sectoral interactions, accountability and stakeholder participation. All four countries are working towards more integrated and responsive approaches to water management and planning, through national water resources management agencies and, in some countries, river basin organisations.

At the regional level, the MRC has a mandate to coordinate water resource issues and a number of other regional and international agreements also relate to water resources development. These regional agreements are cooperative rather than regulatory. Links between national and regional planning need to be clarified and strengthened during the implementation of BDP2.

Issues for effective water governance include:

 Accountability and transparency: roles in the legislative and executive processes need to be clear. Each institution must explain and take responsibility for what it does;

- Coordination of water policy within countries, through structures such as coordinating councils, or a designated ministry with responsibility for water resources;
- Some issues impacting on water governance may fall outside the water domain –
 for example, land tenure. Water managers will need to engage in dialogue with
 other branches of government to seek solutions;
- Coordination of water policy between countries, through effective involvement in the MRC; and
- Harmonisation between national water laws and rules and procedures governing cross-border issues through the MRC.

The BDP Programme can support the improvement of water governance in the LMB in several ways. First, by visibly engaging the MRC in transboundary assessment by determining the cumulative impact of all existing and planned projects and ensuring that the results are being considered by the national planning agencies (see under Environmental protection).

Second, the BDP Programme can help strengthen the linkages between planning across sectors and aerial jurisdictions by producing a practical strategy for the development and management of the LMB that builds on the existing IWRM directions, the MRC strategic plan, and the policies, plans and initiatives in the member countries. The strategy must provide clear management and cooperation framework that will usefully guide the implementation of IWRM principles and practices at the basin, national and sub-basin levels. The adoption of such a strategy, and associated processes and tools, could be used by member countries to share information, coordinate policies, and harmonize systems, methods, procedures and standards. This would create additional building blocks to scale up transboundary initiatives, such as joint-decision making on basin development, joint management of investments, and joint prevention and mitigation of transboundary issues

Third, the BDP2 must support the planning process by building IWRM planning capacity in the four countries, including capacity for the formulation and assessment of basin development scenarios, project identification and screening, streamlining of planning across sectors and aerial jurisdictions, and trade-off facilitation and dispute resolution.

2.4 Cross-cutting issues

Poverty alleviation

Poverty alleviation is the main goal of water resources development in the Mekong Basin. It cannot be disconnected from: 1) accelerated economic development in general (due to increased national production capacity, as well as increased national purchasing power), 2) improved climate for investment, 3) development of human resources (and hereby increased national capacity for production and management), and 4) control of excessive migration from the countryside to the towns.

The close linkages between poverty reduction and water management are addressed in the UN Millennium Declaration (September 2000) and the Chiang Mai Declaration (November 2003). Also, the linkages are emphasised in the national poverty reduction strategies of Cambodia, the Lao PDR and Viet Nam. Thailand has no specific poverty reduction strategy, but water is a theme in the 9th National Economic and Social Development Plan (2002 to

2006). The BDP2 must incorporate these national strategies as an important part of the basis for its work.

Water-related poverty alleviation measures comprise: good governance; safe water supplies and sanitation; water for livelihoods (including, but not limited to irrigation, fisheries and livestock); disaster preparedness and mitigation (notably floods and drought); and management of aquatic and water-related habitats and ecosystems. All these perspectives can be supported and promoted under the BDP2, as clearly indicated in the IWRM Strategic Directions for the LMB prepared under Phase 1 and summarised in Section 2.3.

Gender issues

The MRC Gender Strategy builds on the principles that: 1) gender equity and equality is considered an integral part of all MRC programmes, projects and activities, 2) effectiveness and efficiency in achieving development goals requires the recognition that every MRC activity affects women and men differently, and that their different perspectives, needs, interests, roles and resources should be taken into account at every stage, and 3) gender equity and equality are fundamental values that must be strengthened and reflected in development choices and institutional practices. The strategy calls for "mainstreaming of gender perspectives in all MRC development efforts, ensuring that all MRC development programmes benefit men and women equally, in accordance with their different needs, and with the input and equal participation by men and women at all levels".

This objective of the MRC Gender Strategy has been carried forward into the IWRM Strategic Directions for the LMB, which also promotes the application of the current MRC guidelines on mainstreaming gender in water resources development. The following are examples of important areas where gender issues are of a particular relevance to the identification and successful implementation of development initiatives: public health, particularly domestic water supply and sanitation; primary production, particularly small-scale and traditional farming systems, small-scale fisheries, and traditional subsistence systems; disaster management, such as flood preparedness, including flood proofing; community-based management of natural resources and the environment; and all areas of education, awareness-building, capacity-building and human resources development.

It would be important to conduct a stakeholder analysis in BDP2 that includes sexdisaggregated data and different perspectives of men and woman of the BDP process and the IWRM-based Basin Development Plan. The results would feed into the aforementioned participation and communication manual, which should provide guidance for the integration of gender perspectives in the detailed design and implementation of BDP activities (see Section 2.3).

2.5 Implementation of projects

Projects that are identified and prioritised through the BDP process would support and ultimately form part of the Mekong Partnership Programme. The Mekong Partnership Programme is a regional cooperation programme for the sustainable development of water and related resources. The rolling IWRM-based BDP may be regarded as the planning component of the Mekong Partnership Programme. The latter may have a broader scope in terms of geographic and project diversity. The BDP2 could provide inputs to the conceptualisation of the Mekong Partnership Programme.

All, or virtually all, larger structural projects in the project portfolio would be prepared and implemented by the countries with support from private project developers, development banks, the MRC and others. The MRC would provide coordination and technical assistance to support project preparation and implementation through the review of terms of references, feasibility studies, Environmental Impact Assessments (EIA), etc.; transboundary assessments; and mediation and facilitation. It is envisioned that many of the non-structural projects will be implemented by the MRC, within the existing programme frameworks.

Non-structural projects would include investments that contribute directly to improved management of water and related resources, such as flood warning systems, navigation equipment, and transboundary monitoring stations. Another category of non-structural projects would comprise training, awareness raising, research programmes, monitoring programmes, the development of assessment tools, knowledge and information sharing technologies, and the improvement and harmonization of legal and institutional frameworks in the basin. Through its planning process, the BDP2 would help shape future MRC sector programmes, with a view to collectively directing these programmes towards the achievement of the MRC vision and strategic goals.

During BDP1 many projects were identified and 18 projects prioritised, some of which are being implemented or prepared for implementation. A large majority of the identified projects are non-structural projects. Virtually all of the structural projects are national projects that can be implemented within and by one country. With a few exceptions, the identified projects have only local implications for the transboundary water regime and are free of significant transboundary implications. On the other hand, many of the non-structural projects identified in BDP1 fall in the categories of joint and transboundary projects.

Given this situation, the current project classification system should be brought in agreement with the directions and planning framework of the sustainable development and management of the LMB, which will be formulated under BDP2. It is anticipated that this framework will allow the shortlisting of sound large water resources development projects with possibly significant transboundary implications in the project portfolio of the IWRM-based BDP. Such projects could include planned and newly identified projects that would require prior consultation and/or mutual agreement under Article 5 of the 1995 Mekong Agreement, which are by nature transboundary in significance. Their inclusion in the plan would signify intend to take them forward to pre-feasibility study and beyond, but would not signify ultimate approval to proceed with them, which would be subject to the outcomes of those studies.

Another category of structural projects in the project portfolio could comprise small-scale projects that can alleviate poverty, even if these projects have no significant transboundary implications. In BDP2, partnerships could be explored with development partners and the national entities that would be responsible for the implementation of such projects. Opportunities do exist for such partnerships in the Mekong Delta (with the WB) and in the 3Ss area (with the ADB). Other opportunities may exist with private project developers. For example, small scale projects to conserve and manage upland areas could be linked to ongoing hydropower developments for the benefit of the local and displaced people.

During the BDP2, new projects, both large-scale and small-scale, would be identified and prioritised. The main vehicles for the BDP2 to work with the national agencies on project identification are the ongoing sector work of the various MRC programmes and planning activities in the BDP sub-areas, which should build on the sub-area studies conducted during

BDP1. The results will form the basis of detailed Project Identification Notes. Based on these notes, the implementing entity, such as a line agency and MRC sector programme, would include the project in their planning and take the project forward.

3. BDP2 Objectives And Structure

3.1 Goal and objectives

The BDP Programme development objective is stated as "The water resources of the MRB managed and developed in an integrated, sustainable and equitable manner for the mutual benefit of the basin countries".

Three immediate objectives have been defined to reflect the manner in which the MRC conceptualises basin planning; namely as consisting of a planning process, a knowledge basis and assessment tools, and capacity to run the process by applying the knowledge base and the tools. The immediate objectives are:

- A rolling IWRM based Basin Development Plan produced in support of sustainable development in the MRB;
- Knowledge base and assessment tools further developed and utilised effectively in the MRCS and NMCs; and
- Capacity built at the MRC and NMC levels for IWRM planning and facilitation/mediation in areas where trade-off management is required.

3.2 Programme structure

The *immediate objectives* create a framework within which the entire BDP2 has been framed. Table 1 shows that each objective forms a BDP2 component under which the key outputs are listed that collectively will lead to the achievement of the objective. The framework in table 1 is fully in agreement with the BDP2 Programme Document.

At the 13th meeting of the MRC Council in December 2006, it was recommended that all MRC programmes should include a standard component on programme management and communication (paragraph 107 of the minutes). Efficient programme management and communication will be essential to achieve the BDP2 objectives, since a relevant and acceptable IWRM-based BDP can only be prepared by actively engaging the various stakeholder groups in the planning process, including senior government officials, and achieving a common understanding of how the LMB will be developed and managed to the mutual benefit of the countries and their people. Accordingly, it is proposed to add a fourth component to the BDP2 structure.

Further, the *Objective 2* includes two outputs (*Output 2.2* and *2.3* in Table 1), that relate to training on the use of assessment tools and knowledge-based decision making. It is proposed to consolidate these two outputs in the outputs on IWRM planning capacity building (*Output 3.2 to 3.4* in Table 1) under immediate *Objective 3*.

Responding to MRC Council recommendations, BDP2 programme structure is established to four components as described below;

<u>Component 1: Programme management and communication.</u> Besides programme management, this component will support the communication, coordination, and information exchange with the various stakeholder groups, including MRC programmes, NMCs, national line agencies, RBOs, civil society, NGOs, the private sector, the development banks, and other stakeholders.

<u>Component 2: Rolling IWRM-based BDP.</u> This component will prepare the Plan comprising of selected basin-wide development scenarios, the IWRM-based basin strategy, and the project portfolio that will equitably utilise some of the common Mekong water resources to achieve socio-economic benefits for all countries. The component will also address gaps in sector knowledge and support the next steps in sub-basin planning.

<u>Component 3: Knowledge base and assessment tools.</u> This component will further upgrade and refine the existing knowledge base and selected modeling and assessment tools, such as the DSF, the IBFM process, and the economic, environmental, and social project screening checklists. It will also continue to build capacity for the maintenance and use of the tools by the NMCs and selected national agencies.

<u>Component 4: IWRM-based planning capacity.</u> This component will build capacity for IWRM planning, including scenario formulation and assessment, project identification and preparation, the linkage and harmonization of planning across sectors and aerial jurisdictions, and trade-off facilitation and dispute prevention. The component will also explore the option to built IWRM training capacity in one or more riparian (training) institutions.

Component 1 will support all other components. Components 3 and 4 will support the production of outputs under Component 2, which comprises the elements of the IWRM-based BDP, and will built the capacity to implement and periodically update the Plan, as shown in Figure 1. Table 2 shows the resulting BDP2 structure and the key outputs, as well as the differences with the Programme Document.

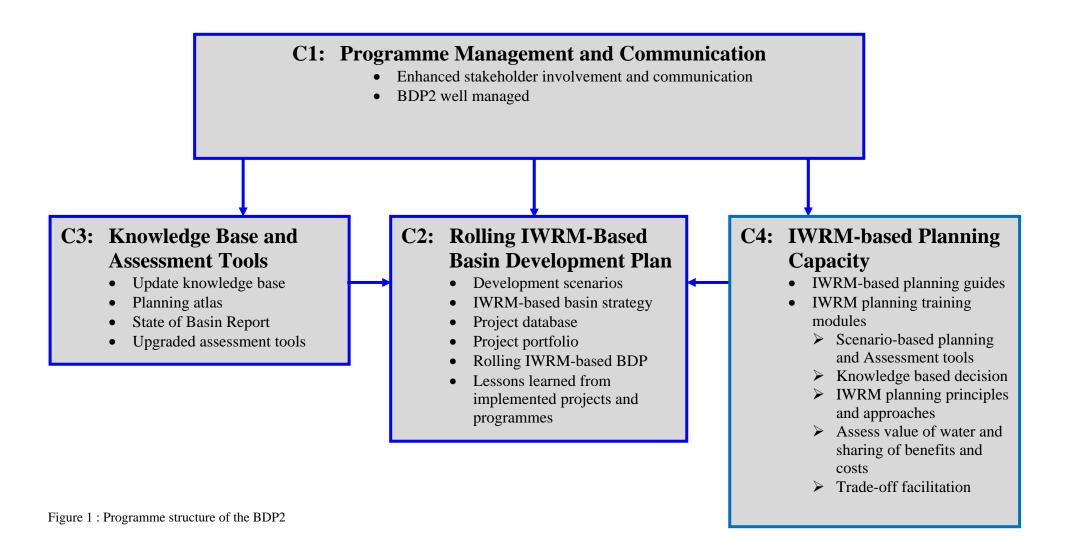
Table 1: The BDP2 immediate objectives and key outputs (as per the Programme Document)

Immediate Objective 1 A rolling IWRM based BDP produced in support of sustainable development in the MRB	Immediate Objective 2 Knowledge base and assessment tools further developed and utilised effectively in the MRC and NMCs	Immediate Objective 3 IWRM planning capacity built at MRC and NMC levels
Output 1.1 – Transparency and stakeholder involvement enhanced including linkages with national planning	Output 2.1 - Knowledge base including sub-regional planning data and assessment tools upgraded, reviewed and operational	Output 3.1 – Upgraded planning guides prepared and agreed
Output 1.2 - Regional/basin- wide scenarios and development opportunities identified, assessed and impacts analysed jointly with the four riparian countries	Output 2.2 - Staff at MRCS and NMC levels skilled in the use of assessment tools	Output 3.2 – IWRM planning principles and approaches internalised at MRCS and NMC levels
Output 1.3 - Programmes and projects proposed by national and sub-area level institutions and stakeholders assessed	Output 2.3 - Knowledge based decision support capacity enhanced at MRCS and NMC levels	Output 3.3 – Capacity built within the MRC to assess value of water and sharing of benefits and costs
Output 1.4 – Portfolio of programmes and projects developed, prioritised and promoted		Output 3.4 – Capacity built within BDP to assist the MRC and the Mekong Programme in trade-off facilitation and mediation
Output 1.5 - Basin scale rolling IWRM – based Plan including facilities for periodic revision prepared in a participatory manner		
Output 1.6 - Lessons learned from implemented projects and programmes collected and analysed		
Output 1.7 – BDP2 managed effectively		

Table 2: BDP2 structure and key outputs

Component 1 Programme management and communication	Component 2 Rolling IWRM based BDP	Component 3 Knowledge base and assessment tools	Component 4 IWRM-based planning capacity
Output 1.1 – Enhanced stake-holder involvement and communication	Output 2.1 – Basinwide development scenarios (Originally Output 1.2)	Output 3.1 - Updated knowledge base (Originally Output 2.1)	Output 4.1 – IWRM-based planning guides (Originally Output 3.1)
Output 1.2 - BDP2 well managed (Originally Output 1.7)	Output 2.2 - IWRM-based basin strategy (Originally Activity 1.5.1) Output 2.3 - Project	Output 3.2 - Upgraded Assessment tools (Originally Output 2.1)	Output 4.2 – Staff at MRCS and NMC levels skilled in scenario-based planning and the use of assessment tools (Originally Output 2.2)
	database (Originally Output 1.3) Output 2.4 – Project portfolio (Originally Output 1.4)		Output 4.3 – Knowledge based decision support capacity enhanced at MRCS and NMC levels (Originally Output 2.3)
	Output 2.5 - Rolling IWRM-based BDP (Originally Output 1.5) Output 2.6 - Lessons learned from		Output 4.4 – IWRM planning principles and approaches internalised at MRCS and NMC levels (Originally Output 3.2)
	implemented projects and programmes (Originally Output 1.6)		Output 4.5 – Capacity built within the MRC to assess value of water and sharing of benefits and costs (Originally Output 3.3)
			Output 4.6 – Capacity built within BDP to assist the MRC and the Mekong Programme in trade-off facilitation and mediation (Originally Output 3.4)

Note: Originally means as per the BDP2 Programme Document



3.3 Outputs and activities

The logical framework in Appendix B breaks the objectives into 16 outputs that collectively would achieve the objectives. In this report the outputs are accurately defined and ascribed a verifiable indicator (Chapter 5). The responsibilities for the timely development of quality outputs are assigned to specific BDP staff members, who have identified and described some fifty activities that are found necessary to produce the outputs.

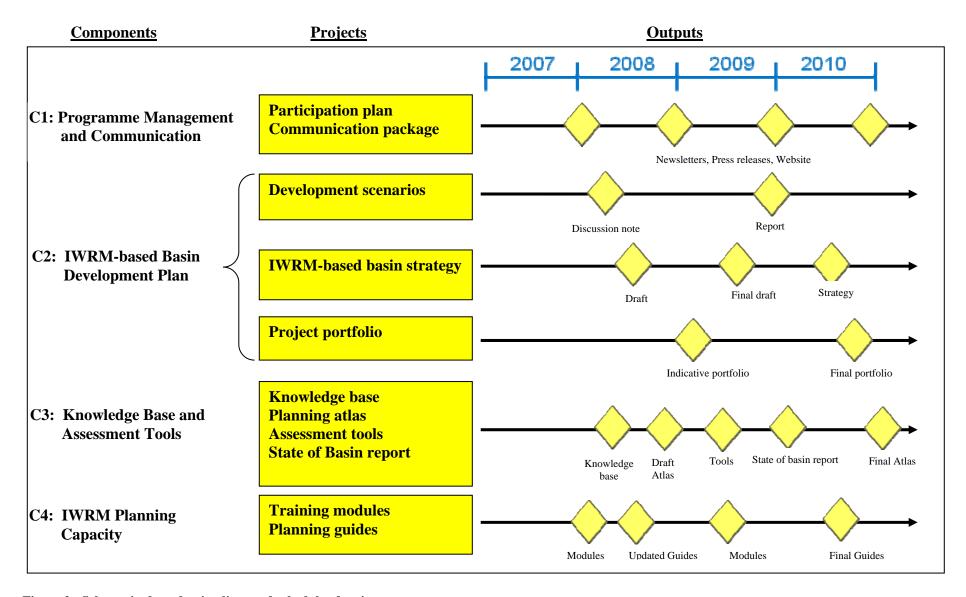
As part of the preparation of this report, the activities have been made operational through the identification of detailed tasks (Chapter 5), each of which has a specific purpose and deliverable contributing to the achievement of the activities. Thus the linkage has been maintained between the highest objectives and the separate tasks.

Appendix C summarises the programme objectives, outputs, manager for output production, and the anticipated level of approval required for each output. Figure 2 presents the schematised production lines of the main outputs. It indicates that a project approach will be adopted to develop the main outputs.

3.4 BDP2 contribution to the MRC Strategy Plan 2006-2010

The MRC adopted an IWRM-based approach in its strategic plan for 2006-2010. The approach aims to balance the promotion and facilitation of further development of some of the basin's water resources with the maintenance of the basin's ability to sustain livelihoods and environmental values. This would require a basin-wide planning process and a strong partnership of the basin's stakeholders, which can effectively link development and natural resource conservation. The BDP Programme provides this planning process. This strategic plan sets forth an overarching goal and four specific goals, which build on strengths of the MRC in an appropriate and meaningful manner.

Table 3 shows that the BDP2 process and outputs will make an important contribution to the achievement of the strategic goals of the MRC. In addition, as described in other parts of this report, the BDP2 will assist the MRC in the achievement of its implementation strategy by supporting the following two processes: 1) the improvement of the coordination and programming of other MRC programmes towards the achievement of MRC strategic goals and 2) the visible engagement of the MRC in transoundary assessment, based on IWRM.



 $Figure\ 2: Schematised\ production\ lines\ and\ schedule\ of\ main\ outputs$

 $Table\ 3: Contribution\ of\ BDP2\ outputs\ to\ the\ goals\ of\ the\ MRC\ Strategic\ Plan\ 2006-2010$

Goal 1	Goal 2	Goal 3	Goal 4
To promote and support coordinated, sustainable and proport development	To enhance effective regional cooperation	To strengthen basin-wide environmental monitoring and impact assessment	To strengthen the IWRM capacity and knowledge base of the MRC bodies, NMCs and line agencies and other stakeholders
Basin development scenarios evaluated and discussed	Networks/partnerships with the many BDP interfaces operated	Cumulative trans- boundary impacts of existing/ planned projects assessed	Transparency and stakeholder involvement enhanced
Project portfolio approved and implementation initiated	Capacity built in the MRC to assess benefits and costs of water resource development scenarios to the member countries	Impacts of selected projects evaluated	Knowledge base and modelling/assessment tools upgraded, reviewed and operational at the basin and national levels
Networks/partnerships with line agencies, donors, investors operated	Capacity built within the MRC in trade-off facilitation and dispute prevention	Experts from line agencies and research institutes trained in the use of modelling and assessment tools	Knowledge based decision support capacity enhanced s IWRM-based planning guides used at the basin, national, and sub-basin levels
The implementation of priority investment projects promoted and selected project supported or facilitated	The implementation of joint/transboundary projects supported or facilitated	Appropriate tools and processes for scenario and project assessments operated at basin, national and sub- basin levels	Planning atlas widely used
Project database operated at the basin and national levels Agreed IWRM-based Basin Strategy used by member countries for socio-economic and sector planning, and the preparation of national and sub-basin IWRM framework plans	Agreed IWRM-based Basin Strategy supports the implementation of 1995 Agreement and the review of the MRC Strategy Plan	Knowledge based decision support capacity enhanced at the basin and national levels	State-of-the Basin (SoB) report updated

3.5 BDP1 achievements and transition into Phase 2

The BDP1 results were prepared with the active participation of many participants, structured around the regional BDP team at the MRCS and the national BDP teams and working groups under the four NMCs. The National ownership of the planning process was encouraged and institutional capabilities were strengthened. At the MRCS, virtually all programmes have become gradually involved in the BDP process. The BDP1 Completion Report provides a useful overview of these achievements as shown Box 1 below.

Box 1: Overview of BDP1 achievements

BDP1 produced

- (1) A planning process, consisting of
 - A functional, comprehensive network of participants and information flows, consolidated during an active dialogue involving some 200 institutional stakeholders;
 - Routines for identification, scoping, and screening of recommended projects and programmes; and
 - Initial practices for promotion and facilitation of priority projects and programmes.
- (2) An IWRM plan, consisting of:
 - Broad, integrated analyses, at sub-area, national and basin-wide level, of baseline conditions, water demand projections, development opportunities, linkages and constraints, and development scenarios;
 - An agreed 'Strategic directions for IWRM in the LMB', reflecting values shared by the member countries, and addressing immediate, medium and long-term water-related development; and
 - A portfolio of useful and bankable projects and programmes that will support the strategic directions and the MRC vision of 'an economically prosperous, socially just and environmentally sound Mekong River Basin'.
- (3) Practical and innovative tools for basin-wide IWRM, together with a knowledge base, comprising data, information, and decision-support tools for impact prediction and feasibility analyses. Hereby, the knowledge base for strategic planning has been widely expanded, as exemplified by the following cross-cutting key publications:
 - MRC State of the Basin Report (June 2003)
 - MRC Social Atlas (May 2003)
 - MRC People & Environment Atlas (August 2003)
 - The BDP Planning Atlas, produced by a GIS-linked database, with a wealth of data and information, and listings of development projects and project ideas (May 2006)
 - The BDP Core Library (May 2006)
- (4) Enhanced capacity in IWRM and multi-disciplinary river basin planning at the regional, national and sub-area level, provided by:
 - Dedicated training sessions and on-the-job training;
 - The MDBC training programme and curriculum; and
 - Six riparian MSc. candidates educated under BDP-related grants.

How the BDP2 will build on these achievements is described in the next chapters and in Appendix A. The scope for improvement and consolidation of BDP1 process and results in BDP2 includes:

- Consolidation of BDP interfaces, in particular with MRC programmes, national line agencies, RBOs, and development partners.
- Consolidation of the practices and formats for the identification, analysis and promotion of priority projects.
- Further improvement of the knowledge base, in particular of the national policy, legal, institutional, and planning frameworks; studies to address certain sectoral information gaps, such as the future water demand for irrigation and the valuation of fish migration routes.
- Consolidation and operationalisation of the existing strategic directions for IWRM in the LMB and supporting the next steps in sub-area planning.
- Consolidation of the operational implementation of assessment tools, such as the DSF and the IBFM process.
- The improvement of planning capacity to produce the rolling IWRM based BDP that will be implemented by the member countries with support from the MRC, development banks, the private sector, NGOs, and others.
- Improved management of the BDP process and quality assurance of outputs.

4. Description of the IWRM-Based BDP

4.1 Elements of the IWRM-based BDP

The BDP2 is designed to institutionalise the participatory planning process established during BDP1, and further develop the assessment tools and planning capacity to produce a Rolling IWRM-based BDP. The Plan comprises three elements that will be prepared with support from the NMCs, national line agencies, local agencies and other MRC programmes. Given the people's high reliance on the river's natural system, the planning process requires a strong partnership of the basin's stakeholders (see Figure 3). The three Plan elements can be summarised as follows:

- Basin-wide Development Scenarios, which assess the potential for the further development of some of the water and related resources in the different parts of the Mekong Basin. The results will guide the formulation of the IWRM-based basin strategy and the project portfolio.
- An IWRM-Based Strategy, which provides a long-term view of how the Mekong Basin will be developed, and guides the implementation of the IWRM process at the basin, national and sub-basin levels. The strategy will assist the line agencies in the preparation of plans and projects that are sensitive to the resource protection issues.
- A Project Portfolio of water resources development projects and supporting nonstructural projects that would continue to develop some of the Mekong Basin's water and related resources for the socio-economic development of the member countries, as envisioned in the 1995 Agreement.

4.2 Basin-wide development scenarios

Development scenarios are useful to compare various "what if" cases. They attempt to predict what would be the most likely result of decisions to be taken in the near future by governments. Scenarios provide the framework, based on sound professional analysis and judgement, for the presentation of strategic options to decision-makers, in this case options for future water and related resources development in the LMB. The number of scenarios to be developed and analysed has to be kept to a minimum. In view of the many uncertainties brought about by the rapid rate of change, there is no point in defining a large number of scenarios, each slightly different from the others.

Each scenario will be developed for the entire basin and represent various levels of water and related resources development in the various sub-basins during the next two decades, to be based on many factors, including the countries' plans for water and related resources development, population and economic growth, investments and trade, poverty reduction, and other issues in national policies and socio-economic plans. Some scenarios will examine the longer term consequences of climate and land use changes, and how road development and other externalities will change the water resources situation during the next decades.

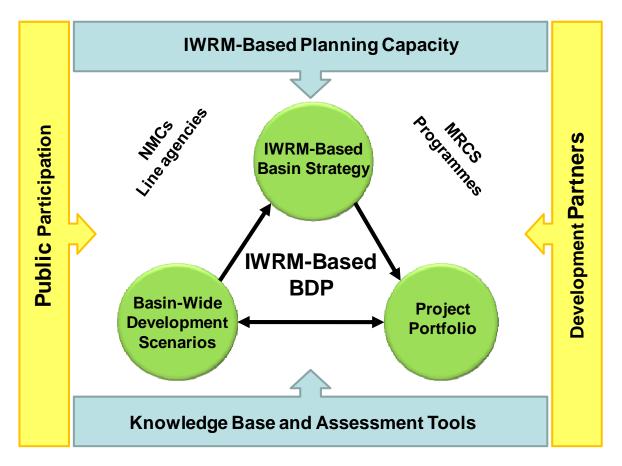


Figure 3: Key elements of a Rolling IWRM-based BDP

The alternative development scenarios will be assessed against appropriate indicators representing common goals and objectives of the four countries. In the assessment process some proven modelling and assessment tools (such as the DSF), and others to be improved (such as the IBFM process), will be used to assess the likely benefits and costs to the member countries of alternative development scenarios, and their contribution to the achievement the MDG for sustainable development and poverty alleviation.

The resulting strategic options for meeting the water needs of all sectors, and those of the basin, will be subjected to basin-wide discussions with the various interest groups. Ultimately, senior government officials of the member countries must provide guidance on the level of basin development that most likely will achieve an optimal balance between economic, environmental, and social outcomes in the LMB. The results will inform the formulation of the IWRM-based basin strategy.

The formulation and analysis of the development scenarios will build on several outputs of BDP1, WUP, EP and others, as described in Chapter 5. The latter also identifies the gaps in the knowledge base which BDP2 needs to address. A major perceived gap concerns the irrigation potential in the Basin. Since the irrigation is the main consumptive user of water resources, and most member countries plan to further develop their agricultural sectors, this gap needs to be addressed with urgency.

4.3 IWRM-based basin strategy

The IWRM-based basin strategy will build on the current "Strategic Directions for IWRM for the LMB" of 2005 and the MRC Strategic Plan 2006-2010. The strategy must provide a long-term view of how the Mekong Basin may be developed and managed to fulfil the development goals of the member countries. It also must elaborate a framework within which water and related resources development projects will be identified, prepared and implemented. As a result, the strategy would guide various types and sizes of water resources developments in the basin, while recognising the need to maintain the basin's vital biodiversity and fisheries. Similarly, the strategy would guide the allocation of the cost and benefits of water and related resources developments, in line with national poverty reduction goals.

Obviously, the IWRM-based basin strategy must be internally consistent and integrated between sectors and countries, as well as conforming to sustainable limits in the various parts of the LMB. Therefore, the strategy should demonstrate a coherent and holistic approach to basin development that draws together all the objectives within each sector (hydropower, irrigation, fisheries, environment, flood management etc.) into a single integrated strategy for the LMB. To ensure its effectiveness, the strategy will have to be consistent with national development policies, strategies and sector plans. How this can be achieved is described in detail in Chapter 5.

