The Annual Report Part 1 is a report from the Mekong River Commission Secretariat on the key MRC achievements at the level of outcomes for the year 2017 in the implementation of the overall MRC Strategic Plan 2016-2020 and Annual Work Plan 2017 as well as a brief financial report summary. Part 2 presents detailed progress reporting on the Annual Work Plan 2017 in terms of outputs and activities under each outcome, as well as detailed financial reporting.
# TABLE OF CONTENTS

- **MESSAGE FROM THE CHIEF EXECUTIVE OFFICER** ................................................................. i
- **EXECUTIVE SUMMARY** ............................................................................................................... ii
  Key Highlights................................................................................................................................ ii
- **INTRODUCTION** .............................................................................................................................. iv
  MRC and its Strategic Plan............................................................................................................... v
  Annual Work Plan 2017 Implementation: Progress, achievements and challenges ....................... vi
- **ACHIEVEMENTS**
  - **OUTCOME 1**
    Comprehensive Study Completed to Inform Better Decision-Making ........................................... 1
  - **OUTCOME 2**
    Bilateral Water Cooperation Increased Through IWRM Transboundary Projects ...................... 5
    Basin-wide Fisheries Strategy Approved for Action ....................................................................... 11
  - **OUTCOME 3**
    Hydropower Impact Mitigation and Risk Management Guidelines Ready for Use .................... 17
    The Rapid Basin-wide Hydropower Sustainability Assessment Tool (RSAT) Utilised ................. 23
    Sustainable Management of Watersheds: The SUMALOM-Nam Ton Project shows the way ......... 27
    Transboundary Environment Impact Assessment Guidelines Set for Approval ......................... 33
  - **OUTCOME 4**
    Pak Beng Hydropower Project Consultation Yielded Joint Statement and Joint Action Plan ......... 39
  - **OUTCOME 5**
    MRC – China Joint Efforts Result in Better Understanding of the Mekong-Lancang River ............ 45
    MRC’s Role Better Recognised due to Strengthened Partnership, Stakeholder Engagement, and Communication .............................................................................................................. 51
  - **OUTCOME 6**
    Improving MRC’s Data and Information System and Services ...................................................... 61
  - **OUTCOME 7**
    Mekong River Commission Launched Gender Mainstreaming Action Plan .............................. 67
- **FINANCIAL SUMMARY** .............................................................................................................. 71
  Income ........................................................................................................................................ 72
  Expenditure .................................................................................................................................. 73
- **OUTCOME STATUS SUMMARY** .............................................................................................. 77
## Abbreviations and Acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFD</td>
<td>Agence Française de Développement (French Development Agency)</td>
</tr>
<tr>
<td>ARF</td>
<td>Administrative Reserve Fund (of MRC)</td>
</tr>
<tr>
<td>AWP</td>
<td>Annual Work Plan</td>
</tr>
<tr>
<td>BDS</td>
<td>Basin Development Strategy</td>
</tr>
<tr>
<td>CF</td>
<td>Core function</td>
</tr>
<tr>
<td>CRBMF</td>
<td>Core river basin management function</td>
</tr>
<tr>
<td>CS</td>
<td>Council Study (of MRC)</td>
</tr>
<tr>
<td>CSTF</td>
<td>Council Study Trust Fund</td>
</tr>
<tr>
<td>CSU</td>
<td>Corporate Services Unit (proposed new structure)</td>
</tr>
<tr>
<td>EMU</td>
<td>Environmental Management Unit (proposed new structure)</td>
</tr>
<tr>
<td>ED</td>
<td>Environment Division</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>GIZ</td>
<td>Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH (German Development Cooperation)</td>
</tr>
<tr>
<td>FAS</td>
<td>Finance and Administration Section</td>
</tr>
<tr>
<td>HRS</td>
<td>Human Resources Section</td>
</tr>
<tr>
<td>ICCS</td>
<td>International Cooperation and Communication Section</td>
</tr>
<tr>
<td>JAIF</td>
<td>Japan-ASEAN Integration Fund</td>
</tr>
<tr>
<td>KfW</td>
<td>German Development Bank</td>
</tr>
<tr>
<td>KRA</td>
<td>Key Results Area (of the MRC’s Strategic Plan 2016-2020)</td>
</tr>
<tr>
<td>LA</td>
<td>Line/implementing agency</td>
</tr>
<tr>
<td>LMB</td>
<td>Lower Mekong Basin</td>
</tr>
<tr>
<td>MC</td>
<td>Member Country</td>
</tr>
<tr>
<td>MIWRMP</td>
<td>Mekong-Integrated water resources management project</td>
</tr>
<tr>
<td>MRC-IS</td>
<td>MRC Information System</td>
</tr>
<tr>
<td>NIP</td>
<td>National Indicative Plan</td>
</tr>
<tr>
<td>NMC</td>
<td>National Mekong Committee</td>
</tr>
<tr>
<td>NMCS</td>
<td>National Mekong Committee Secretariat</td>
</tr>
<tr>
<td>n/r</td>
<td>Not required</td>
</tr>
<tr>
<td>OC</td>
<td>Office of the Chief Executive Officer</td>
</tr>
<tr>
<td>OPD</td>
<td>Operation Division</td>
</tr>
<tr>
<td>OSP</td>
<td>Office of the MRC Secretariat in Phnom Penh, Cambodia</td>
</tr>
<tr>
<td>OSV</td>
<td>Office of the MRC Secretariat in Vientiane, Lao PDR</td>
</tr>
<tr>
<td>PD</td>
<td>Planning Division</td>
</tr>
<tr>
<td>PU</td>
<td>Planning Unit (proposed new structure)</td>
</tr>
<tr>
<td>SDC</td>
<td>Swiss Development Cooperation Agency</td>
</tr>
<tr>
<td>SOB</td>
<td>State of the Basin Report</td>
</tr>
<tr>
<td>SP</td>
<td>Strategic Plan</td>
</tr>
<tr>
<td>TbEIA</td>
<td>Transboundary Environmental Impact Assessment</td>
</tr>
<tr>
<td>TD</td>
<td>Technical Support Division</td>
</tr>
<tr>
<td>TSU</td>
<td>Technical Support Unit (proposed new structure)</td>
</tr>
<tr>
<td>WB</td>
<td>World Bank</td>
</tr>
</tbody>
</table>
It gives me great pleasure to present the Annual Report for 2017. Our work during the past year has been wide-ranging and effective; we have set high standards, which will continue to drive the quality and scope of our work into 2018 and beyond.

As always, the Member Countries have demonstrated their commitment to dialogue and cooperation. As we know, the Mekong River knows no borders, or flags, or languages. It is one River, one Mekong; no one country can hope to manage its precious resources alone. Only through collaboration will the countries of the Mekong be able to manage the River in a sustainable, equitable manner.

While 2017 saw the MRC make significant strides in our work, we are mindful of the tasks that lay before us. As we look ahead to 2018, the upcoming mid-term review of our Strategic Plan will provide an opportunity to take stock of what we have achieved and refocus our efforts on the challenges that remain.

In 2018, we will proudly host the 3rd MRC Summit and International Conference, which will be held from 2-5 April in Siem Reap, Cambodia. The Summit will bring together the leaders of the Member Countries as well as delegations from China and Myanmar to address the prevailing challenges and opportunities that we face. These challenges call for bold and innovative solutions. There are no easy fixes – no simple answers to the complex questions of our times. But through joint endeavour and collaboration, a sustainable future for the Mekong and its people is within our reach.

As the Chief Executive Officer, I would like to take this opportunity to thank all those who have played a role in making 2017 a pivotal year, especially the Governments of the Member Countries and all our partners. I would also like to thank the people of the Mekong for their resilience and for making their voices heard. Without this support, it would not have been possible for the MRC to work towards One Mekong – One Spirit.

Dr. Pham Tuan Phan  
Chief Executive Officer
Executive Summary

This Annual Report covers the key achievements and progress of the Mekong River Commission (MRC) during 2017 – the second year of the MRC Strategic Plan 2016-2020. The MRC Strategic Plan identifies 4 Key Result Areas, 7 Outcomes, 43 Outputs and 169 Activities to be implemented during the 5-year period. The output status in comparison to 2016 shows that the number of outputs “On Track” has increased from 10 to 27 and those “Delayed” have decreased from 25 to 8, making 2017 a leap forward in implementation progress.

Overall, building on the reform and preparatory work of 2016, 2017 was a year of great significance for the MRC. Its role as a knowledge hub was cemented through the completion of the Study on the Sustainable Development and Management of the Mekong River Basin, or Council Study. Data and information was exchanged in ever greater quantities in a spirit of openness. Implementation of MRC strategies, guidelines and procedures elevated the MRC’s water diplomacy role, bringing the Member Countries and their stakeholders together as never before, collaborating to ensure sustainable development of the Basin.

For the year 2017, as of 31 December 2017, the MRC Secretariat received total funding of USD 12,429,272. The total expenditure for the year was USD 12,337,543, which included USD 7,682,679 for the Basket Fund (BF), USD 4,444,779 for the Earmarked Fund (EF), and USD 210,085 for the Administration Reserve Fund (ARF). ¹

Key Highlights

- **The Council Study completed to inform better decision making**
  At the end of 2017, the MRC completed the six-year Council Study. Considering three scenarios – early development (2007), definite future (2020) and planned development (2040), the Study include integrated and cumulative assessments of water resource development impacts in six sectors, tools and datasets for future reference and work, and key messages for decision-makers in the four Member Countries.

- **Basin-wide fisheries strategy approved for action**
  In November 2017, the Mekong Basin-wide Fisheries Management and Development Strategy 2018-2022 (BFMS) was approved by the MRC Council. The Strategy specifies three key objectives: (i) monitoring of key indicators; (ii) management-related priorities, including the conservation of key habitats, fisheries enhancement, and transboundary fisheries management; and (iii) priorities related to development where an advisory role of the strategy is envisaged for fisheries and fish-friendly irrigation, aquaculture, water development and adaptation to climate change.

- **Bilateral Water Cooperation Increased through IWRM Transboundary Projects**
  In 2013-2014, five transboundary projects among the four countries were launched to increase bilateral cooperation in addressing cross-border water issues between the neighbouring countries under the Mekong Integrated Water Resources Management Project (M-IWRMP). To be completed in 2018, the four countries have made good progress in 2017 in terms of conducting bilateral dialogue in the process of building a common understanding of key cross-border water issues, finding durable solutions to address issues together, and sharing best practices in water resources management.

- **Hydropower Impact Mitigation and Risk Management Guidelines ready for use**
  During 2015-2017, the MRC developed Guidelines for Hydropower Environmental Impact Mitigation and Risk Management in the Lower Mekong Mainstream and Tributaries. Informed by

¹Figures under auditing
findings from a major Case Study that investigated the Mekong mainstream cascade operations and mitigation and extensive consultations with relevant line agencies and developers, the Guidelines provide measures, best practice, and state-of-the art impact mitigation approaches for the sustainable development of hydropower dams in the Lower Mekong Basin and its tributaries.

• **Transboundary Environment Impact Assessment set for approval**
  In 2017, after several years, the MRC finalised the Guidelines for Transboundary Environmental Impact Assessment (TbEIA). The Guidelines, which are set for official approval in March 2018, can be used for joint studies on any projects with potential transboundary environmental impacts; for example, hydropower projects, irrigation schemes, navigation, and aquaculture projects. The Guidelines are a supporting tool to the existing national EIA legislation systems, providing a means for the Member Countries to work together in the interests of transboundary environmental management.

• **Pak Beng Hydropower Project consultation yielded agreed statement and joint action plan**
  The PNPCA process for the Pak Beng Hydropower Project (PBHPP) saw a marked improvement in implementation of the PNPCA. Following lessons learned, increased understanding and clarity about the objective and process of PNPCA, increased communication and stakeholder engagement, and pro-activeness of the MRC, for the first time the Joint Committee reached an agreed statement on the PBHPP and agreed to develop a Joint Action Plan (JAP) to support further dialogue and joint monitoring.

• **MRC’s mandate and role better recognized due to strengthened partnership, stakeholder engagement, communication and outreach**
  During 2017, the MRC made great efforts to communicate and engage with partners, stakeholders and the public. Key joint efforts were conducted with China. Several exchanges and mutual learning events with new and existing partners were held. The MRC host six Regional Stakeholder Forums (RSF), which aimed to bring together broader stakeholders in a spirit of open and constructive dialogue. Communication with the media and public drastically increased through press releases, media engagement and social media interactions.

• **Improved Data and Information Systems**
  This year’s growth in data sharing between the MRC, Member Countries, Partners, and research institutes confirmed the MRC as a regional knowledge hub. In 2017, the MRC received a total of 685 data and information requests, with the website receiving up to 40,000 visitors.

• **MRC institutionalizes gender mainstreaming with a New Action Plan**
  The MRC’s commitment to gender made advance in 2017 with the preparation and approval of the Gender Action Plan. The Plan sets to revitalize the implementation of the 2010 Gender Policy through the specific activities identified in the MRC Strategic Plan and Annual Work Plan 2018.
Introduction

The Annual Report highlights the key achievements of 2017 as well as reports on the progress of outputs and activities set out in the 5-year MRC Strategic Plan and the Annual Work Plan (AWP).

The Annual Report is in two parts.

**Part 1** reports at the level of outcomes for the year in the implementation of the overall MRC Strategic Plan 2016-2020 and its Annual Work Plan for 2017 as well as a brief financial report summary.

- **Outcome reporting:** Showcases the outcomes which contain “evidence of change” (in awareness or knowledge, in behaviour or action, in policy or planning) in each of the MRC Strategic Plan’s 7 Outcomes (see below), as measured by their indicators. Outcome indicators have been selected based on evidence of change that occurred during 2017 – not all outcome indicators are reported.

**Part 2** presents detailed progress reporting on implementation of the Annual Work Plan 2017 in terms of outputs and activities under each outcome, as well as detailed financial reporting.

- **Progress reporting:** This is presented in different annexes in which the progress of delivering each output under each outcome is reported in terms of completion of its activities (as planned in the AWP for the year), the percentage of progress of that output (against the 5-year MRC SP), and implementation status in terms of “on track” or “delayed”. In addition, a report on the indicators of each output is provided, showing the rating and status at the end of the reporting year.

- **Financial reporting:** Detailed income and expenditure for the year by Basket and Earmarked funds.
Relationship between SP, AWP & Annual Report

MRC and its Strategic Plan

The mission of the MRC, established by the 1995 Mekong Agreement by Cambodia, Lao PDR, Thailand and Viet Nam, is to promote and coordinate sustainable development and management of water and related resources of the Mekong River Basin for the countries’ mutual benefit and the people’s well-being. Under the MRC framework, the countries cooperate in all fields of sustainable development, utilisation, management and conservation of the water and related resources of the Mekong River Basin including, but not limited to irrigation, hydropower, navigation, flood control, fisheries, etc., in a manner that optimizes the multiple-use and mutual benefits of all riparian peoples and minimises harmful effects.