The IWRM-based basin strategy will be developed through a participatory process with all stakeholders, so that by the time it reaches the MRC Council, it has widespread support. The strategy has to be built upon a clear understanding of the basin's dynamics and the hydrologic, economic, environmental and social impacts that different levels of water resources development impose on the basin dynamics. The current understanding of these dynamics will be further improved by the analysis of development scenarios.

4.4 Project portfolio

It is envisioned that the project portfolio will contain significant water or related resources development projects in each of the four member countries that would continue to develop some of the basin's water and related resources, as envisioned in the 1995 Agreement. The projects would include hydropower projects, irrigation and drought management projects, flood management projects, navigation projects, fisheries projects, and environmental projects. There would also be room for pilot and demonstration programmes. These projects fall in the following categories:

- Joint projects of the four member countries (at a later stage perhaps including the upper basin countries).
- Transboundary projects or suites of complementary projects, between two or three countries.
- National projects or suites of projects with significant or cumulative basin-wide economic, social or environmental implications.

In turn, these three categories fall in two sub-categories, namely structural and non-structural projects. Structural projects are projects with a major investment component in existing or new infrastructure, which would significantly change flow conditions or water quality, and/or improve the productivity of the use of water and related resources. Knowledge to date suggests almost all of the structural projects will fall in the category of national projects.

Many of the non-structural projects identified in BDP1 fall in the categories of joint and transboundary projects.

It will be essential to include the relevant data and information of all large-scale and significant projects with potential transboundary implications in the project database developed during BDP1. This includes the planned and considered national projects in the tributary areas and on the mainstream of the Mekong. The improved data base should also contain a category for already completed and ongoing structural projects, with a view to informing the formulation of development scenarios and recording the negative and positive impacts of these projects.

The existing project classification system will be reviewed and where necessary adapted to support the BDP2 planning process. The system will then be used to consolidate the existing long-list of projects contained in the project database. The projects prioritised during Phase 1 that are not being implemented, or prepared for implementation, will be discussed with the appropriate implementing entities, such as line agencies and MRC programmes, with a view to move these projects forward.

During the BDP2 new projects will be identified, screened and prioritised. The main vehicles for the BDP Programme to work with the national agencies on project identification are the ongoing sector work of the various MRC programmes and the proposed IWRM planning activities in the BDP sub-areas, which will build on the sub-area studies conducted during BDP1. The results will form the basis of detailed Project Identification Notes. Based on these notes, the appropriate implementing entities would include the project in their planning and take the project forward.

In collaboration with EP, the various project screening checklists and guidelines developed during BDP1 will be consolidated in a project assessment toolbox. The toolbox will be used to screen selected large-scale structural projects that are contained in the project data base. The results will be communicated to the responsible line agencies through the NMCs, with a view to minimising adverse impacts and supporting an optimal project design.

Together with the scenario analysis of assessments, the screening of individual projects will provide a platform for the early engagement by the MRC in such projects, and assist the line agencies and development partners in the "clearing" of such projects in an overall basin context, which should facilitate the financing of the project preparation and implementation. The use of the above tools will not necessarily result in screening controversial projects "out" of the project portfolio. The final selection of the project portfolio will be guided by the approved IWRM-based basin strategy and driven by the interests and priorities of the basin countries.

It is anticipated that the project portfolio will include different categories of structural and supporting non-structural projects. One category of structural projects would comprise sound large water resources development projects with possibly significant transboundary implications. This would include the planned and newly identified projects that would require prior consultation and/or mutual agreement under Article 5 of the 1995 Mekong Agreement, which are by nature transboundary in significance. Their inclusion in the plan would signify intend to take them forward to pre-feasibility study and beyond, but would not signify ultimate approval to proceed with them, which would be subject to the outcomes of those studies.

Another category of structural projects in the project portfolio could comprise small-scale projects that can alleviate poverty, even if these projects have no significant transboundary implications. During BDP2, the Programme will support the identification, preparation and implementation of such projects. Partnerships will be explored with development partners and the national entities that would be responsible for the implementation of such projects. Opportunities do already exist for such partnerships in the Mekong Delta (with the WB) and in the 3Ss area (with the ADB). Other opportunities may exist with private project developers.

4.5 Formulation of the IWRM-based BDP

The BDP1 developed a five-stage planning cycle: 1-2) Analysis (sub-area and regional), and later on, monitoring and evaluation; 3) IWRM strategy, 4) Project database and 5) Priority projects (short list) through classification and ranking. The development, promotion and implementation of the BDP and its shortlisted projects were considered outside of the BDP (BDP Completion report for Phase 1, 2001-2006, page 21). This planning cycle reflected the main objective of BDP1 to create the planning process. The original planning cycle used in BDP1 is provided in Appendix D.

BDP2 Programme Document calls for a review of this planning cycle. The review would aim to streamline the planning process in order to address lessons learned, and to ensure that the projects will achieve benefits for all member countries and comply with sound environmental and socioeconomic principles. The review resulted in a slightly modified planning cycle, which is shown in Figure 4. The figure shows that each step in the planning cycle leads to a main output that is described in Chapter 5.

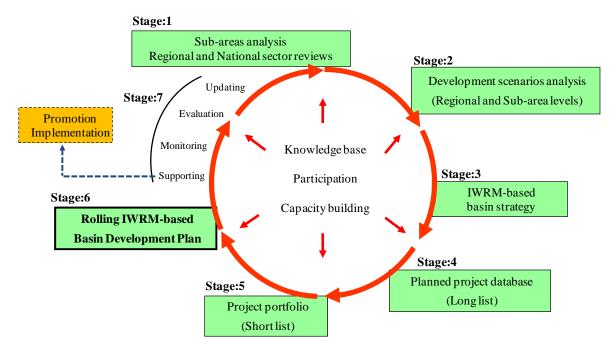
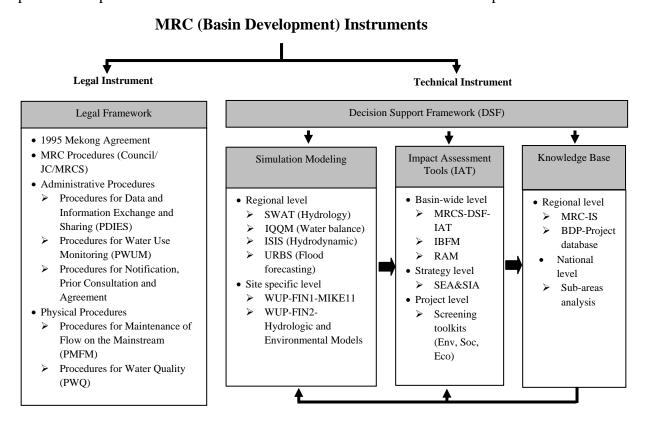


Figure 4: The BDP planning cycle

The rolling IWRM-based BDP will bring all existing, planned and considered significant and large-scale water resources development projects in the BDP process. The formulation of the plan will employ appropriate knowledge and tools that will ensure the plan achieves benefits for all countries and the projects comply with sound environmental and socioeconomic

principles. This would offer a platform for the MRC to engage in transboundary governance, based on IWRM, and help ensure that structural projects will not cause transboundary conflict.

The main instruments available with the MRC that can be used in the BDP process are shown in the figure below. The main technical instruments are those required for the modeling and assessment of basin-wide development scenarios, which have been developed and tested during the last several years under the WUP and EP. They include the regional level simulation models and the IBFM process. The MRC legal instruments and the countries' policies and plans will drive the formulation and assessment of the development scenarios.



The main differences with the planning cycle used in Phase 1 include: 1) the addition of Stage 6 - the formulation of the Rolling IWRM-based BDP, which is the main aim of BDP2 and 2) the addition of Stage 7 – supporting, monitoring, and periodic evaluation and updating of the IWRM-based BDP. A high quality BDP, prepared in a participatory fashion will generate interest and investments almost by itself. This will facilitate the funding and implementation of the plan.

In 2008 a draft outline of the IWRM-based BDP will be prepared based on the concept described in this Chapter. In 2009, the BDP team will integrate the three plan elements in a draft plan document in consultation with the NMCs. By that time the draft versions of the elements have already benefited from basin-wide discussions with the different interest groups and senior government officials. The last year of BDP2 will be used to achieve consensus among the various stakeholder groups on the draft plan document, so that by the time it presented to the MRC Council for approval, it has widespread support.

4.6 Implementation of the IWRM-based BDP

The rolling IWRM-based BDP will include guidelines on the role and responsibilities for the implementation, monitoring, and the participation of stakeholders such as national line agencies, RBOs, the MRC, development banks, private project developers, NGOs, and civil society groups. The guidelines will be based on the MRC Strategic plan 2006-2010, which identifies the role of member countries in the preparation, implementation, and the mobilisation of funding for investment projects.

All, or virtually all, structural projects in the project portfolio would be prepared and implemented by the countries with support from private project developers, development banks, the MRC and others. The MRC would provide coordination, technical assistance or another form of engagement to support project preparation and implementation through the review of Terms of References, feasibility studies, and environmental and social impact assessments; transboundary assessments; and mediation and facilitation; and project identification. If requested, the MRC could organise pre-feasibility studies.

It is envisioned that many of the non-structural projects will be implemented by the MRC, within the existing programme frameworks. These projects would form a part of the MRC's annual work plans. In the longer term, all MRC programmes and activities would support the implementation and the periodic update of the project portfolio, and have project identification notes in the BDP project database.

4.7 Periodic updates of the IWRM-based BDP

Guidelines will be prepared for the periodic updating of the rolling IWRM-based BDP. As projects move through the project cycle, some are removed from the plan because they are completed or proved unfeasible. New projects will be identified and approved for inclusion in the plan. It is envisioned that the project portfolio will be updated every 2 or 3 years. Also the development scenarios and the IWRM-based basin strategy will need to be updated every 5 to 10 years, since new data and information become available that may necessitate a review of earlier agreed understanding of the basin dynamics, basin needs and potential, and national development needs.

It is essential with a periodically updated rolling IWRM-based BDP that a check is kept not only of the progress in implementing the projects set out in each plan, but also that the impacts arising from those projects are closely monitored and evaluated. In this way, each successive plan can be updated in an informed way, adjusting as necessary the plan design to ensure that the basin countries stay on track towards achieving its long term aims. Therefore, time-bound, quantified indicators and procedures for monitoring and evaluation will be set out under the rolling IWRM-based BDP.

The monitoring of the impacts of project implementation will be guided by the IWRM-based basin strategy (Chapter 5). The strategy will define the criteria for impact monitoring, which could, for example, be related to the MDG of sustainable development and poverty alleviation. The monitoring could be undertaken by the various MRC programmes in coordination with national line agencies. The periodic evaluation could be achieved through regular updates of the SoB. The MRC would then report the implications for the IWRM-based basin strategy to the member countries for their consideration in future updates of relevant national policies and plans.

5. Appreciation of Programme Outputs

The Programme Document breaks the three objectives into 14 desired outputs, which collectively would enable BDP2 objectives.

This Chapter defines each of the BDP2 outputs in terms of 1) how they will enable the programme objectives, 2) the baseline status of the output i.e. what has been done in BDP1 and since the Programme Document and what remains to address to achieve the output; 3) verifiable indicators to measure the outputs in terms of their status at different stages of programme implementation, their quality and impact i.e. significance to the achievement of the respective objective at the completion of the programme and 4) the process to achieve the output i.e. inputs and activities and tasks. Appendix B provides an updated Logical Framework Analysis (logframe) of BDP2 that shows the baseline and end result indicators of outputs and the alignment of Programme activities and tasks to the outputs. The logframe will be an essential tool for monitoring the progress, final results and impacts of BDP2.

For each output a diagram summarising the process of activities and tasks leading to the output is provided. Of the 14 outputs, the most important are given in the Box below.

Key outputs of BDP2:

- Formulated and assessed basin-wide development scenarios, which facilitate shared views on development options in the Mekong basin and helps define the IWRM-based Basin Strategy for basin development
- An updated IWRM-based Basin Strategy to guide the implementation of IWRM in LMB and the development of the basin
- A portfolio of programmes and projects identified and short listed under the planning cycle
- A rolling IWRM-based BDP
- Enhanced knowledge base with updated SoB and Planning Atlas
- Upgraded assessment tools which are used effectively by MRC, national line agencies and sub-area level in the planning process and
- Updated planning guides and enhanced capacity for IWRM-based planning

Figure 2 in Chapter 3 presents the schematised production lines of the main outputs. The figure indicates that a project approach will be adopted to develop the main outputs.

Many of BDP2 outputs will require the MRC management's approval to be published and made available in the public domain to promote a transparent planning process and the involvement of stakeholders. A process for quality assurance and clearance of these outputs in line with the MRC procedures for information sharing will be required. Appendix C provides the list of these outputs with respective quality assurance and clearance process.

5.1 Enhanced stakeholder involvement and communication (Output 1.1)

The BDP process involves consensus building based on an informed debate and ownership of different communities and stakeholders in the basin. This requires appropriate mechanisms and a transparent and effective communication to involve the stakeholders and build their confidence on the planning process, which would lead to their acceptance of the final product – the IWRM-based BDP. Meaningful participation and communication in BDP2 should be

achieved through a more systematic and across all programme activities. This output is emphasised as prerequisite for the production of the rolling IWRM-based BDP, while contributing to other objectives of BDP2 such as the credibility of knowledge base and assessment tools, used to prepare the Plan.

During BDP1, a participatory planning process has been established at regional, national and sub-area levels. Stakeholder participation has achieved mainly through sub-area forums while at national level, involvement of line agencies and other institutions was through BDP National working groups and National BDP Sub-committees. The trans-boundary meetings are considered successful as they provided open environment to discuss transboundary issues and to jointly identify development interventions (BDP1 Completion Report).

BDP1 guidelines and documents identified the key principles of participation in organising sub-area for a. These guidelines will be applied in BDP2 activities. However, there is the need to update these guidelines with lessons learnt from the past experiences and taking into account the changing environment of the MRC. To translate these guidelines into actions, a Participation and Communication plan of BDP2 is required to define coherent and consistent activities throughout the BDP process. The following activities and approaches are planned to achieve the output.

Activity 1.1.1: Enhance and implement methodologies and practices for public participation, which will prepare the Participation and Communication Plan of BDP2, building upon BDP1 Guidelines and documents.

Task: To update the Stakeholder analysis, the BDP Guidelines for Stakeholder Participation and prepare the Participation and Communication Plan of BDP2.

Approach: The four Member States have quite different provisions and policies for stakeholder participation in public planning, which the MRC must observe. During BDP1 national routines for stakeholder participation were not consolidated and there is yet a confidence of the stakeholders, civil society organisations and academia on the BDP planning process.

The BDP 2 will continue and improve efforts during BDP1 by expanding target groups at sub-area, national, regional levels to more proactively involve other stakeholders, particularly civil society organisations and academia. Such multi-stakeholder consultations will be undertaken throughout BDP stages: sub-area and sector analysis, scenario formulation and assessment, IWRM-based basin strategy formulation and project identification, screening and prioritisation. Partnering with civil society or NGOs will be undertaken and the dissemination of information on the BDP will be improved to increase public access to this information.

It is essential that all stakeholder consultations are focused with well-defined scope and expected outputs in order not to generate expectations among stakeholders that cannot be met by the MRC e.g. support for projects, which are beyond the scope of the MRC and BDP for joint or "national projects with transboundary impacts "for implementation at the basin level".

This activity will update the existing BDP Guidelines on Stakeholder Participation. The updated guidelines will be included in the comprehensive BDP Stakeholder Participation and Communication Plan. This activity will use the MRC's strategies for Public Participation and

for gender mainstreaming as well as experience from other partners while providing valuable additional benefits to make these strategies operational.

Activity 1.1.2: Improve interactions with national planning and line agencies through direct participation of MRC and NMCs/BDP staff in relevant fora and working groups.

Tasks: (i) To support National BDP teams in identifying constraint areas for participation and communication in the work of BDP sub-committee, national working groups (WG), and Sub-area (SA) WG and (ii) to facilitate participation of line agencies, research institutions and SA WG members in Regional WG on basin wide development scenarios and IWRM-based basin strategy and other formal and informal technical forums and the MRC, NMCs/BDP participation in national fora.

Approach: The BDP National Sub-committee, National WG and SA WG have been operating since BDP1. Focal point in each national line agency has been nominated to coordinate with the National BDP teams. The same would be needed at sub-area level. BDP2 will work with the focal points to identify constraints to effective working of these mechanisms to foster interlink between the BDP and national line agencies.

What is further needed in BDP2 is that this involvement of national agencies in the BDP process is mirrored, and that BDP/MRC is engaged directly with national economic planning and sector planning processes through participation in the existing coordination fora, working groups etc., when this national planning has a bearing on the development of water and related resources in the MRB.

This engagement of BDP/MRC shall take place at various levels and through various key actors of the MRC. At the political level this engagement is the responsibility of the MRC Council Members, at the strategic and policy formulation level it is the responsibility of the MRC JC members and at the operational level the responsibility rests with the NMCs. The role of the BDP in this respect is to support the dissemination and advocacy of the BDP outcome and IWRM strategic directions in these fora and levels and provide technical guidance and support, notably to the NMCs.

This engagement shall raise the general awareness of and support to the MRC and the BDP process, enhance the integration of the outcome of the BDP process in national economic and water related sector planning processes, but also – and not least – facilitate and ensure that all existing and planned major national projects with trans-boundary effects and national sector policies and strategies with basin-wide implications are incorporated into the BDP process and scenario analyses.

The BDP and other MRC programmes will also interact with national line agencies and research institutions through the BDP Regional Working Group on development scenarios and IWRM-based basin strategy. This working group will facilitate the building of shared views on development options, strategies and strategic interventions for sustainable development of the LMB.

Activity 1.1.3: Improve and consolidate for for dialogue on shared development opportunities and trans-boundary issues.

Task: To maintain and further improve the BDP's established mechanisms for dialogues and for a (Regional workshops, national WG meetings, sub-area fora and working groups, transboundary meetings) to discuss development opportunities, trade-off negotiation and alternative development options, benefit sharing among states on different use of water resources, transboundary issues and constraints in order to realise development potentials requiring cooperation of more than two countries. In this process, the roles of BDP in transboundary issues will be better defined and widely communicate.

Approach: The MRC JC, the Council and as the last resort the national governments are ultimate fora for discussions and binding decisions between the four Member States. To ensure that this decision making take into account the views of many important stakeholders outside of the MRC, BDP2 will include, where appropriate, additional dialogues involving these stakeholders. Beside national line agencies, these groups of stakeholders include (i) the private sector and development partners who will be called upon to support the implementation of the IWRM-based BDP, (ii) other regional organisations and/or initiatives that should be compatible with the BDP (and vice versa), (iii) the civil society organisations and NGOs whose active support will both demonstrate alignment of interest and provide increased confidence of the investors, and (iv) local governments and RBOs, who will implement most of the programmes and projects that will eventually flow from the planning process and the academia. The Programme Document provides a provision for such a Stakeholder dialogue during the Inception stage of BDP2, which will be maintained on annual basis throughout the BDP process.

When found appropriate, representatives of China and Myanmar should be included in the fora. The BDP, having the accumulated knowledge of development opportunities and constraints at basin-wide and across sectors is in a position to call dialogue/consultation meeting at strategic points in time and thus provide and maintain the fora needed to enhance collaboration and resolve pertinent issues.

These dialogues will promote an appreciation of a board range of development opportunities (options), which would help balance the (conflicting) interests between sectors, at different levels and between member countries to arrive at an integrated approach to achieving the overall development aims. The task requires careful design of dialogues and fora to facilitate discussions and to ensure that balanced development options are considered and agreed upon. Realistically, any chosen development options will create gain-lose situation. Win-win situation may arise if effective negotiation takes place. However, the trade off negotiation requires high skills of diplomacy, wise planning and hard work in the preparation. This activity will also include formal and informal dialogues that will facilitate trade-off negotiations while contributing to the identification of areas for strengthening the trade-off negotiation and facilitation skills of the MRC, NMCs and key line agencies, to be implemented under Component 4 on IWRM capacity building.

Transboundary governance is a key mandate of the MRC and the BDP as the MRC umbrella programme. Under the framework of a follow up project to WUP (Mekong IWRM Support project), BDP2 will work with other MRC programmes to define clear roles and processes for the MRC and Member States to work together in analysing and addressing transboundary issues and potential transboundary impacts of development projects. It is essential that the MRC's and BDP's roles on transboundary issues are widely communicated with countries and public stakeholders build a common understanding on these roles.

Activity 1.1.4: Build partnerships with relevant regional actors and the international donor community.

Tasks: (i) To identify and foster partnership opportunities with key regional partner organisations by engaging them in the BDP process (basin-wide development scenarios, IWRM-based basin strategy formulation and development of project portfolio) and timely provision of credible BDP information and assessment and (ii) to support the MRC in developing the Mekong Partnership Programme with these partner organisations.

Approach: Due to the fundamental role that Mekong Basin's water and related resources play in the socio-economic development, management of the river must be linked to regional political and economic initiatives. A major value-added of the MRC is in the promotion and partnership with development banks, donors, UN institutions, private sector, academic institutions and NGOs (such as IUCN, the International Water Management Institute, the World Wildlife Fund for Nature, Wetlands International and WorldFish Centre) whose experience in environmentally sustainable and pro-poor development would enrich the BDP.

It is crucial that the MRC forges effective links with other regional cooperation initiatives including ASEAN, the ADB's GMS Economic Cooperation Programme and the emerging WB/MWRAP as well as bilateral donors. According to the Strategic Plan 2006-2010 efforts will be made to minimise overlap based on mutual assessment of each partners' comparative advantages. Ways forward include strategic partnerships, trans-boundary issues, networking, participation in the regional dialogue fora and working groups of these actors. As examples, it would be important for the MRC to engage with GMS core Environment Programme and the Environment Operations Centre as well the GMS Working Group on Environment (including the Hydropower Subcommittee).

The International Cooperation and Communication Section (ICCS) develop and maintain these links to and liaison with regional initiatives and donors.

In this process BDP will work through an assistance of ICCS in providing information on BDP-activities and participate in relevant fora of these initiatives, thereby ensuring that basin-wide scenarios and assessment tools are relevant and made available to regional cooperation initiatives and donors. This can include joint or long term partnership with potential organisations/institutes in co-development of initiatives, short-list projects, scenarios, IWRM-based basin strategy, and stakeholder participation fora and activities. The access to BDP assessments and analyses as addressed in activity 1.1.1, an improved and documented credibility of MRC work as addressed in Component 2 and a demonstrated capacity to perform analyses are necessary to enhance future cooperation with these actors. A successful cooperation will imply that these actors recognise the Mekong Programme as the core regional cooperation programme for the sustainable development of water and related resources agreed by the Member States and that they involve the MRC and the knowledge base and assessment tools as appropriate in their project preparation and long –term partnership plan.

The first stakeholder dialogue under BDP2 will be used for consultation with these actors on approaches and specific areas of collaboration that would be mutually beneficial. Following consultations or dialogues would help foster this partnership.

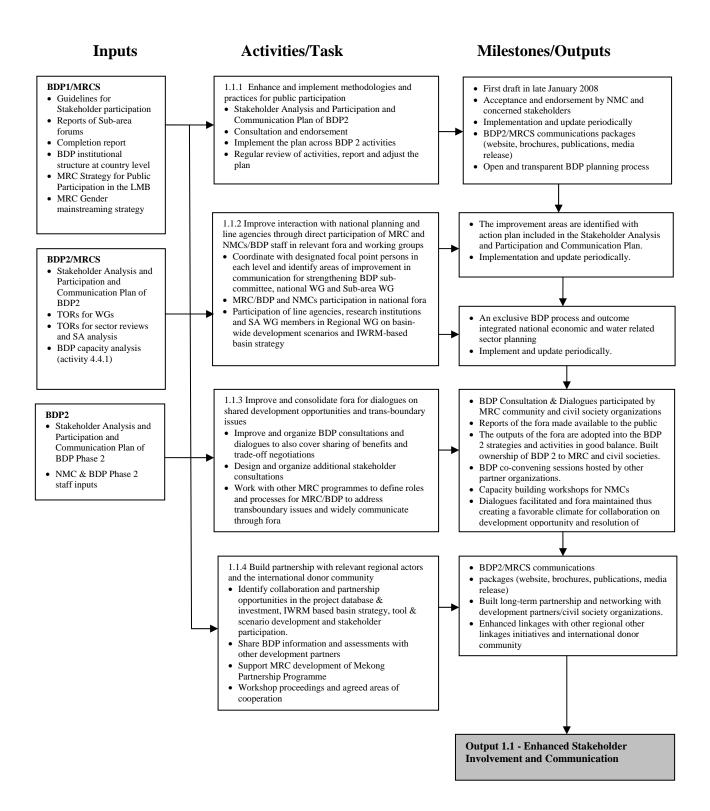


Figure 5: Process to achieve Output 1.1

5.2 BDP2 well managed (Output 1.2)

The programme management activities of BDP2 should be aligned with and contribute to the achievement of outputs and objectives. The coherence and synergy between the MRC programmes and the BDP will be given special attention as the interdependencies between the programmes inspire a fruitful BDP process. Programme coordination and management information will not only serve the purpose of recording the programme implementation. Rather they are important means of building a common understanding among concerned stakeholders in the implementation progress, challenges faced both in terms of progress and quality of products and measures required to address the challenges so that the programme outputs and objectives will be met. Programme management information (reports and others) will also be used as communication tools to generate interest and strengthen engagement of development partners and the public in the BDP.

Several programme management processes and procedures have been established during Phase 1 including preparation of regional and national work plans and coordination meetings. At national level, process for consultation with national BDP working groups on national activities and for approval of the BDP sub-committee of national work plan also exist. BDP2 will build on these processes and procedures to strengthen the management of the Programme, especially in ensuring consistent alignment of activities against agreed outputs, improving their coherence at regional, national and sub-area levels and timely monitoring and reporting. Activities under this output are:

Activity 1.2.1: Managerial and administrative procedures strengthened

The BDP Regional team will prepare the necessary guidelines or internal BDP working papers to further strengthen the process and procedures, established in BDP1. This will cover each step of Programme management: work planning, communication and coordination, financial management, monitoring, reviews and reporting and risk management.

Activity 1.2.2: Staff competencies matching needs

During the inception stage, TOR for staff were reviewed and revised in line with the clearer definition of technical content of the programme activities. Recruitment of both regional and national staff has taken place following MRC recruitment procedures. Adjustments have also been made in changing the National GIS/Data Management Specialist position to National Natural Resources Planner given the plan from Information and Knowledge Management Programme (IKMP) to have similar national IKMP positions in the four countries.

The assignment of BDP regional team members as project managers for different outputs will be reviewed on regular basis to ensure the match of evolving requirements of the work and available capacity while facilitating competencies improvements and career development for staff. Both regional and national BDP staff will be provided with relevant trainings as identified in the training needs assessment and optimising the MRC training opportunities.

Activity 1.2.3: Management information system internalised

The processes and procedures prepared under activity 1.2.1 will help foster strong and consistent engagement of implementing partners in managing, monitoring and evaluating BDP2 progress and achievement. Information flow will be maintained in a transparent

manner to support this. MRCS and MRC management will be kept informed on programme progress and issues arising so they can monitor and guide the programme. Key deliverables from the improved management information system will include (i) duly shared progress and financial reports; and (ii) improved system to store and share BDP information, documents and other materials. These will allow timely management decisions on the programme.

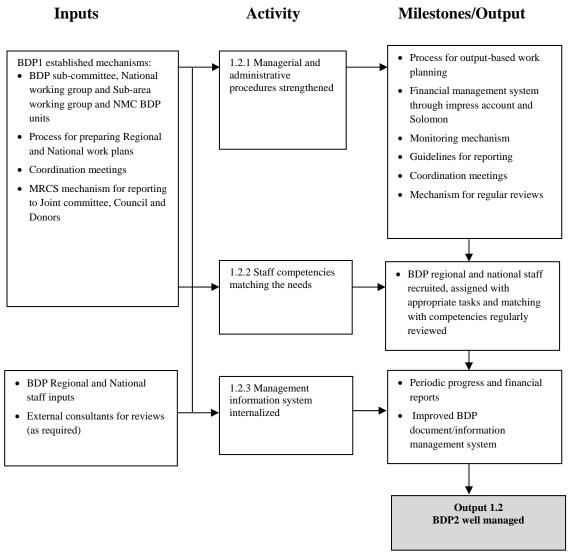


Figure 6: Process to achieve Output 1.2

5.3 Basin-wide development scenarios (Output 2.1)

In general, a scenario is a "What If" case, describing a possible future situation. Scenarios are not about predicting the future. Rather they are about perceiving the future in the present. The basin-wide development scenarios in BDP2 context is defined as a hypothetical combination of possible changes in hydrological condition and/or multi-sector water demands and/or proposed multi-sector water related interventions in the Mekong Basin for a planning horizon of next 20 years. The possible change in hydrologic condition will be mainly focused on climate change which is referred in the Strategic Direction for IWRM at the basin scale. The multi-sector water demands consist of hydropower, irrigation, water supply, fishery, navigation, tourism, flood management, environment sectors. The water related interventions will include joint, transboundary and national and upper countries large scale infrastructure

development projects as well as the series of development projects that may cause cumulative transboundary impacts.

The analysis of basin-wide development scenarios will illustrate the limitation, potential and sensitivity of the basin in relation to water resources development, and to assess the related social, economic and environment consequences to the long-term basin development. The analysed results of basin-wide scenarios will then provide information to guidance an IWRM-based basin strategy and a project portfolio in the LMB.

During BDP1, scenario formulation started in 2003 at sub-area level. The formulation and assessment of sub-area scenarios were included in the process of sub-area analysis in order to formulate sub-area development strategy and to provide input to basin-wide scenarios. The sub-area scenario formulation results are presented in most of the sub-area reports. Unfortunately, there has been no further review of these results, assessment of the impacts and integrate them into basin-wide scenarios. On the other hand, WUP completed work on seven scenarios to calibrate, test and validate a basin modelling package in the DSF for the Mekong Basin in March 2004. These scenarios represent a wide range of the possible changes in hydrological conditions, system demands and interventions based on different assumptions.