For 2016-2020, the MRC Strategic Plan (SP) identifies 4 Key Result Areas, 7 Outcomes, 43 Outputs and 169 Activities to be implemented during the 5-year period. The MRC SP addresses the priorities identified in the Basin Development Strategy (BDS) 2016-2020 at the regional/basin level. The National Indicative Plans 2016-2020 for each Member Country address the BDS priorities at the national levels through joint projects, national projects of basin significance, and national and decentralized activities.

Overall, the MRC strives for the following results and outcomes:

**Key Results Area 1:**
Enhancement of national plans, projects and resources based on basin-wide perspectives

- **Outcome 1:** Increased common understanding and application of evidence-based knowledge by policy makers and project planners
- **Outcome 2:** Environment management and sustainable water resource development optimized for basin-wide benefits by national sector planning agencies
- **Outcome 3:** Guidance for the development and management of water and related projects and resources shared and applied by national planning and implementing agencies
Annual Work Plan 2017 Implementation: Progress, achievements and challenges

To achieve the 7 outcomes of the MRC SP, the AWP 2017 plans to implement 35 outputs, 56 activities and 321 tasks, in line with its associated budget of approximately USD 17 million (revised version).

Overall, 2017, the second year of the Plan, was a year of significant achievement for the MRC, building on the reforms and preparatory work of 2016. The output status in comparison to 2016 shows that the number of outputs “On Track” has increased from 10 to 27 and those “Delayed” have decreased from 25 to 8, making 2017 a leap forward in implementation progress.

Output Status
In 2017, the MRC’s work resulted in a number of major achievements. For each key achievement, a pathway to change, illustrated by a diagram, has been developed to explain how tasks attribute to short-term change and contribute to longer term impacts. The arrows in the diagrams illustrate the linkages and assumptions of how tasks lead to short-, medium-, and long-term change. The diagrams will be updated annually to better manage the attribution gaps and increase the likelihood that outcomes are achieved.

Finally, in addition to addressing basin-wide needs, opportunities and challenges, the MRC also contributes to the UN Sustainable Development Goals. The following figure illustrates how MRC outcomes and outputs are linked to the SDG

Good progress and achievements also come with challenges. In 2017, implementation rates and corresponding disbursement were higher than in the previous year. As expected, and planned for, the AWP 2017 was implemented by the fully operational new MRC Secretariat (four Divisions, one Office of the CEO and corresponding staff) structure and partners from the Member Countries. Implementation also benefitted from a fully funded plan. Nonetheless, there was still a gap between what was planned and what could be implemented. In the Annual Work Plan 2018, these challenges and difficulties were identified and management measures were agreed. In Part 2, risks and risk management measures are also reported.
## MRC ANNUAL WORK PLAN 2017 PROGRESS

### STUDIES

<table>
<thead>
<tr>
<th>1. Increased common understanding and application of evidence-based knowledge by policy makers and project planners</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.1</strong> Study on water requirement and availability for specific land uses completed for flood &amp; drought management &amp; impacts adaptation &amp; mitigation purposes</td>
</tr>
<tr>
<td>TD</td>
</tr>
<tr>
<td>On-going</td>
</tr>
<tr>
<td>60%</td>
</tr>
<tr>
<td><strong>1.4</strong> Basin-wide development and climate change scenarios and related assessments including Council Study completed and findings agreed and disseminated</td>
</tr>
<tr>
<td>OC &amp; PD</td>
</tr>
<tr>
<td>On-going</td>
</tr>
<tr>
<td>70%</td>
</tr>
<tr>
<td><strong>1.7</strong> Study on transboundary impacts of water and related projects completed and promoted</td>
</tr>
<tr>
<td>PD</td>
</tr>
<tr>
<td>On-going</td>
</tr>
<tr>
<td>50%</td>
</tr>
</tbody>
</table>

### STRATEGIES

<table>
<thead>
<tr>
<th>2. Environment management and sustainable water resources development optimized for basin-wide benefits by national sector planning agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2.1</strong> Basin-wide strategy for sustainable hydropower updated and approved</td>
</tr>
<tr>
<td>PD</td>
</tr>
<tr>
<td>New</td>
</tr>
<tr>
<td>10%</td>
</tr>
<tr>
<td><strong>2.2</strong> Regional strategies for flood management updated, prepared and approved</td>
</tr>
<tr>
<td>TD</td>
</tr>
<tr>
<td>On-going</td>
</tr>
<tr>
<td>75%</td>
</tr>
<tr>
<td><strong>2.3</strong> Basin-wide fisheries management and development strategy (BFMS) approved and action plan developed and implemented</td>
</tr>
<tr>
<td>ED</td>
</tr>
<tr>
<td>New</td>
</tr>
<tr>
<td>25%</td>
</tr>
<tr>
<td><strong>2.4</strong> Joint infrastructure and non-infrastructure projects and mechanisms between two or more member countries initiated, further developed and carried out</td>
</tr>
<tr>
<td>PD</td>
</tr>
<tr>
<td>New</td>
</tr>
<tr>
<td>65%</td>
</tr>
<tr>
<td><strong>2.5</strong> Mekong climate-change adaptation strategy and action plan finalized, approved and implemented</td>
</tr>
<tr>
<td>PD</td>
</tr>
<tr>
<td>On-going</td>
</tr>
<tr>
<td>70%</td>
</tr>
<tr>
<td><strong>2.6</strong> Basin Development Strategy, including a new indicative Basin Development Plan, updated and approved for 2021-2025</td>
</tr>
<tr>
<td>PD</td>
</tr>
<tr>
<td>New</td>
</tr>
<tr>
<td>15%</td>
</tr>
<tr>
<td><strong>2.7</strong> Master plan for regional waterborne transport implemented</td>
</tr>
<tr>
<td>TD</td>
</tr>
<tr>
<td>New</td>
</tr>
<tr>
<td>40%</td>
</tr>
<tr>
<td><strong>2.8</strong> Strategy for basin-wide environmental management for prioritized environmental assets developed and approved</td>
</tr>
<tr>
<td>ED</td>
</tr>
<tr>
<td>New</td>
</tr>
<tr>
<td>25%</td>
</tr>
<tr>
<td><strong>2.9</strong> Regional strategy for drought management and mitigation developed and approved</td>
</tr>
<tr>
<td>TD</td>
</tr>
<tr>
<td>On-going</td>
</tr>
<tr>
<td>60%</td>
</tr>
</tbody>
</table>

### GUIDELINES

<table>
<thead>
<tr>
<th>3. Guidance for the development and management of water and related projects and resources shared and applied by national planning and implementing agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3.1</strong> Preliminary design guidance for mainstream dams reviewed, updated and implementation supported</td>
</tr>
<tr>
<td>PD</td>
</tr>
<tr>
<td>On-going</td>
</tr>
<tr>
<td>40%</td>
</tr>
<tr>
<td><strong>3.3</strong> A set of guidelines and frameworks on waterborne transport management prepared and promoted</td>
</tr>
<tr>
<td>TD</td>
</tr>
<tr>
<td>On-going</td>
</tr>
<tr>
<td>90%</td>
</tr>
<tr>
<td><strong>3.4</strong> The sharing and learning of &quot;best practice&quot; guidelines and tools to support the development and operation of water and related projects on tributaries of transboundary significance</td>
</tr>
<tr>
<td>PD</td>
</tr>
<tr>
<td>On-going</td>
</tr>
<tr>
<td>60%</td>
</tr>
<tr>
<td><strong>3.5</strong> Methodologies for sustainable use and management of wetlands developed and implementation supported</td>
</tr>
<tr>
<td>ED</td>
</tr>
<tr>
<td>On-going</td>
</tr>
<tr>
<td>65%</td>
</tr>
<tr>
<td><strong>3.6</strong> Guidance for design and operation of irrigation systems with transboundary implications prepared and implementation supported</td>
</tr>
<tr>
<td>PD</td>
</tr>
<tr>
<td>New</td>
</tr>
<tr>
<td>55%</td>
</tr>
<tr>
<td><strong>3.7</strong> Guidelines for fish-friendly irrigation schemes promoted and implementation supported</td>
</tr>
<tr>
<td>PD</td>
</tr>
<tr>
<td>On-going</td>
</tr>
<tr>
<td>40%</td>
</tr>
<tr>
<td><strong>3.8</strong> Transboundary Environmental Impact Assessment (TEIA) guidelines established, approved and promoted</td>
</tr>
<tr>
<td>ED</td>
</tr>
<tr>
<td>On-going</td>
</tr>
<tr>
<td>65%</td>
</tr>
</tbody>
</table>

### PROCEDURES

<table>
<thead>
<tr>
<th>4. Effective and coherent implementation of MRC Procedures by Member Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>4.1</strong> MRC Procedures and associated technical guidelines reviewed and updated</td>
</tr>
<tr>
<td>PD</td>
</tr>
<tr>
<td>Functional</td>
</tr>
<tr>
<td>40%</td>
</tr>
<tr>
<td><strong>4.2</strong> MRC Joint Platform and working groups for MRC Procedures implementation supported</td>
</tr>
<tr>
<td>PD</td>
</tr>
<tr>
<td>Functional</td>
</tr>
<tr>
<td>30%</td>
</tr>
</tbody>
</table>

---

**Output Type**

**On-going**: 27  
**Completed**: 12  
**Updated**: 9  
**Not Yet Started**: 8  
**Total AWP 2017 Output**: 35

**Summary**

- **Completed preparatory work** for the development and implementation of MRC Procedures, including associated technical guidelines.
- **Established and implemented** regional partners and stakeholders, and strategic engagement of Member Countries.
- **Promoted and implemented** the sharing and learning of “best practice” guidelines and tools.
- **Finalized** the Basin-wide fisheries management strategy (BFMS) and action plan.
- **Completed** the development and implementation of water and related projects on tributaries of transboundary significance.
- **Established, approved and promoted** the guidelines and frameworks on waterborne transport management.

**Status**

- **On track**: 27  
- **Delayed**: 8  
- **Total**: 35
MRC ANNUAL WORK PLAN 2017 PROGRESS

COOPERATION

5. Effective dialogue and cooperation between Member Countries and strategic engagement of regional partners and stakeholders on transboundary water management

- 5.1 Partnerships with MRC’s Dialogue Partners further developed & implemented, including an additional agreement with China on cooperation for Mekong basin development & management
- 5.2 Partnerships with ASEAN, GMS and other organizations updated and implemented
- 5.3 Regional Stakeholder Platform established and implemented for enhanced dialogue and collaboration with broader stakeholders Member Countries promoted

MONITORING

6. Basin-wide monitoring, forecasting, impact assessment and dissemination of results strengthened for better decision-making by Member Countries

- 6.1 Monitoring and forecasting systems for MRC Procedures and Indicators Framework developed and maintained
- 6.2 Regional information systems and databases quality assured, standardized, improved and maintained
- 6.3 MRC modeling and related impact assessment tools updated and approved for use by MRC and Member Countries
- 6.4 State of Basin, Status of Climate Change, and technical reports based on MRC Indicator framework prepared
- 6.5 Communication of and access to MRC data, information and knowledge developed and maintained

ORGANIZATION

7. MRC transitioned to a more efficient and effective organization in line with the decentralisation Roadmap and related reform plans

- 7.1 MRC’s structural reform implemented and linkages with Member Countries further improved
- 7.2 MRC’s human resource reform implemented
- 7.3 MRC’s financial and administrative reforms implemented and operationalized
- 7.4 Annual work plans, and results-based monitoring, evaluation and reporting system for MRC SP and NPs prepared and fully operationalized
- 7.5 Support to NPs

**Division / Office**
- AD: Administration Division
- ED: Environmental Management Division
- OC: Office of CEO
- PD: Planning Division
- TD: Technical Support Division

**% of Completion Scale**
- Not Yet Started
- Completed preparatory work
- Half way done
- Completed most of the work
- Completed

**Output Type**
- On going: 0-100%
- New: 0-100%
- Functional: +20% / year

**Status**
- On Track
- Delayed

Updated: December 2017
### BDS Needs & Challenges

#### Sustainable Development Goals

<table>
<thead>
<tr>
<th>Target</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5</td>
<td>By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters</td>
</tr>
<tr>
<td>5.5</td>
<td>Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life</td>
</tr>
<tr>
<td>2.4</td>
<td>By 2030, ensure sustainable production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality</td>
</tr>
<tr>
<td>6.1</td>
<td>By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements</td>
</tr>
<tr>
<td>6.3, 6.5</td>
<td>By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally</td>
</tr>
<tr>
<td>6.6</td>
<td>By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes</td>
</tr>
<tr>
<td>7.a</td>
<td>By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology</td>
</tr>
<tr>
<td>7.a</td>
<td>By 2030, ensure sustainable consumption and production patterns and reduce their environmental impact on all life on Earth</td>
</tr>
<tr>
<td>13.1</td>
<td>Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries</td>
</tr>
<tr>
<td>13.2</td>
<td>Integrate climate change measures into national policies, strategies and planning</td>
</tr>
<tr>
<td>13.3</td>
<td>By 2030, substantially increase water use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity</td>
</tr>
<tr>
<td>13.5</td>
<td>By 2020, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters</td>
</tr>
<tr>
<td>13.6</td>
<td>Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed</td>
</tr>
<tr>
<td>13.7</td>
<td>By 2020, take urgent and significant action to stop, reverse and where possible, halt the deterioration of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species</td>
</tr>
</tbody>
</table>

#### MRC Outcomes

<table>
<thead>
<tr>
<th>Study</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Support Food Security &amp; Resilience by improving food requirement &amp; availability for land uses</td>
</tr>
<tr>
<td>1.5, 2.2</td>
<td>Support Food Security &amp; Resilience by improving food requirement &amp; availability for land uses</td>
</tr>
<tr>
<td>1.7</td>
<td>Support Food Security &amp; Resilience by improving food requirement &amp; availability for land uses</td>
</tr>
<tr>
<td>2.2 Regional Flood Management Strategies</td>
<td>1.5, 13.1, 13.3</td>
</tr>
<tr>
<td>2.9 Regional Strategy for Drought Management</td>
<td>1.5, 2.4, 13.1, 13.2, 13.3</td>
</tr>
<tr>
<td>2.3 Basin-wide Fisheries Management Strategy (BFMS)</td>
<td>1.5, 2.4, 13.1, 13.2, 13.3</td>
</tr>
<tr>
<td>2.6 Basin Development Strategy</td>
<td>1.5, 2.4, 13.1, 13.3</td>
</tr>
<tr>
<td>1.6</td>
<td>Support food &amp; nutrition by ensuring food requirement &amp; availability for land uses</td>
</tr>
<tr>
<td>1.5, 2.4, 13.1, 13.3</td>
<td></td>
</tr>
</tbody>
</table>