Experience with basin-wide scenario development and modelling has been gained. Six WUP scenarios were tested in conjunction with the WB Mission on "Modelled observations on development scenarios in the LMB". Based on this analysis, five development scenarios have been developed in 2005 within the MRCS BDP including Based line, Chinese dams, Low development, Irrigation and High development scenarios. The results of scenario formulation were analysed using the DSF in cooperation of Technical Services Division/WUP modelling team and the Resource Allocation Model (RAM) which was developed under BDP1. The DSF is mainly used to assess and investigate the change of flow and water levels in main stream of the Mekong River and analyse the impact of flow changes in terms of navigation potential, salinity intrusion, flood management, crop flood damage, fish habitat availability, fisheries productivity, environmental maintenance and wetland impacts. The RAM is used to describe the value added by water in each of the member countries by each of development scenarios which are analysed based on valuation assumptions.

These scenarios works during BDP1 lacked of participation of countries, resulting in the different understanding on the role of scenarios in BDP process and consensus on scenario formulation and assessment. Activities under this output will start with a review of existing scenarios and outputs of BDP1 to prepare a Discussion paper on basin-wide scenarios in BDP2. This Discussion paper will serve as an agreed framework to scope basin-wide scenarios in BDP2, the process for scenario formulation and assessment as well as assessment criteria and tools to be used. NMCs, National line agencies and other concerned stakeholders from the four member countries as well as MRC programmes, EP, IKMP, Fisheries Programme (FP), NAP and FMMP will participate in this process through a Regional technical working group on IWRM-based basin strategy and development scenarios. The Terms of Reference for this Regional Technical Working group are provided in Appendix E. Activities under this output are the following.

Activity 2.1.1: BDP/MRC leads a process towards consolidated shared visions of the water resources development of the Mekong Basin

There are different views on water resources development in the Mekong Basin as reflected in outputs of BDP1, namely SA report, National and Regional sector reviews, 20-years development scenarios and Strategic Directions for IWRM in the LMB. Based on these outputs, Regional BDP team will design and lead a working process with broad participation from the Member States and possibly technical experts from upstream countries to consolidate shared visions on water resources development in the Mekong Basin. Plan setting report will be prepared to provide information, especially on potential and significant development projects in the Mekong Basin to basin-wide development scenarios and project database. This scope of this report will be similar to that of the SoB Report but will be significantly shorter. It will focus on the status of each sector within the basin, development opportunities and constraints as well as national and other regional development policies, leading to an appreciation of the development need for the whole basin.

An analysis of BDP1 outputs has shown the need to update and further improve the existing SA and sector reports as well as the extent of new knowledge and availability of data to fulfill information needs of basin-wide development scenario analysis. Thus, this activity will start with updating sub-area studies and specific sector reviews which are the first step of planning process in BDP planning cycle. The Regional BDP team will prepare the revised sub-area guideline, reflecting lessons learned from BDP1 and additional information needs for analysis in BDP2. This revised guideline will be used to update and analysis information in all subareas, cooperating with National WGs, SA WGs and RBOs. The sector reviews in Phase 1 will be analysed to identify information gaps and coordinate with MRC programmes and NMCs including partner agency representing sector interests and key civil society to update specific sector issues. The results from updated sub-area studies and selected sector review will be integrated into the regional aspect. The workshop on visions of the water resource development in the Mekong Basin will involves the upper countries to share vision about future water related development in the upper part of the Mekong Basin. Based on the shared vision on long term national and regional water resources development of the Mekong Basin, the plan setting will be finally prepared to provide long term view of multi-sector water resources development opportunities and constraints in the Mekong Basin.

The milestones to be achieved through this activity are setting up of Regional Technical Working Group on scenario and IWRM-based basin strategy; updated sub-area reports, filled in knowledge gaps in BDP related sectors and shared vision on water resources development and plan setting.

Activity 2.1.2: Concretize large scale development options, opportunities, constraints and analyse costs, benefits and impacts

The information on development opportunities and constraints from the updated sub-area studies, improved information on specific sectors and shared vision on water resources development of the Mekong Basin based on Activity 2.1.1 will be further processed to formulate development options and basin-wide scenarios in this activity. The main focuses of this activity are basin-wide development scenario formulation and assessment. The regional working group on basin-wide scenarios will be created at the first stage of this activity to strengthen the role of key stakeholders in the formulation and evaluation of basin-wide scenarios and enhance their understanding and acceptance of the outcomes. Members of the working group will involve experts from the member countries and MRC programmes and influential members of civil society.

A discussion paper on basin-wide development scenario formulation and assessment will be prepared by the regional BDP team to discuss among the Regional technical working group. The purposes of the discussion paper are to scope development options and a number of basin-wide development scenarios based on the outputs from Activity 2.1.1, to discuss on the approach to formulate scenarios and assess the impacts and to identify key indicators of impact assessment for planning concern. The number of scenarios to be developed and analysis has to be kept to a minimum. There is no point in defining a large number of scenarios, each slightly difference from the others. The basin-wide development scenarios should represent the most possible development, the development potential and the alternative developments (options) in the basin for sustainable development if the development is over basin limitations. Furthermore, the development scenarios should be integrated with climate change scenarios which are developing under EP for planning improvement. From the discussion results, the proposed scenarios will be formulated and shall be presented to the MRC JC for approval during March-April 2008.

To be plausible, this activity shall receive inputs for the models and assessment tools from the knowledge base operated by IKMP through the MRC-Information System and the Member States through the relevant line agencies of key data on all significant-existing, ongoing and planned- national water related infrastructure projects on the tributaries and mainstream. The data collection and preparation will take time about four months. In Strategic Plan 2006-2010, it is mentioned through the BDP, the MRC has an important role in registering all developments in the basin to enable the comprehensive development and analysis of scenarios and the analysis of implications of project, including the cumulative effects of national developments. The BDP staffs at MRCS and NMCs levels should be trained to run the model and use the assessment tools to examine the existing scenarios in the MRCS before analyse the proposed scenarios. This training activity will be explained in Output 4.2.

The impact assessments of the proposed scenarios will be divided into four parts: hydrological, environmental, social and economic impacts. Based on DSF, simulation models such as the soil and water assessment tool (SWAT), the integrated quality and quantity model (IQQM) and ISIS will be used to assess hydrological impact. The modelling for hydrological impact assessment will build on existing scenarios during BDP1 and the WUP. The impact analysis of different scenarios on environmental, social and economic issues will be assessed with Impact Assessment Tools in DSF (IKMP), IBMF predictive tools (EP) and RAM (BDP). In addition, results from the Vulnerability Assessment (VA) and Social Impact Monitoring Activity, carried out by EP with support from BDP, will be used to ensure that the assessment and selection of scenarios take into account significant values of the natural resources in various dimensions and potential implications on the aquatic ecosystem and social vulnerability of people living in the basin, caused by different drivers.

Therefore, this section needs supporting from the modelling and IBFM teams of IKMP and EP, respectively. On another hand, the legal instruments namely PMFM and procedure of water quality (PWQ) which are starting formulated during WUP will be used as the criteria to evaluate which proposed scenario is successful in achieving the planning objectives. The impact analysis will start in June 2008 and continue until Dec 2009. A review panel of international or regional experts in river basin management including hydrological, environmental, social and economic aspects, will be established to review the stages of scenario formulation and assessment. Finally, the scenarios analysed results should be published and presented to the MRC JC for approval during March-April 2010. The indicators of this activity are basin-wide scenarios formulated and impact analysed. Figure 7

presents the detailed process to formulate and assess basin-wide scenarios is in BDP2 showing linkages between inputs, activities and milestones and final output.

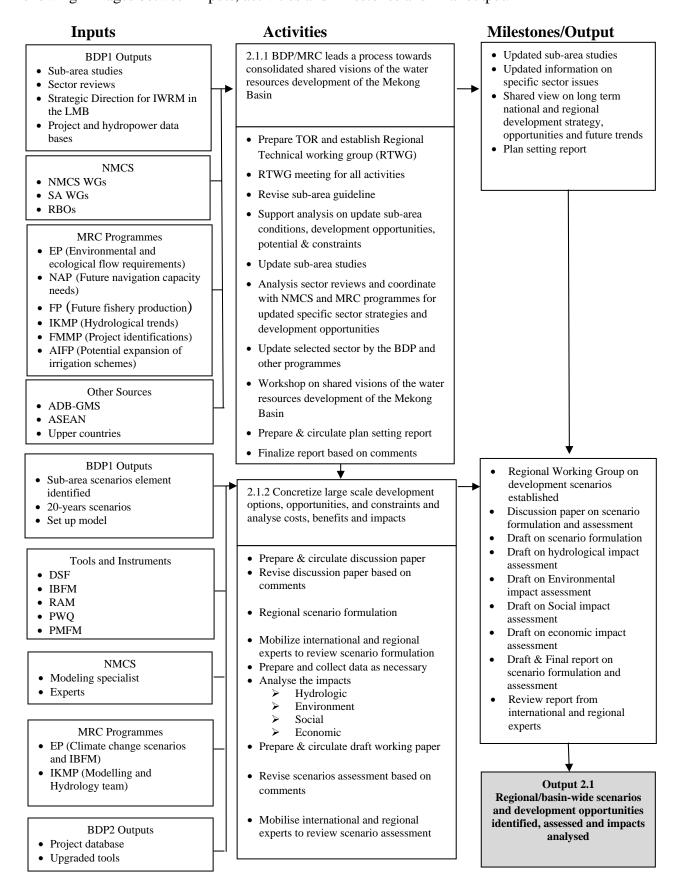


Figure 7: Process to achieve Output 2.1

5.4 IWRM-based basin strategy (New Output 2.2)

The IWRM-based basin strategy will provide the approach that most appropriately steers the development and management of the basin's water resources towards fulfilling (clarified) policy, such as high-level development objectives, principles and statements provided in the 1995 Agreement, the MRC's strategy 2006-2010, and recent national policy documents adopted by the member countries.

The strategy will be developed in a basin-wide dialogue with the various interest groups, and supported by a Regional technical working group on the IWRM-based basin strategy and development scenarios. Thus, the strategy will be driven by the interests and priorities of the countries and their people. The strategy will build on the large information base that has been developed during the last decades.

As an initial concept, which will be further discussed and agreed by member countries, the strategy will comprise four key elements as described below.

1) Shared vision, goals, objectives and guiding principles for sustainable development of the LMB

This will build on the existing Strategic Directions for IWRM in the LMB (approved by the Council in 2005), the MRC Strategic Plan 2006-2010, and national policies, plans, interests and priorities. The shared vision, goals, objectives and guiding principles amongst the member states will guide the formulation and assessment of basin-wide development scenarios and the subsequent consensus building process to arrive at optimal strategic development options for the countries, and the Mekong Basin itself, in terms of economic, environmental, and social outcomes. The optimal options will drive the basin development strategy. The shared vision, goals and objectives will also provide guidance to the formulation of the basin management strategy.

2) A basin development strategy that provides clear directions and a planning framework for sustainable development of the LMB

This strategy must built upon a clear understanding of the basin's dynamics and the hydrologic, economic, environmental and social impacts that large-scale structural projects impose on these dynamics. The current understanding will be further improved by the formulation and assessment of basin-wide development scenarios. These scenarios will assess the economic, environmental and social benefits and costs to the member countries of various levels of water resources development in the LMB during the next few decades.

The resulting strategic options for meeting the water needs of all sectors, and those of the Mekong Basin itself, will be subjected to basin-wide discussions with the various interest groups in the LMB. Ultimately, senior government officials of the member countries must make choices and reach a consensus on the options that most likely will achieve an optimal balance between economic, environmental, and social outcomes in the LMB. The achieved consensus or vision among the member countries on how the basin will be developed will be elaborated in clear directions for basin development and a planning and cooperation framework for the design of national and transboundary project portfolios.

3) A basin management strategy that guides the implementation of IWRM in the LMB

The basin management strategy will build on the existing Strategic Directions for IWRM in the LMB (approved by the Council in 2005), the MRC Strategic Plan 2006-2010, and the ongoing IWRM processes in the member countries. The strategy is about governance. Its focus is on how to achieve linkages between the basin, national and sub-basin levels and get management structures working better. The strategy will provide clear directions and a management and cooperation framework that will usefully guide the implementation of IWRM principles and practices at the basin, national and sub-basin levels. The Regional technical working group will help ensure that the basin management strategy is complementary to the national policies and strategies.

The basin management strategy will also provide guidance to the harmonization of systems, methods, procedures, standards and tools for the monitoring, planning, development and managing water resources throughout the LMB. This would create additional building blocks for transboundary water management and the goodwill among the MRC, line agencies, and other government agencies to work together. The four countries will then be in an excellent position to scale up transboundary initiatives, since their own management programs and capabilities will be roughly on par with one another.

4) Roles and responsibilities of different stakeholders in the implementation of the IWRM-based basin strategy

This will describe the roles and responsibilities for the implementation of the IWRM-based basin strategy among the various stakeholders, including the MRC, the member countries, the development partners, and the dialogue partners. It will also describe the monitoring and reporting system that needs to be put in place to monitor progress in the implementation of the strategy and the achievements of its objectives.

It is anticipated that the IWRM-based basin strategy will provide information that will usefully support: 1) the implementation of certain articles of the 1995 Agreement, 2) the preparation of the MRC Strategic Plan 2011-2015, 3) the update of national socio-economic and sector plans, 4) the preparation of national and sub-basin IWRM strategies (or framework plans), and 5) the design and implementation of the project portfolio of the rolling IWRM-based BDP.

Implementation process

A summary of the implementation process to achieve the above described results is presented in the accompanying diagram. Figure 8 shows that it is proposed to establish a regional working group to support the BDP team in the implementation of the various activities. The regional technical working group, which will be established in the beginning of 2008, will strengthen the role of key stakeholders in the formulation and promotion of consensus on an IWRM-based basin strategy that guides the development and management of water and related resources in the LMB towards fulfilling policies and development objectives of the member countries and their people.

The draft TOR, which is being circulated among the NMCs covers the scope of works, the functions and membership of the working group, and miscellaneous issues regarding the operations the working group. It is proposed to nominate a facilitator to advise the Regional BDP Coordinator in setting the roadmap for the working group, and to facilitate meetings and coordinate follow-up actions among the working group members. The facilitator will also

provide inputs, as required, to support the review and approval of intermediate results of the working group by the JC and senior government officials.

The BDP team will prepare most of the technical inputs to working group workshops and implement recommendations. Since the formulation of an acceptable basin strategy involves consensus building and informed debate among many stakeholders, the programme management and communication component will implement periodically wider stakeholder consultations, in consultation with the regional technical working group.

A concept of the IWRM-based basin strategy will be available in March for discussions with the regional technical working group. A first draft of the strategy will be available for discussions with stakeholder groups towards the end of 2008. The second draft of the strategy will benefit from the initial assessment of development scenarios and will be prepared in the first half of 2009. After review by the JC, the second draft will be discussed in stakeholder dialogues. The final draft strategy will be prepared towards the end of 2009 and, after approval by the JC, reviewed by senior government officials. The final strategy would be available by mid 2010 for approval by the Council. Subsequently, the strategy will be published and its implementation supported.

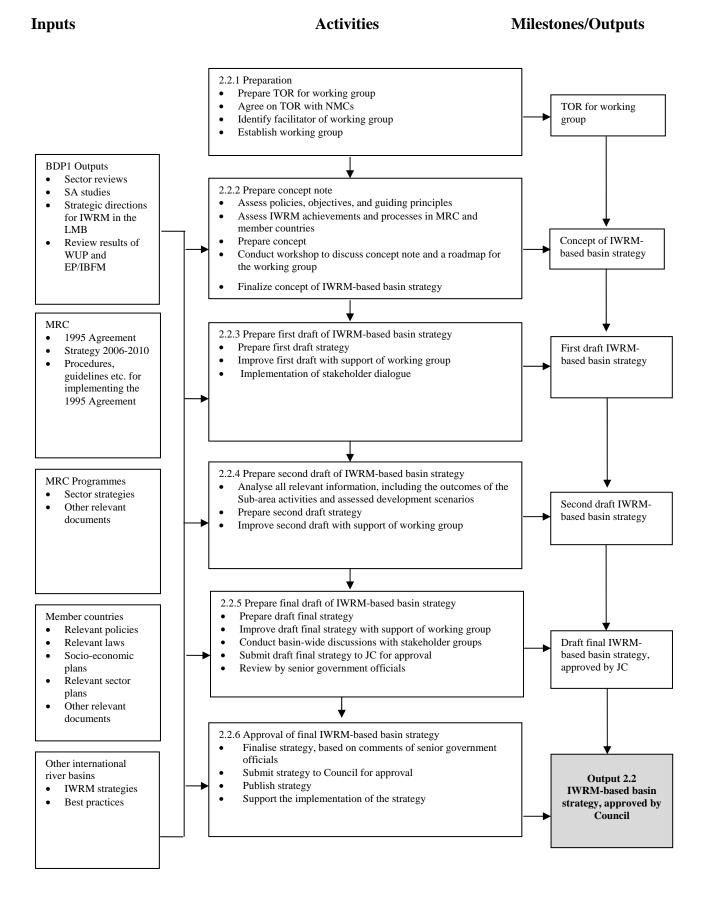


Figure 8: Process to achieve Output 2.2

5.5 Project database (Output 2.3)

This output – programmes and projects proposed by national institutions and stakeholders assessed – shall further refine the four-step guidelines for the SA analysis and transboundary planning established in BDP1 to identify, analyse and discuss with stakeholders the programmes and projects with relevance to the basin and/or at sub-area scale. However, during the inception stage, the following important considerations have been clarified:

- The formulation and assessment of development scenarios in BDP require that sub-area analysis and transboundary planning not only identify new projects to be included in the BDP planning process but also to provide information on national ongoing and planned water resources development projects with potential implications, including those on the mainstream. This is based on the mandate of BDP to "register all developments in the basin" (MRC Strategic plan 2006-2010, page 15). This process should also aim at building a shared understanding of significant impacts of all projects at basin or sub-area level, on-going, planned and newly identified, especially on how they would contribute to poverty reduction and sustainable development of the basin.
- The information regarding the national water development projects (current and planned) and the sectoral reviews should be collected to serve the scenario formulation and analysis for the basin
- The needs assessment based on national (and sectoral) development plans is important to ensure that the projects included in the BDP process are also national priorities, which is a prerequisite for funding by development partners.

Therefore, the BDP Phase2 will develop a project database and will benefit from the existing project list. The project database will also include categories such as:

- Ongoing projects
- Projects which do not require any MRC fund mobilisation and planned accordingly
- Projects which receive no funding and planned accordingly

The project database will also include information on projects upstream if available. Such a Project database will be valuable to provide a comprehensive view on existing, planned and potential water and related resources developments at different scale and in different parts of the LMB. The project database will be part of BDP knowledge base and will be managed by IKMP in the long run. The development of Project database will be based on the existing BDP project long list and shortlist, inputs from MRC sector programmes, BDP2 sector reviews and Sub-area analysis and other national and regional sources.

The categories to be used to identify and assess programmes and projects will be further refined in consultation with countries under output 2.4 below.

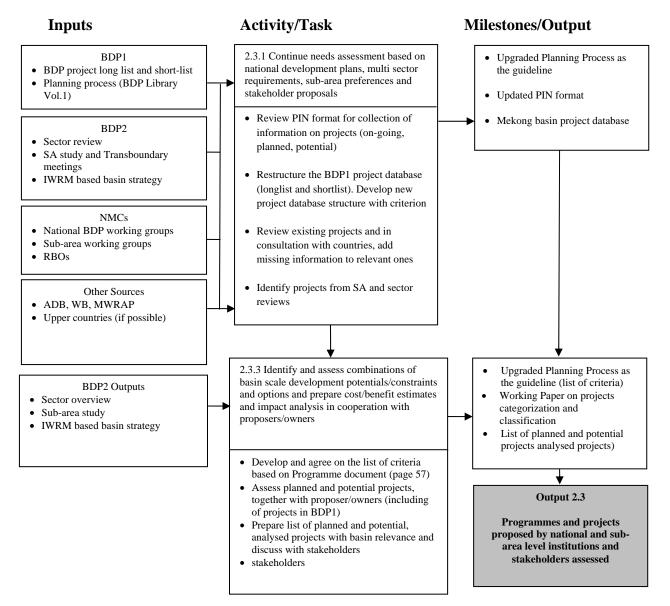


Figure 9: Process to achieve Output 2.3

5.6 Project portfolio (Output 2.4)

Based on the Project Database (Output 2.3), a database of planned projects will be developed to facilitate further categorisation and classification. This Planned project database will comprise of analysed planned and potential projects, coming out from output 2.3 above and are assessed by the BDP process as having relevance to the basin and/or at sub-area scale. These projects can be both: planned with no need for MRC fund mobilisation and planned and identified needing MRC support in fund mobilisation.

The project portfolio is will be the list of categorised and classified projects from the planned project database and becomes a part of the IWRM-based BDP for the LMB. The project portfolio, as part of the IWRM-based BDP, will contain (i) water and related resources development and management projects that have been planned (and probably funded) and assessed by BDP as having basin-wide significance; (ii) projects that assessed by BDP as should be developed for the benefits to all member countries and the basin as whole. Large and small scale structured projects which are described in the section 2.5 and 4.4 should also

fall in these categories. All of these projects will be implemented by the member countries, together with their development partners.

The MRC Strategic Plan 2006-2010 has clearly identified the role of member countries in mobilising funding for investment projects under the IWRM-based BDP through political level (MRC Council members), strategy and policy level (MRC JC) (MRC Strategic plan 2006-2010, page 14). The MRCS in project identification has the role to ensure harmony with the IWRM-based basin strategy, at the identification, initial analysis and initial approval stages of joint projects and programmes and large national projects with potential basin-wide. During the project preparation stage, investment project are prepared by line agencies in cooperation with development partners and the MRC may support line agencies, through the NMCs, by providing the technical assistance, focusing on the areas of environmental, social and hydrological impact assessments.

The first activity under this output will be to review and update the project screening and ranking process, developed in BDP1 including criteria. The existing criteria used in BDP1 include:

- 1) Strategic relevance. Consistency with the entity of strategy elements
- 2) National priority and support from member countries
- 3) Potential value, costs, side effects, risks, uncertainties
- 4) Completeness of decision basis
- 5) Implementation aspects: (i) Whether an institutional framework is identified and operational for implementation and operation; (ii) resource requirements (in terms of funds, water, land, other natural resources, energy, technology, management); (iii) open interfaces with national planning and investment programmes; and (iv) open legal or administrative implications (if any)

The Programme Document (page 59) has also identified the following criteria for the projects:

- Harmony with the Strategic Directions for IWRM in LMB.
- National priority and support from Member states.
- Potential value, costs, side effects, risks, uncertainties.
- Completeness of decision basis.
- Implementation aspects.

The MRC Strategic Plan for 2006-2010 further clarifies the focus on the MRC on the following categories of projects, which should be used to scope the Project portfolio of the IWRM-based BDP:

- Joint projects and programmes, initially including the four riparian states of the LMB, later hopefully also including the two upper riparian countries China and Myanmar.
- Transboundary projects or suites of complementary projects, between two or three riparian states.

• National projects or suites of projects, or land and water policies, with significant or cumulative basin-wide implications.

Activities under this output will also include update of the guideline and criteria for the development of the planned project database and the Project portfolio based on relevant documents, particularly the MRC Strategic Plan 2006-2010 and the BDP planning process (BDP Library Vol.1). This document will provide further characterization of the above mentioned categories of projects and clarify the role of the MRCS, NMCs and line agencies in the full process from project identification to completion under the BDP. The updated guideline will be finally integrated with the IWRM based basin strategy as a basin wide planning framework (see section 6.4).

In principle, all of the projects in the project portfolio must correspond with the IWRM-based basin strategy, which clearly guides the development in different parts of the basin based on thorough analysis of basin-wide development scenarios, their multi-sector impacts and costs and benefits of each development options.

To ensure the relevance and credibility of the project portfolio and learning from BDP1 experience, the following important points will be emphasised throughout the process of identification, assess, screening and prioritisation:

- The purpose and scope of the project portfolio should be comprehended and agreed by the concerned stakeholders at the beginning of the process
- Criteria will be discussed and agreed with the stakeholders to guide their actions in project identification and preparation of the PIN. The criteria should include concrete indicators to ensure the consistency of proposed projects with the IWRM-based strategy
- Coherence of PIN format with national project proposal format to facilitate integration of the BDP projects into national plans and priorities and
- Roles and responsibilities of each of the stakeholders with regard to preparation of PIN, project development and preparation and funds mobilisation should be clear to facilitate joint actions in promotion of the project portfolio.

The link between application of the guidelines and criteria for project identification and preparation and use of assessment tools for project analysis, screening and prioritisation will be ensured through integrated trainings under BDP2.

During BDP1 many projects were identified and 18 projects prioritised, some of which are being implemented or prepared for implementation. In BDP2, the progress of the Project portfolio including above 18 projects will be monitored and reviewed periodically. If required, the MRC will support seeking fund, provide coordination, technical assistance, or another form of engagement to support project preparation and implementation through the review of TORs, feasibility studies, EIAs, etc. In order to grasp project owners' requirement correctly and move further steps, some follow-up meeting might be held with them and concerned NMCs.

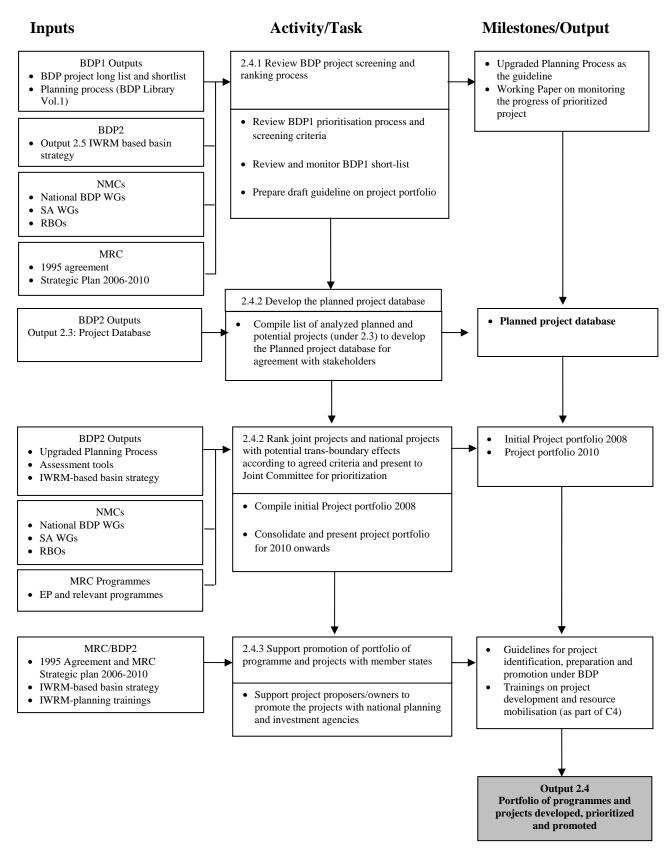


Figure 10: Process to achieve Output 2.4

5.7 Rolling IWRM-based BDP (Output 2.5)

The IWRM-based BDP will be a coherent and consistent plan document, comprising the main plan elements: basin-wide development scenarios, the IWRM-based basin strategy, and the project portfolio. The description of the plan is provided in Chapter 4. The activities that will support the preparation of the plan elements are described in the previous sections.

In the first half 2008 an outline of the IWRM-based BDP will be prepared in the context of the Mekong Partnership Programme (see Section 2.5). The results of basin-wide discussions of the outline will guide the further development of the plan elements. Towards the end of 2009, the BDP team will integrate the three plan elements in a draft plan document in consultation with the NMCs. By that time the draft versions of the elements have already benefited from basin-wide discussions with the different interest groups, and senior government officials have provided direction to the IWRM-based basin strategy. The last year of BDP2 would be used to achieve consensus on the draft plan document so that by the time it is presented to the MRC Council for approval, it has widespread support.

5.8 Lessons learned from implemented projects and programmes (Output 2.6)

During national and regional consultations on the Inception Report of BDP2, there are strong requests from member countries for the BDP programme to play a more explicit role in supporting the formulation and implementation of (pilot) projects, identified through the BDP process. In this regard, BDP2 has been identified as the MRCS focal point for the following two transboundary projects: 1) the ADB supported Technical assistance study in the Sesan, Srepok and Sekong basin and 2) the WB Mekong-IWRM support project (formally named WUP2).

Both of these projects include activities to document lessons learned and promote joint learning in the preparation and implementation of these projects with an aim to establish in the long run an institutionalised mechanism for the MRC to work with funding agencies in preparation and implementation of the BDP projects. The lessons learned from these pilot projects, and evolving others will be documented by the BDP2 as part of monitoring and implementation of the IWRM-based BDP, which will provide inputs for regular updates of the Plan.

At the same time, BDP2 with support from NMCs, line agencies and local stakeholders as well as Development partners will update the project portfolio regularly to monitor the implementation of the projects identified through the BDP process. Reports on these projects implementation will be reviewed to assess their impacts on the ground. Strong support from countries in obtaining and sharing project reports is prerequisite for this output to be achieved.

5.9 Updated knowledge base (Output 3.1)

The formulation and implementation of the IWRM-based BDP requires a robust and comprehensive information base, requisite quality assured assessment tools, and the capacity within MRC and national line agencies to use and sustain all of these. Therefore, a key plan in BDP2 is to consolidate all relevant planning data and information within the IKMP, rather than hold some of the information in separate databases under BDP.

The existing MRC- Information System, hosted by IKMP and BDP will be enhanced further, serving as the basis for the preparation of an Atlas of development projects in the LMB that is part of a Planning Atlas. Activities under this output are the following.

<u>Activity 3.1.1</u> Upgrade the MRCS and NMCs' knowledge and information bases from BDP1 will provide easy access to updated planning level data for all BDP units.

Review of current data holdings in BDP, WUP, EP, FP, NAP and IKMP will be undertaken by BDP Regional team in close collaboration with IKPM to consolidate and identify additional data requirements and establish data collection programmes. A knowledge base was established under BDP1. Expansion (and/or updating) is required to support the production of other outputs under BDP2:

The updating of the State of the Basin Report and the subsequent BDP planning exercise must be undertaken using a consistent and transparent database. Much data is held by IKMP, but also equally lies with other MRC programmes, including the BDP. This task requires that all information necessary for planning at basin level on IWRM basis is identified and, where existing within the MRCS, is brought together within a single consistent format.