#### Strategies

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.4 Joint Projects</td>
<td>1.5, 6.5, 6.6, 7.9, 9.1, 17.14</td>
</tr>
<tr>
<td>2.3 Basin-wide Sustainable Hydropower Development Strategy</td>
<td>1.5, 6.5, 6.6, 7.9, 9.1, 17.12</td>
</tr>
<tr>
<td>2.5 Mekong Climate Change Adaptation Strategy &amp; Action Plan</td>
<td>1.5, 5.5, 11.1, 13.1, 13.3, 13.4</td>
</tr>
<tr>
<td>2.7 Master Plan for regional waterborne transport</td>
<td>8.2, 17.9</td>
</tr>
<tr>
<td>2.8 Basin-wide Environmental Management Strategy</td>
<td>1.5, 6.6, 15.1, 15.5, 15.6, 15.7</td>
</tr>
</tbody>
</table>

#### BDS Needs & Challenges

<table>
<thead>
<tr>
<th>BDS Needs &amp; Challenges</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy Security</td>
<td>1.1 Study on water requirement &amp; availability for land uses</td>
</tr>
<tr>
<td>Food Security</td>
<td>1.5, 13.1, 13.3</td>
</tr>
<tr>
<td>Resilience against floods &amp; drought</td>
<td>1.5, 13.1, 13.3</td>
</tr>
</tbody>
</table>
Comprehensive Study Completed to Inform Better Decision-Making

**Indicator:** Evidence of national and regional decision-making based on or referring to MRC knowledge products

The rapid development in the Mekong River region is increasingly putting pressure on the Basin’s water and related resources. The current knowledge of how different water uses will impact the River Basin still has gaps and the predictions made using models and other tools do, in many areas, still have uncertainty. This causes uncertainty in the planning framework and in cooperation for sustainable development. In order to facilitate cooperation within the MRC framework there is an urgent need to close the most important knowledge gaps and improve the certainty of predictions of impact from major developments in the Mekong River Basin.

In November 2011, the Prime Ministers of Cambodia, Lao PDR, Thailand and Viet Nam resolved to conduct a Study on Sustainable Management and Development of the Mekong River Basin during the Third Mekong-Japan Summit. The MRC Council commissioned the study the following month.

The objectives of the study were threefold: first, to develop scientific evidence of the positive and negative environmental, social, and economic impacts of water resource development; second, to use the findings to enhance basin development planning by the MRC; and third, to transfer capacity and technology to the four countries. The Council Study builds on the previous studies of the MRC, including the Basin Development Plan’s Assessment of Basin-wide Development Scenarios and the Strategic Environmental Assessment of Mainstream Dams.
PROGRESS
To conduct the Council Study, the MRC formed 12 teams. Six covered the thematic areas of agricultural land use, irrigation, domestic and industrial water use, flood protection, hydropower and navigation. Five teams covered the cross-cutting areas of climate change, modelling, biological resources, economics and social issues. The study also had a cumulative impact assessment team.

The Council Study considered three scenarios – early development (2007), definite future (2020) and planned development (2040) with the 2007 scenario serving as the baseline. The scenario for 2020 was for existing projects involving agriculture, irrigation, water use, flood protection, hydropower and navigation along with projects either under construction or firmly committed in these sectors (including the Xayaburi and Don Sahong hydropower projects). The third scenario was the 2020 scenario plus other developments in the six sectors planned for implementation by 2040.

The Study went through extensive consultations with development of the concept note, terms of references and inception report, which altogether took around 2-3 years to complete. The development of the assessment methodology as well as the assessment itself took another 2 years. The Study was completed at the end of 2017, following numerous regional technical working group consultations, small group meetings and national level discussions, as well as two specific stakeholder forums.

EVIDENCE OF CHANGE
The main outputs from the Study include integrated and cumulative assessments of water resource development impacts and key messages for the decision-makers in the four Member Countries. The completed study also contains tools and datasets that can be used and replicated to guide future policy-oriented research. The Council Study generated a number of important findings that have added to the knowledge base on sustainable management of the Mekong River Basin. Evidenced by the views and perspectives expressed in technical and stakeholder consultations, it is clear that emerging results and findings, some previously unknown, were discussed and debated actively. Irrespective of one’s perspective regarding the findings, they constitute important reflections to guide future plans for development of the Basin.

High level dissemination to policy makers and integration of the Council Study findings into various MRC activities, such as the update of the sustainable hydropower strategy, the State of Basin Report 2018, and the formulation of Basin-wide Environment Management Strategy and the next Basin Development Strategy are planned for the coming years.
Pathway to Change

Study on the Sustainable Development and Management of the Mekong River Basin

In the beginning...

What we did....

Who we reached....

As a result of what we did....

And then potentially....

And eventually....

Reduce development trade-offs and optimize mutual benefits of water sectors & thematic areas for sustainable development

Findings are shared, discussed and referenced by key agencies and stakeholders

Opportunities & trade-offs discussed and decisions made at policy level

NMCs and line/ implementing agencies increased capacity, collaboration, and awareness of new tools and assessment findings

Senior officials increased understanding of opportunities and trade-offs of water resources development

Key policies makers

Disseminated results to policy makers & the public

Engaged countries and stakeholders on the approach & findings

Formulated scenarios and conducted assessments

Developed & enhanced tools and methodologies

50 Line Agencies in 4 Member Countries

150+ Stakeholders attended forums

Some knowledge gaps on the impacts of development in various sectors & thematic areas
Bilateral Water Cooperation Increased Through IWRM Transboundary Projects

Indicator: Evidence that National Plans benefit from basin-wide strategies and action plans

Managing the Mekong water resources beyond national boundaries is critical for sustainable development of the Mekong Basin, as water, fish and sediment are all flowing from one country to another. The four Mekong countries of Cambodia, Lao PDR, Thailand and Viet Nam had been cooperating for decades to jointly manage the shared resources based on rules and guidelines set up by the Mekong Agreement.

However, cooperation was more centered around regional cooperation, focusing on the management of shared resources on the Mekong mainstream. As the Mekong countries felt the need for more bilateral cooperation to tackle transboundary water issues along the borders at the bilateral provincial level in response to local needs, the MRC facilitated the establishment of five transboundary projects among the four countries to address cross-border water issues between the neighbouring countries under the Mekong Integrated Water Resources Management Project (M-IWRMP). This M-IWRMP is a cross-cutting project that has promoted IWRM practices of coordinated planning and management of water resources with the application of MRC procedural rules on water use planning, data sharing and flow monitoring since 2010.

The five transboundary projects include:

- Mekong and Sekong Rivers Fisheries Management Project between Cambodia and Lao PDR, which addresses the issue of declining migratory whitefish species
- Sesan and Srepok River Basins Water Resources Management Project which aims to improve transboundary cooperation between Cambodia and Viet Nam in the face of hydropower development
- Mekong Delta Water Resources Management Project between Cambodia and Viet Nam that addresses challenges from upstream development and climate change
- Xe Bang Hieng and Nam Kam River Basins Wetland Management Project between Lao PDR and Thailand that aims to strengthen wetland resources management through knowledge sharing
- Tonle Sap Lake and Songkhla Lake Basins Communication Outreach Project between Cambodia and Thailand that supports healthy lake governance through outreach and learning exchange

With these projects, the four countries are now increasing bilateral dialogue in the process of building a common understanding of key cross-border water issues, finding durable solutions to address issues together, and sharing best practices in water resources management.

Launched in 2013 and 2014, respectively, these five projects are slated for completion in 2018.
PROGRESS

Among these transboundary projects, three; the Mekong – Sekong, Sesan – Srepok and Mekong Delta Projects aim to identify common transboundary water issues and challenges they face, and present solutions to address common priority issues by designing bilateral cooperation mechanisms and developing joint action plans. The other two projects; Xe Bang Hieng – Nam Kam and Tonle Sap – Songkhla Lake emphasise exchange of experience in water management.

Building upon the efforts made in previous years, in 2017 the three projects; Mekong – Sekong, Sesan – Srepok and Mekong Delta identified common issues in transboundary water management by consolidating inputs from consultation with various stakeholders, extended field surveys and literature reviews. The process and results of issue-finding efforts were documented in three papers and published in mid-2017 as Transboundary Fisheries Management in the Mekong and Sekong River of Cambodia and Lao PDR; Transboundary Water Resources Management Issues in the Sesan and Srepok River Basins of Cambodia and Viet Nam; and Transboundary Water Resources Management Issues in the Mekong Delta of Cambodia and Viet Nam. Toward the end of the year, the three project teams continued bilateral dialogue to agree priority issues and further discuss how to set up bilateral cooperation mechanisms.

The other two projects of wetlands and lakes management continued to exchange their experiences in water resources management. Building upon reciprocal study visits between Laos’ Xe Champhone and Thailand’s Nong Han wetlands in the previous years, in 2017 the wetland management project team documented findings from the exchange visits, particularly in the areas of resource utilisation, data sharing and livelihoods. The team continued dialogue to develop a community-based wetland management plan, taking lessons from the counterpart’s experience. The lakes team, meanwhile, continued a participatory video exchange initiative where people from the communities of Tonle Sap and the Songkhla Lake visited each other to film and show their community-based water management activities as part of the knowledge exchange. Following the study visits and video exchange, the team continued dialogue to document joint learning on climate change adaptation, fisheries management and women’s empowerment in order to improve community-based lake governance.

EVIDENCE OF CHANGE

Through these transboundary projects, the Mekong countries continued to build up dialogue between the neighbouring countries to increase collaboration at the sub-basin level to address local cross-border water resources management issues. This is new and unique to the MRC’s history of cooperation.

In particular, the three projects; Mekong – Sekong, Sesan – Srepok and Mekong Delta leaped ahead in bilateral water cooperation, as they enhanced bilateral dialogue between local stakeholders within the countries concerned and agreed on priority transboundary issues they need to address for better resources management.

With the Mekong – Sekong Fisheries Management Project, fisheries specialists from Cambodia and Lao PDR jointly identified seven challenges as priority issues. They found that exploitative fishing practices, including intensive fishing and the use of illegal fishing gear, had caused a decline in fish stock in the border provinces along the Mekong and Sekong Rivers. They also commented that various water infrastructure activities, such as logging, blasting rapids, sand mining and dam construction for causing degradation of fish habitats, leading to a reduction of fish population and production. A lack of bilateral fisheries management mechanisms, limited fisheries data collection and sharing, and low capacity of human resources at provincial and district levels also hinder the improvement of local fisheries management.
On identifying these challenges, the project team conducted joint monitoring of five long-distance migratory white fish species in the selected villages, and set a target of a 10 percent increase in fish abundance within four years. In order to reach that goal, the bilateral team agreed to aim at a 50 percent reduction of illegal fishing activities in the transboundary conservation pool, and an 80 percent cut in the use of a traditional but illegal fishing gear – called Lee Traps – in the Khone Falls. Since then, the team has been developing a joint fisheries management body to address the priority issues and discuss details of a management plan to reduce illegal fishing activities and use of illegal gear.

Through the Sesan – Srepok project, Cambodia and Viet Nam have increased transboundary dialogue on common challenges in water resources management along the bordering provinces, where rapid changes were experienced due to hydropower development, intensive mining, agricultural irrigation, and deforestation.

The project team identified six joint issues for the management of water resources along the borders. A lack of meteorological and hydrological data, insufficient hydro-data sharing between the two countries, absence of early warning systems of flooding for local communities, and limited capacity of human resources at the provincial level were major issues that need to be addressed for the improvement of shared water resources management. The bilateral team also found that the two countries need to introduce adequate mitigation measures to prevent negative impacts of hydro-development in the sub-basins, and to raise awareness of local populations about water development and its likely effects.

Following the identification of priority issues, the two countries have been developing collaboration mechanisms to regularly discuss local water issues, exchange meteorological and hydrological data, and plan early flood warning systems at the provincial and district levels. In addition, the project team has also begun discussion on the development of a joint action plan to improve bilateral water cooperation.

The Mekong Delta project has also supported Cambodia and Viet Nam to increase collaboration to address water resources issues in the delta that concern both countries. Through consultation with government officials and local stakeholders and field surveys, the project team identified six main issues that need to be addressed. A lack of transboundary planning on flood and drought management, uncoordinated development of flood control and irrigation systems, the absence of efficient coordination mechanisms to discuss water issues, and limited capacity of institutional and human resources have all been identified. Limited understanding in the cumulative and immediate effects of upstream hydropower development and climate change as well as insufficient implementation of a bilateral inland navigation agreement also hinder the effective management of shared water resources.

Since the identification of priority issues, Cambodia and Viet Nam have been developing cross-border coordination mechanisms to exchange hydro-data and improve transboundary water cooperation, suggesting that sharing various data, such as river flow rates, water quality and sediment would enable more coordinated planning of flood control measures. Before the project ends in 2018, both countries are expected to design a joint action plan to implement the coordination mechanisms for better transboundary cooperation to address the priority issues.

The five transboundary project teams of the Mekong countries see clear benefits of bilateral dialogue. Sharing their experience at a public forum in Sakon Nakhon, Thailand, in mid-September 2017, key members of the five projects said that frequent dialogue to understand each other, attention to different needs of the countries concerned, and strong commitment to joint actions were some of the main lessons learnt from bilateral projects.
“The most important thing is that the two countries are now aware of transboundary issues and committed to solving those issues together,” said Phai Sok Heng, Cambodian consultant to the Sesan – Srepok and Mekong Delta projects. He continued by stating that frequent meetings and discussions was a key factor to find common issues and explore joint solutions through cooperation: “We’ve met so many times to discuss and work together for common goals, and finally started understanding our counterparts more. Without this understanding, it was impossible to explore effective collaboration.”

CONCLUSION

For the last few years, the Mekong countries have increased bilateral water cooperation through the IWRM transboundary projects. The countries have actively participated in the process of building a common understanding of key cross-border issues, have begun strengthening bilateral collaboration mechanisms, and have shared best practices in local water resources management from each other’s experiences. Transboundary dialogue is now clearly taking root at the local level between neighbouring countries.