BDP1 social data are typically held at district (or equivalent) level, whereas within each country there is a wealth of information held at village level drawn from census data. It is understood that most of this is already in digital format. In order to evaluate social impacts of flow regime changes, it is necessary to hold data at probably village level, particularly with respect to impacts on socially deprived areas.

Embracing IWRM principles in the planning process will necessitate broadening of the information base compared to earlier studies. The main data gaps have been identified above. However, there may be other data requirements that emerge during the preparations for the updated SoB Report and initial consideration of development options. The Chief Technical Advisor (CTA) and the Economist will need to remain alert to these requirements as they emerge and discuss with the NMCs (and others) as to how further data can best be collected. It is anticipated that the resulting Guidance Note on further data collection will be a rolling document updated as needs are identified and data collection protocols are agreed with the NMCs.

The BDP team will work closely with IKMP/Technical Support Division to ensure that the MRC-Information System and knowledge base is regularly updated and maintained to reflect current knowledge about the Mekong basin. Lessons learned from BDP1 Completion report are crucial in this regard. The BDP team will, in particular use the information contained in the GIS and the knowledge base to conduct analyses and assessments covering social, environmental and economic aspects of scenario outcomes. GIS and knowledge base capability will further be consolidated among the NMCs and data exchange systems/protocols will be developed and made operational. A continuously updated knowledge base designed for planning and with extensive use of GIS will be an indicator for this output.

Activity 3.1.2 Update the Planning Atlas

The Planning Atlas provides valuable information supporting IWRM-based BDP planning process and promotes appreciation of the spatial data available for basin planning within

IKMP and other MRC programmes and encourages its effective use within all aspects of BDP planning process.

Review of data requirements for the Planning Atlas, preparation and updating spatial data necessary for planning atlas will be undertaken by the BDP Regional team in close cooperation with IKMP. The review of data requirements should also be carried out with other MRC programmes to draw the important and relevant spatial data including maps of existing and proposed projects to be used as part of the baseline information. The Planning Atlas prepared during phase 1 will be updated in terms of content, applicability and usefulness.

Although the spatial data will be updated, the publication of planning atlas will incorporate other data and information which at later stage will be used to support the formulation of the IWRM-based BDP.

The draft Planning Atlas prepared in 2008 will be reviewed, discussed by countries and MRC programmes for further improvement. Publication of the final Planning Atlas in 2010 will be done through contract with a printing company. Result indicator of this will be high quality Planning Atlas published and available on CD.

Activity 3.1.3 Support the preparation of State of Basin Report

Updating of the SoB will be a periodic task of the MRCS, expected to occur every two years. The first MRC SoB was published in 2003. This update is due and will draw heavily on the improved knowledge of the basin gained during BDP2 and will support the updating the rolling IWRM-based BDP from 2011 onward.

Consideration needs to be given to the format of the report in the context of an appreciation of its target audience and the key types of message that need to be put over. It has been suggested that each successive SoB report should devote a part of the book to expanding on particular themes (e.g. development cooperation in the basin, pro-poor development, environmental sustainability, climate change, etc). These could be related to particular outputs from the MRC programmes that coincide with the SoB publication for instance.

Consideration may also be given to recognising the accessibility to detailed information through the IKMP portals, and the corresponding need not to repeat detailed data in the SoB, but to cross reference to the IKMP (assuming that in the meantime, greater public access to data becomes possible, as reflected in industry trends).

It is anticipated that the SoB would be a high quality product to be found in bookshops and the libraries of all major institutions, providing a view of the State of Basin in an eminently readable and digestible format.

The BDP Programme, being an overarching MRC programme, will lead coordination of the process to prepare the update of SoB.

In collaboration with other MRC programmes, the CTA will review the existing SoB, identify data and information required for its update and sources of information within and outside the MRCS and prepare a concept note for an updated SoB. The concept note will also include a proposal to establish A task force comprising representatives of MRC programmes

and selected NMCs. The task force will plan and update the State of Basin Report. BDP will provide financial support for the work of the Task force including collection of data if required, meetings, editing and publication of the SoB. The coordination role is with ICCS the preparation of inputs for updating different parts of the report rests with all MRC programmes. The expected result is high quality State of Basin Report approved by the MRC JC and printed in 2009.

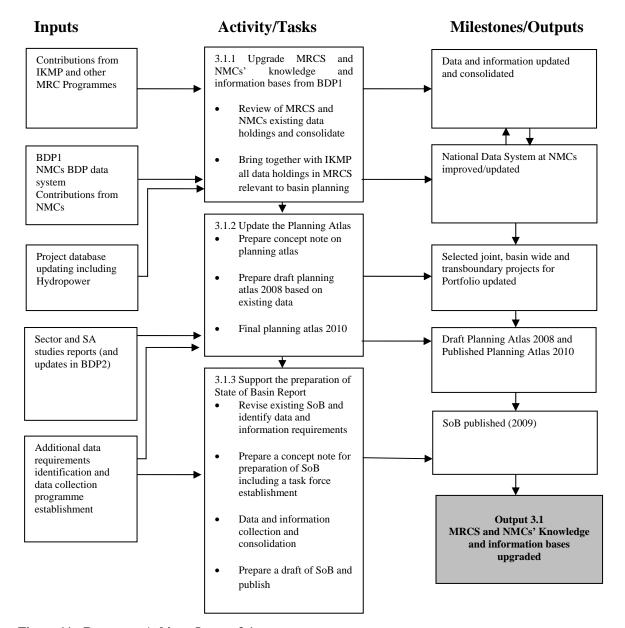


Figure 11: Process to Achieve Output 3.1

5.10 Upgraded assessment tools (Output 3.2)

This output comprises of a set of assessment tools that will be used throughout the BDP planning process and contributes to the achievement of Immediate Objective 2: Knowledge base and assessment tools further developed and utilised effectively in the MRC and NMCs. It aims to upgrade assessment tools to be able to assess impacts of development options and the proposed projects for the IWRM-based BDP.

Several assessment tools such as the DSF and SEA were developed by the WUP and EP in collaboration with BDP1, which has developed the SIA and the RAM. Another predictive tool that has been recently developed under WUP and EP is the IBFM. These tools have been designed to support decision making and intended to be applied in different stages of the BDP planning process. However, their application for BDP was not fully described and tested during Phase I. The tools themselves are in different states of development and therefore need to be further examined for application, reviewing and upgrading, if necessary, to meet the needs.

As the BDP2 will further pursue scenario-based planning approach, an Assessment framework is needed to set clear criterion and process for assessment in the BDP planning process i.e. impacts of development scenarios, costs and benefits of different development options and relevance of projects to be prioritised and included in the project portfolio. Credible tools will be essential part of this assessment framework.

The implementation process to achieve the output has built on the originally identified activities in the Programme Document. Some more detailed activities/tasks have been included. The review of capability and procedures of Assessment Tools will be undertaken in close collaboration with responsible MRC programmes e.g IKMP for DSF and EP for IBFM.. The results will provide suggestions and recommendations for improvements and upgrading of the tools and this will also be done by the responsible MRC programmes with assistance of a qualified international consultant.

The assessment tools will be quality assured through peer review by an international panel of independent experts. The Evaluation Report of Assessment Tools will be produced and guidelines on the use of tools will then be developed. The implementation of this activity should be carried out in conjunction with subarea studies and scenarios formulation and assessment activities.

To obtain consensus on the tools and their application and upgrading within the Assessment framework, a regional workshop needs to be organised with all parties concerned particularly responsible MRC programmes, the tools developers and NMCs, the users. The results will be reported to the JC for further recommendation and endorsement

Figure 12: Describes the process of planned activities/tasks to achieve the output.

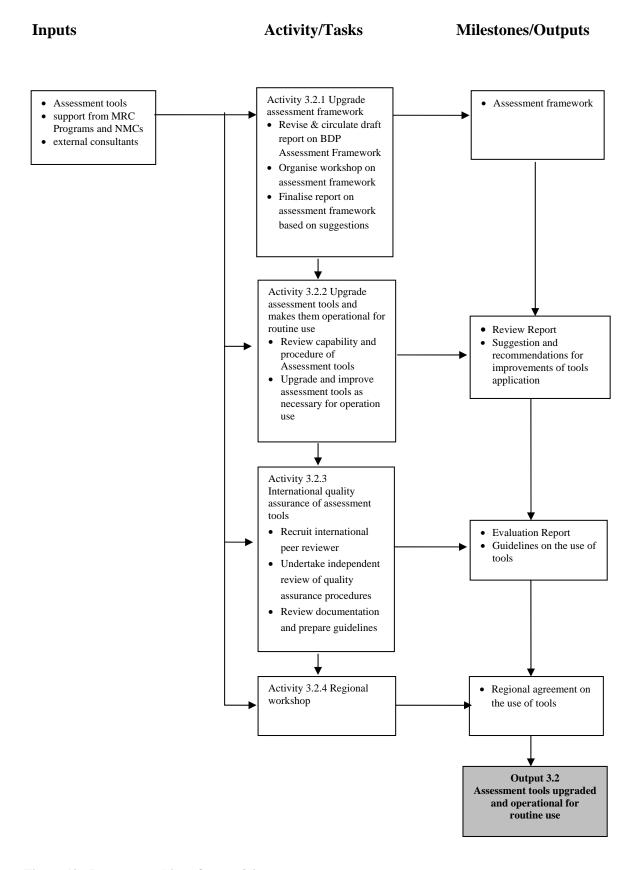


Figure 12: Process to achieve Output 3.2

5.11 IWRM planning guides (Output 4.1)

During BDP1, several planning guides were prepared to document the BDP planning process. The guides cover subjects such as the planning cycle, sub-area studies, scenario formulation, stakeholder participation, project screening checklists and others. It is clear that in a number of cases, processes covered under the guides are developed in an evolutionary way through working with stakeholders in a participatory manner. Thus, some guides may represent what was originally planned, as opposed to what was actually found to be practical and beneficial during implementation.

The processes defined for BDP2 build on but differ somewhat from BDP1 and it is appropriate to review what the requirements are for BDP2 guidelines and establish a programme to amend and/or add to guides prepared during BDP1. A few new guides are already anticipated in some of the sections above, such as a guide for the formulation of a basin development strategy, a guide for the preparation of sub-area IWRM-based framework plans, and a guide for the periodic updating of the IWRM-based BDP.

The guides are intended for the benefit of a wide range of stakeholders and it is appropriate to commence the review of the guides in 2008 with a workshop to gain feedback on the usefulness of the BDP1 planning guides, in terms of relevance, clarity, applicability and timing of availability, as well as capturing how the process of producing guides could be usefully enhanced for BDP2. Subsequently a phased plan will be prepared for the updating of existing guides and the preparation of new guides. The timing of the preparation of the guides will be based on the needs of the guides for planning during BDP2.

It is anticipated that the planning guides will support the decentralization of a larger part of the BDP activities in accordance with the need for more active stakeholder participation. Moreover, the uniformity and transparency in data and analysis is enhanced when using agreed standards and guidelines, which may facilitate transboundary water cooperation. The planning guides will be translated in all four riparian languages to further enhance their dissemination and use.

At the end of BDP2, an assessment will be made of the usefulness of the BDP planning guides by interviewing members of working groups and others who have actually used the planning guides. Based on this assessment, an updated set would be produced to help sustain the rolling planning process beyond 2010. As a minimum, the IWRM-based BDP will need to be updated periodically.

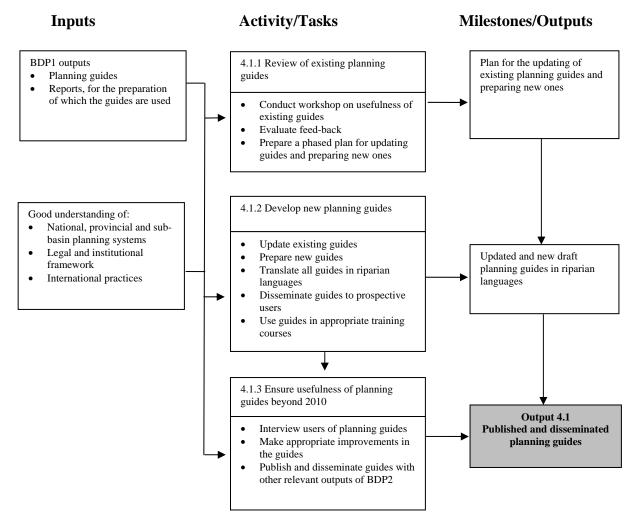


Figure 13: Process to achieve Output 4.1

5.12 Training modules on IWRM-based planning (Output 4.2 to 4.6)

Capacity building for IWRM-planning in BDP2 will target NMC, line agencies and sub-area level with focus on four areas critical to a sustainable BDP planning process: (i) IWRM planning principles and approaches; (ii) knowledge and capacity to use assessment tools including analytical tool to assess value of water and sharing of benefits and costs; (iii) skills to use knowledge base to support decision making and (iv) capacity of BDP to assist the MRC to facilitate trade off. These four areas are reflected in the following outputs:

- Output 4.2 Staff at MRCS and NMC levels skilled in scenario-based planning and in the use of assessment tools.
- Output 4.3 Knowledge base decision support capacity enhanced at MRCS and NMC levels.
- Output 4.4 IWRM planning principles and approaches internalised at MRCS and NMC levels.

- Output 4.5 Capacity built within the MRC to assess value of water and sharing of benefits and costs, which specifically emphasises upgrading modelling skills and capacity to use and interpretation of the results of the RAM.
- Output 4.6 Capacity built within BDP to assist the MRC in trade-off facilitation, which focuses on building capacity of BDP in providing knowledge, facts and professional evaluations, which the MRC can present to parties in trade-off situations and consensus building in planning.

BDP1 has carried out country level training need assessment (TNA) to implement the BDP Programme. With support from the MRC/Murray Darling Basin Commission Strategic liaison partnership (MDBC) training modules on integrated river basin management (IRBP) have been developed and trainings were provided at regional and national level. Complementary national trainings on project identification, preparation and management were provided to line agencies and sub-area level. Initial training on scenario-based planning was also provided with MDBC support.

There are several TNAs, which either have been undertaken or are planned within the MRC and provide good information on training needs for BDP. Furthermore, since the BDP2 Programme Document, a number of MRC capacity and training activities with relevance to the BDP programme has been initiated or are under planning.

MRC/MDBC strategic liaison partnership phase III

This project has an objective to "Improve understanding and application of IWRM across the MRC, NMCs and line ministries particularly in support of the BDP2". Under this objective, the project plans to:

- Review and update the existing IWRM modules (by the MRCS with MDBC specialist inputs) and deliver training for BDP (1st quarter 2008).
- Application of IWRM through five paired MDPC/MRC case studies (2nd quarter 2008 to end 2011).
- Orientation sessions and support on networking and mentoring and communications skills (second quarter 2008 to 2011).

AusAID support to the MRC integrated training strategy and programme (2007-2012)

The formulation of AusAID support to update and implement the MRC integrated training strategy and programme (MITSP) will commence in late 2007–early 2008 with a comprehensive need analysis of the MRC current training needs and preparation of an update of the 2003 MITSP document and its implementation plan. The actual implementation of this plan is expected to be early 2009 throughout to 2012 targeting all MRC programmes.

MRC-ECO Asia Regional Cooperation Initiative

Under this initiative, United States Agency for International Development (USAID) will support the development of training modules on cooperation and prevention of transboundary water conflicts. Many parts of these modules are relevant and can be used to develop a positive and pro-active module to facilitate the cooperative joint analysis of benefits and costs and dialogues in case trade off are required during basin planning process. BDP2 will work with this initiative to design and deliver a pilot training module in 2008.

On-going Training Activities under MRC Programmes with Relevance to BDP

WUP has developed training modules and provided training to National WUP units on the use of DSF. Case studies have also been undertaken and a regional training on upgraded DSF reporting tool is planned for late 2007 – early 2008.

Under EP, trainings on IBFM have been on-going. In addition, guidelines for Transboundary Environmental Impact Assessment are under preparation, followed by training on application of the Guidelines after approval by the MRC JC.

To optimise the synergy with training activities under MRC programmes and support the implementation of the MRC overall strategy to integrate programme-based training activities into the integrated capacity building programme (ICBP), the following process to implement IWRM trainings under BDP2 will be applied:

- BDP focused capacity analysis and TNA to also identify potential national training institutions and trainers (2008);
- Design and implement priority trainings at regional and national levels including study visit to learn about water resources development in support of the preparation of the IWRM-based BDP (2008)
- Training of trainers in four member countries (2008)
- Integration of BDP training into the MRC Integrated training strategy and programme, led by ICBP (2009 onward) and national training.
- Final assessment of training impacts

BDP focused capacity analysis and TNA

Given the existing and planned TNAs by the MRC and with the vision to facilitate a stronger integration of BDP planning process into national planning for its sustainability, the capacity analysis and TNA will focus on (i) analysis of institutional arrangements for BDP related planning in each country and capacity of institutions/individuals with mandate for BDP planning process in each country against the perceived needs for the internalisation of the basin concerns and the planning process in national/sector planning; (ii) assess specific training needs on knowledge and skills to use scenarios and assessment tools in planning process and (iii) identify potential institutions with long term mandate for training on IWRM and planning to explore BDP2's piloting the training of trainers (TOT) and building the capacity of national training institutions to deliver training at country level.

Design and implement priority training in 2008

- Scenario-based planning: BDP programme will work with MDBC and external experts on scenarios to further develop the scenario-based planning module from BDP1 and provide training for the BDP2 working group on basin wide development scenarios, members of the National BDP WG and SA WG and research institutions. This training is crucial in building common understanding and support to basin-wide scenario formulation and assessment. Technical specialists from China will be invited to training workshops with the DSF.
- Use of assessment tools: BDP2 will work with IKMP and EP to build on the ongoing training on DSF, IBFM and other tools (SIA, EIA, RAM) and provide training, to the BDP2 basin wide scenario working group, members of National

BDP WG and SA WG. This is important for the future transfer of the improved modelling and impact assessment tools to the countries to maintain the BDP planning process as well as to inform national water policies and projects.

- IWRM principles and approaches in basin planning: Together with MDBC, IWRM training module will be upgraded, taking into account the needs for this type of training to go beyond the general principles of IWRM to address the needs of the different target groups in each member country. Improving skills to use knowledge base to support decision making will be part of this training.
- Pilot regional training on trade off facilitation.
- High level exposure/study tour to other river basins to learn from successful and unsuccessful experiences in developing shared views on development potentials and constraints in a river basin, in defining common strategies to guide the basin development and management process as well as institutional mechanisms to maintain the "rolling" IWRM-based BDP.

Training of national trainers

A regional training institution with rich experience in IWRM and training of trainers will be engaged to design modules to train national trainers from the selected training institutions

The training modules, which will be finalised after the regional training course and national pilot trainings in the four countries, will be translated into riparian languages to be used by the training institutions and national trainers to provide trainings to line agencies and sub-area level.

Further training as part of ICBP (2009 and 2010)

BDP trainings in 2009 and 2010 will include the continuation of designed trainings at national and sub-area levels. Additional regional and national trainings including follow up trainings on scenarios and assessment tools and trade off facilitation will be identified and implemented as part of the MRC broad ICBP, supported by AusAID.

Evaluate training impacts (2010)

A quick review of BDP training and capacity building activities will be undertaken, combining desk review of available materials, random interviews and comparative analysis. TOR for this assessment will be prepared in due course by the BDP Regional team for agreement and carrying out the assessment.

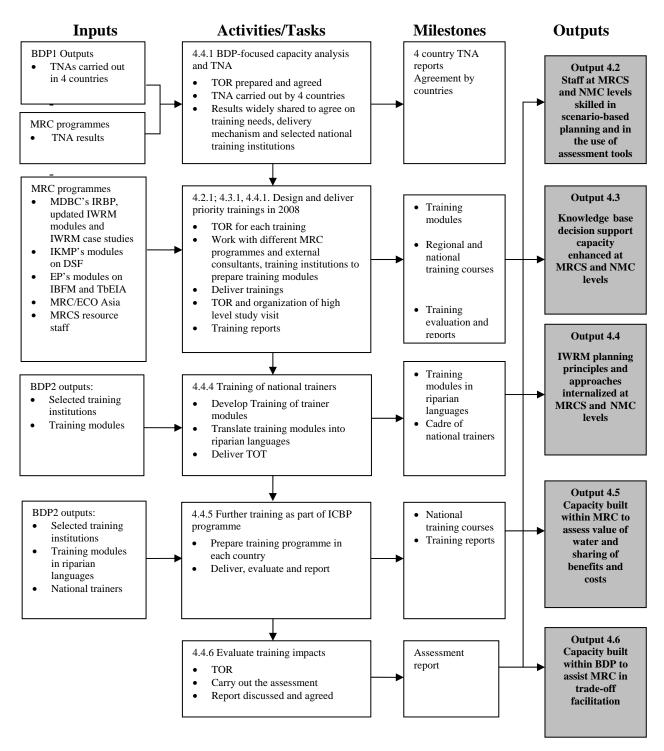


Figure 14: Process to achieve Output 4.2 to 4.6

6. Programme Implementation Plan (PIP)

6.1 Programme implementation process

The following annual tasks are defined to frame the implementation process of BDP2. These anticipated tasks appear as the milestones enabling the achievement of set outputs and objectives by the end of the programme:

2007

- The completion of the inception phase: Inception Report is endorsed by all relevant stakeholders.
- The launch of the updated sectoral analysis and the related sub-area work.
- The review of the project lists: Long and short listing of projects and updating the lists into the restructured Project database based on relevant guidelines and criteria.
- The preparation of the discussion paper: This work defines the requirements of basin development scenarios to meet the purposes of BDP based on review of existing scenarios.
- Assessment framework: The preparation of a discussion paper on the BDP assessment framework. This framework is a review of the existing assessment tools.
- The launch of the IWRM training needs assessment.
- The establishment of the regional working groups on basin-wide development scenarios and IWRM-based basin strategy.

2008

- The completion of the sector reviews and updated sub-area analysis.
- The formulation and assessment of the development scenarios using DSF.
- The completion of the IWRM-based basin strategy draft.
- The preparation of the Initial project portfolio.
- The preparation of the detailed outline of the IWRM-based BDP.
- The preparation of the 2008 draft Planning Atlas.
- The initiation of the training courses: The core of the IWRM training is planned to focus on scenario-based planning, assessment tools and the principles of IWRM.

2009

- The completion of the improved project database.
- The completion of the improved and peer reviewed modelling and assessment tools.
- The completion of the Users' guides and brochure that describe the uses, limitations and credibility of the tools.
- The finalisation of the development scenario analysis.
- The final drafting of the IWRM-based Basin strategy.
- The completion of the updated project portfolio.
- Reaching the indicative IWRM-based BDP.
- The continuation of the training programme.

2010

- The completion of the final reports of agreed scenario(s) for IWRM-based BDP.
- The completion of the final Basin IWRM strategy.
- Updating the project portfolio.
- Final IWRM-based BDP.
- The publication of the project database.
- The publication of the planning atlas.
- Updating the planning guides.
- The assessment of the impacts regarding the IWRM training.
- The preparation of BDP2 final review and the completion report.

6.2 Programme Implementation Plan for 2007-2010

The work plan for the four-year BDP2 has been updated in line with the schedule of outputs and their milestones. Given the prolonged inception stage, Stage A (first 18 months following the Inception stage) will mostly be involved in the preparation of IWRM-based BDP components.

Figure 15 provides the overall work plan of BDP2 for the remaining period (end 2007-2010). This overall work plan will be the basis for preparation of more detailed and adjusted, if necessary, annual work plans.

Based on this overall work plan, the annual work plans will be prepared to (i) identify the key tasks that the programme should achieve during the year; (ii) determine the annual budget allocation for the relevant activities, at regional and national level and (iii) indicate the major monitoring tools. Based on the annual work plans, quarterly work plans will be prepared. The national work plans will be produced complying with the entire programme work plan prepared for that period.

6.3 Programme implementation arrangements

6.3.1 Organisation

The organisation of the BDP2 at the MRCS reflects that high priority is given to the BDP process in the MRC Strategic Plan 2006-2010. According to the Strategic Plan, the basin planning functions through the BDP. The BDP will take a pivotal role using acquired knowledge from the MRC programmes to build an overall perspective of what the development needs are and where the 'pertinent knowledge gaps' are, and this will eventually set the agenda for the MRC programmes. The BDP's role is pivotal in building a perspective regarding the basin development needs, identifying the 'pertinent knowledge gaps' for this development. In order to achieve its goals, the BDP benefits from the knowledge of other MRC programmes and contributes to the MRC agenda setting. The BDP process will identify and prioritise the basin projects and this will ultimately support the Mekong Partnership Programme.

Thus, the BDP Programme is well situated in the Planning Division of the MRCS. It reports to the Director of the Planning Division. The Director reports to the Office of the Chief Executive Officer who works under the MRC Joint Committee and the Council.

6.3.2 Roles and responsibilities of implementing partners

BDP Regional Team

The regional BDP team at the MRCS comprises of six riparian professional staff: a CTA, a senior advisor on river management (funded by Japan), and two administrative staff. The riparian professional staff comprises of a BDP Programme Coordinator, an Environmental Specialist, a Social Scientist, an Economist, a Modelling Specialist, and a GIS & Data Management Specialist. Recruitment of some staff is still underway.

Each key output of the BDP2 will be managed under a project, for which a BDP Regional team member will be appointed as project manager. Each of the project managers is responsible for the implementation and timely production of the programme outputs (see

Figure 15: Overall PIP of BDP2 for 2007-2010

Table 4 below). They will prepare and maintain a detailed operational work plan and schedule the day-to-day activities in their project. Work plans will specify and schedule the intermediate results, and the inputs by the BDP regional and national staff, consultants, other MRC programmes, national working groups, and others. The BDP Programme Coordinator will ensure that the coherence and synergy will be provided during the operation of the individual project work plans and their alignment with the scheduled outputs of the BDP2.

Table 4: Preliminary Distribution of Management Responsibilities amongst the BDP Regional Team

Component	Output/Project	Project Manager
C1 - Programme	Stakeholder participation and	Social Scientist
management and	communication plan	
communication	Programme management	Programme Coordinator
	Basin development scenarios	Modelling Specialist and Economist
	IWRM Strategy	CTA
C2 – IWRM-based	Project database	Senior Advisor on River
Basin Development		Management
Plan	Project portfolio	Senior Advisor on River
		Management
	IWRM-based BDP	CTA
	GIS-databases	GIS and Database Management
		Specialist
	Planning Atlas	GIS and Database Management
		Specialist
C3 - Knowledge	State of Basin Report	Chief Technical Advisor
base and	DSF	Modelling Specialist
assessment tools	IBFM	Environmental Specialist (with Social
		Scientist and Economist
	Environmental and social	Environmental Specialist and Social
	check lists	Scientist
	Economic tools	Economist and Modelling Specialist
	Institutionalised training	CTA
IWRM capacity	capacity	
	Training modules	Economist

The project managers will prepare the work packages for the supporting activities by other MRC programmes, TOR for consultants and WGs, and implement the capacity building activities, and supervise their implementation. They will also review the reports and prepare inputs to these reports in terms of progress reports, guidance for the national BDP activities, and others. In consultation with the BDP Programme Coordinator, the project managers will maintain communications with appropriate BDP interfaces, and ensure that a coordinated and comprehensive approach is maintained.

The CTA will be responsible for the technical direction of the BDP and the quality assurance of its main outputs, in particular the IWRM-based BDP. She or he will support the project managers in their tasks and provide on-the-job training for the BDP teams and others. He or she will also support the dialogues with the many interfaces, amongst others through technical presentations and discussion papers.

The BDP Programme Coordinator will be responsible for managing the BDP2 and its many interfaces, and for the overall delivery of BDP outputs and products as planned. The Programme Coordinator will work closely with the sociologist in preparing a communication and participation plan for the BDP2, in consultation with the ICCS and the national BDP Coordinators.

All BDP team members are assigned with responsibilities and associated time allocations for tasks supporting the projects, within their spheres of experience. For a considerable part of their time, the project managers will support other projects than their own, which will facilitate team building maximising each other's strengths and interests.

National BDP team

Since the beginning of BDP1, a national BDP team functioned in each of the four member states. The national BDP teams deployed a coordinator, a GIS/database specialist and an administrator. During the Inception stage of the BDP2, the need for a Natural resources planner will appear. On the other hand, the IKPM will build a national IKPM team in each of the four NMCs including a GIS/Data management specialist. The National GIS/Data management specialist post is therefore changed to Natural resources planner in the national BDP teams. The national BDP team reports to the NMC Secretariat and the Secretariat is responsible to the NMC. Under the NMC, some other BDP related entities functioned such as BDP sub-committee, BDP coordination unit and BDP working groups.

The fundamental responsibilities of the national BDP teams are:

- The active participation in the preparation of programme work plans, planning and implementation of the programme activities at national and sub-area level under the direction of the BDP sub-committee and in line with overall programme work plans;
- Monitoring the progress of activities at national and regional levels by ensuring the quality of outputs. Reporting on national level activities and contributing to programme reports;
- Being responsible for all consultations and communications regarding BDP within their country. Regularly informing the Regional team on new developments including specifically regarding the impacts on IWRM-based BDP preparation;
- Facilitating the active participation and contribution of relevant line agencies and stakeholders in the planning process, and ensuring that the emerging IWRM-based BDP serves national interests and priorities, including ongoing, planned or considered large-scale water utilisation projects, such as hydropower and irrigation projects.
- Ensuring that the national views are well represented in the formulation of the IWRM-based BDP.
- Active promotion of IWRM principles in national programmes and projects.

The BDP Programme Coordinator's task is to ensure that the arrangements are made to integrate the national BDP teams at all stages in the BDP's overall work plan implementation.

The activities at national level are directed by the programme overall work plans, prepared by the regional BDP team on annual and quarterly basis. The National BDP Coordinators will prepare the national work plans. The cost estimate will be based on the overall work plans of the programme for consensus by the whole BDP2 team (regional and national) during Coordination meetings.

Initially, technical experts of the line agencies through the National BDP WGs and SA WGs will need to provide the missing data and information to update sector reviews and SA analysis in support of the formulation of the IWRM-based BDP. When the IWRM-based BDP is operational, the relevant data and information will flow back to the line agencies, together with the results of project identification and feasibility studies, and the assessment of the national projects in the basin context. The results will usefully inform the line agencies and their development partners and accelerate the decision making on the implementation of major national water utilisation projects.