If continued, this bilateral collaboration will eventually help sustain sustainable basin-wide development, as strengthened bilateral water cooperation through dialogue will help improve the livelihoods of local communities, enhance the management of flood and drought situations, and increase their food security in the long run.
Transboundary Projects

1. Xe Bang Hieng and Nam Kam River Basins Wetland Management Project
2. Mekong and Sekong Rivers Fisheries Management Project
3. Sesan and Srepok River Basins Water Resources Management Project
5. Tonle Sap Lake and Songkhla Lake Basins Communication Outreach Project
Basin-wide Fisheries Strategy Approved for Action

**Indicator:** Evidence that National Plans benefit from basin-wide strategies and action plans

In spite of progressive urbanization and emerging secondary and tertiary sectors of the economies of the four riparian countries, the majority of their people still depend on the Mekong river ecosystem, including fish, for their livelihoods, as a source of income and employment, and for food. To safeguard the food security and livelihoods of millions of people living along the Mekong River, regional cooperation on fisheries management is vital. With each riparian country implementing its own national strategy, however, the need for a regional strategy was clear.

To address the hitherto limited regional cooperation on this issue, the MRC coordinated the development of a strategy to bring the Member Countries together to monitor, plan, and sustainably manage fisheries across the Lower Mekong Basin.
PROGRESS

In November 2017, the Mekong Basin-wide Fisheries Management and Development Strategy 2018-2022 (BFMS) was approved by the MRC Council. It was developed in collaboration with the four Member Countries, Government Agencies and relevant national, regional and international stakeholders, including the South Asia Fisheries Development Center (SEAFDEC) and the UN Food and Agriculture Organisation (UN-FAO).

The Strategy was developed to create mutual understanding between relevant actors and encourage increased communication and cooperation for fisheries management and development in the Lower Mekong Basin. The Strategy specifies three key objectives: (i) monitoring of key indicators; (ii) management-related priorities, including the conservation of key habitats, fisheries enhancement, and transboundary fisheries management; and (iii) priorities related to development where an advisory role of the strategy is envisaged for fisheries and fish-friendly irrigation, aquaculture, water development and adaptation to climate change.

The formulation of the BFMS relied on two key strategic elements: (i) communication and mutual understanding between actors and (ii) regional cooperation for fisheries management and development. Technical experts from the Departments of Fisheries of each Member Country were engaged to support the finalisation of the strategy, and further feedback was given by research centres such as IFReDI in Cambodia and LARReC in Lao PDR.

The successful development of the Strategy owes much to the extensive consultations undertaken by the MRC. From September to November 2017, in the latter stages of the consultation process, the MRCS implemented country visits to consult with National Mekong Committees and implementing line agencies and regional fisheries-related agencies to identify significant issues and prioritise key strategic actions for the formulation of the Project Based Action Plan for the BFMS.

In December, the team coordinated with the SEAFDEC-Sweden Project to co-organise a regional consultation on formulation of the Project Based Action Plan for the BFMS. The 40 participants included members of the MRC Expert Subgroup on Fisheries, implementing Agencies from the Member Countries, as well as delegates from regional and international organisations, namely SEAFDEC, NACA and FAO.

EVIDENCE OF CHANGE

Above all, the BFMS represents collaboration and consensus. An early success of the Strategy was the agreement among the Member Countries on key regional management and development issues. Based on these issues, the strategic priorities for the BFMS were then developed. Importantly, through the BFMS preparation process, data from all four Member Countries can be analysed together after synchronisation, resulting in reliable findings that support more effective decision-making for the sustainable management of fisheries.

The figure below shows the regional issues identified during the consultation process. Each strategic priority within the Strategy tackles several issues. For instance, the first strategic priority targets the lack of a synchronised monitoring management database and platform to improve regional cooperation between Member Countries.
While the Strategy itself marks a critical development for the sustainable management of fisheries in the Mekong, its development would not have been possible without the change in perceptions and awareness of key policy makers; for instance, the leadership of the Member Countries’ Departments of Fisheries. The MRCS worked actively with the Member Countries to foster the relevance of sustainable fisheries management in order to ensure food security, reduce poverty and secure incomes for the people that rely on fisheries in the Mekong Region.

To implement the Strategy, the countries agreed to develop the five-year Project-Based Action Plan to tackle the regional and transboundary issues, including; the sustainable use and conservation of fish resources; gender equity in fisheries management and development; and property rights in fisheries. Under the Action Plan, appropriate projects are being designed to address the Strategy’s priorities.

The figure below provides an overview of the proposed project-based action plan (PBAP). Under each outcome specific project activities address the BFMS priorities, targeting the regional management and development issues identified in the above figure.

Where we are now?

Monitoring Issues:
- Fisheries monitoring database analysis and synchronization (regional & national level) for inland fisheries management for sustainability.
- Fisheries database sharing platform for improvement of management and monitoring.
- Capacity on fisheries monitoring and technical document preparation.

Management Issues:
- Regional & transboundary conservation of key habitats and fish resources.
- Fisheries co-management and coordination between users and their organization for the management of fisheries resources within shared fish stocks and transboundary areas.

Development Issues:
- Fish-culture techniques in particular Mekong indigenous species to support fish stock enhancement.
- Maintenance and restoration activities to enhance connectivity in rivers for the conservation of fish migratory patterns required.
- Adaptation strategies on the climate change impacts.

Where we want to be in 2022?

3 Strategic Priorities

1. Monitoring of key indicators to document changes in capture fisheries and other sectors.

2. Management-related priorities, promoting proactive regional engagement and cooperation.

3. Priorities related to water development, where a responsive and advisory role of the BFMS 2018-2022 is envisaged.

Snapshot of Actions

Transfer fisheries monitoring to national agencies according to MRC Decentralisation Road Map (2016-2020).

Update identification, mapping and demarcation of key habitats of the LMB ecosystem and rank key conservation areas.

Conduct in-depth country investigation into status and key issues/constraints for effective and responsible fish-stock and habitat-enhancement activities in all four Member Countries.

Integrate ‘fish-friendly irrigation’ into national agriculture development strategies.

Develop Regional Technical Guidelines for Aquaculture Development.

Promote gender equity and equality, including elimination of abusive child labour in the Mekong fisheries region consistent with universal human rights.

Assist Member Countries in developing/improving legal frameworks for fisheries co-management.

Develop guidelines for the identification of climate-change-related vulnerability of fisheries-specific habitats and species.

Implementation

Approved BFMS 2018-2022

Finalized Project-based Action Plans (PBAP)

Implement Project-based Action Plans (PBAP)

New Fisheries Expert Subgroup

Fundraising PBAP

Strategy Evaluation

2017 2018 2019 2020 2021 2022
The BFMS is relevant to the Sustainable Development Goals (SDGs). The Strategy’s emphasis on ensuring access to fisheries as a source of food contributes to Goal 2 on Zero Hunger, and its focus on the sustainable use of resources reflects Goal 12 on Responsible Consumption and Production.

In addition, SDG 5 on Gender Equality is addressed through the Strategy’s focus on gender and fisheries; the BFMS recognises the importance of gender equality and encourages the active involvement of women in the decision-making processes from household to government level.

Fisheries provide food security and livelihoods for millions of people living along the Mekong River. Through the Member Countries’ commitment to understanding and consensus, the BFMS is set to play a key role in ensuring that the people’s needs continue to be met. Continuous dialogue and the sharing of experiences will remain the basis for the Strategy’s continued development and flexibility, laying the foundations for the responsible and sustainable management of fisheries in the Lower Mekong Basin for years to come.

Pathway to Change

Collaborative management of fisheries in an environmentally non-degrading, economically viable, socially acceptable and technically appropriate manner and stimulate responsible and sustainable use of fisheries and living aquatic resources in the Lower Mekong Basin

A regional project-based action plan (PBAP) will be formulated and implemented based on the strategic priorities and actions

Fisheries Expert Subgroup will technically support the effective implementation of the PBAP

Consensus on Regional and Transboundary fisheries issues and the necessity of a multi-discipline strategy on regional fisheries management and development.

The first Mekong Basin-wide Fisheries Management and Development Strategy encompassing 10 strategic priorities and actions to address regional and transboundary fisheries issues

Technical specialists of Fisheries departments and Research Centres

Regional/international organisations (FAO, SEAFDEC, CSOs)

Management and policy levels of Departments of Fisheries.

Review and reflection of the Member Countries national & international strategies

Identification of the Regional Fisheries priorities ‘to be promoted’

Establishment of Regional Expert Subgroup on Fisheries

Approval of Strategy by Council to be implemented

A variety of national strategies for fisheries management and development in each Member Country, limited regional collaboration concerning common issues of fisheries management
Hydropower Impact Mitigation and Risk Management Guidelines Ready for Use

Indicator: Evidence that National Plans benefit from basin-wide strategies and action plans

Intensive hydropower development in the Mekong Basin has highlighted its substantial economic benefits for Member Countries. However, there are potential trade-offs with other sectors across economic, environmental and social spheres as highlighted by a number of MRC studies.

Basin-scale and system-scale planning is critical and urgent for sustainable development of the energy and water sectors. However, knowledge and application of Mekong-specific hydropower impact mitigation options were limited. In response to these limitations and within the context of sustainable hydropower development, the development of guidelines for environmental impact mitigation and risk management were of critical importance.

The MRC works to embed sustainable hydropower considerations into regulatory frameworks and planning systems of the Member Countries and into project-level planning, design, implementation, and operational activities. It emphasises the need to understand the scale and distribution of risks associated with hydropower development, attempting to reduce these risks and optimise benefits on the mainstream and tributaries.
PROGRESS

During 2015-2017, the MRC developed Guidelines for Hydropower Environmental Impact Mitigation and Risk Management in the Lower Mekong Mainstream and Tributaries. The Guidelines focus on long-term sustainability in the Mekong Basin supporting whole-of-basin planning and management.

The goal of the MRC Hydropower Mitigation Guidelines – informed by findings from a major Case Study that investigated the Mekong mainstream cascade operations and mitigation – was to provide measures, best practice, and state-of-the-art impact mitigation approaches for the sustainable development of hydropower dams in the Lower Mekong Basin and its tributaries.

Capacity building, training, and outreach as well as on-the-job training were conducted throughout the development of the Guidelines. Communication materials were developed and various national and regional consultations were held with participation from implementing line Agencies in the Member Countries, as well as over 400 Stakeholders from the private sector, academia, and international and local development organisations.

As part of the consultation process, the MRC supported five separate Sustainable Hydropower Development Forums, including a Hydropower Sustainability Forum: Mekong+ in Oslo, in September 2017. This latter event was a collaboration between the MRC, GIZ and Multiconsult, and was also supported by NORAD, the Norwegian Ministry of Foreign Affairs, and Deltares.

These Fora brought together Member Country representatives, national hydropower utility operators, developers, and hydropower consultants to discuss and share experiences.

Engagement with international partners was also a major undertaking. The approach to development of the Guidelines and findings from the Case Study were presented to the World Bank Global Hydropower Lead, and opportunities for further collaboration explored. These and other engagement activities provided state-of-the-art knowledge generation throughout the development process.

EVIDENCE OF CHANGE

Specifically, in 2017, the Guidelines were used during the Procedure for Notification, Prior Consulation and Agreement (PNPCA) implementation. As a result of the Case Study, the quality of the PNPCA Technical Review Report of the Pak Beng Hydropower Project was substantially improved. The reviewers were able to rely on the Case Study, which included Pak Beng as part of the planned Northern Lao cascade, to validate or supplement information provided by the developer.
In general, the Guidelines have added value to the MRC’s Preliminary Design Guidance for Mainstream Dams (PDG), which may be used by developers during project preparation and then by the MRC to assess projects through the PNPCA. The Guidelines detail the application of regional and global ‘good industry practice’ for mitigation of potential hydropower impacts in the Mekong context.

In addition, the Guidelines have improved stakeholders’ understanding of Mekong-specific hydropower impact mitigation options. These options can be raised and championed to deal with the risks and impacts of major hydropower developments which are now better understood for the Mekong Basin. These include economic, environmental, and social consequences of impacts to river hydrology and downstream flows, geomorphology and sediments, water quality, fisheries and aquatic ecology; and biodiversity, natural resources and ecosystem services.

The MRC Guidelines, in tandem with the substantial knowledge base on the avoidance, minimisation and mitigation options, can make a contribution to the Sustainable Development Goals (SDGs). With knowledge-based Mitigation Guidelines and tools, project planners and implementers are able to make more informed decisions, striking a balance between hydropower development and environmental and social protection in the LMB to ensure integrated management of water resources while supplying sustainable energy for all.

Therefore, the Guidelines can be linked to Sustainable Development Goal 6 on Water and Sanitation, specifically target 6.5, which states: “By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate” and target 7.B of Goal 7 on Affordable and Clean Energy: “By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programmes of support.”

With hydropower a vital source of renewable energy for the Mekong Region, the need for collaboration between upstream and downstream countries is essential. The Mitigation Guidelines provide a vital tool for Member Countries to work together to make sure best practices and state-of-the art impact mitigation approaches are shared and applied in the cause of sustainable development.
Pathway to Change

Hydropower Impact Mitigation and Risk Management Guidelines

In the beginning...

In the beginning...

Limited knowledge and application of Mekong-specific hydropower impact mitigation options at project and basin scale for mainstream and tributaries

What we did...

As a result of what we did...

What we did...

And then potentially...

And eventually...

And then potentially...

Potential adverse impacts of hydropower development avoided, minimised and mitigated

Potential adverse impacts of hydropower development avoided, minimised and mitigated

World Bank may support global dissemination

World Bank may support global dissemination

Developers adopt life-cycle approach to mitigation and address basin-wide concerns

Developers adopt life-cycle approach to mitigation and address basin-wide concerns

All stakeholders improved understanding of Mekong-specific hydropower impact mitigation options

All stakeholders improved understanding of Mekong-specific hydropower impact mitigation options

Engaged stakeholders on the approach & results

Engaged stakeholders on the approach & results

Presented results to World Bank Global Hydropower Desk

Presented results to World Bank Global Hydropower Desk

Reached out to 400 Stakeholders from private sector, academia and CSOs

Reached out to 400 Stakeholders from private sector, academia and CSOs

12 Implementing Line Agencies in 4 Member Countries

12 Implementing Line Agencies in 4 Member Countries

Guidelines shared and applied by national hydropower planning and implementing agencies

Guidelines shared and applied by national hydropower planning and implementing agencies

Updating (P)DG to be more relevant, practical and user-friendly

Updating (P)DG to be more relevant, practical and user-friendly

Quality of PNPCA Technical Review Report of Pak Beng Hydropower Project improved

Quality of PNPCA Technical Review Report of Pak Beng Hydropower Project improved

Modelled impacts & mitigation, developed user-friendly guidelines & manual

Modelled impacts & mitigation, developed user-friendly guidelines & manual

Developed freely accessible mitigation knowledge base

Developed freely accessible mitigation knowledge base

Who we reached....

Who we reached....