The national BDP teams need to lead the initiation of country-specific mechanisms for the integration and synchronization of the periodically updated IWRM-based BDP with the national planning processes and coordinate with line agencies and provincial authorities to make this happen. At the same time, the NMC/BDP staff needs to be represented in relevant national planning processes, particularly in the planning of large-scale hydropower and irrigation developments, since such developments may have significant downstream impacts.

National line agencies and local stakeholders

The involvement of the national line agencies and local stakeholders through the existing BDP National WGs and SA WGs will be strengthened to facilitate a closer integration of BDP in the national planning processes in each member state. During the start up of the BDP2, a review of BDP planning cycle in Phase 1 and the preliminarily updated BDP planning cycle of Phase 2 (see Chapter 2 and Figure 1) will be undertaken to ensure that BDP planning cycle has a close linkage with national planning. The national line agencies, relevant research institutions and local organisations will also participate in Regional technical working groups to ensure continuous and consistent participation and contribution of the line agencies and other national stakeholders in the preparation and finalisation of main outputs in BDP2 such as the Basin development scenarios and IWRM strategy.

Mechanisms will be created for the line agencies and local stakeholders to:

- Provide timely information and data on all existing and planned national water and related resources development strategies, plans with basin-wide implications and projects with potential transboundary effects.
- Support the process of long term, basin-wide scenario formulation and analysis.
- Ensure continuity and consistency in the representation of views and interests of national planning and line agencies and local authorities in the BDP processes. Close coordination between National BDP units and the focal points in relevant line ministries and local governments is key in this regard.
- Facilitate interfaces to and cooperation with new and upcoming river basin organisations/committees, including knowledge sharing and a functional delineation of local, national and regional responsibilities and development initiatives.
- Build capacity in relevant departments for the application of the MRC modelling and assessment tools to improve project identification and design, and inform national water resources planning.

• Integrate BDP processes and the resulting IWRM-based BDP in national socioeconomic planning and water related sector planning.

This will require significant inputs from the BDP2 resources to support the NMCs and their BDP teams in achieving the afore-mentioned responsibilities, including the capacity building. The trainings under BDP2 and follow ups with the MRC ICBP should focus on further improvement of the capacity in the NMCs for creating strong ties with line agencies and other related parties as envisioned in the BDP2.

MRC programmes

A key challenge is recognised in the BDP2 formulation. The challenge is to build a sustainable basin planning process that will enable subsequent editions of the IWRM-based BDP produced with greater reliance on riparian resources. The interfaces among the MRC programmes, national planning, and line agencies are seen as pivotal to the establishment of an integrated planning process linking the all levels of planning in the basin.

The MRC sector programmes have an overarching objective of promoting wise use of resources in their respective sectors through the appropriate development projects. Looking to the future, it is expected that they will increasingly influence, promote and, where appropriate, participate in the national planning within the framework of IWRM-based BDP. The BDP, supported by the IKMP and EP, represents that part of the MRC is devoted to build an overall understanding of the basin's resources, and potential. This role promotes opportunities for the member countries to cooperate in their realisation of the collective development goals.

The overall approach set out for the BDP2 is for the MRC programmes to take the lead role in reviewing their individual sectors, identifying constraints and opportunities, formulating (in some cases updating existing) sector strategies, identifying appropriate structural and non-structural projects with the line agencies), and supporting the detailed project identification studies, if needed. The BDP2, with support from the IKMP and ICBP, has a primary function to ensure that: 1) the MRC programmes collectively provide an integrated, optimal and sustainable approach to basin development, 2) the resulting IWRM-based BDP is consistent with the national interests and priorities, 3) the necessary steps to facilitate capacity building to achieve the basin planning process are taken, and 4) the MRC programmes provide major inputs to the BDP outputs, such as the development of the IWRM-based basin strategy, the analysis of basin development scenarios, project portfolios, and the planning atlas.

Looking back, the BDP1 suffered from not having the extensive experience that is needed to develop a BDP. It also often worked in isolation from the other MRC programmes and did not fully benefit from them as this knowledge could have been very important to utilise in the IWRM-based basin strategy. The following is now proposed to address these issues: The primary role of the BDP regional team is to manage the IWRM-based BDP formulation process and combine the various contributions in a coherent and consistent IWRM-based BDP.

The technical inputs will be provided by each MRC programme through a series of agreed "work packages" with BDP, which will include contributions to the most BDP outputs. Ideally, these work packages should be placed and mentioned clearly in the working plans of the MRC programmes. The BDP team will maintain the technical oversight. Figure 16 provides a schematisation of how the work flow of the various MRC programmes will contribute to BDP outputs.

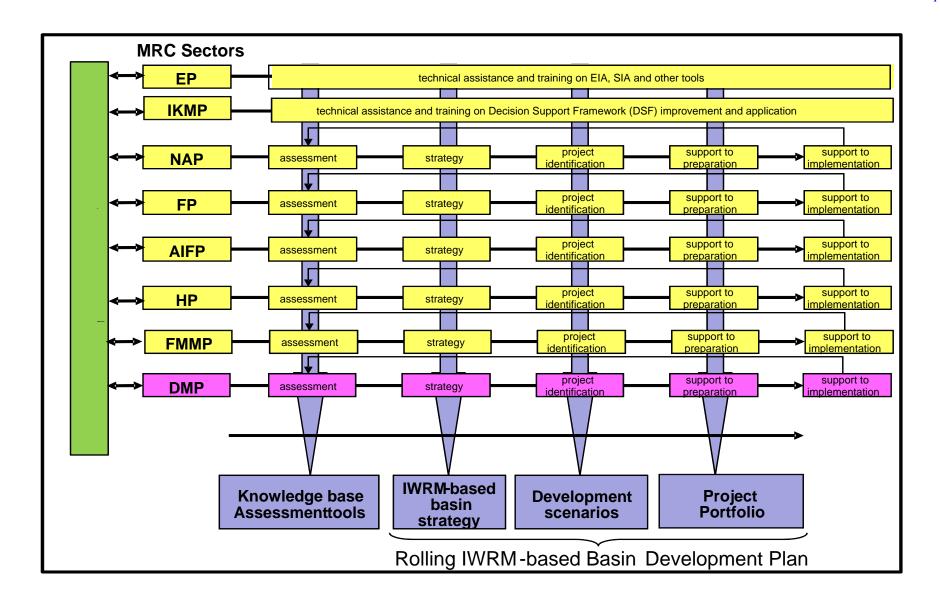


Figure 16: Workflow of MRC Programmes

Appendix F provides a detailed description of the technical inputs from MRC programmes to BDP2, which are identified by the BDP and will be finalised in relevance with the MRC programmes to design the work packages.

External consultants

It is anticipated that external consultants will be required in three ways. Firstly, there are evident skill gaps and/or resource constraints in a number of areas, which judicious use of consultants can overcome in the short term. Secondly, there may be a need to support the BDP team during the periods when the contributions of different MRC programmes require integration into the Basin IWRM-based basin strategy and the project portfolio of the IWRM-based BDP. Thirdly, there are occasions when peer review is required, for instance of preliminary elements of the IWRM-based BDP, or for assessment tools and processes, which necessarily require an independent view.

Against this background, the inputs are planned to be received from external consultants in the following areas: the financial assessment of the planned and considered hydropower projects, the assessment of the irrigation potential in the Basin, project identification and preparation, modelling and assessment tools, environmental economics, IWRM capacity building and training, and publication and communication. The inputs of the consultants in these areas are estimated in Appendix G.

6.3.3 Coordination and interfaces

Coordination between the BDP regional and national teams

The BDP regional and national teams should be seen as one team in implementing BDP2. The BDP Programme Coordinator and National BDP Coordinators will maintain regular communications on day-to-day management of the programme. The BDP Regional team members will also maintain regular communications with their respective counterparts in the national teams on technical issues under their respective projects.

The quarterly coordination meetings will be the main mechanism to facilitate the programme management and coordination. The meetings will serve to (i) review the progress in the previous quarter; (ii) discuss and reach an agreement on the work plan for the next quarter; (iii) address the programme management and coordination issues and (iv) discuss important technical issues that will affect the work plan implementation. When required, the coordination meetings will be extended for technical discussion amongst the BDP team. The first coordination meeting of the year will also serve to review the progress of previous year and the work plan for the particular year.

Relationship with national line agencies and sub-area stakeholders

The coordination among the national BDP teams, national line agencies, and sub-area stakeholders will mainly be through the existing working groups. The Participation and Communication Plan of the BDP2 will identify the specific areas for improvement and design to strengthen the national BDP teams, and the BDP units to enhance their coordination and facilitation role. Another important area in this regard is the identification of possible means to strengthen the BDP interfaces with local communities, NGOs and the civil society in each country.

Coordination with MRC programmes

Coordination between BDP2 and other MRC programmes will be in two areas.

Coordination to implement BDP2

Appendix F describes the identified inputs from MRC programmes to achieve BDP2 outputs. To foster the coordination with MRC programmes, it is proposed that the following BDP staff would work for a significant portion of their time in the respective MRC programmes:

Environmental Specialist with the EP

Social Scientist with the EP

Modelling Specialist with the IKMP

GIS & Data Management Specialist with IKMP

This will enable each specialist to work with like-minded experts (gaining technical support), to discuss the requirements of the BDP process with the other MRC programmes, to strengthen the necessary links between BDP and these programmes, and finally to extend the acquired knowledge by working in these programmes and benefit from their experience. The BDP Programme Coordinator will make consultations with the relevant MRC programmes and arrange the staff involvement as stated above.

Representatives from the MRC programmes will participate in the BDP Regional TWG on IWRM-based basin strategy and basin-wide development scenarios. This will help foster the collaboration between the MRC programmes with National planning agencies and decision makers in their respective sectors. In addition, the BDP programme will organise regular programme discussions on critical outputs of BDP2 to engage other programmes and build consensus amongst MRC programmes on BDP outputs in their linkage with broader MRC Sector Programmes and other programmes.

Coordination to address transboundary issues

Addressing transboundary issues is relevant to all MRC programmes, given the MRC role in transboundary governance. Several initiatives to identify and address transboundary issues have been in place:

- WUP1 carried out a study on Diagnostic Approaches to Transboundary Issues, which identified six transboundary issues.
- EP: planned work programme on transboundary environmental assessment.
- FMMP: ongoing work programme on enhanced cooperation in addressing transboundary flood issues.
- NAP: ongoing work programme on socio-economic analysis regional transport planning.
- FP: ongoing work programme on fisheries valuation and fisheries development strategy.

The BDP programme is tasked with assessing transboundary impacts or cumulative impacts of on-going and planned interventions in the basin. In order to do this, BDP should bring different MRC programmes together. An internal working group has been established in the context of MRC/USAID ECO-Asia initiative on conflict prevention and management. The working group has developed TOR for identification and analysis of potential transboundary issues, which would serve as the basis for coordinating MRC programmes actions in this regard. Considering all these different initiatives and the need for a coherent MRC approach in transboundary issues, it is proposed in the WB/MRC Integrated Water River Management support project that the project will support the creation of a regional cooperation framework

with processes, tools and capacity. The BDP2 will be the focal point for this project and will thus coordinate MRC programmes on transboundary issues.

6.4 Stakeholder participation and communication

The BDP2 Participation and Communication Plan, prepared by the BDP team with the support from ICCS, will be consulted with countries and relevant stakeholders. It will serve as the main framework of actions under the BDP2 to strengthen the stakeholder participation and communication. The Plan will undertake a series of activities, identified through an updated stakeholder analysis, and will be implemented across all the 4 components activities of BDP2. Reporting on the implementation of these activities will be part of the periodic programme reports. The emphasis will be put on documentation of feedbacks from different stakeholder groups for continuous improvements for the plan implementation. The training and capacity building for national BDP units, NMCs and line agencies to more proactively engage with local communities, academia, NGOs and mass media to advocate for the BDP will contribute to the implementation of the Plan and success of the BDP2.

6.5 Gender mainstreaming

The Participation and Communication Plan and detailed design of tasks under BDP2 will pay particular attention to issues of gender equality in the process and equal benefits to men and women. The stakeholder analysis will include sex-disaggregated data and the different perspectives of men and women of the IWRM-based BDP and the BDP process. Participation of women in programme activities and their specific needs in communication will be given an emphasis in the BDP2. The updated logical framework attempts to incorporate the gendersensitive indicators to measure BDP efforts in this regard. However, to bear in mind that these efforts are still initial and at this stage, apart from ensuring the participation of women in the programme activities, creating a broader BDP process taking specific actions into account for gender mainstreaming remains a challenging task.

6.6 Revised budget

The overall budget remains very similar to that given of the BDP2 Programme document. (viz: US\$11,044,000) and is summarised below:

Summary of Costs

		Amount US\$
Staff costs		4,841,934
Official trabel		365,000
Workshops		1,848,000
Training		680,000
Equipment		300,000
Publications		350,000
Subcontracts		500,000
Sub-tatal		8,884,934
Contingency	@ app 2%	160,111
MRC Secretariat support	@ 11.0%	994,955
National contribution in kind	@ 10.0%	1,004,000
Ground Total		11,044,000

The main changes include the revised estimate of staff and short-term international expert inputs to a more realistic level. On the other hand, the estimated provision of resources for MRC programmes is increased significantly as in line with the new approach of BDP2 to strengthen the cooperation with MRC programmes, agreed at the BDP2 Launch Workshop in Ho Chi Minh City in Jan 2007. This estimate is based on careful analysis of the required inputs from the MRC programmes and the current availability of resources to deliver these inputs to BDP. However, given the funding prospects of some programmes, i.e. EP and FP, resources from BDP will definitely required, particularly in terms of the development scenario analysis.

A breakdown of this estimate is provided in Appendix G.

6.7 Programme monitoring and evaluation

Programme monitoring

The monitoring of progress and quality of outputs and activities will be based on (i) the agreed work programme, (ii) indicators of the outputs and objectives as agreed in Inception Report and adjustments in line with changing development context and (iii) agreed TOR for specific activities and tasks.

The monitoring should focus on:

- The progress of activities and how they contribute to the achievement of the outputs and tasks
- The quality of deliverables from activities, interim and final outputs
- How the progress under each output will contribute to the achievement of objectives and
- How the programme contributes to overarching goals of poverty reduction and sustainable development in LMB.

Gender mainstreaming and effectiveness of communication will be important cross-cutting issues for monitoring.

Monitoring mechanisms under BDP2 include:

- Day-to-day monitoring of the BDP regional team: Project Managers and National BDP Coordinators
- Monthly joint monitoring of the progress of activities and their alignment towards the achievement of BDP2 with a reference to monthly-brief
- Quarterly coordination meeting for monitoring the progress, expenditures and the quality of interim and end results of outputs.
- Annual programme and donor reviews

The BDP Regional team will mainly be responsible for monitoring of the overall progress of the programme. While National BDP Coordinators primarily focus on monitoring of activities at national level, their monitoring of whole programme including activities at regional level will be important to ensure the countries' ownership of the programme.

MRCS Management through the Chief Executive Officer will be responsible for monitoring of BDP2 as part of the implementation of MRC annual work programme and the MRC Strategic Plan 2006-2010. The BDP Programme Coordinator is tasked to provide regular updates to MRCS management to facilitate this monitoring.

The MRC JC will monitor the programme through the MRCS quarterly reports to the JC and reports to its regular meetings. The participation of JC members in the important activities of BDP2, such as the final selection of development scenarios, the IWRM-based basin strategy and the review of the IWRM-based BDP, will be critical to obtain guidance and facilitate the JC review and approval of its outputs. In addition, a BDP Steering Committee consisting of JC members and senior representative from National planning agencies will be established to strengthen the JC monitoring, supervision and strategic guidance for BDP2. The TOR for the BDP Steering Committee is provided in Appendix I.

The programme development partners will monitor the progress through six-monthly reviews and financial reports. The annual consultation meeting and/or joint Donor review will facilitate to reach a more realistic knowledge of the programme progress and identify the related issues in the process and solutions to support the MRC in addressing these issues.

Programme reviews

The BDP2 is subject to:

- Annual joint donor review.
- Mid-term review of the programme which will coincide with the 2nd year annual review. I.e. by end 2008.
- Final review toward the end of the programme implementation, which will be carried out by independent consultants in collaboration with the donor reviewers.

For the (joint) donor review, the general guidelines for review by the respective donor will be applied. The BDP Regional team will be responsible to liaise with the Donors and make arrangements to facilitate the reviews. The participation of countries, and where possible key line agencies in the review would be important and the BDP Programme Coordinator should ensure that this will happen in a systematic manner.

For the mid-term and final reviews, the BDP Programme Coordinator will be responsible to prepare the TOR to engage in external independent experts to help provide objective views on the programme and its achievements. The TOR will be consulted and agreed with countries.

6.8 Quality management

The quality and credibility of BDP programme results are crucial for the MRC to reach its full potential as an international river basin organisation that facilitates environmentally sustainable economic development in the Mekong Basin. The quality of the BDP programme results has improved significantly during the BDP1. This trend will be continued during Phase 2 with additional quality assurance measures put in place. The MRC programmes will also add a wide range of experience and skills to the BDP process, hence providing quality control of technical products.

Internal quality management

The quality plan (Draft BDP Guideline, revised February 2004) will serve as the basis for internal quality management within the BDP Regional team. The updates to this quality plan are expected to be received during the course of BDP2 implementation, drawing upon lessons learned as the implementation of BDP2 involves. Each Project manager will be responsible for quality management of his/her activities while quality management of outputs, especially those requiring MRC management approval and publishing will be subject to the MRCS quality management procedures.

External quality assurance

Setting up a plan for external quality assurance is at the request of the main donor of BDP2 (Danida). The external quality assurance through independent expert panel review is expected for the following critical outputs of BDP2:

Assessment tools

A particular concern is the credibility of the MRC modelling and assessment tools as perceived by the NGOs, line agencies and development partners. Although the MRC built up the senior professional modelling and assessment experience and the modelling and assessment tools appear to be adequate, they will be always be subject to criticism by interest groups.

Whilst it is not anticipated that major upgrades of the DSF are needed for BDP purposes, there is a need to review the DSF. The review should also consider the requirements for using the DSF to assess the possible significant impacts of tributary hydropower projects to the tributaries. The IBFM process is evolutionary and further refinements are being put in place by the EP. The BDP is primarily interested in the IBFM process on the mainstream. However, since the project impacts on some of the tributaries are likely larger than on the mainstream, there is a scope for pioneering the IBFM process on some tributaries.

Although the DSF has undergone peer review, the BDP will engage an external scientist, who is an internationally recognised expert in applying tools such as the DSF. The consultant will ensure that the assessments made by the MRC are scientifically satisfactory and robust. He will also support the adoption of transparent and reproducible modelling and assessment procedures, including quality assurance through the performance of uncertainty assessments of model results. The results of the modelling and assessment tools usage will be published, together with the information on the limitations and credibility of these tools.

It is a worldwide experience that building confidence in a tool among stakeholders usually requires that the modelling and assessment process is transparent, and that the stakeholders are given the possibility to follow and review this process. Therefore, interest groups, including international NGOs, will be given the opportunity to learn more of the models and tools, including their assumptions and the data used (see Appendix B).

It is envisioned that the above measures will help building the senior professional experience, scientifically based modelling procedures, transparency, and stakeholder involvement in the use of MRC modelling and assessment tools. This should enhance the credibility of the MRC.

The IWRM-based BDP

There were different perspectives on what the core product of BDP Programme – the IWRM-based BDP - would look like. The Inception stage of BDP2 improved its conceptualization towards the Plan preparation and the planning process leading to the Plan. The quality and technical soundness of the Plan document and its components i.e. the Basin IWRP, development scenarios and project portfolio are crucial in building a common understanding and consensus among the member states and the diversion of the stakeholder groups in the LMB to adopt a basin-wide plan. In addition to the Working groups regarding the development scenarios and IWRM-based basin strategy, an expert panel comprising of internationally well-known experts and experts from riparian countries will be mobilised to review each of the draft plan and the final IWRM-based BDP to ensure that it does meet the international standards.

Special attention will also be given to the documentation of comments and inputs, both internal and external, with a view to document the lessons-learned cases for regular updating of the Plan in the long run.

6.9 Reporting

The BDP2 will produce a number of technical and programme management reports. These shall include:

- The Inception Report
- A number of thematic reports, working papers and training packages (training needs assessment, various training courses and assessment of training impacts)
- The project information notes, awareness raising and communication materials

Appendix H provides a list of programme management reports with their schedule and responsibilities for reporting. In summary, periodic programme management reports under BDP2 include:

- The monthly brief
- Quarterly progress and the financial report
- Bi-annual progress and financial reports

6.10 Risk management

The Danida appraisal report listed a number of perceived risks to achieving the successful outcome of the BDP2. The following outlines how the activities set out in this report address the concerns that are within the control of BDP2.

6.10.1 National provisions for IWRM

The concerns here are that IWRM is yet to be fully integrated into national planning, that legal and institutional constraints may have to be overcome in some countries, and that technical capacity within each country may not be sufficient to implement programmes on an IWRM basis.

The absence of IWRM to a greater or lesser degree in national planning does not preclude that the rolling IWRM-based BDP can be prepared on an IWRM basis. The current information gaps to support IWRM planning at basin level have been identified and are not

insurmountable. The likely impact of unfamiliarity with IWRM is that it will take longer for some to understand how IWRM should be embraced at basin-level. The design of the work plan recognises that the plan needs to be worked up progressively, building up understanding step-by-step.

The formulation and implementation of a comprehensive IWRM-based basin strategy will address this concern (see Section 5.4 of this report). The completed strategy will usefully guide the implementation of IWRM principles and practices at the basin, national, and subbasin levels. The strategy will incorporate practical directions for how the Mekong Basin can be developed, as well as directions for the monitoring and evaluation of the strategy.

Institutional and legal structures will be reviewed in this context and any constraints including IWRM training needs will be identified. The IWRM capacity building under BDP2 will be tuned into country's specific needs with focus on training on basin IWRM understanding, planning capacity and project identification, preparation and implementation. This component of BDP2 will complement a much larger initiative on IWRM capacity building in the LMB, currently under conceptualization by the MRC.

6.10.2 Interpretations of IWRM and stakeholder participation

There are two concerns here. First is whether IWRM has totally entered into the psyche of the MRC and whether BDP2 will fully embrace these principles. Secondly, there is acknowledgement that there are different interpretations of what IWRM actually is, and the concern is that this may cause misunderstandings and compromise the principles.

There is no simple answer to this. Certainly the MRC has been working hard over the last decade to transform its approach to basin planning and certainly there is unquestionable commitment to incorporate IWRM principles in all its programmes. Moreover, a new programme component has been designed (Component 1 – Programme Management and Communication), which is directed towards managing the many BDP interfaces and the participation of stakeholders in the planning process (see Chapter 3 and 5).

Nevertheless, whilst there is plenty of room for optimism, this needs to be monitored and corrective actions taken if found necessary.

6.10.3 Sustainability of the BDP assessment tools

There is a concern that there are insufficient resources available to the MRC to sustain the existing assessment tools and to upgrade them.

Capacity to sustain these tools is indeed a problem. However whether more training is a sustainable solution under prevailing MRC employment conditions is questionable. An activity has been included to consider this, as well as alternatives such as encouraging partnering with academic or commercial modelling institutions.

The need to upgrade the tools for the purposes of BDP2 is apparent only with the RAM, which, if needed, is relatively easy to achieve. Whether the DSF needs to be upgraded for basin-level planning, and in what way, needs to be assessed once the critical planning issues (those that materially affect choices) have been identified and the capacity of the DSF to discriminate between solutions has been examined. These assessments have been programmed into the BDP2 activities. IKMP has sufficient funds to support the maintenance and improvement of the DSF. It is expected that EP will have the capacity and funding to

further improve the IBFM process. BDP2 contributes to this process with a specialist economist consultant.

Of course, other MRC programmes, which deal at sub-basin level, may have more detailed information requirements which may be a more important driver for upgrading models.

6.10.4 Support from other MRC programmes

The importance of the interface between BDP and other MRC programmes has been stressed and is seen as critical in a number of areas. There would be also the risk that the other programmes cannot make sufficient time available for BDP.

These concerns have been addressed by strengthening the relationships beyond what was previously planned, as set out in Chapter 6. Moreover, assessment of the knowledge gaps for basin planning conducted recently, revealed that the knowledge gap is relatively small except for the hydropower and irrigation sectors. This is not surprising since the MRC did not have operational programmes in the hydropower and irrigation sectors. The BDP2 will support the emerging MRC hydropower and irrigation programmes in addressing the identified gaps. The identified gaps in the knowledge base of the other sectors can largely be addressed under the ongoing MRC programme frameworks, without funding support from the BDP Programme. However, there is a need for periodic coordination meetings between the BDP Programme and the other MRC programmes (see Section 6.3 and Appendix F).

6.10.5 Accessibility to data and information

The concern is that BDP2 will not have access to essential data and information, such as on the existing and planned large-scale structural projects on the tributaries and mainstream.

This is a modest risk, since national consultation meetings on this report revealed that the national line agencies and their design/research institutes are planning to the share the required data and information with the BDP Programme. The vehicle that has been designed to facilitate data and information sharing is a regional working group on basin development scenarios with representation of the various water using sectors. The main objective of the working group, however, is to strengthen the role of key stakeholders in the formulation and evaluation of basin-wide development scenarios and to promote consensus and acceptance of the outcomes in the member countries.

6.10.6 BDP2 and the public

There is a concern that BDP2 could proceed without effective interaction with civil society, diminishing the confidence in and credibility of the plan.

This has been addressed in a number of ways, including activities to identify key stakeholders and to prepare a Participation and Communication Plan of BDP2. The Plan will include arrangements to engage different stakeholders through national and regional workshops, through an internet forum, regular publications and newsletters, all supported by inclusion of a communications expert in the team and technical support and supervision by ICCS of the MRCS (see Section 5.1). Moreover, a social scientist in the regional BDP team specialising in public participation will support the new component

6.10.7 Developing an information base for the Upper Mekong Basin

The concern is that BDP2 will not have access to adequate and reliable data to develop an information base for the upper Mekong Basin for issues relevant to the LMB, such as land

use, water resource developments, hydrological data, data related to climate change, and in particular the likely operating modes of the hydropower cascade on the Lancang (see Section 2.2).

China and Myanmar, MRC Dialogue Partners, are both cooperating in several sectors. China exchanges flow data with the MRC. Another focal area for the cooperation with China is the Navigation Programme (NAP). The BDP Programme, in collaboration with IKMP, could consider inviting technical specialists from China to (training) workshops related to the formulation and assessment of basin-wide development scenarios, using the DSF. Other mechanisms for developing and information base for the Upper Mekong Basin include partnering with other regional programmes. These options will be explored under BDP2 component 1, activity 1.1.4: Build partnerships with relevant regional actors and the international donor community.