12 Implementing Line Agencies in 4 Member Countries

12 Implementing Line Agencies in 4 Member Countries

Reached out to 400 Stakeholders from private sector, academia and CSOs

Reached out to 400 Stakeholders from private sector, academia and CSOs

Limited knowledge and application of Mekong-specific hydropower impact mitigation options at project and basin scale for mainstream and tributaries

Limited knowledge and application of Mekong-specific hydropower impact mitigation options at project and basin scale for mainstream and tributaries

12 Implementing Line Agencies in 4 Member Countries

12 Implementing Line Agencies in 4 Member Countries

Reached out to 400 Stakeholders from private sector, academia and CSOs

Reached out to 400 Stakeholders from private sector, academia and CSOs

Limited knowledge and application of Mekong-specific hydropower impact mitigation options at project and basin scale for mainstream and tributaries

Limited knowledge and application of Mekong-specific hydropower impact mitigation options at project and basin scale for mainstream and tributaries
The Rapid Basin-wide Hydropower Sustainability Assessment Tool (RSAT) Utilised

**Indicator:** Evidence of national and basin benefits in using MRC guidelines and standards

In regions such as the Mekong River basin where rivers are closely tied to everyday human life and natural resources are central to livelihoods, sustainable hydropower development and river basin planning call for close attention to how social and natural systems will adapt to the changes that hydropower will bring. The application of sustainability assessment tools such as the RSAT can assist the identification of development strategies, institutional responses and management measures that can maximize and broaden the benefits of hydropower development and reduce the risks, particularly for those social groups and ecosystems with less capacity to absorb and adapt to change.

The RSAT goes beyond individual projects to take a River Basin approach to sustainable hydropower development, considering broader environmental, economic, technical, social, strategic and cumulative impacts and institutional responses for sustainable development.

Most countries in the region have a good foundation of environmental laws and regulations regarding Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA). However, integration of multiple issues and criteria to develop, implement and operate hydropower plants from a River Basin perspective could be developed further, especially in reference to transboundary impacts and sub-regional power trade and needs. These are the gaps addressed by the RSAT.
PROGRESS

Since 2009, the Rapid Basin-wide Hydropower Sustainability Assessment Tool (RSAT) has been designed, trialed and developed as a specific tool for basin-wide application for hydropower planning. RSAT provides a framework and methods to apply IWRM principles to sustainable hydropower development. In the last 6 years, efforts have been made to develop and complete the RSAT with a series of training activities, trials and workshops to turn the concept into a comprehensive set of tools with clear User Guide.

RSAT is designed to support collaborative and integrative planning and decision-making processes and dialogue among key stakeholder groups. In an RSAT assessment and dialogue process, a sub-basin with hydropower development is assessed against a set of topics and criteria using the secondary data and information that is available. Focus is therefore placed not on individual hydropower projects but on the broader context of the energy sector and water resource planning and management at sub-basin, national and transboundary levels. The RSAT is designed to complement and not replace existing tools such as ESIA and SEA.

In 2017, RSAT became an important reference tool for MRC work such as the Technical Review Report of the Proposed Pak Beng Hydropower Project (PBHPP). The TRR also makes recommendations with respect to opportunities to increase the level of confidence in the assessments of possible impacts. Recommendations are made with respect to options to increase transboundary cooperation and mutual benefits should the PBHPP proceed. In achieving these objectives, the review was set against a raft of MRC documents, including the RSAT. The RSAT hydropower sustainability criteria was used specifically in the TRR’s social-economic assessment. The resulting review framework of the report comprised of a set of eight Review dimensions comprising 89 questions to systematically examine the transboundary socio-economic impact assessment of hydropower dams in the Mekong. The review dimensions were framed as a series of questions to investigate principles of design, data quality, stakeholder engagement, evidence for impact analysis and mitigation measures, and opportunities for benefit sharing. The 10 applied review questions were developed with reference to guidance notes and definitions from 10 RSAT topics and 27 sub-topics in analysing sustainability of hydropower in a basin-wide context.

EVIDENCE OF CHANGE

After several regional meetings and discussions on the shared Srepok River Basin, the transboundary RSAT dialogue between Cambodia and Viet Nam resulted in a number of agreed recommendations: (1) Joint Study between Cambodia and Viet Nam on the minimum flow and water demand/conservation/protection measures for addressing loss of biodiversity and ecosystem services in the Basin; (2) Improve water resource monitoring and forecasting systems e.g. mechanisms for flood and drought (Early warning system) and more effective information sharing between two countries (Official and Public), via the MRC Flood Bulletin; (3) Build capacity of water resource and reservoir managers to use reservoirs for better flood and drought risk reduction through inclusion of transboundary risks and all rules and regulations of HP Dam operation; (4) strengthen Joint action to develop flood and drought management measures in the Srepok River Basin. The guiding manual and RSAT will provide useful support to the countries during implementation of these recommendations.

In the meantime, a team of nine riparian facilitators have been trained to facilitate application of RSAT at country level. The trained facilitators have been given opportunities to promote and facilitate participation of diversified stakeholders from different sectors at local level with possible ideas and initiatives in line with the national context such as; (1) how the tool can be useful in the process of developing a legal framework to assess hydropower dams and other projects in Cambodia; (2)
added-value of the RSAT approach in Cham Islands Marine Protected Area; (3) feasibility of a joint transboundary project between China and Lao PDR on fisheries management in northern Lao PDR; (4) RSAT introduction and expansion through the support of the Myanmar Union Parliament; and (5) how to use the RSAT tool to evaluate existing hydropower projects in Thailand.

“In Cambodia, the Royal Government of Cambodia is developing guidelines to define a legal framework to assess hydropower dams and other projects. From my point of view, RSAT is a complementary tool to the framework. Even though the tool is not legally binding, it is still very useful. And I really hope that we can integrate RSAT into the legal framework,” said an RSAT Facilitator from Cambodia.

“RSAT is evidence based rather than opinion based. It also can be conducted at any stage of hydropower development and it can be conducted by hydropower projects themselves,” stated an RSAT Facilitator from Lao PDR.

“In Myanmar we have many hydropower projects. However, most of hydropower projects are criticised by local people and international experts for not being sustainable. Thus, we want to understand more about what a sustainable hydropower project requires. RSAT can help us deal with this question,” said an RSAT facilitator from Myanmar.

“As Thailand is not developing any new hydropower projects, we can use RSAT to evaluate existing hydropower projects and see what to improve. We can use RSAT for other Corporate Social Responsibility (CSR) Projects as well. I am working with the Electricity Generating Authority of Thailand (EGAT) and they expressed their interest in applying the tool”: RSAT facilitator from Thailand.

In Viet Nam, the RSAT has been applied and piloted at the community level facilitating discussion on how to protect and improve flooding and dry conditions in the Cham Island Marine Protected Area from impacts of the development of nearby hydropower projects.
Sustainable Management of Watersheds: The SUMALOM-Nam Ton Project shows the way

**Indicator:** Evidence of national and Basin benefits in using MRC guidelines and standards

Watersheds provide essential ecological services. They offer unique habitats for wildlife and provide important sources of water for consumption and agricultural purposes. Because of their numerous functions, watersheds make a vital contribution to the health of the Mekong Basin’s collective ecosystem.

Although watershed management has a long history in the Mekong Region, the lack of a clear strategy to integrate management across local, national, and transboundary levels had led to their significant degradation. The need to develop knowledge and experience on sustainable watershed management across the region was evident. To address this need, a collaborative project between the MRC and the Lao and German Governments through the German Development Bank (KfW), was launched in 2009.
PROGRESS
The Sustainable Management of Watersheds in the Lower Mekong Basin (SUMALOM)-Nam Ton Project comprised of one component in Lao PDR aimed at showcasing best practices in sustainable watershed management in the Nam Ton watershed (Part 1), and a regional component aimed at addressing regional implications (Part 2). The overall objective of Part 1 of the Project, with the support of MRC through its management of Part 2, was to secure the watershed functions of the Nam Ton Pilot Project Area within the Lower Mekong Basin and improve the livelihoods of local people in a sustainable manner. The Department of Water Resources of Lao PDR led the implementation of Part 1 with the MRC taking the lead for Part 2.

Part 2 of the Project, which aimed to enhance technical expertise and adopt replicable solutions through exchanging best practices and lessons learnt from the Project as well as from other watershed management initiatives in the region, was completed in 2017. Project Part 2 has made important contributions towards achieving this overall objective. The basis for this lies in the achievements it has made in providing IWRM-related technical assistance to Part 1 of the Project, consolidating and maintaining a watershed management knowledge base, facilitating development research, disseminating and exchanging lessons learnt from the implementation Part 1, and establishing and maintenance of the MRC website on watershed management in the LMB.

On 15 and 16 August, the MRC, in cooperation with KfW and the Department of Water Resources under Lao PDR’s Ministry of Natural Resources and Environment, held a Regional Workshop on Watershed Management. More than 70 watershed practitioners, including representatives from the four Member Countries, international organisations, the private sector, River Basin communities, and academia shared their expertise and experiences.

EVIDENCE OF CHANGE
The Project has had an impact on sustainable watershed management in the Nam Ton River pilot area. The livelihoods of the local community have been improved through various initiatives, including farmer-to-farmer training, sustainable irrigation schemes and micro-finance networks. But change has not been confined to the grass roots; evidence and experience from the Project has led to the reform of both policy and institutions for water regulation in Lao PDR.

SUMALOM Nam Ton Project: Tangible results at a Glance
Improved farming system and socio-economic outcomes:

- 738 ha protection forest planted by 441 families
- 142 land title allocated for plantations, rattan, upland & paddy fields
- 65 ha paddy field for 102 families
- 5 irrigation schemes serving 212 ha for 132 families
- 242 demonstration farmers and extension groups
- 152 beneficiaries of micro-finance network.
Improved watershed management

- 43 villages with a Participatory Water and Land Use Plan (PWLUP)
- 3 agriculture extension centres established and equipped with a management plan for future extension activities and sustainability
- equipment for water monitoring
- watershed management and village environmental committee established
- water regulation formulated.

In addition to the localised outcomes outlined above, the Project has also made a contribution to watershed management in the region by sharing lessons learnt from the SUMALOM-Nam Ton Project with watershed management practitioners at regional, national and local levels from other countries.

“The results achieved through this project show that watershed management can be developed in a sustainable way,” said Mr. Lorenz Gessner, KfW Country Director. “The valuable lessons learnt as well as the best practices from this project can be easily applied to future projects for sustainable watershed management in MRC Member Countries and in other areas.”

Participants at the Regional Workshop proposed priority actions for the MRC, national line agencies, River Basin Organisations, local governments, and developers to respond to the opportunities and challenges identified for watershed management in the region. Proposed actions include the development of a regional planning framework, the training of watershed practitioners, and the creation of a platform for cooperation between the MRC, development partners, and the private sector. The platform is supported by the establishment and maintenance of the MRC website on watershed management in the LMB, which came online in 2012.

The experiences gained through the Project and its numerous collaborative activities have raised the awareness of key stakeholders and provided a regional knowledge base for sustainable watershed management in the Lower Mekong Basin.

Participants at the Regional Workshop on Watershed Management held in Vientiane, Lao PDR on 15-16 August 2017
Above all else, the Project concerns the generation of knowledge and experience. While there was a focus on the Nam Ton watershed at its outset, the impact of the Project is being felt across the Mekong Region. Watershed practitioners form the Member Countries have been able to come together and learn from both the Project and from each other’s unique experiences, cementing networks that will facilitate learning well beyond the lifetime of the Project.

The knowledge and experience has been captured in the MRC’s blueprint for a Regional Framework for watershed management, which will be further streamlined into national watershed management plans in the near future.

**Pathway to Change**

**Sustainable Watershed Management in the LMB**

**In the beginning...**

- Insufficient understanding of the interlinkages between watershed management and the ecological, social and economic functions; continuous degradation of watersheds

**What we did...**

- Supported the pilot project in Lao PDR
- Consolidated watershed knowledge base and tools into accessible website
- Facilitated exchanges between watershed practitioners
- Held large regional workshop/forum

**Who we reach...**

- Dept. of Water Resources (MoNRE) & Division of Agriculture Extension and Cooperatives (MAF) Lao PDR
- Watershed practitioners
- Supporting partners and organisations

**As a result of what we did...**

- Policy and institutional reforms in Lao PDR to address watershed challenges: new (i) land rights and decentralization, (ii) financing mechanisms (iii) provisions in concession agreements.
- Integration of WM in BDS, MRC SP and MRC core functions

**And then potentially...**

- Experiences and lessons learned from the Nam Ton watershed applied in other watersheds of the Mekong
- Knowledge and experiences from watershed management in all countries reflected and applied in Nam Ton and other places

**And eventually...**

- Enhanced reforestation, improved livelihoods and ecological services and goods
OUTCOME 3

Transboundary Environment Impact Assessment Guidelines Set for Approval

**Indicator:** Evidence of national and Basin benefits in using MRC guidelines and standards

The MRC and the Member Countries have long recognised that environmental sustainability – one of the three pillars of the Mekong Basin vision – is required for overall sustainable development. Finalisation of the Transboundary Environment Impact Assessment Guidelines (TbEIA Guidelines) addresses a major gap in transboundary cooperation in the Mekong Region.

Prior to their development, Member Countries assessed the environmental impacts of development projects mostly within their borders and usually in isolation; there was no overarching framework to coordinate activities to identify and mitigate potential cross-border impacts. The Guidelines enable the Member Countries to work together more effectively and with greater transparency to manage transboundary issues, contributing to the MRC’s overall goal of encouraging sustainable environmental practices in combination with economic development.
PROGRESS

Following a process that can be traced back to 1998, the Transboundary Environment Impact Assessment Guidelines were finalised in 2017. The Guidelines, which are set for official approval in March 2018, will increase transboundary communication and coordination, and further strengthen the bonds between the countries of the Lower Mekong River.

The endorsement of the MRC’s Methodology for Environmental Impact Assessment (EIA) in 1998 was among the first steps towards a collective agreement on managing projects with potential transboundary environmental impacts. The preparation of the MRC Strategic Environmental Assessment (SEA) System, which complemented the national EIA, was approved in 2002. Subsequently, based on findings from the SEA system, the MRC Secretariat was requested to initiate a TbEIA system in 2003. More than 15 years of consultations led to the development of a ‘living document’ (the current Guidelines) that is able to evolve to meet the challenges of a changing social, economic, and natural environment.

A comprehensive consultation process was a key driving force in developing the Guidelines. Technical specialists from the Member Countries’ EIA departments and key relevant line Agencies – eventual users and implementers of the guidelines – provided feedback and suggestions on their practicality and adaptability, which were subsequently incorporated into the Draft Guidelines. In 2017 alone, the MRC conducted 12 national and 3 regional consultations to discuss content and terminology, as well as procedures to incorporate the Guidelines into existing national EIA systems. The discussions, which also used input from the MRC-commissioned Case Study on the Impacts of the Se San River, led to agreement of the final draft in November 2017.