Appendix A: BDP1 achievement and transition into BDP2

BDP2 Component	BDP2 Output	BDP1 Output	Remarks/Implementation Approach
C1. Programme management and communication	Enhanced transparency and stakeholder involvement	Established networks: BDP Subcommittees BDP National working groups BDP sub-area working groups Other advisory networks Workshops, meeting, and forums National and regional consultations Sub-area working sessions and forums Transboudary sub-area and bilateral meetings Training sessions BDP coordination meetings	 The established participatory planning processes established under phase I will be broadened to create a strong partnership of the basin's stakeholders, which can effectively link development and natural resource conservation Results of workshops, meetings and forums will be used to prepare for activities of Phase 2
	BDP2 well managed	Working Papers Guidelines for Stakeholder participation Guidelines for stakeholder participation in sub-areas Reports Project implementation and quality plan	 Will be reviewed and updated in 2007 to prepare the Participation and Communication Plan of BDP2 Communication packages will be prepared Will be reviewed and reporting system will be established for BDP2
C2. Rolling IWRM based BDP	Basin-wide development scenarios	Guidelines RAM user guide Draft guideline for Sub-area analysis Draft guideline on sub-area scenario formulation Data system MRC project database MRC hydropower database Reports Scenarios for strategic planning MRC DSF and BDP application Economic valuation of water resources (RAM) Modeled impacts of scoping development scenarios in the LMB	 Review and update existing guidelines for sub-area studies and scenario formulation Workshop on scenario formulation and analysis Review of already analysed hypothetical scenarios, using established networks and consultation process Consultation and agreement on additional basin scenarios and required data Update of project and hydropower databases Update of existing sector studies and sub-area reports Formulate scenarios, based on existing reports, the updated databases, and other updated information and data Analyse scenarios using DSF, IBFM process, SIA & SEA at regional and sub-area scales and possibly RAM to assess transboundary impacts of different levels of water resources development

BDP2 Component	BDP2 Output	BDP1 Output	Remarks/Implementation Approach
		IBFM concept note and IBFM Reports Sub-area studies 13 Sub-area reports 20-year scenarios Development scenarios formulated, analysed and reported in several publications DSF and RAM	
	Basin IWRM- based Development Strategy	Reports Nation and regional sector reviews Sub-area strategies SWOT analyses and development perspectives for each sub-area included in the BDP Planning atlas Basin-wide strategies Agreed 'Strategic directions for IWRM in the LMB' SEA checklist and report	 Review of existing reports and strategies Prepare a draft outline of the Basin IWRM strategy based on (i) agreed principles in the Strategic directions for IWRM in the LMB, (ii) updated sector reviews and sub-areas studies, and SWOT analysis, by partly use IBFM, VA and simulation study from EP; as well as new studies if necessary (iii) scenarios analysis and (iv) in consultation with NMCs, line agencies and other stakeholders Prepare the Strategy, using established consultation processes Consultation and agreement for finalisation of the Strategy
	Project database	Guidelines Data system guideline Data system MRC project database MRC hydropower database Data systems at 4 riparian countries Reports Data system and knowledge base Long-list of projects and programmes More than 400 projects included in the MRC project database	 Review and consolidate/update existing hydropower database and project database using existing and new information and data from sector studies and the update of sub-area reports. Consultation with NMCs and other stakeholders Build project data based including existing, ongoing and planned project database
	Project Portfolio	Guidelines Project screening toolkits (user guides of economic, environment and social assessments) Data system MRC project database	 Review, update and further develop the toolkits esp. SIA and SEA at sub-area scales based on requirements, consultation and agreements Review and update the project database using updated sector reviews and sub-area studies

BDP2 Component	BDP2 Output	BDP1 Output	Remarks/Implementation Approach
		MRC hydropower database Reports Social and environment issues and assessment (SIA and SEA) Sub-area studies 13 Sub-area reports Long-list of projects and programmes More than 400 projects included in the MRC project database Short-list of projects and programmes 1st shortlist (9 projects) approved by Council in November 2005 2nd extended shortlist (11 projects) submitted to the JC in April 2006 SEA and SIA	 Use agreed tools to assess and prioritise projects to be included in the portfolio Identify, in consultation with NMCs, information gaps to update the projects, approved by Council and next steps to move them forward Further enhance the participation of line agencies (hydropower, irrigation etc) so that they will play a leadership role in all activities related to the project portfolio, since they are responsible for the preparation and implementation of project. The MRC programmes need to be involved in sector studies and project identification.
C3. Knowledge base and Assessment Tools	Updated knowledge base	Data system	 Consolidate existing BDP information and data at MCR and national level Add new data Use IKMP human resources in NMCs for this purpose. Use existing and updated sector studies sub-area studies Inputs from IKMP to update planning atlas for publication Consultation with countries for outline of the new State of Basin Report Inputs by MRC programmes and countries Results of analysis of development scenarios Coordinate the update of the 2003 State of Basin Report
	Upgraded assessment tools	Guidelines Project screening toolkits (user guides of economic, environment and social assessments) RAM user guide Reports MRC DSF and BDP application	 Review and update, if needed. Use and further improve the DSF, in particular the further integration of the "prediction models", informed by the IBFM process. Support the further development of IBFM Review RAM Consolidate the current checklist for screening of projects(SEA, SIA, EIA, Economic) into 1 checklist for the screening of projects and

BDP2 Component	BDP2 Output	BDP1 Output	Remarks/Implementation Approach
		 Economic valuation of water resources (RAM) Social and environment issues and assessment (SIA and SEA) IBFM concept note Existing scenarios (20-years) Development scenarios formulated, analysed and reported in several publications DSF and RAM 	1checklist for the screening of sector plans and the Basin IWRM strategy
C4.IWRM Planning Capacity	Staff at MRCS and NMC levels skilled in scenario-based planning and in the use of assessment tools	Reports and trained staffs Training needs assessment in each country The MDBC training programme (4 modules)	 Update of training needs assessment Design of training programmes and schedules building upon the existing modules. Implement priority training workshops (scenarios) in 2007-2008 Implement training programme using as much as possible the trained staffs

Appendix B: Logical Framework Analysis

	Description	Verifiable Indicators	Means of Verification
Development Objective	The water resources of MRB managed and developed in an integrated, sustainable and equitable manner for the mutual benefit of the riparian States	Water level and stream flow characteristics and the quality of the aquatic environment maintained within acceptable limits	Monitoring of levels, stream flow and water quality at regional station network
Immediate Objectives /Components	A rolling IWRM based Basin Development Plan produced in support of sustainable development in the MRB	1. Potential development initiatives and projects based on IWRM principles identified, screened, prioritised and promoted for financing Base line: Building blocks of the IWRM-based BDP available but no Plan. Some projects are under preparation for finance by World Bank and Asian Development Bank.	MRC Council approval and Initiatives financed
	2. Knowledge base and assessment tools further developed and utilised effectively in the MRC and NMCs	2. MRC information system updated and DSF, SIA, SEA and RAM upgraded, peer reviewed and used in scenario analyses and project impact assessments Based line: MRC data and information system scattered. BDP separate database requires updates. Limited access by NMCs, line agencies and public to the MRC knowledge base.	2. Annual published catalogue of IKMP, report from international peer review, assessment reports,
	3. Capacity built at MRC and NMC levels for planning based on IWRM and for facilitation/mediation in areas where trade-offs are required	3. Training in IWRM concepts and approaches and in support for facilitation conducted Base line: Initial capacity building in Phase 1. MRC's planned comprehensive ICBP for 2008-2012 but no work on trade-off facilitation	3. Proceedings of workshops and consultations, training monitoring reports and final training impact assessment report
	Immediate objectives Output descriptions	Verifiable Indicators of Objectives Verifiable Indicators of Outputs	Means of Verification
C1	Programme management and Communication		
	1.1 Transparency and stakeholder involvement enhanced including interaction with national planning	1.1 Improved guidelines, stakeholder consultations at all levels and through all BDP processes and products, public access to and increased dissemination of BDB outcome and results Baseline: Available Guideline and local stakeholder involvement at sub-area level. Limited capacity of NMCs to open the BDP planning process to academia, NGOs.	1.1 Minutes of meetings, records of exchange and manuals, training provided to NMCs in stakeholder involvement
	1.2 BDP2 managed effectively	1.2 Agreed quality products delivered in time and within budget Baseline: BDP teams mobilised, some programme management mechanism exist and needs improvement	1.2 Work plans, reports, assessment reports, records of MRC management (JC and Council meetings)

	Description	Verifiable Indicators	Means of Verification
C2	A rolling IWRM based Basin Development Plan produced in support of sustainable development in the MRB	Potential development initiatives and projects based on IWRM principles identified, analysed, jointly promoted and financed	Initiatives financed
	2.1 Basin-wide development scenarios	2.1 Regional investment proposals agreed between the four Member States for further development	2.1 JC/Council decisions
		Baseline: Some scenarios formulated and analysed under WUP but not yet accepted by countries. No official data on national basin significance projects including on mainstream	
	2.2 IWRM-based basin strategy	2.2 Strategy agreed between the four member countries and supported by development partners and civil society	2.2 JC/Council decisions, minutes of stakeholder meetings
		Baseline: Strategic directions for IWRM in LMB approved by Council but does not provide specific directions for basin development (i.e. projects to be implemented). Not yet agreed clear scope of the Strategy.	
	2.3 Programmes and projects proposed by national and sub-regional level institutions and stakeholders assessed (Project database)	2.3 All significant national projects and programmes with trans-boundary impacts are submitted	2.3 Published Project database
	(Hoject database)	Baseline: BDP project (long and short) list does not include infrastructure projects with transboundary impacts. No official data on projects to formulate and analyse development scenarios.	
	2.4 Portfolio of programmes and projects developed, prioritised and promoted (Project portfolio)	2.4 Project portfolio of prioritised projects maintained, available and accessible	2.4 MRC/BDP database, reports
	2.5 IWRM based BDP including facilities for periodic revision prepared in a participatory manner	2.5 Approval by member countries and acceptance of stakeholders of the Plan	2.5 JC/MRC decision, minutes of stakeholder consultations
	and the second s	Baseline: No plan exists. Initial link of BDP with national planning. No mechanism to update regularly.	
	2.6 Lessons learned from implemented projects and programmes collected and analysed	2.6 Socio-economic and environment trends	2.6 Socio-economic statistics and surveys and environmental monitoring results
		Baseline: the MRC is expected to play a bigger role in projects, especially national projects with transboundary impacts.	
C3	Knowledge base and assessment tools further developed and utilised effectively in the MRC and NMC	MRC information system updated and DSF, SIA and SEA upgraded and used in project impact assessments	Assessment reports based on updated information

	Description	Verifiable Indicators	Means of Verification
	3.1 Knowledge base including sub-regional planning data upgraded, reviewed and made operational	3.1 Updated GIS databases and sub-regional reports as well as tools ready for use, complete with manuals and guides	3.1 Manual and guidelines
		Baseline: GIS database getting out of date. Scattered data system. BDP database needs be integrated into IKMP	
	Planning atlas (draft 2008 and published 2010)	High quality Planning atlas published and available in CD	Accessibility through the MRC, shops
		Baseline: BDP sub-area atlas available in GIS. Need of more credible MRC atlas of the whole basin to serve planning	
	State of Basin Report	High quality State of Basin Report approved by MRC Council and published	MRC decision, accessibility through MRC, shops
		Baseline: 2003 State of Basin Report needs update	
	3.2 Upgraded assessment tools	3.2 Guidelines for the use of tools	3.2 Assessment reports, feedbacks of users
		3.2 Approval of JC of peer review report and recommendations undertaken	
		Baseline: Limited access to and application by countries of MRC tools for planning	
C4	Capacity built at MRC and NMC levels for IWRM planning and for facilitation/mediation in areas where trade-offs are required	Training in IWRM concepts and approaches and in support for facilitation/mediation conducted	Assessment reports based on updated information
	4.1 Upgraded planning guides prepared and agreed	4.1 Guidelines available and their use monitored	4.1 JC decision, printed Guides
		Baseline: BDP Planning guides exist and need update to foster link with national planning	
	4.2 Capacity enhanced at MRCS and NMC levels in scenario-based planning and in using assessment tools	4.2 Training material from BDP1 updated and training conducted with women participation	4.2 Report of training courses with sex-disaggregated data
		4.2 Tools applied during assessments	
	4.3 Knowledge base decision support capacity enhanced at MRCs and NMCs levels	4.3 Knowledge base and tools applied during assessments and planning	4.3 Assessment and training reports
	4.4 IWRM planning principles and approaches internalised at MRCS and NMC levels	4.4 Plans and reports has IWRM as strategic basis	4.4 Plans and training reports
	and three levels	4.4. Training modules developed and training courses conducted with women participation	
		Baseline: Different level of IWRM –based planning in the 4 countries.	

Description	Verifiable Indicators	Means of Verification
4.5 Capacity built within MRC to assess value of water and sharing of benefits and costs	4.5 Training of staff in valuations and sharing principles	4.5 Training modules and reports
4.6 Capacity built within BDP to assist MRC and the Mekong Programme in trade-off facilitation	4.6 Training of staff, including women in principles of trade-off and facilitation skills facilitation	4.6 Training modules and reports

	Output (as objective of each Activity) Activity Description	Verifiable Indicator for output Verifiable Indicator for each Activity Description of Tasks within each Activity	Means of Verification
Activities	1.1 Transparency and stakeholder involvement enhanced	Improved guidelines, stakeholder consultations at all levels and through all BDP processes and products, public access to and increased dissemination of BDB outcome and results	Minutes of meetings, records of exchange and manuals, training provided to NMCs in stakeholder involvement
	1.1.1 Enhance and implement methodologies and practices for public participation	1.1.1 Update BDP guideline for Stakeholder participation, prepare the Participation and Communication Plan and implement.	1.1.1 BDP Planning Guide, the plan and its acceptance by stakeholders, minutes from stakeholder consultations, BDP publications
		a) To clarify the roles of and responsibilities for public participation in the BDP process and to review past experience and identify where improvements can be made b) To firm up consultation procedures for BDP2	a) Working paper and workshop proceedings b) Guidance note
		c) To determine the need for further training in stakeholder consultation within both BDP and NMCs and set out a training programme to meet these	c) Training needs assessment and training programme
	1.1.2 Improve interaction with national planning and line agencies through direct participation of MRC and NMCs/BDP staff in relevant fora and working groups	$1.1.2\ MRC\ participation\ in\ national\ planning\ for\ a\ ,\ working\ groups\ etc-formal\ and\ informal$	1.1.2 Minutes of meetings and working group documents
		a) To review current practices, identify areas for improvement and agree ways to strengthen National BDP WG, SA WG to facilitate that BDP is factored in to national agency planning b) To provide necessary support to NMCs to better promote BDP in-country and	a) Working papers and workshop proceedings including agreed actions as part of the Participation and Communication plan b) In line with agreed actions
		engage line agency participation c) To develop strong relationships with national planning agencies, to gain greater insight into national and regional development agenda and to promote synergy with the BDP	c) Agreed actions implemented for stimulating dialogue with national planning agencies
	1.1.3 Establish and maintain fora for dialogues on shared development opportunities and trans-boundary issues	1.1.3 Establish consultation process to engage riparian and other stakeholders throughout the IWRM-based BDP formulation, formal and informal	1.1.3 Minutes of Stakeholder consultations, meetings
		a) To establish a process for engagement, discussing and agreeing basin development strategies and BDP	a) Working papers documenting process and lesson learned from consultations

Output (as objective of each Activity)	Verifiable Indicator for output Verifiable Indicator for each Activity	Means of Verification
Activity Description	Description of Tasks within each Activity	Victing of Vermenton
	b) To build better understanding of the MRC and its role in transboundary projects	b)Minutes of consultations c) Records of media and NGO messages on the MRC
1.1.4 Build partnerships with relevant regional actors and the international donor community	1.1.4 Establish links between BDP and regional initiatives with clear role of the MRC	1.1.4 Updated strategies of development partners
	a) To promote close working relationships with other regional organisations and link BDP outcomes to their strategies and plans	a) Working papers on experiments of initiated partnerships (with development partners, NGOs) b) Workshop proceedings and agreed areas of cooperation
	b) To promote specific components of the BDP for investment	b) BDP projects and/or programmes funded by regional partner organisations
1.2 BDP2 managed effectively	1.2 Agreed quality products delivered in time and within budget	Work plans, reports, assessment reports, records of MRC management (JC and Council meetings)
1.2.1 Managerial and administrative procedures strengthened	1.2.1 Process and procedures for work plans, budgets, monitoring and reporting	1.2.1 BDP working papers, guidelines, reports
	a) To raise the BDP staff competencies in managing a programme of this magnitude	a) Performance assessment of staff in applying new procedures
1.2.2 Staff competences matching needs	1.2.2 Staff composition, experience and performance	1.2.2 Survey of staff performance
	a) To ensure staff recruited under BDP have a good match with required competencies	a) Annual performance reviews, programme reports
1.2.3 Management information systems internalised	1.2.3 Reporting framework established	1.2.3 Guideline Document
	a) To establish system and format for measuring physical and financial progress of the BDP2	a)Working paper – Guidelines for reporting under BDP2
	b)To establish system for coordination, monitoring and regular reviews of Programme c) To establish a permanent record of all documents generated by BDP2, and to ensure ready access to these by all team members	b)Coordination meeting minutes, review reports c) Guideline for document control
2.1 Basin-wide development scenarios	2.1 Basin wide development scenarios formulated, analysed and accepted by member countries	2.1 JC/Council decisions
2.1.1 BDP/MRC leads a process towards consolidation of shared visions of the water resources development of the Mekong Basin	2.1.1 Accepted Plan setting report	2.1.1 Workshop proceedings
	a) Revise sub-area guideline b) Support analysis on update sub-area conditions, development opportunities, potential & constraints	a) Annex to the draft Plan setting report
	c) Update sub-area studies	b) Annex to the draft Plan setting report

Output (as objective of each Activity) Activity Description	Verifiable Indicator for output Verifiable Indicator for each Activity Description of Tasks within each Activity	Means of Verification
2.1.2 Concretize large scale development options, opportunities, constraints and analyse costs, benefits and impacts	d) Analysis sector reviews and coordinate with NMCS and MRC programmes for updated specific sector strategies and development opportunities e) Update selected sector by the BDP and other programmes f) Workshop on shared visions of the water resources development of the Mekong Basin g) Prepare & circulate plan setting report h) Finalise report based on comments 2.1.2. Scenarios and development options analysed a) Establish working group b) Prepare & circulate discussion paper Revise discussion paper based on comments c) Workshop on consolidation of scenario formulation and assessment d) Regional scenario formulation e) Mobilise international and regional experts to review scenario formulation f) Prepare and collect data as necessary g) Analyse the impacts i Hydrologic i Environment i Social i Economic h) Prepare & circulate draft working paper i) Revise scenarios assessment based on comments j) Mobilise international and regional experts to review scenario assessment	c) Annex to the draft Plan setting report d) Annex to the draft Plan setting report e) Workshop proceedings f) Draft Plan setting report g) Final Plan setting report 2.1.2 Report of scenario formulation and analysis a) Regional Working group on development scenarios established b) Discussion paper on scenario formulation and assessment c) Workshop proceedings d) Work plan on scenario formulation e) Work plan on scenario analysis: > Work plan on hydrological impact assessment > Work plan on Environmental impact assessment > Work plan on economic impact assessment T) Draft & Final report on scenario formulation and assessment g) Review report from international and regional experts
2.2 IWRM-based basin strategy	Strategy agreed between the four member countries and supported by development partners and civil society	MRC JC/Council decisions, minutes of stakeholder consultations

Output (as objective of each Activity) Activity Description	Verifiable Indicator for output Verifiable Indicator for each Activity Description of Tasks within each Activity	Means of Verification
2.2.1 Formulate detailed IWRM strategies for cross- sectoral, balanced developments and consolidate into a comprehensive IWRM Strategy for the LMB	2.2.1 An update IWRM Strategy for the LMB • Preparation:	2.2.1 IWRM-based basin strategy, minutes of MRC JCC/Council
	 ➤ TOR for working group ➤ Agree on TOR with NMCs ➤ Identify facilitator of working group ➤ Establish working group • Prepare concept note: ➤ Assess IWRM achievements and processes in MRC and member countries ➤ Concept of IWRM-based basin strategy ➤ Conduct workshop to discuss concept note and a roadmap for the working group 	a) TOR for working group b) Concept of IWRM-based basin strategy
	 Finalise concept of IWRM-based basin strategy Prepare IWRM implementation strategy: Update the strategic directions for IWRM Review by working group Finalisation of the strategy for the implementation of IWRM in the LMB Implementation of stakeholder dialogue Review and approval by JC 	c) Approved strategy for the implementation of IWRM in the LMB
	 Prepare basin development strategy Analyse all relevant information, including the outcomes of the assessed development scenarios Conduct workshops with working group to prepare a 1st draft of the basin development strategy (if useful, include strategic options) Implement a stakeholder dialogue With support from the working group, prepare the 2nd draft for consideration of Prime Minister office Prepare the 3rd draft and conduct a stakeholder dialogue Review and approval by JC 	d) Approved strategy for the development of the Mekong Basin
	 Prepare IWRM-based basin strategy Integrate the strategies for the implementation of IWRM, the development of the basin, and the management of the basin Review and improvement by working group Implement stakeholder dialogue Review by Governments 	e) Approved IWRM-based basin strategy
2.3 Programmes and projects proposed by national and sub-regional level institutions and stakeholders assessed	All significant national programmes and projects submitted	Project database

Output (as objective of each Activity) Activity Description	Verifiable Indicator for output Verifiable Indicator for each Activity Description of Tasks within each Activity	Means of Verification
2.3.1 Continue needs assessments based on national development plans, multi-sector requirements, sub-regional preferences and stakeholder proposals	2.3.1 Updated needs assessments /quality and quantity	2.3.1 Report on present and future needs
	a)Review PIN format for collection of information on projects b)Review and add missing information in BDP1 project database c)Identify projects from SA and sector reviews	a)Updated PIN format, list of projects identified
2.3.2 Identify and assess combinations of basin scale development potentials/constraints and options and prepare cost/benefit estimates and impact analyses in cooperation with proposers/owners	2.3.2 Update BDP1 project database (longlist) with new classification criteria and missing information of projects in collaboration with proposers/owners a)Review structure of existing long and short list and update into Project database	2.3.2 Project summaries
	b)Develop and agree on the list of criteria (Programme document page 57) c)Assess, together with proposer/owners (including of projects in BDP1) d)Prepare list of potential, analysed projects with transboundary relevance and discuss with stakeholders	b)Upgraded planning process as the guideline (list of criteria), list of potential prioritised projects, and work plan on projects categorisation and classification
2.4 Portfolio of programmes and projects developed, prioritised and promoted	Portfolio of prioritised projects maintained	Updated Project portfolio available and accessible
2.4.1 Review BDP Project Screening and Ranking Process	2.4.1 Revise BDP ranking process and criteria	2.4.1 Inspection of document
	a)Review BDP1 prioritisation process and screening criteria b)Review and update BDP1 short-list c)Prepare guideline on project portfolio	a) Working paper b) Working paper and presentation c) Guidance note
2.4.2 Include identified basin relevant programmes and projects in BDP Planned project database	1.4.2 Planned project database populated	1.4.2 BDP database, reports
	a) To combine planned projects in the Project database into the Planned project database for further screening and prioritisation for inclusion in the Project portfolio.	a) Reports
2.4.3 Rank joint projects and national projects with potential trans-boundary effects according to agreed criteria and present to Joint Committee for prioritisation	2.4.3 Project portfolio developed and approved by JC to be part of the IWRM-based BDP	2.4.2 JC decision, reports
	a)Generate initial Project portfolio in 2008 b)Final Project portfolio 2010 c)Update beyond 2010	Reports, MRC/BDP database

Output (as objective of each Activity) Activity Description	Verifiable Indicator for output Verifiable Indicator for each Activity Description of Tasks within each Activity	Means of Verification
2.4.4 Support promotion of portfolio of programmes and projects with Member States	2.4.4 Project advocacy supported by PIN into national planning and line agencies through the various MRC levels	1.4.4 Minutes of meetings and written correspondence
	a) To promote the investment potential within the BDP to potential investors	a) Promotion material disseminated effectively to potential investors
2.5 Basin scale rolling IWRM based plan including facilities for periodic revision prepared in a participatory manner	Approval by countries and acceptance of stakeholders of the IWRM-based BDP	MRC JC/Council decisions, minutes of meetings
2.5.1 Combine detailed IWRM strategies, development scenarios and project portfolios into a rolling IWRM based BDP intended for periodic revisions	2.5.1 Comprehensive IWRM based BDP	1.5.2 Planning document
	a) To set out a first draft of the BDP and prepare related presentation materials b) To review the draft BDP amongst a wide range of stakeholders, and identify	a) Draft BDP and related presentation materials b) Workshop proceedings
	areas of improvement c) To complete and make ready for publication the final version of the BDP and its accompanying documentation d) To review the draft Plan amongst a wide range of stakeholders, and determine	c) Requisite sets of printed documents, CD versions and formats appropriate to place on MRC website d) Workshop proceedings
	the basis for finalising it e) To finalise the rolling plan based on the outcomes from stakeholder feedback gained in Task 2.5.1d. and prepare final printed and soft copy products for publication	e) Final printed and soft copy products for publication
2.6 Lessons learned from implemented projects and programmes collected and analysed	Socio-economic and environment trends	Socio-economic statistics and surveys and environmental monitoring results
2.6.1 Gather lessons learned from impacts of programmes and projects facilitated by the Mekong Programme	2.6.1 Collection of evaluation reports and field investigation (if required)	1.6.1 Data and evaluation reports
	a) To identify transboundary projects from which useful lessons can be learnt	a) List of suitable projects with existing reports for each collected
	b) To establish the lessons that can be drawn from past transboundary activities to help shape future planning	b) Working paper
3.1 Knowledge base updated and operational	GIS databases and tools ready for use complete with manuals and guides	Manual and guides

Output (as objective of each Activity) Activity Description	Verifiable Indicator for output Verifiable Indicator for each Activity Description of Tasks within each Activity	Means of Verification
3.1.1 Upgrade MRCS and NMCs' knowledge and information bases from BDP1	3.1.1 Recent data included in information base	3.1.1 Inspection of information base
	a) Review of existing data and information available at MRC Programmes and consolidate	a) Working papers
	 Social data held for the LMB to in a consistent manner at a disaggregated level appropriate to BDP requirements Irrigation data held for the LMB in a consistent manner at a disaggregated level appropriate to BDP requirements Significance of groundwater within the current BDP2 planning exercise and, if required, establish the necessary minimum database Review the available information on water quality within MRCS and determine whether there is a need for further data collection for BDP2 purposes 	 Established database and catalogue and published social atlas with commentary, including poverty and vulnerability mapping Established database and catalogue and published irrigation atlas with commentary Working paper and, if required, database Guidance note on additional data requirements
	b) Bring together within IKMP all data holdings in MRCS relevant to basin planning	b) Updated IKMP database and data catalogue
3.1.2 Planning Atlas	3.1.2 High quality printed and published planning atlas, also on CD	3.1.2 Reports, MRC website and library
	 a) Prepare concept note on Planning atlas b) Consultation and agreement with countries, MRC programmes c) Draft Planning atlas 2008 d) Final Planning atlas 2010 	a)Concept note b) Minutes of meetings
3.1.3 State of Basin Report	3.1.3 State of Basin Report approved and published a) Concept note in collaboration with EP b)Support MRC Taskforce to prepare the SoB and consultation c)Print and publish	3.1.3 Updated State of the Basin Report, hard and soft copies
3.2 Upgraded assessment tools	Guidelines for the use of tools	Assessment reports, feedbacks of users
3.2.1 Upgrade assessment tools and modelling procedures for use in all BDP Units	3.1.4 Assessment tools available and modelling procedures formulated	3.1.4 Manuals and software
	a) To review established IBFM processes and determine application within BDP b) To review the condition of the DSF and its appropriateness for basin level planning portfolio assessment c) To review the status of the RAM, determine its current fitness for purpose and implement required improvements	a) Draft guideline on application of IBFM within BDP b) Draft guideline on application of DSF within BDP c) Draft guideline on application of RAM, terms of reference for upgrade and upgraded model

Output (as objective of each Activity) Activity Description	Verifiable Indicator for output Verifiable Indicator for each Activity Description of Tasks within each Activity	Means of Verification
	d) To promote understanding of and confidence in the main analytical processes to be used in BDP2	d) Presentation materials on IBFM, DSF and RAM and workshop proceedings
3.2.2 International quality assurance of assessment tools and modelling procedures	3.1.4 Peer review panel appointed	3.1.4 Peer review report
	a) To ensure that quality assurance procedures are in place and are being followed b) To update draft Guideline in response to peer review of quality assurance procedures	a) Audit report b) Guideline on use of knowledge base
	c) To update draft Guideline in response to peer review of quality assurance procedures	c) Updated guideline on application of RAM, terms of reference for upgrade and upgraded model
4.1 Upgraded planning guides prepared and agreed	4.1 Upgraded planning guides prepared and agreed Guidelines available	
4.1.1 Upgrade BDP planning guides	 4.1.1 Updated Guidelines a) TOR for the assessment and undertake the assessment b) Production of a suite of guidelines to support BDP2 process 	4.1.1 BDP database, reports a)TOR, report and workshop proceedings b) Guidelines updated
4.2 Staff at MRCS and NMC levels skilled in scenario- based planning and in the use of assessment tools	Training in use of assessment tools conducted	Report of training courses with sex-disaggregated data
4.2.1 Senior professional capacity with internationally recognised expertise in modelling within the MRCS	4.2.1 Identify MRCS modelling staff to participate in the core group of resources on models and tools	
4.2.2 Train relevant staff at MRCS, NMC and line agencies levels in scenario-based planning and tools application	4.2.2 Training material available and training course delivered	4.2.2 Training reports
	a) Review MRC existing training materials on different assessment tools	
	b) Together with IKMP and EP, engage training experts to design the course and deliver training	
4.3 Knowledge based decision support capacity enhanced at MRCS and NMC levels	Knowledge base and tools applied during assessments and planning	Assessment reports
4.3.1 Relevant staff at MRCS and NMC levels select and apply information and tools on a routine basis	4.3.1Impact studies firmly grounded on knowledge and modelling skills	2.3.1 Inspection of study reports
	 a) To underpin the engagement of NMC staff in the planning process as active participants b) To promote sustainability of analytical processes beyond the BDP2 c) To promote better understanding of the planning and assessment procedures and 	a) Guideline b) Concerned staff relocated c) A culture of mentoring team members embedded

Output (as objective of each Activity) Activity Description	Verifiable Indicator for output Verifiable Indicator for each Activity Description of Tasks within each Activity	Means of Verification
	d) To ensure that NMC staff have access to the same planning information as the MRCS-based team c) To deliver the training on IWRM together with MDBC	d) Monthly updates of information transferred to NMCs c)Report of training courses
4.4 IWRM planning principles and approaches internalised at MRCS and NMC levels	Plans and reports has IWRM as strategic basis Training modules developed and training courses conducted with women participation	Plans and training reports
4.4.1 Carry out BDP capacity and training needs assessment	4.4.1 Carry out TNA in each country and submit reports	4.4.1 TNA Reports
4.4.2 Identify training institutions	4.4.2 Training institutions identified in 4 countries and MOU signed to deliver trainings at national and local levels	4.4.2 TNA, MOU
4.4.3 Training of trainers	4.4.3 Trainers available and trained to serve BDP a)Work with training institutions to select trainers b)Design course for TOT and deliver trainings	4.4.3 List of trainers b)TOT materials
4.4.4 Deliver training courses in countries and to local levels	 4.4.4 National and local trainings provided and reports prepared a) Organize national and local trainings b) Prepare regular reports to be incorporated in Programme progress reports 	4.4.4 Training reports
4.4.5 Assess training impacts	 44.5 Assessment report accepted by countries and MRC for follow up a) TOR b) Carry out assessment c) Discuss results and finalise reports 	4.4.5 Report
4.5 Capacity built within the MRCS to assess value of water and sharing of benefits and costs	Training of staff in valuations and sharing principles	Training sessions
4.5.1 Upgrade modelling skills and staff capabilities to valuate water in different uses	4.5.1 Water valuated in its different uses and scenarios	4.5.1 Valuation reports
	a) To reach a consensus on the relevant roles of different models in evaluating water uses and where the focus of attention should lie b) To identify training requirements under BDP and set out a programme and work plan for these c) To deliver the training programme established under Task 3.3.1b	a) Working paper b) Training needs assessment report and BDP training plan(4.4.1) c) Training modules and related documentation, monitoring and assessment reports and final assessment report
4.6 Capacity built within BDP to assist the MRC and the Mekong Programme in trade-off facilitation and mediation	Training of staff in principles of trade-off facilitation	Training sessions

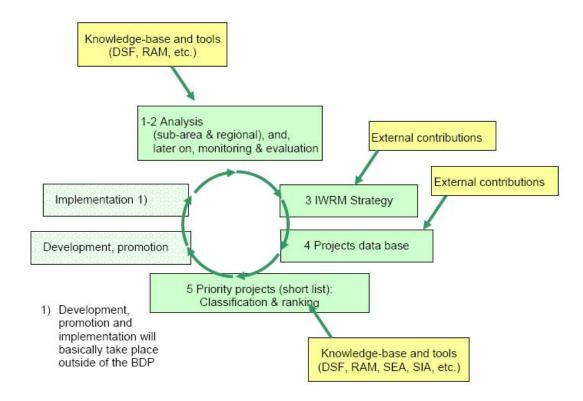
Output (as objective of each Activity) Activity Description	Verifiable Indicator for output Verifiable Indicator for each Activity Description of Tasks within each Activity	Means of Verification	
4.6.1 Assess skills requirements	likely to be needed and to draw upon lessons learnt from other MRC programmes	4.6.1 Training material a) Working paper b) TNA (with 3.2.1)	
4.6.2 Train staff in principles of trade-off facilitation	4.6.2 Staff trained a) To deliver the training programme established under Activity 3.4.1b	4.6.2 Training reports a) Training modules and related documentation, monitoring and assessment reports and final assessment report	

Appendix C: BDP2 outputs requiring approval

BDP Ref.	Objective/Outputs	Outputs milestones	Format	Manager of output production	Required approval		Timeframe
21021				Production	JC	Council	
C1	Programme management	and Communication					
1.2	BDP2 well managed	Inception Report	Printed and published	Programme Coordinator	X		January 2008
		Mid-term report	Printed and published	Programme Coordinator	X		August 2009
		Completion report	Printed and published	Programme Coordinator	X	X	December 2010
C2	IWRM-based BDP						
2.1	Basin-wide Development Scenarios	Discussion note on formulation and assessment of basin-wide development scenarios	Working paper	Modelling Specialist	X		April 2008
		Updated Sub-area reports	Printed and published	CTA	X		Mid 2009
		Scenario formulation and assessment report with strategic options for decision making	Printed and published	Modelling Specialist	X	X	2 nd half of 2009
		External peer review reports	Printed and published	Modelling Specialist	X		
2.2	IWRM-based basin strategy	Detailed outline of the IWRM-based basin strategy	Working paper	CTA	X		May 2008
		1 st draft IWRM-based basin strategy	Draft report	CTA	X		End 2008
		2 nd draft IWRM-based basin strategy	Draft report	CTA	X		1st half 2009
		3 rd draft IWRM-based basin strategy	Draft report	CTA	X		3 rd quarter 2009
		Final draft IWRM-based basin strategy	Printed and published	CTA	X	X	End 2009
2.4	Project portfolio	Updated criteria for assessment, screening and prioritising projects (as part of Assessment framework)	Working paper	Sr. Advisor on River management	X		Mid 2008
		2008 Project portfolio	Printed report	Sr. Advisor on River management	X		End 2008
		2009 Project portfolio	Printed report	Sr. Advisor on River management	X		End 2009
		2010 Project portfolio	Printed report	Sr. Advisor on River management	X		3 rd quarter 2010
2.5	IWRM-based BDP	Outline of the IWRM-based BDP	Draft report	CTA			
		Indicative IWRM-based BDP 2009	Printed and published Plan document	CTA	X	X	
		Final IWRM-based BDP 2010	Printed and published Plan document	CTA	X	X	
C3	Knowledge base and asses	ssment tools	•	•	•		•
3.1	Planning atlas	Draft Planning atlas 2008	Electronic (CD, website)	GIS/Database Specialist	X		

BDP Ref.	Objective/Outputs	Outputs milestones	Format	Manager of output production		quired proval	Timeframe
					JC	Council	
		Planning atlas 2010	Printed and published	GIS/Database Specialist	X		
	State of Basin Report	State of Basin Report	Printed and published	CTA	X	X	Mid 2009
3.2	Upgraded assessment tools for planning	BDP Assessment framework	Printed and published	Environmental specialist	X		
		Report of peer and international review of the upgraded tools	Printed and published	Environmental specialist	X		
C4	IWRM based planning capacity building						
4.1	Updated Planning Guide	Printed report	Printed and published report	CTA	X		
4.4	IWRM planning capacity	Training impact assessment	Printed report	Economist	X		

Appendix D: BDP1 Planning Cycle



Appendix E: Terms of Reference for Regional Technical Working Group on IWRM-based basin strategy and development scenarios (Revised, 12 February 2008)

1. Justification

The preparation of an IWRM-based basin strategy that will guide the development of the Lower Mekong Basin (LMB) is one of the main activities in BDP Phase 2. This basin strategy will be informed by the assessment of basin-wide development scenarios and the large knowledge base that has been build during the last several years.