EVIDENCE OF CHANGE

3 key areas of change that occurred were decisive in finalising the Guidelines: 1) increased recognition and urgency to finalise the TbEIA 2) agreement on the updated TbEIA procedures, and 3) need for integration into MRC Core Functions and national EIA systems.

Recognition of the importance of Transboundary Environment Impact Assessment

Securing commitment to transboundary initiatives is only possible if Member Countries recognise the necessity for cooperation. Following publication of the final report of the Se San River Case Examination in 2016 – a joint study by Cambodia and Viet Nam supported by the MRC – it became evident that TbEIA is an essential tool for identifying the potential cross-border impacts of development projects.

The Case demonstrated the first visible transboundary effects of development and confirmed impacts on livelihoods and biodiversity in downstream areas. As a result, the Member Countries accepted the necessity for TbEIA and became strong proponents, which generated the momentum to finalise the TbEIA Guidelines.

Establishment of clear TbEIA procedures

One of the key outcomes of the consultation process was the development of a key concept and a clear step-by-step process for TbEIA. An eight-step process guides the Country of Origin (project proposer and implementer) and the corresponding Member Countries on how to implement TbEIA effectively (see the box in the figure below).
The Updated TbEIA Process

1. **Identification of need for TbEIA**
   - EIA authority prepares TbEIA Initiation letter based on inputs from Proponent and send to the Potentially Affected Country(ies)

2. **Response**
   - EIA authority acknowledges receipt and interest in participation in TbEIA within 30 days

3. **Early Consultations**
   - Identification of relevant stakeholder
   - Scope Analysis
   - Provision of data
   - Work plan for public consultation events in the Potentially Affected Country

4. **Determination of the scope**
   - Conduct scoping exercise
   - EIA authority ensures that formal scoping conclusion reflects transboundary dimension as appropriate

5. **Preparation of the EIA Report**
   - Proponent (EIA consultant contracted by Proponent) conducts EIA analyses and fact-finding consultations
   - Prepare EIA Report and submit it to the EIA authority
   - Conduct transboundary / regional consultations on EIA report findings

6. **Stakeholder Engagement**
   - EIA authority sends the EIA Report to the Potentially Affected Country via NMC in Country of Origin and MRCS
   - MRC conduct national consultation and public participation events
   - NMC collects comments on EIA report and send to Country of Origin via MRC

7. **EIA Approval and Decision on the project**
   - EIA authority concludes the EIA process. Decision making (permitting) authority adopts decision on project implementation and accompanying statement (how EIA results were considered)

8. **EIA results implementation and monitoring**
   - Proponent (project operator) implements EMP and monitoring (including components on the territory of the Potentially Affected Country(ies)) and reports systematically the results of the monitoring via MRC.
**TbEIA integration into MRC procedures**

Another crucial change achieved in 2017 was the establishment of the TbEIA Guidelines in connection with the MRC core functions and activities. Prior to the existence of the Guidelines there was no concrete means to connect with other MRC work. The TbEIA Guidelines act as a bridge connecting other relevant MRC activities as follows:

- **The PNPCA process** has been included as part of the transboundary consultation process for EIA reporting and public participation within the potentially affected Country(ies) (see Steps 5 & 6 in the figure above)
- **Preliminary Design Guidance (PDG) for Proposed Mainstream Dams in the Lower Mekong Basin** has been included as part of the suggested mitigation design for hydropower projects (Steps 3 & 4 and ongoing in step 8)
- **Joint Environmental Monitoring (JEM)** has been included as part of the suggested monitoring system in the Guidelines (Steps 3, 4 & 8)
- **Joint Action Plan (JAP) (Pak Beng)** has been included as part of the suggested tool to follow up on mitigation measures and the Environmental Mitigation Plan (EMP) in the Guidelines (See Steps 7 & 8)

The MRC will act as a focal point to coordinate the TbEIA Guidelines, encouraging the active involvement of multiple stakeholders and offering ongoing support throughout the process to ensure implementation is well-managed. This will give the MRC the opportunity to learn from the experience of the Member Countries in practice and use these lessons to improve the Guidelines as necessary.

The Guidelines can be used for joint studies on any projects with potential transboundary environmental impacts; for example, hydropower projects, irrigation schemes, navigation, and aquaculture projects. Also, their flexibility enables the Guidelines to supplement existing MRC Procedures, such as the Procedures for Data and Information Exchange and Sharing (PDIES), the Procedures for Water Use Monitoring (PWUM), and the Procedures for Maintenance of Flows on the Mainstream (PMFM).

Ultimately, the Transboundary Environmental Impact Assessment Guidelines are a supporting tool to the existing national EIA legislation systems, providing a means for the Member Countries to work together in the interests of sustainable development for the Mekong and its people.
Pathway to Change
Transboundary Environment Impact Assessment (TbEIA) Guidelines

**In the beginning...**
There are a variety of national environmental assessment frameworks, but no regional assessment tool on transboundary environmental impacts.

**What we did...**
- Reviewed and incorporated national EIA’s into the proposed TbEIA guidelines
- Conducted case studies
- Actively engaged line agencies on the proposal & findings (15 consultations)

**Who we reached...**
- Technical specialists from national EIA departments
- Key management level from the implementing line agencies in each Member Country

**As a result of what we did...**
- Increased common understanding of the necessity for TbEIA by Member Countries from the lessons learned in the mainstream hydropower project consultations

**And then potentially...**
- Agreement on TbEIA Guidelines to be a flexible document that can be amended and developed based on experiences and new aspirations

**And eventually...**
- The Final Draft of the Guidelines for TbEIA will be endorsed by the JC in May 2018
- Increased sharing of information, transparency and transboundary environmental cooperation leading to minimisation of negative impacts from development

**Outcomes 3**
OUTCOME 4

Pak Beng Hydropower Project Consultation Yielded Joint Statement and Joint Action Plan

Indicator: Evidence of adverse transboundary impacts that were mitigated, minimized or avoided in basin planning and management by using MRC Procedures

The issues, including lack of formal agreements, for the first two prior consultation processes for mainstream dams on the lower Mekong basin are well known.

In this context, from the beginning of the Procedures for Notification, Prior Consultation and Agreement (PNPCA) process for the Pak Beng Hydropower Project (PBHPP), there was a clear expectation from the Member Countries, Development Partners and stakeholders that there should be a continual improvement from the previous cases. Some stakeholders were even questioning the effectiveness of the PNPCA and the relevance of the whole MRC cooperation framework should a similar result emerge from Pak Beng.

Two key elements to ensuring a better process were thus identified: firstly, to provide clear milestones and decisions to the process as well as its follow up, and secondly, to improve the way external stakeholders understand and engage in the process. The former refers to “What happens after the prior consultation” and the latter is about increasing involvement with stakeholders. Both objectives were realized for the Prior Consultation process for the PBHPP.
PROGRESS

Lao PDR submitted documentation outlining the proposed Pak Beng Hydropower Project on the Mekong mainstream on the 4th of November 2016, thus initiating the third MRC Prior Consultation process under the MRC’s Procedures for Notification, Prior Consultation and Agreement.

The Prior Consultation process for the PBHPP formally began on 20 December 2016 and ended on 19 June 2017 in accordance with the 6-month timeframe stipulated in Article 5.5 of the 1995 Mekong Agreement. During the process, two regional stakeholder forums were conducted to inform stakeholders of the approach and method for the review process and its results. Stakeholder forums at national levels were also conducted in each of the notified Member Countries – Cambodia, Thailand, and Vietnam. The range and number of stakeholders varied from 60 at the national consultations to 180 at the regional events, and included the MRC Member Countries, Development Partners, NGOs and civil society, as well as research institutions, academics, private developers and the media. The timeline of the PC process and associated events is illustrated below.

EVIDENCE OF CHANGE

Unlike the two earlier PC cases, the process for the PBHPP was concluded, and in addition to a Technical Review Report, a historic Statement was agreed by the MRC Joint Committee (JC) following its Special Session on 19 June 2017.

The Statement included a request to the MRCS to support – for the first time – the preparation of a Joint Action Plan (JAP) that outlined a process for implementing the Statement. In this regard, the JAP is designed to follow the PC process and is defined as a cooperative mechanism. Furthermore, the JAP aims to provide mechanisms for ongoing feedback and data exchange and knowledge sharing between Lao PDR and the MRC about the ongoing design, construction and operation of the PBHPP. It also aims to monitor the implementation of the Statement and support Lao PDR in its ongoing efforts to identify measures that may further avoid, minimise, or mitigate the potential adverse impacts of the PBHPP. It also aims at enhancing the benefits of the project, sharing knowledge and experience among the Member Countries.
The Joint Action Plan has transformed the PNPCA process - it now has a clear endpoint with concrete decisions toward enhancing measures to avoid, minimise and mitigate potential transboundary impacts while enhancing good faith between the Member Countries. Going through four successive drafts, the final version of the JAP, negotiated and agreed in December 2017, was submitted to the MRC Joint Committee for approval.

Upon approval by all of the Member Countries, the JAP will be conducted in a phased manner, with reviews after each Phase using the tracking (monitoring) matrix to be developed and agreed upon by all Member Countries. These Phases are as follows:

The Joint Action Plan for the PBHPP highlights the flexible nature of MRC procedures. One of the MRC’s strengths is its commitment to learn and adapt to lessons learnt. Because the Mekong is an exceptionally complex system that is undergoing on-going changes through population growth, economic development, industrialization and climate change, the capacity to adapt is vital.
Pathway to Change
Pak Beng Hydropower Project consultation

And eventually....

And then potentially....

As a result of what we did....

Who we reached....

What we did....

In the beginning....

Enhanced measures to avoid, minimize or mitigate potential transboundary impacts

Mechanism for ongoing feedback & data exchange on ongoing design, construction & operation of the PBHPP

Agreed Statement by MRC Joint Committee and JAP for PBHPP approved as a working version for MRC to implement in its Annual Work Plan 2018

Enhance good faith cooperation for the benefits of the project and the sharing of knowledge and experience amongst the Member Countries

16 Implementing Line Agencies in 4 Member

12 national meetings & 5 regional meetings

Broader stakeholders

Clear role and process with innovative ideas such as the Joint Statement and JAP

MRCS proactively working with proposing country and other Member Countries

Reached out to stakeholders

Increased communication, openness and transparency

Lack of consensus on previous two prior consultation cases, no agreed or concrete follow-up measures or actions
MRC – China Joint Efforts Result in Better Understanding of the Mekong-Lancang River

Indicator: Evidence of stronger engagement with China and Myanmar

Although the Upper Mekong (called Lancang in China) and the Lower Mekong are one transboundary river, only the four Lower Mekong riparian states became members of the Mekong River Commission (MRC) when it was established by the 1995 Mekong Agreement. Efforts to work with upstream riparian countries have involved China and Myanmar as Dialogue Partners at annual dialogue meetings, as well as data sharing (during the wet season), exchange visits and participation in technical workshops and meetings. Although these efforts have been useful in managing the river from the Commission’s point of view, questions remain concerning developments in the Lancang River and their effects on the countries and people downstream.
PROGRESS

Building on previous efforts in 2016, when the MRC and China worked together on the Joint Observation and Evaluation of the Emergency Water Supplement, the two parties joined forces again in 2017 to organise the 3rd MRC-China Joint Technical Symposium and to launch the Joint Research Project on Hydrological Impacts of the Lancang Hydropower Cascade on Downstream Extreme Events.

The MRC along with China’s Ecosystem Study Commission for International Rivers (ESCIR) jointly organised the 3rd Technical Symposium on ‘Capacity Building and Experience Sharing on Sediment Control and Management for River Dams’ on 16-17 October 2017 in Nanjing, China. The two-day symposium hosted more than 40 participants comprising government officers from the MRC Member Countries and their line agencies, and experts and private sector representatives from China, including: the ESCIR; the Institute of Water Resources and Hydropower Research of the Ministry of Water Resources of China; China Renewable Energy Engineering Institute; Hohai University; Nanjing University of Information Science and Technology – College of Hydrology and Meteorology; Tsinghua University; the Asian International Rivers Centre of Yunnan University; HydroChina Kunming Engineering Corporation; and, HydroLancang.

The Joint Research Project aims to assess the role of the Lancang cascade reservoirs on downstream flooding and droughts, and to explore the potential for mutual benefits of upstream-downstream collaborations. The research activity is a collaboration between the MRC, the new Lancang-Mekong Water Resources Cooperation Center, and the International Water Management Institute (IWMI). The research will focus on the droughts of 2009-2010 and 2012-2013, the flash floods in December 2013, and the extreme drought of 2015-2016.

EVIDENCE OF CHANGE

These two initiatives, in addition to continued data sharing, annual dialogue meetings, exchange visits and technical cooperation, are worth highlighting as examples of strong engagement between the MRC and China. They emphasised more joint efforts being made by MRC and China.

During the Symposium, experts shared experience and studies on sediment control and management of river dams that could contribute to new guidelines and tools for effective planning and development in the Lancang-Mekong River Basin to maximize regional benefits and minimise transboundary impacts. The MRC was particularly impressed by work on sediment control and flushing measures in the Yellow River. Additionally, a Chinese participant presented a Basin-wide Integrated Monitoring Information System that incorporates modern information systems, the Internet of Things (IOT), and cloud technology to establish a dynamic monitoring system for hydropower operation management.
A presentation delivered by HydroLancang on the Ecological Restoration of the Lancang River Hydropower Development revealed a plan for 23 hydropower cascades on the Lancang River. While other hydropower initiatives are under study or at the design stage, six hydropower plants (Gongguoqiao, Xiaowan, Manwan, Dachaoshan, Nuozhadu and Jinghong) are currently in full operation. The presentation also introduced restoration of aquatic ecology and terrestrial ecology during the construction and operation of the hydropower cascades, including fish migration measures, fish breeding and releasing, fish habitat protection, slope protection with vegetation, and rehabilitation.

In December 2017, as part of the Joint Research Project, a field visit was conducted to the Mekong. The participants visited key sites along the River, including the main hydrological station on the Mekong mainstream at Nakhon Phanom as well as management facilities at the Nam Kam Irrigation Project. A trip to Nong Han Lake – the second largest lake in Thailand – was particularly instructive with regards to its rules of operation and its water resources system.

Mr. Zhang Xu, Inspector (Director General Level) at the Chinese Office of State Flood Control and Drought Relief Headquarters, highlighted how the joint visit promoted the discussion of key issues: “The participants had an opportunity to exchange their concerns on water management, energy production, and riparian livelihoods that depend on the river. Notable topics of discussion centered on navigation, irrigation, fish farming and water supply,” he said.
The joint visit was hosted by the Thai National Mekong Committee Secretariat in cooperation with the Department of Water Resources, Sakhon Nakhon Inland Fisheries Research and Development Center, and Nam Kam Operation and Maintenance Irrigation Project/Royal Irrigation Department.

The Mekong-Lancang River is a common resource for the people of six riparian countries. Continued data and information sharing, knowledge and experience exchange and more joint efforts are critical to the sustainable development of this shared resource. While China is not a member of the MRC, they are long-standing Dialogue Partners. Since 2016, joint efforts between the MRC and China have begun to bear fruit in terms of building greater understanding and trust between upstream and downstream states, building the foundation for more active cooperation in the future.
MRC’s Role Better Recognised due to Strengthened Partnership, Stakeholder Engagement, and Communication

**Indicator:** Evidence that the opinions/perspectives of academic/research institutions, civil society and private sector are taken into consideration by MRC and Member Countries

The Mekong River Basin is a complex system with many opportunities and challenges. Located in a significant geo-political region and endowed with great resources for the riparian countries’ economies and the peoples’ livelihoods, there is no shortage of perceptions and interest from stakeholders from within and without the Basin on how to best develop and manage the river. Entrusted as the “manager of the river”, the MRC draws different expectations as regards its role, mandate and responsibility.

Before reform, the MRC had not been as active in its communication, stakeholder engagement and outreach during the previous few years. For example, no broad stakeholder engagement was conducted for the Xaiyaburi Project prior to consultation and only one was carried out for Don Sahong towards the end of the process. Although one forum was held to provide inputs into the preparation of the new Basin Development Strategy, it was not considered sufficient. This often results in the MRC’s latest work not being widely known, the mandate of the organization misunderstood, and its relevance questioned. Some viewed it as a (failed) “regulator” of the river, some as merely a “research organization”, and others as a “talk shop” without any teeth.

With the new organisational structure fully operationalised by late 2016, the new MRC team responsible for strategy, partnership, communication and engagement put the plan, mechanisms and tactics in place to promote and communicate the work of the MRC and engage relevant stakeholders in an institutionalized, regular and transparent way. In terms of partnerships, a revival of cooperation with existing partners and the initiation of collaboration with new partners were prioritized. For stakeholder engagement, a Regional Stakeholder Forum (RSF) was established. For communication, media and outreach, several mechanisms, channels and tactics were implemented.
ENHANCED PARTNERSHIP AND MUTUAL LEARNING

2017 continued to see excellent cooperation and support from the MRC’s current Development Partners, including Australia, Belgium, the European Union, France, Germany, Japan, Luxembourg, Netherlands, Sweden, Switzerland and the World Bank. Exchange and mutual learning activities were conducted with partners such as ASEAN, the Mississippi River Commission, US Army Corps of Engineers, IWMI, IUCN, Oxfam, SEI and WLE.

In the context of updating the MOU with ASEAN and developing joint activities, MRC participated in the 17th Meeting of the ASEAN Working Group on Water Resources Management (AWGWRM) in April 2017, in Kuala Lumpur, and conducted a Secretariat-to-Secretariat meeting and dialogue in August 2017, in Jakarta.

In April 2017, MRC council members and ministers from Lao PDR, Thailand and Viet Nam made a historic exchange visit to the Mississippi River to observe and draw lessons on water resources development and management, flood control, and public hearings and consultation. Dr. Tran Hong Ha, Vietnam’s Minister of Natural Resources and Environment, said he hoped to take back information on the Corps’ stakeholder engagement process. He added that he appreciated how the Mississippi River Commission listened to all participants at the public meeting.
In July 2017, Joint Committee members and senior staff of the MRC Secretariat embarked on a two-day retreat and collaboration workshop themed ‘Building capacity in shared vision planning and negotiation for sustainable water resource management’. The event, which was supported by the United States Army Corps of Engineers (USACE), the Mississippi River Commission and the Lower Mekong Initiative, sought to enhance strategic collaboration and negotiation for the MRC management body.

The year also saw new partnerships formed, including with the Korean Development Institute under the framework of Mekong-Korea, Morocco, Southeast Asia Fisheries Development Centre (SEAFDEC), and UNESCAP.

Under the MOU with Morocco, the first Arab and African partner of the MRC, an exchange visit to Morocco by the MRC delegation in the context of preparing the action plan of collaborative activities, took place in October 2017. The MRC delegates travelled to different sites and projects, including the Sidi Mohamed Ben Abdallah Dam; a water treatment plant; the agriculture and irrigation training program at the High Institute for Applied Technology, and the renowned Moroccan Agency for Sustainable Energy (MASEN).

Mr So Sophort, Deputy Secretary General of the Cambodian National Mekong Committee, and Alternate Member of the MRC Joint Committee for Cambodia, shared his take-aways and what could be applicable to the Mekong context:

“Based on the historic records, some parts or the entire Mekong Basin might face more serious drought in the future. One of the key priorities for the Mekong Basin would be water-use efficiency for irrigation. We [the MRC] could further investigate the drip irrigation system that is currently practiced in Morocco. The drip system is known for its effectiveness and efficiency and could potentially be applied to address emerging circumstance in the Mekong Basin.”
IMPROVED STAKEHOLDER ENGAGEMENT FOR MORE EFFECTIVE MANAGEMENT OF THE BASIN

Collaboration through technical and mutual learning and sharing with partners around the world brought new ideas and lent confidence to the MRC’s own work, much of which is in line with global practice and standards. This is especially the case in the area of stakeholder engagement, where the MRC follows internationally accepted principles of early and regular engagement, transparent sharing of information, interactive and two-way meetings, and the provision of feedback and follow-up activities.

The year saw the MRC host six Regional Stakeholder Forums (RSF), all of which aimed to bring together not only government representatives, but also broader stakeholders and partners, especially from the private sector, development partners, researchers, non-government organisations, and civil society organisations for open and constructive dialogue on pressing issues affecting the Mekong River Basin and how the MRC is addressing them.

The first RSF of 2017 was focused on both the Pak Beng Hydropower Project and the ongoing Council Study, a comprehensive study on the sustainable management and development of the Mekong River. It was held on the 22-23 February in Luang Prabang, Lao PDR. Then, on May 5, the MRC convened a second forum on the Pak Beng Project in Vientiane. Project documents, MRC’s review and assessment and other papers were posted on the MRC website.

Stakeholders participating in these two consultations highly appreciated the opportunity to actively engage with, question, and learn about the Pak Beng Project before the MRC put forward its recommendations to the MRC Joint Committee. The fora were highlighted as a significant improvement of the Procedures for Notification, Prior Consultation and Agreement (PNPCA) process, which allows the MRC Member Countries to discuss and evaluate benefits and risks of any proposed water-use project that may have significant impacts on the Mekong River mainstream.

A representative of local NGO in Vietnam added: “The two regional stakeholder forums allow not only for contributions from the government institutions, like the National Mekong Committees, but also views and opinions from civil society organisations, NGOs, and research institutes.”
“Compared to Don Sahong and Xayaburi, I found the regional stakeholder forum for Pak Beng PNPCA was better in a number of ways. The project documents were released earlier, information, including presentations were released prior to the forums, and there were better efforts to document and respond to questions and comments, including the next steps of the Prior Consultation Process,” said an expert from an international NGO.

Testimonials from selected stakeholders reflect overall satisfaction with the RSF process. Survey results from the second RSF on the Pak Beng Project consultation support this view:

Stakeholders Engagement Key Figures

- **93%**
  - of respondents are satisfied that their key concerns are reflected in the MRC Prior Consultation Technical Review Report

- **87%**
  - agreed that the forum provided response to key issues and comments obtained from 1st Regional Stakeholder Forum

- **86%**
  - of respondents agreed that the post-consultation engagement and information sharing plan with stakeholders on the Pak Beng project will strengthen the PNPCA process.

- **99%**
  - of respondents agreed that the Forum provides a participatory environment for all stakeholders to raise opinions (7% increase compared to the 1st Forum)

- **84%**
  - of respondents agreed that the information and documents for 2nd Regional Stakeholder Forum were available in a timely manner (3% increase compared to 1st Forum)

Total of 300 Respondents
The MRC hosted a RSF on the Mekong Adaptation Strategy and Action Plan in June, a forum on Sustainable Hydropower Practice with a focus on developers and private companies and a watershed practitioners workshop targeting local actors in August, and two further RSFs on the Council Study; one in February 2017 (on the assessment approach and methodology) in Luang Prabang, and one in December 2017 (on emerging findings) in Vientiane.

Overall, more than 300 event participants responded to evaluation surveys in 2017, showing that an average of nearly 90% of respondents were satisfied with the MRC, which marks an 8% increase in comparison with 2015. In addition, 70% of respondents said that they are using and making reference to MRC products as part of their work.

PROACTIVE COMMUNICATION, DISSEMINATION AND OUTREACH TO INFLUENCE PUBLIC PERCEPTIONS

Strengthening partnerships and improving stakeholder engagement requires proactive communication, dissemination and outreach to the media and the general public. As a regional knowledge hub, the MRC strives to disseminate information and insights widely and effectively in collaboration and with support from partners and stakeholders, as well as to facilitate information exchange between countries and sectors.
Translation and dissemination

Recently, the MRC has produced a number of studies, tools, and guidelines that are based on international experiences and technical expertise in the region. Several of these tools have been shared with relevant stakeholders during the past year, including via the MRC website. From 2017, key documents have been translated into riparian languages to reach the wider public. One of the MRC’s publications that has continued to be promoted is the newsletter *Catch and Culture – Environment* (see box).

**Catch and Culture – Environment**

Known as Catch and Culture between 1995 and 2016, the newsletter is published three times a year and mainly targets a non-technical audience in multiple sectors related to fisheries and environment, including policymakers, development partners, the private sector, members of parliament and the general public. It has been periodically translated into the Khmer, Lao, Thai and Vietnamese languages.

In 2017 alone, the newsletter covered topics ranging from trade in endangered fish species, fisheries management, fish passage, and aquaculture to marketing, water quality, conservation, world fish prices, and anti-microbial resistance, a burning problem in all four Lower Mekong countries.

The newsletter has developed a solid reputation in the region and beyond for objective reporting rather than advocacy. Through the newsletter, the MRC has helped increase recognition of inland fisheries and their important contribution to the economies of the Lower Mekong as well as livelihoods, food security and nutrition.

Catch and Culture – Environment has more than 650 non-commercial subscribers worldwide. In addition, 1,000 copies are printed three times a year, with 800 sent to the four National Mekong Committees for distribution to dozens of line agencies in the four countries.

Anecdotal evidence for the publication’s success include positive feedback from multiple stakeholders in the Lower Mekong Basin and other national, regional and international organisations such as the Australian Centre for International Agricultural Research (ACIAR) in Canberra, the intergovernmental Network of Aquaculture Centres in Asia-Pacific (NACA) in Bangkok and the Food and Agriculture Organisation of the United Nations (FAO) in Rome.

Digital and social media

2017 also witnessed dramatic improvement in digital work at the MRC compared to past years. News and important documents were regularly updated on the MRC website. For important events, information and related documents were made available on the website ahead of time to ensure smooth information sharing with stakeholders and the public, especially at regional stakeholder forums. To ensure public participation in MRC activities, a comment and feedback box was set up on the MRC website.

Furthermore, the MRC also uses social media to improve public access to timely information. In 2017, the MRC published more than 200 posts on MRC activities on Facebook, with more than 500,000 visits to the MRC page. The organisation also live streamed the main sessions of the regional stakeholder forums for Pak Beng hydropower project, attracting almost 4,500 viewers.
Press engagement

The press is another important channel proactively engaged by the MRC to share news on its work, disseminate research, and foster dialogue on topics of wider interest. To improve collaboration with the media, the MRC invited national and regional media representatives to participate in governance meetings, stakeholder fora and other events. The MRC has also sought to regularly engage with and respond to media outlets to clear up misunderstandings in efforts to provide the public with accurate information.

The MRC has worked hard to engage the press and has achieved wide coverage as a result: 85 news articles on MRC activities were published in local and regional media, along with 26 feature articles, 5
opinion pieces, and 36 press releases. The MRC also responded to 40 media inquiries, including from the Vientiane Times, Bangkok Post, The Nation, Cambodia Daily, Phnom Penh Post, Vietnam News, Vietnamnet, Voice of America, the BBC and Radio Free Asia. An increasing number of news articles refer to the critical importance of the MRC’s activities and research, with one media outlet proclaiming that the MRC’s research is “regarded as highly competent internationally”.

This work could be seen to have an impact on the media and general public’s understanding of the MRC. Of the 85 news stories covering or mentioning the MRC, the majority were neutral, with about 20 percent positive and 22 percent critical.

**Outreach events**

Finally, the MRC has engaged in a number of outreach activities to increase awareness of and capacity for sustainable water resources development. For example, a Master’s program on sustainable hydropower development was launched in partnership with the National University of Laos at the end of 2017, integrating several tools developed by the MRC. A seminar featuring MRC representatives as keynote speakers was conducted for 300 students and lecturers at the National University of Laos in March 2017. In December 2017, a workshop for 50 postgraduate students for water resources management was conducted by an MRC senior staff member at Vietnam’s Thuy Loi University (Hanoi University of Water Resources) to share the MRC’s work and experiences on key issues affecting the Mekong Region.

Mekong Day in April 2017 was celebrated with a photo exhibition to increase the public’s knowledge of the River. Eleven Brown Bag Lunches were organised with participation of MRC staff and partners aimed at sharing of information, knowledge and experience on issues related to the sustainable development of the River Basin.

The MRC acknowledges that successful cooperation in the Mekong River Basin hinges on open and transparent sharing of information and knowledge. Therefore, improving its own outreach and engagement efforts was a priority in 2017 and will remain a priority for the MRC in the years to come.
Improving MRC’s Data and Information System and Services

Indicator: Communication of and access to MRC data, information and knowledge developed and maintained

The management of water and related resources in the Mekong is dependent on the availability of reliable data and information. Because countries have restrictions on how domestic data is shared with other countries, it is particularly challenging to obtain data on transboundary phenomena. While newly available data sources based on remote sensing could partially address this issue, field data collected by the MRC Member Countries on the ground remains a vital source of information on the distribution, quantity and quality of resources in and along the Mekong.

The MRC Procedures for Data and Information Exchange and Sharing (PDIES), adopted in November 2001, set a framework for the Member Countries to share and exchange data on water resources, topography, agriculture, navigation, flood management and ecology, among others. The PDIES were the first set of rules to support the coordination of intergovernmental technical cooperation between the four Member Countries. Based on these Procedures, the Member Countries established the MRC Information System, which receives and stores data and information from the Member Countries and makes it available for public use. The PDIES have enabled the MRC to accumulate and synchronise data from the Member Countries, providing transboundary perspectives on a range of issues along the Mekong.
PROGRESS

As part of the MRC Data Sharing and Information System, the MRC has created numerous data platforms for the collection and sharing of data targeting different areas (see the figure below).