The IWRM-based basin strategy will provide the approach that most appropriately steers the development and management of the water and related resources in the LMB towards fulfilling high-level development objectives and policy principles and statements, such as provided in the 1995 Agreement, the MRC Strategic Plan 2006-2010, and national policy documents adopted by the member countries. The completed and approved strategy document will replace the current strategic directions for IWRM in the LMB.

It is essential that the process for the formulation and assessment of development scenarios and preparation of the IWRM-based strategy will be driven by the interest and priorities of the member countries and their people. To ensure a meaningful participation of key stakeholders from the four member countries in this process, and to promote consensus and acceptance of the outcomes in the member countries, it is proposed to establish a regional working group that will assist the BDP team in the formulation and assessment of basin-wide development scenarios and the preparation of an IWRM-based basin strategy.

2. Background

The BDP Phase 2 will build on the processes and results of Phase 1 to produce an IWRM-based Basin Development Plan. The Plan comprises three elements that will be prepared with support from the NMCs, national line agencies, local agencies and other MRC programmes. Given the people's high reliance on the river's natural system, the planning process requires a strong partnership of the basin's stakeholders. The three elements of the plan can be summarised as follows:

- Development Scenarios, which assess the potential and constraints for the further development of some of the water resources in the various parts of the Mekong Basin. The results will guide the formulation of the IWRM-based Basin Strategy and the Project Portfolio.
- An IWRM-based basin Strategy, which provides a long-term view of how the Lower Mekong Basin (LMB) may be developed in a sustainable manner for poverty reduction. The strategy will also guide the implementation of the IWRM process at the basin, national and sub-basin levels, and assist the line agencies in the preparation of plans and projects that are sensitive to the resource protection issues.
- A Project Portfolio of water resources development projects and supporting nonstructural projects that would continue to develop some of the LMB's water and related resources, and minimise harmful effects that might result from natural occurrences and man-made activities, as envisioned in the 1995 Mekong Agreement.

3. Concept of development scenarios

Current water resources development of the Mekong Basin is still limited compared to almost all large river basins in the world. Governments of the Riparian countries increasingly recognise that developing some of the economic potential of the Mekong River system in a sustainable way – for domestic use, for fisheries, for hydropower, for navigation, for irrigation, and for flood management - can alleviate poverty and improve livelihoods. Given the people's high reliance on the river's natural system, such development must be undertaken with equal consideration to conserve the basin's rich riverine ecology and the large fresh water fisheries.

Under the BDP Programme, a few development scenarios will be formulated for the entire basin, which represent different levels of water and related resources development in the LMB during the next two decades. The basin-wide development scenarios will be based on several factors, including 1) future hydrological conditions, 2) future water demands, and 3) interventions assumed to be in place. The assessment of the formulated development scenarios will demonstrate how the water resource regime would be altered from what it is today, and what are the positive and negative economic, environmental and social implications. The results will inform the formulation of a strategy for basin development, which is one of the elements of the IWRM-based basin strategy (see below).

4. Concept of the IWRM-based basin strategy and its linkage with development scenarios

The IWRM-based basin strategy will comprise four key elements, as described below.

1) Shared vision, goals, objectives and guiding principles for sustainable development of the LMB

This will build on the existing Strategic Directions for IWRM in the LMB (approved by the Council in 2005), the MRC Strategic Plan 2006-2010, and national policies, plans, interests and priorities. The shared vision, goals, objectives and guiding principles amongst the member states will guide the formulation and assessment of basin-wide development scenarios and the subsequent consensus building process to arrive at the optimal strategic development options for the countries, and the Mekong Basin itself, in terms of economic, environmental, and social outcomes. The optimal options will drive the basin development strategy. The shared vision, goals and objectives will also provide guidance to the formulation of the basin management strategy.

2) A basin development strategy that provides clear directions and a planning framework for sustainable development of the LMB

This strategy must built upon a clear understanding of the basin's dynamics and the hydrologic, economic, environmental and social impacts that large-scale structural projects impose on these dynamics. The current understanding will be further improved by the formulation and assessment of basin-wide development scenarios. These scenarios will assess the economic, environmental and social benefits and costs to the member countries of various levels of water resources development in the LMB during the next few decades (see above).

The resulting strategic options for meeting the water needs of all sectors, and those of the Mekong Basin itself, will be subjected to basin-wide discussions with the various interest groups in the LMB. Ultimately, senior government officials of the member countries must make choices and reach a consensus on the options that most likely will achieve an optimal balance between economic, environmental, and social outcomes in the LMB. The achieved consensus or vision among the member countries on how the basin will be developed will be elaborated in clear directions for basin development and a planning and cooperation framework for the design of national and transboundary project portfolios.

3) A basin management strategy that guides the implementation of IWRM in the LMB

The basin management strategy will build on the existing Strategic Directions for IWRM in the Lower Mekong Basin (approved by the Council in 2005), the MRC Strategic Plan 2006-2010, and the ongoing IWRM processes in the member countries. The strategy is about governance. Its focus is on how to achieve linkages between the basin, national and sub-basin levels and get management structures working better. The strategy will provide clear directions and a management and cooperation framework that will usefully guide the implementation of IWRM principles and practices at the basin, national and sub-basin levels. The working group will help ensure that the basin management strategy is complementary to the national policies and strategies.

The basin management strategy will also provide guidance to the harmonization of systems, methods, procedures, standards and tools for the monitoring, planning, development and managing water resources throughout the LMB. This would create additional building blocks for transboundary water management and the goodwill among the the MRC, line agencies, and other government agencies to work together. The four countries will then be in an excellent position to scale up transboundary initiatives, since their own management programs and capabilities will be roughly on par with one another.

4) Roles and responsibilities of different stakeholders in the implementation of the IWRM-based basin strategy

This will describe the roles and responsibilities for the implementation of the IWRM-based basin strategy among the various stakeholders, including the MRC, the member countries, the development partners, and the dialogue partners. It will also describe the monitoring and reporting system that needs to be put in place to monitor progress in the implementation of the strategy and the achievements of its objectives.

It is anticipated that the IWRM-based basin strategy will provide information that will usefully support: 1) the implementation of certain articles of the 1995 Agreement, 2) the preparation of the MRC Strategic Plan 2011-2015, 3) the update of national socio-economic and sector plans, 4) the preparation of national and sub-basin IWRM strategies (or framework plans), and 5) the design and implementation of the project portfolio of the rolling IWRM-based Basin Development Plan.

5. Objective of establishing the regional technical working group

The objectives in establishing the Regional technical working group are:

• To support BDP2 in formulation and assessment of basin-wide development scenarios and the preparation of the IWRM-based basin strategy.

• To strengthen the role of key stakeholders in the IWRM-based BDP formulation process.

6. Functions of the regional technical working group

The functions of the working group include.

- To motivate the process of development scenarios in river basin planning and scope and assessment in BDP context.
- If needed, to facilitate and support the collection of additional data and information for the formulation and assessment of development scenarios and the formulation of certain aspects of the IWRM-based Basin Strategy.
- If necessary and appropriate, to advise the BDP Programme on national policies, legislation, strategies, plans, programmes, and processes related to the water and related resources, with a view to providing inputs to the formulation and assessment of development scenarios and the preparation of the IWRM-based basin strategy.
- To review and comment on data and information, prepared by the BDP team regarding the formulation and assessment of development scenarios and drafts of the IWRM-based basin strategy
- To discuss and agree on the updated shared vision, goals and objectives for sustainable development in the LMB, which will define the criteria to assess and select the development scenarios and strategies.
- To represent in these meetings the views and interests of each of the member countries, and ensure compatibility between the basin strategy on the one hand and the existing and planned national strategies on the other.
- To assist in building a common understanding on results of the development scenarios formulation and assessment and subsequent versions of the IWRM-based Basin Strategy among regional, national and local stakeholders.
- To support and provide inputs, as required, for appraisal and endorsement/approval of the JC and the Council of the interim and final results of the development scenarios and the IWRM-based basin Strategy.
- To recommend required training and capacity building in each member countries for the formulation and assessment of development scenarios and the preparation of the IWRM-based basin strategy.

7. Members of the regional technical working group

Since this is a regional working group with a broad agenda and participants from four countries and from MRC programmes, the risk exists that the membership becomes too large. It is proposed to limit the membership to 30-35 members.

It is suggested that the regional working group will be composed of maximum seven members from each member country, as follows.

- 1. A representative of the NMC.
- 2. A senior staff of the national agency responsible for planning and investment.

- 3. A senior staff of the national water resources agency/committee (apex organisation) responsible for the regulation of water resources and the implementation of IWRM.
- 4. A senior staff of a line agency with responsibilities for agriculture or hydropower that has good and comprehensive planning skills in the water sector. Alternatively, this member could come from a water research institute that supports line agencies and/or other government agencies in long-term planning.
- 5. A senior staff of the line agency for environment that is familiar with the management of wetlands and other aquatic resources, as well as with significant point sources of pollution, such as mines.
- 6. A senior member of a progressive river basin organisation responsible for the management of water resources.
- 7. An influential member of academia or civil society that takes an interest in water resources development and poverty reduction and has experience in scenario-based planning. This member could come also from a water research institute that supports line agencies in long-term investment planning.

The members will be nominated by the NMCs. To the extent possible, the members will be maintained as permanent members of the TWG.

Other members

Other members will include the following:

- 1) Senior staff of MRC programmes, in particular FMMP, NAP, FP, EP, which will provide inputs, as specified in the BDP Inception Report.
- 2) BDP Programme staff (Coordinator, CTA, others).

Facilitator of the working group

A Facilitator of the working group will be nominated by the BDP Steering Committee. The Facilitator will advise the BDP Regional Coordinator in setting the agenda and roadmap for the working group. Supported by the BDP Programme, the Facilitator will facilitate meetings and coordinate follow-up actions among the working group members. The Facilitator will also provide inputs, as required, to support the review and approval of interim results of the working group by the JC.

8. Expected Qualifications of the working group members

Since the IWRM-based strategy would have important implications for national development policies and plans, the working group members must comprise of influential policy makers and experts that have the confidence of senior government officials. The individual members of each country needs to bring in complementary experiences and skills, including policy development, investment planning, sector planning, water resources management, and scenario development. At least one member of each country team should have good knowledge and experience in water resources modelling.

9. Meetings of the regional technical working group

Schedule of meetings and participation

Schedule for meetings of the Working Group will be determined by the BDP Phase 2 schedule in formulation and evaluation of the development scenarios and in preparation of the IWRM-based basin strategy. An indicative schedule of the Working Group is provided in section 7 below. It is anticipated that the Working Group will convene at least quarterly, starting in the beginning of 2008 for workshops and meetings.

Not all members will have to participate in each workshop or meeting. Depending on the agenda, the BDP Regional Coordinator, in consultation with the NMCs, will propose the attendance to the Facilitator of the Working group for his/her decision.

For some workshops and meetings, the Working Group may be enlarged to include technical specialists on an as needed basis and at the discretion of the BDP Coordinator. If needed, subworking groups may be established to perform activities specified in the minutes of meetings of the Working Group.

Facilitation and administrative support

The BDP Regional team will be responsible to provide facilitation and administrative support to the operations of the Working Group. These include preparation of draft work schedule for the Working Group, agenda and background documents for meeting and taking notes of discussions. The National BDP teams will support the Regional team in coordinating follow up actions by the members of the Working group.

10. Indicative work plan of the regional technical working group

The regional working group would be established in the beginning of 2008. The revised inception report of BDP Phase 2 calls for the basin-wide development scenarios which are assessed in terms of economic, environmental and social impacts in the first half of 2009. It is envisioned that by mid 2010, senior government officials from the member countries will reach a consensus on the preferred development scenario.

The revised inception report of BDP Phase 2 also calls for a first draft of the IWRM-based basin strategy in September 2008, which will be subjected to discussions with the various stakeholder groups in the LMB. In 2009, when the assessments of new development scenarios are available, a second draft the strategy will be prepared for the consideration of the JC/Council.

A detailed schedule of the BDP Programme activities related to the development scenarios and the IWRM-based basin strategy is attached to the TOR.

11. Modification and dissolution of the working group

These Terms of References may be modified by the BDP Regional Coordinator, in consultation with the Facilitator and members and the NMCs.

The working group will be dissolved by the decision of the BDP Steering Committee. The Facilitator will propose this dissolution in consultation with members and the NMCs.

12. Financial arrangement

The BDP Programme will cover the costs of workshops and meetings, including travel and per diem.

Appendix F: Summary of inputs from MRC Programmes to BDP2 and Needs for BDP2 contributions

BDP Phase 2 output	EP	IKMP	FMMP	FP	NAV	AIFP, WSMP	HP
2.1 Basin-wide Development scenarios	Will formulate and assess climate change scenarios. Will lead the economic, environmental and social assessment of basin-wide development scenarios through the application of the IBFM process. BDP will provide technical coordination and international and riparian economists	Will provide data and staff for the formulation and assessment of development scenarios with the DSF	Will support the formulation and assessment of development scenarios Will estimate the cost to the four countries of recent flood events	Will support the assessment of development scenarios Will estimate the economic value of the fresh water fishery in the different parts of the Mekong Basin Will estimate the reduction of the economic value of the fresh water fishery due to: 1) flow changes and 2) cut-off of fish migration routes by mainstream dams	Will support the assessment of development scenarios	Will support the assessment of development scenarios BDP will assess the irrigation potential in the LMB and prepare a 10-15 year irrigation programme for each of the four countries WSMP will assemble available information regarding land use changes and their likely implications for the run-off from watersheds	Will support the assessment of development scenarios BDP will make a cursory assessment of the feasibility of likely preparation and implementation schedule of the planned and considered hydropower projects in the LMB
Cross activities	EP 3.1 to 3.4; 6.1; 6.2	IKMP 2.3; 3.2	FMMP 2.1; 3.1	FP 2.1 to 2.4; 3.3	NAV 1.1	AIFP 2.1.2	
2.2 IWRM- based basin strategy	Will review subsequent versions of the strategy		Will review subsequent versions of the strategy	Will review subsequent versions of the strategy	Will review subsequent versions of the strategy	Will review subsequent versions of the strategy	Will review subsequent versions of the strategy
Cross activities	EP 3.4.1	IKMP 3.1; 3.2; 5.1 to 5.4	FMMP 2.1; 2.2; 3.1; 3.2	FP 2.2 to 2.4; 3.3	NAV 1.1; 2.1	AIFP 1.1	
2.3 Project database		Will integrate BDP's updated project and hydropower databases in the	Will provide PINs of identified projects with significant transboundary	Will provide PINs of identified projects with significant transboundary	Will provide PINs of identified projects with significant transboundary implications	BDP will prepare PINs of identified projects with significant transboundary	Will review the MRC/BDP hydropower database and provide technical backstopping for its

BDP Phase 2 output	EP	IKMP	FMMP	FP	NAV	AIFP, WSMP	НР
		IKMP knowledge system. Will implement MRC procedures for data and information sharing and management	implications	implications		implications	improvement
Cross activities	EP 3.2	IKMP 3.1; 3.2; 5.1 to 5.4	FMMP 1.7; 2.1; 2.2; 3.1; 3.2; 4.1	FP 3.1; 3.5	NAV 2.2	AIFP 1.2	
2.4 Project portfolio	Will jointly with BDP utilise its assessment tools to predict the transboundary impacts of selected development projects		Will provide pre- feasibility level assessments for priority projects with significant transboundary implications	Will prioritise and document projects	Will provide pre- feasibility level assessments for priority projects with significant transboundary implications	WSMP will provide PINs of significant identified watershed management projects that can be linked to and benefit from hydropower and other developments BDP will select and document priority irrigation projects	Support the selection and documentation of projects
Cross activities	EP 3.1; 3.2		FMMP 2.1; 2.2; 3.1; 3.2; 4.1	FP 3.1; 3.5	NAV 2.2	AIFP 1.2	
3.1 Knowledge base	The studies will inform the compilation of SoB report and planning atlas thematic mapping	Will review data and information holdings in collaboration with BDP. Will review data and information holdings in collaboration with BDP. Will support the		The studies will inform the compilation of SoB report	The studies will inform the compilation of SoB report	Knowledge base on Watershed Management will contribute to BDP knowledge base.	

BDP Phase 2	EP	IKMP	FMMP	FP	NAV	AIFP, WSMP	HP
output						, , , , , , , , , , , , , , , , , , ,	
		preparation of the report					
		Updating and collecting new dataset will inform the preparation of planning atlas					
Cross activities	EP 2.3; 4.1 to 4.3; 4.5	IKMP 2.3; 3.1 to 3.4; 4.5; 5.4		FP 2.1	NAV4	AIFP 1.1	
3.2 Assessment tools	Will improve the IBFM process and its integration with the DSF Will take the lead in consolidating the existing MRC/BDP/EP project screening checklists into a project assessment tool box	Will maintain and further improve the DSF in consultation with BDP and other programmes					
Cross activities	EP 3.1; 3.4; 4.4; 6.1	IKMP 4.1					
4.1 Updated Planning Guide			Will provide a guide for the planning of flood mitigation and management measures				
4.4 IWRM planning capacity	BDP will utilise EP's training experience and material on assessment tools.	Will continue to provide hands-on training on the DSF, including the use of DSF for case studies				WSMP will provide training on the use of its Resource Kit in BDP Sub-areas	

BDP Phase 2	EP	IKMP	FMMP	FP	NAV	AIFP, WSMP	HP
output							
		in the BDP Sub-areas					

Appendix G: Revised budget

1. Budget allocation (Total)

	Quantity	Rate	Amount	Programme doc	Defference
Staff Costs			4,841,934	5,271,000	-429,066
MRCS/BDP Programme staff	448.0		1,966,775		
BDP NMC staff	528.0		701,159		
MRC Programme inputs	34.0		374,000		
Short term international consultants	72.0		1,800,000		
Official travels			365,000	320,000	45,000
National	400	200	80,000		
Regional	600	300	180,000		
International	35	3,000	105,000		
Workshops			1,848,000	1,536,000	312,000
Coordination	20	15,000	300,000		
Sub-area	126	3,000	378,000		
National	106	5,000	530,000		
Regional	32	20,000	640,000		
Training			680,000	640,000	40,000
In-country training	48	10,000	480,000		
Training at MRCS/ external institute	10	20,000	200,000		
Equipment			300,000	300,000	0
Expendable			100,000		
Non-expendable			200,000		
Publications			350,000	350,000	0
Publication, media			150,000		
Miscellaneous			200,000		
Sub - contracts			500,000	450,000	50,000
Sub-total 1			8,884,934	8,867,000	17,934
Contingency @ App 2%			160,111	178,045	
Sub-total 2			9,045,045	9,045,045	0
MRC Ssecretariat support @ 11.0%			994,955	994,955	
Total donor support			10,040,000	10,040,000	0
National contribution in kind @ 10.0%			1,004,000	1,004,000	
Grand Total			11,044,000	11,044,000	0

Note 1 Sub-contracts

Sub-contracts for national/regional consultants or MRC programmes for data collection/ analysis, translation services etc

Note 2 Change from Programme document

- 1. Staff work/month is more rearistically estimated
- 2. Many tasks by short term international consultant will be done by MRC programmes and BDP team
- 3. Significant increase of regional workshop is in regional working group on scenario and the strategy. They are anticipated the higher cost for stakeholder consultation.
- 4. Increase in sub-contract to allow engagement of national training institutions

1-1 Breakdown of Staff Cost

	Months	Rate	Amount*
MRC/BDP Programme Staff	448.0		1,966,775
Programme Coordinator	48.0	5,000	235,337
Chief Technical Advisor	44.0	15,000	639,510
Senior Advisor on Rivver Management	48.0	0	0
Economist/Planner	36.0	5,000	182,074
Nat Res Planner/Environmentalist	47.0	5,000	221,119
Socio-Economist	47.0	5,000	216,602
Modelling Specialist	44.0	5,000	202,328
GIS & Data Management Specialist	40.0	5,000	187,837
Administrative Officer	46.0	1,000	42,779
Secretary	48.0	1,000	39,189
BDP NMC staff	528.0		701,159
BDP coordinator	192.0	1,000	175,940
GIS & Data Management	144.0	3,000	359,200
Secretary	192.0	1,000	166,019
MRC Programme inputs	34.0		374,000
ICCS	0.0	11,000	0
HRS	1.0	11,000	11,000
EP	17.0	11,000	187,000
M-IWRMSP	0.0	11,000	0
IKMP	0.0	11,000	0
FMMP	0.0	11,000	0
AIFP	6.0	11,000	66,000
NAP	4.0	11,000	44,000
FP	1.0	11,000	11,000
HP	5.0	11,000	55,000
Short term international consultants	72.0		1,800,000
Senior Water Resources Planner	15.0	25,000	375,000
Senior Planner/ Economist	8.0	25,000	200,000
Natural resources planner	11.0	25,000	275,000
Socioligist/ Socio-economist	2.0	25,000	50,000
IWRM Specialist	19.0	25,000	475,000
Modeling Specialist	7.0	25,000	175,000
Scenario Panel	5.0	25,000	125,000
Model peer review	5.0	25,000	125,000
Estimated totals	1,127.8		4,841,934

Note: Amount of Staff cost

The actual expenditure on the MRCS and NMCs staff in 2007 has been taken account in this table. All the rest is calculated by the planned months and estimated rate.

2 Budget allocation (Annual)

	2007	2008	2009	2010
Staff Costs	389,914	1,134,600	1,803,500	1,513,920
MRCS/BDP Programme staff	274,775	564,000	564,000	564,000
BDP NMC staff	55,559	165,600	240,000	240,000
MRC Programme inputs	, -	105,000	187,000	82,000
Short term international consultants	59,580	300,000	812,500	627,920
Official travels	55,102	101,200	98,000	110,698
National	1,070	22,000	20,000	36,930
Regional	39,017	49,200	48,000	43,783
International	15,015	30,000	30,000	29,985
Workshops	98,744	640,000	610,000	499,255
Coordination	22,411	85,000	90,000	102,589
Sub-area	-	75,000	180,000	123,000
National	53,482	220,000	140,000	116,518
Regional	22,852	260,000	200,000	157,148
Training	4,092	280,000	275,908	120,000
In-country training	-	120,000	240,000	120,000
Training at MRCS/ external institute	4,092	160,000	35,908	-
Equipment	167,997	54,000	57,315	20,688
Expendable	24,312	30,000	25,000	20,688
Non-expendable	143,685	24,000	32,315	-
Publications	27,001	70,000	124,500	128,499
Publication, media	1,140	40,000	52,500	56,360
Miscellaneous	25,861	30,000	72,000	72,139
Sub - contracts	-	500,000	-	-
Sub-total 1	742,851	2,779,800	2,969,223	2,393,060
Contingency	62	29,191	72,459	58,399
Sub-total 2	742,913	2,808,991	3,041,682	2,451,459
MRC Ssecretariat support	81,721	308,989	334,585	269,660
Total donor support	824,633	3,117,980	3,376,267	2,721,119
National contribution in kind	82,463	311,798	337,627	272,112
Grand Total	907,096	3,429,778	3,713,894	2,993,231

3 Budget by each Component and Output

Code	Contents	amount	(Prgm doc)	Deference	
Component 1		1,789,000			
Output 1.1	Transparency and stakeholder involvement enhanced including interaction with national planning	541,000	545,000	-4,000	
Output 1.2 (former 1.7)	BDP Phase 2 managed effectively	1,248,000	270,000	978,000	
Component 2	A rolling IWRM based Basin Development Plan produced in support of sustainable development in the Mekong River Basin	4,206,000			
Output 2.1 (former 1.2)	Basin-wide development scenarios	1,581,000	1,700,000	-119,000	
Output 2.2 (former 1.5.1)	IWRM based basin strategy	456,000	-	456,000	
Output 2.3 (former 1.3)	Programmes and projects proposed by national and sub- regional level institutions and stakehollders assessed (Project database)	775,000	1,000,000	-225,000	
Output 2.4 (former 1.4)	Portfolio of programmes and projects developed, prioritized and promoted (Project portfolio)	904,000	610,000	294,000	
Output 2.5 (former 1.5)	IWRM based BDP including facilities for periodic revision prepared in a participatory manner 304,000		855,000	-551,000	
Output 2.6 (former 1.6)	Lessons learned from implemented projects and programmes collected and analysed	186,000	215,000	-29,000	
Component 3	Knowledge base and assessment tools further deveploed and utilized effectively in MRC and NMC	827,000			
Output 3.1 (former 2.1)	Updated knowledge base	340,000	000 000	452,000	
Output 3.2 (former 2.1)	Upgraded Assessment tools	487,000	980,000	-153,000	
Component 4	Capacity built at MRC and NMC levels for IWRM planning and for facilitation/mediation in areas where trade-off are required	3,218,000			
Output 4.1 (former 3.1)	Upgraded planning guides prepared and agreed	544,000	595,000	-51,000	
Output 4.2 (former 2.2)	Staff at MRCS and NMC levels skilled in the use of assessment tools	961,000	1,175,000	-214,000	
Output 4.3 (former 2.3)	Knowledge based decision support capacity enhanced at MRCS and NMC levels	373,000	485,000	-112,000	
Output 4.4 (former 3.2)	IWRM Planning principles and approaches intenalised at MRCS and NMC levels	568,000	675,000	-107,000	
Output 4.5 (former 3.3)	Capacity built within MRC to assess value of water and sharing of benefits and costs	388,000	485,000	-97,000	
Output 4.6 (former 3.4)	Capacity built within BDP in trade-off facilitation and mediation	384,000	450,000	-66,000	
Total direct don	or support in USD	10,040,000	10,040,000	-	

3.1 (1) Budget breakdown by each output

Budget for Output 1.1 (1/16)**Budget for Output 1.2** (2/16)"Enhanced stakeholder involvement and communication" "BDP Phase 2 managed effectively" Quantity Rate Amount Quantity Rate Amount Staff Costs 222,745 Staff Costs 130.745 MRCS/BDP Programme staff 27.0 129,923 MRCS/BDP Programme staff 20.0 109,923 BDP NMC staff 28.0 BDP NMC staff 28.0 20,822 20,822 MRC Programme inputs 2.0 22.000 MRC Programme inputs 0.0 0 Short term international consultants 2.0 Short term international consultants 50,000 0.0 0 46.000 Official travels Official travels 4.000 National 80 200 16,000 National 20 200 4,000 Regional Regional 100 300 30,000 0 300 0 International 0 3,000 0 International 0 3,000 0 Workshops 210,000 Workshops 320.000 Coordination 0 15,000 0 Coordination 20 15,000 300,000 Sub-area 0 3,000 0 Sub-area 0 3,000 0 18 National 5.000 National 5.000 90.000 4 20.000 Regional 20,000 120,000 Regional 20,000 0 6 0 Training Training 0 In-country training 0 10,000 0 In-country training 0 10,000 0 Training at MRCS/ external institute Training at MRCS/ external institute 0 20,000 0 0 20,000 0 Equipment Equipment 300,000 Expendable 0 Expendable 100,000 Non-expendable Non-expendable 0 200,000 **Publications** 0 **Publications** 350.000 Publication, media 0 Publication, media 150.000 Miscellaneous 0 Miscellaneous 200,000 Sub - contracts 0 Sub - contracts 0 478,745 1,104,745 Sub-total 1 Sub-total 1 Contingency @ 2.0% 8,627 Contingency @ 2.0% 19,908 Sub-total 2 487,372 Sub-total 2 1,124,653 MRC Ssecretariat support @ 11.0% 53,611 MRC Ssecretariat support @ 11.0% 123,712 Total donor support Total donor support 540,983 1,248,365 Total donor support (rounded figures) 541,000 Total donor support (rounded figures) 1,248,000

3.1 (2) Budget breakdown by each output

Budget for Output 2.1 (3/16) Budget for Output 2.2 (4/16)
"Basin-wide development scenarios" "IWRM based basin strategy"

	Quantity	Rate	Amount		Quantity	Rate
Staff Costs			976,745	Staff Costs		
MRCS/BDP Programme staff	51.0		236,923	MRCS/BDP Programme staff	22.0	
BDP NMC staff	52.0		96,822	BDP NMC staff	14.0	
MRC Programme inputs	13.0		143,000	MRC Programme inputs	1.0	
Short term international consultants	20.0		500,000	Short term international consultants	7.0	
Official travels			38,000	Official travels		
National National	40	200	8,000	National	0	200
Regional	100	300	30,000	Regional	70	300
nternational	0	3,000	0	International	0	3,000
Vorkshops			324,000	Workshops		
Coordination	0	15,000	0	Coordination	0	15,000
Sub-area	28	3,000	84,000	Sub-area	14	3,000
National	16	5,000	80,000	National	0	5,000
Regional	8	20,000	160,000	Regional	2	20,000
Fraining			0	Training		
In-country training	0	10,000	0	In-country training	0	10,000
raining at MRCS/ external institute	0	20,000	0	Training at MRCS/ external institute	0	20,000
Equipment			0	Equipment		
Expendable			0	Expendable		
Non-expendable			0	Non-expendable		
Publications			0	Publications		
Publication, media			0	Publication, media		
Miscellaneous			0	Miscellaneous		
Sub - contracts			60,000	Sub - contracts		
Sub-total 1			1,398,745	Sub-total 1		
Contingency @ 2.0%			25,206	Contingency @ 2.0%		
Sub-total 2			1,423,951	Sub-total 2		
MRC Ssecretariat support @ 11.0%			156,635	MRC Ssecretariat support @ 11.0%		
Total donor support			1,580,586	Total donor support		
Total donor support (rounded figures)			1,581,000	Total donor support (rounded figures)		

3.1 (3) Budget breakdown by each output

Budget for Output 2.3 (5/16) Budget for Output 2.4 (6/16)
"Project database" Project Portfolio"

	Quantity	Rate	Amount		Quantity	Rate	Amount
Staff Costs			451,745	Staff Costs			498,745
MRCS/BDP Programme staff	48.0		209,923	MRCS/BDP Programme staff	44.0		191,923
BDP NMC staff	40.0		56,822	BDP NMC staff	36.0		48,822
MRC Programme inputs	10.0		110,000	MRC Programme inputs	3.0		33,000
Short term international consultants	3.0		75,000	Short term international consultants	9.0		225,000
Official travels			8,000	Official travels			19,000
National	40	200	8,000	National	20	200	4,000
Regional	0	300	0	Regional	50	300	15,000
International	0	3,000	0	International	0	3,000	0
Workshops			166,000	Workshops			162,000
Coordination	0	15,000	0	Coordination	0	15,000	0
Sub-area	42	3,000	126,000	Sub-area	14	3,000	42,000
National	8	5,000	40,000	National	12	5,000	60,000
Regional	0	20,000	0	Regional	3	20,000	60,000
Training			0	Training			0
In-country training	0	10,000	0	In-country training	0	10,000	0
Training at MRCS/ external institute	0	20,000	0	Training at MRCS/ external institute	0	20,000	0
Equipment			0	Equipment			0
Expendable			0	Expendable			0
Non-expendable			0	Non-expendable			0
Publications			0	Publications			0
Publication, media			0	Publication, media			0
Miscellaneous			0	Miscellaneous			0
Sub - contracts			60,000	Sub - contracts			120,000
Sub-total 1			685,745	Sub-total 1			799,745
Contingency @ 2.0%			12,357	Contingency @ 2.0%			14,412
Sub-total 2			698,102	Sub-total 2			814,157
MRC Ssecretariat support @ 11.0%			76,791	MRC Ssecretariat support @ 11.0%			89,557
Total donor support			774,893	Total donor support			903,714
Total donor support (rounded figures)			775,000	Total donor support (rounded figures)			904,000

3.1 (4) Budget breakdown by each output

t for Output 2.5 based BDP"			(7/16)	Budget for Output 2.6 "Lessons learned from implemented proje	cts and prog	ammes"	
	Quantity	Rate	Amount		Quantity	Rate	
Staff Costs			197,745	Staff Costs			
/IRCS/BDP Programme staff	15.0		65,923	MRCS/BDP Programme staff	19.0		
BDP NMC staff	14.0		6,822	BDP NMC staff	28.0		
MRC Programme inputs	0.0		0	MRC Programme inputs	2.0		
Short term international consultants	5.0		125,000	Short term international consultants	0.0		
Official travels			9,000	Official travels			
lational	0	200	0	National	0	200	
Regional	30	300	9,000	Regional	0	300	
nternational	0	3,000	0	International	0	3,000	
Vorkshops			62,000	Workshops			
Coordination	0	15,000	0	Coordination	0	15,000	
Sub-area	14	3,000	42,000	Sub-area	14	3,000	
National	0	5,000	0	National	4	5,000	
Regional	1	20,000	20,000	Regional	0	20,000	
Training			0	Training			
n-country training	0	10,000	0	In-country training	0	10,000	
raining at MRCS/ external institute	0	20,000	0	Training at MRCS/ external institute	0	20,000	
Equipment			0	Equipment			
Expendable			0	Expendable			
lon-expendable			0	Non-expendable			
Publications			0	Publications			
Publication, media			0	Publication, media			
/liscellaneous			0	Miscellaneous			
Sub - contracts			0	Sub - contracts			
Sub-total 1			268,745	Sub-total 1			
Contingency @ 2.0%			4,843	Contingency @ 2.0%			
Sub-total 2			273,588	Sub-total 2			
MRC Ssecretariat support @ 11.0%			30,095	MRC Ssecretariat support @ 11.0%			
Total donor support			303,683	Total donor support			
Total donor support (rounded figures)			304,000	Total donor support (rounded figures)			

3.1 (5) Budget breakdown by each output

Budget for Output 3.1 (9/16)
"Updated knowledge base"

Budget for Output 3.2 (10/16)
"Upgraded Assessment tools"

	Quantity	Rate	Amount	Quantity Rate	Ar
Staff Costs			221,745	Staff Costs	31
MRCS/BDP Programme staff	19.0		76,923	MRCS/BDP Programme staff 20.0	9
BDP NMC staff	35.0		69,822	BDP NMC staff 36.0	7.
MRC Programme inputs	0.0		0	MRC Programme inputs 2.0	2:
Short term international consultants	3.0		75,000	Short term international consultants 5.0	12
Short term international consultants	3.0		75,000	Short term international consultants 5.0	123
Official travels			19,000	Official travels	19
National	20	200	4,000	National 20 200	4
Regional	50	300	15,000	Regional 50 300	15
International	0	3,000	0	International 0 3,000	
Workshops		45.000	60,000	Workshops	60
Coordination	0	15,000	0	Coordination 0 15,000	
Sub-area	0	3,000	0	Sub-area 0 3,000	
National	4	5,000	20,000	National 4 5,000	20
Regional	2	20,000	40,000	Regional 2 20,000	40
Training			0	Training	
In-country training	0	10.000	0	In-country training 0 10,000	
Training at MRCS/ external institute	0	20,000	Ő	Training at MRCS/ external institute 0 20,000	
Equipment			0	Equipment	
Expendable			0	Expendable	
Non-expendable			0	Non-expendable	
Publications			0	Publications	
Publication, media			0	Publication, media	
Miscellaneous			0	Miscellaneous	
Sub - contracts			0	Sub - contracts	40
oub - contracts			· ·	oub - contracts	70
Sub-total 1			300,745	Sub-total 1	430
Contingency @ 2.0%			5,420	Contingency @ 2.0%	7
Sub-total 2			306,165	Sub-total 2	438
MD0.0			,	MD0.0	
MRC Ssecretariat support @ 11.0%			33,678	MRC Ssecretariat support @ 11.0%	48
Total donor support			339,843	Total donor support	480
Total donor support (rounded figures)			340,000	Total donor support (rounded figures)	48

3.1 (6) Budget breakdown by each output

Budget for Output 4.1 "Upgraded planning guides and agreed"			(11/16)	Budget for Output 4.2 "Staff at MRCS and NMC levels skilled in	the use of ass	essment too	(12/16) Is"
	Quantity	Rate	Amount		Quantity	Rate	Amount
Staff Costs			321,745	Staff Costs			370,745
MRCS/BDP Programme staff	29.0		175,923	MRCS/BDP Programme staff	39.0		160,923
BDP NMC staff	28.0		20,822	BDP NMC staff	57.0		109,822
MRC Programme inputs	0.0		0	MRC Programme inputs	0.0		0
Short term international consultants	5.0		125,000	Short term international consultants	4.0		100,000
Official travels			0	Official travels			0
National	0	200	0	National	0	200	0
Regional	0	300	0	Regional	0	300	0
International	0	3,000	0	International	0	3,000	0
Workshops			120,000	Workshops			80,000
Coordination	0	15,000	0	Coordination	0	15,000	0
Sub-area	0	3,000	0	Sub-area	0	3,000	0
National	16	5,000	80,000	National	8	5,000	40,000
Regional	2	20,000	40,000	Regional	2	20,000	40,000
Training			0	Training			360,000
In-country training	0	10,000	0	In-country training	24	10,000	240,000
Training at MRCS/ external institute	0	20,000	0	Training at MRCS/ external institute	6	20,000	120,000
Equipment			0	Equipment			0
Expendable			0	Expendable			0
Non-expendable			0	Non-expendable			0
Publications			0	Publications			0
Publication, media			0	Publication, media			0
Miscellaneous			0	Miscellaneous			0
Sub - contracts			40,000	Sub - contracts			40,000
Sub-total 1			481,745	Sub-total 1			850,745
Contingency @ 2.0%			8,681	Contingency @ 2.0%			15,331
Sub-total 2			490,426	Sub-total 2			866,076
MRC Ssecretariat support @ 11.0%			53,947	MRC Ssecretariat support @ 11.0%			95,268
Total donor support			544,373	Total donor support			961,344
Total donor support (rounded figures)			544,000	Total donor support (rounded figures			961,000

3.1 (7) Budget breakdown by each output

Budget for Output 4.3 (13/16)

"Knowledge based decision support capacity enhanced at MRCS and NMC levels"

Budget for Output 4.4 (14/16)

"IWRM Planning principles and approaches intenalised at MRCS and NMC levels"

	Quantity	Rate	Amount		Quantity	Rate	Α
taff Costs			246,745	Staff Costs			2
RCS/BDP Programme staff	33.0		120,923	MRCS/BDP Programme staff	24.0		9
BDP NMC staff	42.0		64,822	BDP NMC staff	35.0		
IRC Programme inputs	1.0		11,000	MRC Programme inputs	0.0		
hort term international consultants	2.0		50,000	Short term international consultants	5.0		1
fficial travels			23,000	Official travels			
ational	40	200	8,000	National	40	200	
Regional	50	300	15,000	Regional	50	300	
nternational	0	3,000	0	International	0	3,000	
Vorkshops			0	Workshops			(
Coordination	0	15,000	0	Coordination	0	15,000	
Sub-area	0	3,000	0	Sub-area	0	3,000	
National	0	5,000	0	National	4	5,000	
Regional	0	20,000	0	Regional	2	20,000	4
raining			0	Training			10
n-country training	0	10,000	0	In-country training	12	10,000	1:
raining at MRCS/ external institute	0	20,000	0	Training at MRCS/ external institute	2	20,000	•
Equipment			0	Equipment			
Expendable			0	Expendable			
lon-expendable			0	Non-expendable			
Publications			0	Publications			
Publication, media			0	Publication, media			
/liscellaneous			0	Miscellaneous			
Sub - contracts			60,000	Sub - contracts			
Sub-total 1			329,745	Sub-total 1			5(
Contingency @ 2.0%			5,942	Contingency @ 2.0%			
Sub-total 2			335,687	Sub-total 2			5
IRC Ssecretariat support @ 11.0%			36,926	MRC Ssecretariat support @ 11.0%			į
otal donor support			372,613	Total donor support			5(
otal donor support (rounded figures)			373,000	Total donor support (rounded figures)			5(

3.1 (8) Budget breakdown by each output

lget for Output 4.5 pacity built within MRC to assess value ts"	of water and	I sharing of I	(15/16) penefits and	Budget for Output 4.6 "Capacity built within BDP in trade-off facil	itation and m	nediation"	
	Quantity	Rate	Amount		Quantity	Rate	Amo
Staff Costs			110,745	Staff Costs			116,7
MRCS/BDP Programme staff	19.0		65,923	MRCS/BDP Programme staff	19.0		70,9
BDP NMC staff	27.0		19,822	BDP NMC staff	28.0		20,8
MRC Programme inputs	0.0		0	MRC Programme inputs	0.0		
Short term international consultants	1.0		25,000	Short term international consultants	1.0		25,0
Official travels			53,000	Official travels			83,0
National	40	200	8,000	National	40	200	8,0
Regional	50	300	15,000	Regional	0	300	
International	10	3,000	30,000	International	25	3,000	75,0
Workshops			60,000	Workshops			20,0
Coordination	0	15,000	0	Coordination	0	15,000	
Sub-area	0	3,000	0	Sub-area	0	3,000	
National	4	5,000	20,000	National	4	5,000	20,0
Regional	2	20,000	40,000	Regional	0	20,000	
Training			80,000	Training			80,0
In-country training	6	10,000	60,000	In-country training	6	10,000	60,0
Training at MRCS/ external institute	1	20,000	20,000	Training at MRCS/ external institute	1	20,000	20,0
Equipment			0	Equipment			
Expendable			0	Expendable			
Non-expendable			0	Non-expendable			
Publications			0	Publications			
Publication, media			0	Publication, media			
Miscellaneous			0	Miscellaneous			
Sub - contracts			40,000	Sub - contracts			40,0
Sub-total 1			343,745	Sub-total 1			339,7
Contingency @ 2.0%			6,194	Contingency @ 2.0%			6,1
Sub-total 2			349,939	Sub-total 2			345,8
MRC Ssecretariat support @ 11.0%			38,493	MRC Ssecretariat support @ 11.0%			38,0
Total donor support			388,432	Total donor support			383,9
Total donor support (rounded figures)			388,000	Total donor support (rounded figures)			384,0

4 Budget for NMCs

4 Baaget for Nines	Quantity	CNMC Rate	Amount	Quantity	LNMC Rate	Amount	Quantity	TNMC Rate	Amount	Quantity	VNMC Rate	Amount
	Quantity	Nate		Quantity	rate		Quantity	Nato		Quantity	Nate	
Staff Costs			175,290			175,290			175,290			175,290
MRCS/BDP Programme staff	0.0		0	0.0		0	0.0		0	0.0		0
BDP NMC staff MRC Programme inputs	132.0 0.0		175,290 0									
Short term international consultants	0.0		0	0.0		0	0.0		0	0.0		0
Onort term international consultants	0.0		·	0.0		· ·	0.0		· ·	0.0		· ·
Official travels			73,000			73,000			73,000			73,000
National	80	200	16,000	80	200	16,000	80	200	16,000	80	200	16,000
Regional	120	300	36,000	120	300	36,000	120	300	36,000	120	300	36,000
International	7	3,000	21,000	7	3,000	21,000	7	3,000	21,000	7	3,000	21,000
Workshops			227,000			227,000			227,000			227,000
Coordination	0	15,000	0	0.0	15,000	0	0.0	15,000	0	0.0	15,000	0
Sub-area	32	3,000	94,500	31.5	3,000	94,500	31.5	3,000	94,500	31.5	3,000	94,500
National	27	5,000	132,500	26.5	5,000	132,500	26.5	5,000	132,500	26.5	5,000	132,500
Regional	0	20,000	0	0.0	20,000	0	0.0	20,000	0	0.0	20,000	0
Training			120,000			120,000			120,000			120,000
In-country training	12	10,000	120,000	12.0	10,000	120,000	12.0	10,000	120,000	12.0	10,000	120,000
Training at MRCS/ external institute	0	20,000	0	0.0	20,000	0	0.0	20,000	0	0.0	20,000	0
Equipment			60,000			60,000			60,000			60,000
Expendable			20,000			20,000			20,000			20,000
Non-expendable			40,000			40,000			40,000			40,000
Publications			70,000			70,000			70,000			70,000
Publication, media			30,000			30,000			30,000			30,000
Miscellaneous			40,000			40,000			40,000			40,000
Sub - contracts			100,000			100,000			100,000			100,000
Sub-total 1			825,290			825,290			825,290			825,290
Contingency @ App 2%			32,022			32,022			32,022			32,022
Sub-total 2			857,312			857,312			857,312			857,312
			•									
MRC Ssecretariat support @ 11.0%			0			0			0			0
Total donor support			857,312			857,312			857,312			857,312
National contribution in kind @ 10.0%			251,000			251,000			251,000			251,000
Grand Total			1,108,312			1,108,312			1,108,312			1,108,312

5 Financial support

		TOTAL			2007			2008			2009			2010	
	DANIDA	SIDA	Not Funded	DANIDA	SIDA	Not Funded	DANIDA	SIDA	Proposed AusAID	DANIDA	SIDA	Not Funded	DANIDA	SIDA	Not Funded
0, 110	0.000.040	202 422	20.400	0.45 40.4	44.400		007.000	470.000	20.422	4 405 040	207.050		4 540 000		
Staff Costs	3,862,348	889,180	90,406	345,424	44,490	-	867,362	176,832		1,135,642	667,858	-	1,513,920	-	-
MRCS/BDP Programme staff BDP NMC staff	1,497,147	459,628	10,000	267,005	7,770	-	530,000	24,000		136,142	427,858	-	564,000	-	-
	258,839	429,552	12,768	18,839	36,720	-	405.000	152,832	12,768	407.000	240,000	-	240,000	-	-
MRC Programme inputs	374,000	-		-	-	-	105,000	-		187,000	-	-	82,000	-	-
Short term international consultants	1,732,362		67,638	59,580	-	-	232,362	-	67,638	812,500	•	-	627,920	-	•
Official travels	326,356	-	38,644	55,102	-	•	71,200		30,000	98,000	•	-	102,054	•	8,644
National	80,000	-	-	1,070	-	-	22,000	-	-	20,000	-	-	36,930	-	-
Regional	180,000	-	-	39,017	-	-	49,200	-	-	48,000	-	-	43,783	-	-
International	66,356	-	38,644	15,015		-	-		30,000	30,000	-	-	21,341		8,644
Workshops	1,348,744	-	499,255	98,744	-	-	640,000	-	-	610,000		-	-	-	499,255
Coordination	197,411	-	102,589	22,411	-	-	85,000	-	-	90,000	-	-	-		102,589
Sub-area	255,000	-	123,000	· -	-	-	75,000	-	-	180,000	-	-	-		123,000
National	413,482		116,518	53,482		_	220,000	-	-	140,000		-	-	-	116,518
Regional	482,852	-	157,148	22,852	-	-	260,000	-	-	200,000	-	-	-	-	157,148
Training	280,000	-	400,000	4.092	-		-		280,000	275,908	-	-	-		120,000
In-country training	240,000		240,000	.,	-	-				240,000		-		-	120,000
Training at MRCS/ external institute	40,000	-	160,000	4,092	-	-	-	-		35,908	-	-	-	-	-
Equipment	279,312	-	20,688	167,997	-	-	54,000	-	-	57,315	-	-	-		20,688
Expendable	79,312	-	20,688	24,312	-	-	30,000	-	-	25,000	-	-	-	-	20,688
Non-expendable	200,000	-	-	143,685	-	-	24,000	-	-	32,315	-	-	-	-	-
Publications	221,501	-	128,499	27,001	-	-	70,000	-	-	124,500	-	-	-	-	128,499
Publication, media	93,640	-	56,360	1,140	-	-	40,000	-	-	52,500	-	-	-	-	56,360
Miscellaneous	127,861	-	72,139	25,861	-	-	30,000	-	-	72,000	-	-	-	-	72,139
Sub - contracts	500,000		-		-	-	500,000		-			-	-		-
Sub-total 1	6,818,261	889,180	1,177,492	698,360	44,490	•	2,202,562	176,832	400,406	2,301,365	667,858	•	1,615,974	-	777,086
Contingency	136,694	11,720	11,697	-	62	-	20,843	3,348	5,000	64,149	8,310	0	51,702	-	6,697
Sub-total 2	6,954,955	900,900	1,189,189	698,360	44,552	-	2,223,405	180,180	405,406	2,365,514	676,168	0	1,667,676		783,783
MRC Ssecretariat support	765,045	99,100	130,811	76,820	4,901	-	244,575	19,820	44,594	260,206	74,379	-	183,444	-	86,217
Total donor support	7,720,000	1,000,000	1,320,000	775,180	49,453	-	2,467,980	200,000	450,000	2,625,720	750,547	0	1,851,120		870,000
Crand Tatal dayor compart			40.040.000			004.000			2 447 000 1			2 270 227			0.704.400
Grand Total donor support			10,040,000			824,633			3,117,980			3,376,267			2,721,120

Appendix H: Programme management reports under BDP2

Type of reports	Timeframe	Reporting line	Purpose of the report
Inception Report	At the end of Inception stage	MRC JC Donors	To set out the implementation of BDP2 and baselines against which the end-of-programe results will be measured.
Monthly brief	Every month (by the end of first week of the following month)	Director of Planning Division, MRCS	To provide a brief overview of activities undertaken during the month and highlight issues arisen as well as follow up actions.
Quarterly progress and financial report	Every three calendar months, by 15 th of the first month of the following quarter	BDP Coordination meetings MRC Joint Committee	To provide core BDP2 implementing partners (MRCS, NMC, line agencies) with a regular update on the Programme implementation. It will serve as inputs for discussion at Coordination meetings to maintain the Programme's track toward set outputs/objectives.
			To provide JC with update on the Programme implementation for guidance and management decisions
			To be consolidated into six-monthly progress and financial reports
Six-monthly	Bi-annually (by 31 st July for the	Donors of BDP2	As per the funding Agreements
progress and financial report period January-June and 31 st January for the period July-December)		Other stakeholders as appropriate.	To ensure transparency of information and maintain interest of stakeholders and the public on the BDP process
Report of donor	Annually (after the completion of	Donors of BDP2	As per the requirements of the donors, stipulated in funding agreements
reviews	the review)	MRCS Management and MRC Joint Committee	
		Other stakeholders as appropriate.	
National completion	September 2010	BDP SC, National and SA WG	To provide a final national self assessment of BDP2 implementation
report of BDP2		MRCS Management and MRC Joint Committee	To provide inputs into final review and Completion report of BDP2
		Donors of the BDP2	
		Other stakeholders as appropriate.	
BDP2 Completion report	December 2010	 MRCS Sr. Management and MRC Joint Committee Donors of the BDP2 	To provide a comprehensive assessment of BDP2 including its design, efficiency and effectiveness of the Programme implementation, results and impacts (if any) and lessons learned to draw out recommendations.
		Other stakeholders and the public	

Appendix I: Terms of reference for BDP steering committee

1. Background

The 1995 Agreement charges the Joint Committee (JC) with the formulation of a Basin Development Plan (BDP) to promote, support, cooperate and coordinate in 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 emphasis and preference on joint and/or basin-wide development projects. As such, the IWRM-based BDP will guide the development and management of the LMB and will be used by JC as a blueprint to identify, categorise and prioritise projects to seek assistance for and to implement at the basin level.

Phase 1 of the BDP Programme (2001-2006) has achieved much in terms of creating a participatory planning process at national and sub-basin level, building capacity and developing tools to be used in the Basin development planning. Phase 2 of the Programme (2007-2010) is to produce the rolling IWRM-based BDP, using the enhanced participatory planning process, also with civil society stakeholders while further developing tools and IWRM capacity. The IWRM-based BDP should be adopted and implemented by member countries together with their development partners and other stakeholders.

The key success factor of the BDP Programme is the consensus building throughout the BDP planning process and the acceptance of member countries and other concerned stakeholders of the IWRM-based BDP for its implementation.

At national level, National BDP Sub-committees have been established in the four member countries to facilitate coordination and national consensus building. The National BDP Sub-committee is chaired by the Vice chair of the National Mekong Committee or a JC member and has members from key line agencies with mandate and responsibilities for water and related resources development in the LMB.

Consensus building at regional level has been mainly through regional consultations and meetings of the MRC JC and Council. Lessons learned from BDP Phase 1 show that consensus building and approval of member countries of different outputs of the BDP Programme were jeopardized by the following factors.

- Limited involvement of NMCs and line agencies in the preparation of the elements of the IWRM-based BDP such as development scenarios, the IWRM strategy and assessment tools:
- There were limited time during JC and Council meetings for the JC and Council to
 provide strategic guidance for the BDP Programme implementation and to have indepth discussions on important issues for the BDP such as development opportunities
 and constraints in the LMB and common strategies to guide further development of
 water and related resources for poverty reduction.
- The National BDP Sub-committees were instrumental in facilitating coordination and building consensus in each country. However, there were limited exchanges between the National BDP Sub-committees, especially between the national planning agencies to promote shared views on development of the LMB.

• Limited participation and thus support from the concerned stakeholders and civil society organisations to the BDP process.

Against this background, it was recommended by the countries in the Regional consultation on the Inception Report of BDP Phase 2 on 7 December 2007 that a BDP Steering Committee or a similar mechanism should be established to ensure a stronger guidance, supervision and support to BDP Phase 2 by the JC.

This recommendation is also in line with the MRC overall policy to establish a Steering Committee for all MRC programmes to provide guidance on the programme implementation and enhance collaboration. Presently, Steering Committees have been established for FMMP, IKMP, NAP and other programmes.

2. Objectives of establishing the BDP steering committee

- To strengthen the guidance and support from the JC and member countries for the BDP process;
- To enhance dialogues and collaboration between the key decision makers in the four member countries, aiming at building shared views and regional consensus on Basin development planning in LMB;
- To provide additional forums for in-depth discussions on important issues and outputs of the BDP that will facilitate the approval of the elements of the IWRM-based BDP, the Plan itself and its implementation.

3. Composition of the BDP steering committee

Members of the BDP steering committee:

The following proposed membership of the BDP Steering Committee is subject to review and agreement by the member countries.

- Member of the Joint Committee (who is also Chair of the National BDP Subcommittee in some countries) or alternate member of the Joint Committee. In case either the Member of the JC or alternate member is available, it is up to the Member of the JC to designate a senior representative of the NMC to perform this function on his/her behalf;
- A senior representative from the National planning agency;
- The CEO (or Officer-in-charge) of the MRCS. In special circumstances, the CEO or Officer-in-charge can delegate this role to a senior manager of the MRCS.

Chairmanship of the BDP steering committee:

The Chair of the Joint Committee will serve as the Chair of the BDP Steering Committee. As such chairmanship of the BDP Steering Committee will be on annual rotating basis. In special circumstances, the Chair can delegate this responsibility to the alternate member of JC of his/her country.

4. Roles of the BDP steering committee

• Regular monitor the progress of BDP Phase 2, particularly the progress in preparing elements of the IWRM-based BDP;

- Provide guidance on technical and Programme implementation issues including interactions with the Regional technical working groups of BDP Phase 2 to guide their works;
- Review important draft documents or outputs of BDP Phase 2 and advise the BDP team/MRCS on approach, process and technical aspects in preparing and finalising these outputs;
- Keep the MRC Joint Committee and Council and Governments of the Member States informed on important issues of BDP Phase 2;
- Help facilitate discussion and consensus building at the Joint Committee, Council and Government level that will support the approval of important outputs of BDP Phase 2 and ultimately the IWRM-based BDP.

5. Meetings of the BDP steering committee

Schedule of the meetings

- The BDP Steering Committee will meet bi-annually. The meeting should be organised at least one month before the Joint Committee meeting.
- When required, additional meetings will be organised to facilitate in-depth discussion on important issues and/or outputs of the BDP.
- As a principle, the meetings of the BDP Steering Committee will be organised back-to-back with the Coordination meetings of BDP Phase 2 to (i) allow maximised participation of the BDP Regional and National teams in reporting to the Steering Committee and discussing directions for the Programme implementation and (ii) to save cost and travel time.

Proposed focus of the meetings

The following topics will be the core in periodic meetings of the BDP Steering Committee:

- Review the progress of BDP Phase 2 during the last six months and work plan for the up-coming six-months;
- Discuss technical and management issues arisen during the period and advise on solutions;
- Review and discuss key draft documents (or outputs) that will require JC approval.

For ad-hoc meetings, specific agenda will be prepared by the BDP Regional team in consultation with countries and submitted to the BDP Steering Committee members in due course before the meeting.

6. Minutes of the BDP steering committee meetings

Minutes of the BDP Steering Committees meetings will serve as key management decisions for BDP Phase 2 that should be complied with and followed upon by all concerned Implementing Partners. The minutes will serve as the basis for the BDP Steering Committee to monitor follow up actions by the BDP teams.

The BDP Regional team will be responsible for preparing the draft minutes of these meetings for signature of the Chair and circulation to all concerned for follow up actions.

7. Financing for the BDP steering committee meetings

Finance for meetings of the BDP Steering Committees will be from BDP Phase 2 budget line for Coordination meetings and/or Regional meetings and workshops. The BDP Regional team will be responsible for organising the meetings with support from the National BDP team of hosting country for each meeting.