Access to data and information is provided through the Data and Information Services Portal (DISP). The Portal enables users to search and download a variety of data, including spatial data, time-series, non-spatial data and technical documents. Advanced searches can be run through the Master Catalogue, which allows users to specify specific criteria.
The Mekong Information Platform is a website that facilitates the exchange of information on integrated water resources management in the Mekong River Basin. Another platform in the system, the Community Site, encourages public engagement on various topics, and acts as a gateway by providing numerous fora that enable the free exchange of knowledge. Finally, users with specific areas of interest can use topic-specific databases, which hold data related to specific topics, such as watersheds and socio-economic data, etc.

A great deal of progress has been made in recent years to improve the user-friendliness of the portals and encourage public use. In 2017, interactive maps for climate change, water quality and flood forecasting were published online. Any user is now able to use the maps for basic analysis of the Mekong Region. The MRC Information System team has provided support to the National Information System technical teams on the administration of national systems. Particularly, the team focused on technical capacity building, including restoring servers and handling hardware issues.

EVIDENCE OF CHANGE

The various technical measures that the MRC undertook throughout 2017 to make data and information more easily accessible to the public have made a contribution to the user-friendliness of MRC Information Systems. For instance, the climate change atlas allows the assessment of climate change impacts in the Lower Mekong Basin based on different climate scenarios. Operators can interact with the online map and investigate various climate parameters, such as rainfall and mean temperatures based on different models (see figure 3). This tool can provide a baseline for studies related to climate change in the LMB.

The MRC Climate Change Atlas. An interactive online map for basic climate change impact assessment

The IS Team managed to enhance cooperation with other regional organisations and initiatives, including the Lancang Mekong Initiative, the Asian Disaster Preparedness Center, World Bank, the Australian Department of Foreign Affairs and Trade, the Stockholm Environment Institute, UN Water and China. This cooperation led to the development of an initiative on data sharing to fill existing data gaps. The MRC Data Sharing and Information System has proved to be an important knowledge hub for the region.

In 2017, the MRC received a total 685 data and information requests, with the website receiving up to 40,000 visitors.
Examples of MRC data sharing in 2017

In June 2017, the Asian International Rivers Center of Yunnan University, China, approached the MRC to work with the Secretariat’s technical team. They were interested in using MRC data and information for the ‘Balancing River Health and Hydropower Requirements in the Lancang River Basin Project’ – a project implemented together with the Faculty of Agriculture of the National University of Laos under the CGIAR (Consultative Group for International Agricultural Research) Water, Land and Ecosystem Research Programme. Specifically, Yunnan University requested data on the characteristic of water flow in the Lower Mekong Basin, including hydro-meteorological data for Mukdahan, Pakse, Stung Treng and Kratie as of 2008.

On 19 October 2017, the project team presented their findings at a consultation workshop at Yunnan University’s Asian International Rivers Center attended by twenty specialists from government, non- and inter-government, academic and engineering organisations and institutes from China, Lao PDR and Myanmar. At the workshop, the MRC delegation advised the project team on further steps to strengthen partnerships with the MRC, the Lower Mekong Basin countries, and China to address some of the issues raised by their research.

A further example of data sharing in 2017 was MRC’s partnership with the Japan Aerospace Exploration Agency’s (JAXA) Space Applications for Environment (SAFE) prototype project to enhance the use of satellite data. The SAFE prototype project aimed at improving input for the Soil and Water Assessment Tool (SWAT), a tool used by the MRC to support decision making.

In February 2017, a technical meeting attended by 16 participants, including representatives from MRC, the Japan Space Forum (JSF), the Centre for Water Hazard and Risk Management (ICARM), the National Research Institute for Earth Science and Disaster Prevention (NIED), and Geoinformatics Center (GIC) under the Asian Institute of Technology (AIT), Thailand. Following the meeting, The MRC received satellite data from JAXA, which was revised based on MRC field data. The partnership was strengthened further in October 2017, when JAXA provided training to MRC technical staff on using JAXA servers to access and use satellite data.

“The SAFE prototype project has been successful at providing much-needed data and enhancing our knowledge base,” said Dr. Pham Tuan Phan, MRC CEO, expressing his appreciation for the support of JAXA, ICHARM and NIED. It is expected that the partnership will enhance flood management capability in the Mekong Region.

Data sharing between the MRC, the Member Countries, as well as regional and international organisations and research institutes has confirmed the MRC’s role as a key regional knowledge hub. The MRC Data Sharing and Information System consists of numerous data platforms for the collection and sharing of data, making data publicly available in the spirit of openness and cooperation. The strong partnerships that have been forged between the MRC and the wider research community add to this collegiate spirit and bode well for the sustainable management of the Mekong in the coming years.
**OUTCOME 7**

**Mekong River Commission Launched Gender Mainstreaming Action Plan**

**Indicator:** Gender-disaggregated data is collected and used for the MRC’s M&E system

Women and men have different roles, needs, contributions and impacts on the environment specifically when it comes to water resources. Women and girls are often more vulnerable to the negative impacts of water shortages due to biological needs (such as menstrual hygiene management and maternal health); social norms (responsibility for water collection); and particular risks (such as sexual assault).

For example, nearly 58 per cent of economically active women work in the agriculture sector and 54 per cent of the labour force in small-scale inland fisheries are female. The leadership role of women is increasingly recognized in building peace and in fostering equitable water policies—a field which has been traditionally male dominated. Yet gender inequality and exclusion prevail at all levels of water policies, strategies and programmes. National and local water policies rarely take account of gender-specific water needs. Women and men are far from equally represented in technical, managerial and top-level water management roles. This has resulted in economic losses and social injustice. The full and equal participation of all women and men in water resources management, therefore, is essential to build a sustainable future and promote the advancement of the 2030 Agenda for Sustainable Development.

One of the biggest challenges for institutions in moving gender equality forward is the gap between policy and implementation. Although the MRC Gender Policy was endorsed by the governments of the riparian countries in 2000, an action plan was not fully developed. Although there important work on capacity and knowledge development has been, there remain challenges for the effective institutionalisation and implementation of gender responsive measures. The development and approval of MRC Gender Action plan is a key stepping stone to address these challenges.
PROGRESS

Gender mainstreaming is one of the principles underlying the MRC 2016-2020 Strategic Plan. Building on past work, seven gender indicators were integrated into all four key results areas of MRC outcomes. During the restructuring process, gender mainstreaming was reflected through the integration of gender work in the job descriptions of relevant positions under the new structure. Specifically, the task of coordinating gender mainstreaming is housed under the Office of the CEO and integrated into the job description of the Chief of Strategy and Partnership, with gender mainstreaming responsibility integrated into the job descriptions of relevant Chief positions and a number of technical specialists.

In 2017, a gender analysis was carried out for inputs into the preparation of the first MRC Gender Action Plan – to implement the Gender Policy in the context of the new Strategic Plan. During preparation, a number of interviews and meetings were held with key stakeholders, including the MRC, National Mekong Committee Secretariats (NMCS) and national agencies responsible for gender work in all four Member Countries.

In October 2017, the MRC, with the support of GIZ, SIDA, and Women Organising for Change in Agriculture and Natural Resource Management (WOCAN), facilitated a regional workshop with Member Countries on gender analysis, the gender action plan and to recap on capacity building for mainstreaming gender into the organisation. About 30 participants from the NMCSs and relevant Ministries such as Agriculture and Rural Development, Water and Natural Resources and Environment, Women’s Affairs, Planning, Forestry and Fisheries, Social Development and Human Security, as well as Oxfam, took part in the workshop.

The workshop provided an opportunity for the National Mekong Committee Secretariats to develop and strengthen their own Gender Action Plans to align with the MRC Gender Action Plan.

The MRC Gender Action Plan consists of comprehensive and practical concrete tasks to address gender equality at both institutional and project levels, including technical capacity, leadership commitment, accountability, and organisational culture. The Action Plan goes beyond the common approach of integrating gender only at project level to build organisational capacity and ownership to achieve gender sensitive programming, organisational structures and procedures. Understanding that the gender integration process can only be sustainable beyond the project period if there is the political will, staff
time and resources, the new Action Plan includes activities to ensure that technical skills for gender mainstreaming are strengthened, a positive organisational culture is promoted and a mechanism for individual, programmatic and organisational accountability is in place.

In line with the Gender Action Plan, MRCS has also monitored gender balance in the participation of regional and national consultations. For regional meetings, the 2017 results are as follows:

**EVIDENCE OF CHANGE**

During the Regional Workshop on Gender Action Plan consultation, participants exchanged views as to why gender mainstreaming is fundamental to water resource development and management. A lively discussion was seen on how to increase the number of women in leadership positions and how data collection can be more gender sensitive. The questions and discussion also enabled participants to understand better the achievements and challenges in making the MRC a more effective gender responsive organisation. Inspired by MRC Gender analysis, participants then analysed their own organisations with regards to gender mainstreaming, thus strengthening the understanding of gender issues in their institutions.

The 2017 gender monitoring data has given MRC a solid basis to encourage Member Countries to nominate more women participants to meetings and consultations. At the regional level for 2018, in line with a globally recognised practice of strengthening gender equality, the MRC will aim for at least 30% female participation from each Member Country attending regional consultations.

The importance of gender mainstreaming in sustainable water resources development and management has been acknowledged by all the Member Countries. Early political willingness from all MRC leaders, including the Council, Joint Committees and MRC senior managers was demonstrated when the Gender Policy was approved and endorsed by the governments in 2000. This political commitment has now been translated into concrete action through the development and approval of the MRC Gender Action Plan.
**FINANCIAL SUMMARY**

This briefly summarises the financial performance of the MRCS in terms of: expenditure vs approved budget for 2017; funds received from all sources vs total expenditure for 2017; and a comparison with the financial performance in 2016.

For the year 2017, as of 31 December 2017, the MRC Secretariat received total funding of USD 12,429,272. On the expenditure side, the total for the year was USD 12,337,543, which included USD 7,682,679 for the Basket Fund (BF), USD 4,444,779 for the Earmarked Fund (EF), and USD 210,085 for the Administration Reserve Fund (ARF). Furthermore, USD 1,637,066 in obligations (“committed” expenditures but not paid) was recorded at the end of December 2017. The available cash balance was USD 4,238,858.

**Table 1: Summary of Funds Received and Expenditure**

<table>
<thead>
<tr>
<th>Overall Financial Summary</th>
<th>As of 31 Dec 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated Income vs Actual Fund</td>
<td>Estimated Income</td>
</tr>
<tr>
<td>BF</td>
<td>8,476,022</td>
</tr>
<tr>
<td>EF</td>
<td>6,638,308</td>
</tr>
<tr>
<td>ARF</td>
<td>414,699</td>
</tr>
<tr>
<td>subtotal</td>
<td>15,529,029</td>
</tr>
<tr>
<td>AWP2017 vs Actual Expenditure</td>
<td>AWP 2017</td>
</tr>
<tr>
<td>BF</td>
<td>10,034,479</td>
</tr>
<tr>
<td>EF</td>
<td>7,168,307</td>
</tr>
<tr>
<td>ARF</td>
<td>414,699</td>
</tr>
<tr>
<td>subtotal</td>
<td>17,617,485</td>
</tr>
</tbody>
</table>

**Actual Cash Movement during 2017**

Net cash receipts (total funds received less total expenditures) in 2017: 91,730

Add: Cash from previous years: 12,514,784

Cash Refund from Prepaid insurance premiums in 2017: 7,399

Deduct: Cash subjected to return to donors: (165,697)

**Cash balance, 31 December 2017**: 12,448,216

**Deduct: Cash – restricted**

- Employees’ Provident Fund: (501,018)
- Administrative Reserve Fund: (4,367,981)
- Current Liabilities, Accounts payable as of 31 Dec 2017: (112,430)
- Obligation as of 31 Dec 2017: (1,637,066)
- Earmarked Cash Balance as of 31 Dec 2017: (1,590,864)

**Cash - unrestricted available for 2018 BF Operations**: 4,238,858

**INCOME**

Income is cash received (contributions from member countries and development partners) by the MRCS from 1 January 2017 to 31 December 2017. The total cash for the period was USD 12,429,272. This is approximately 80% of the total projected income of USD 15,529,029.

---

1 The figures presented here pertain to unaudited figures; the Independent Auditors Report and the Audited Financial Statements will be issued by KPMG at the end of March 2018 and will be shared to all stakeholders in April 2018.
**Income for the Basket Fund (BF):** As of 31 December 2017, MRCS had received in total USD 9,389,832, equivalent to 111% of the total planned income for the BF for the year 2017. This is 11% more than projected due to the Australian Government transferring their contribution ahead of schedule.

**Income for the Earmarked Fund (EF):** MRCS received a total of USD 2,998,701 for the EF for the year 2017, which is equal to 45% of the estimated income. The reason for the low disbursement was that the operational nature of the EF fund was based on the progress of each planned activity that was agreed with each donor. There have been delays in certain activities over the year. However, the majority of EF projects have been moving forward with their planned activities during the last period of the year and it is expected that disbursement will pick up in 2018.

**Income for the Administration Reserve Fund (ARF):** The ARF requires the approval of Member Countries before it can be used thus it is treated as income for planning purposes. In late 2016, MRC Member Countries approved $414,699 from the ARF to cover the costs of office relocation activities. During the period ending December 2017, there was interest income from the term deposit for the Administration Reserve Fund of USD 40,739.

### Table 2: Source of Income

<table>
<thead>
<tr>
<th>Sources of funds</th>
<th>2017</th>
<th>%</th>
<th>2016</th>
<th>%</th>
<th>2015</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member Countries</td>
<td>2,851,149</td>
<td>23%</td>
<td>2,545,339</td>
<td>17%</td>
<td>1,636,557</td>
<td>8%</td>
</tr>
<tr>
<td>Development Partners</td>
<td>8,784,319</td>
<td>71%</td>
<td>12,339,661</td>
<td>81%</td>
<td>16,346,095</td>
<td>79%</td>
</tr>
<tr>
<td>hers (Interest Incomes...)</td>
<td>256,420</td>
<td>2%</td>
<td>153,075</td>
<td>1%</td>
<td>272,021</td>
<td>1%</td>
</tr>
<tr>
<td>Management Admin Fee</td>
<td>537,384</td>
<td>4%</td>
<td>211,728</td>
<td>1%</td>
<td>2,324,132</td>
<td>11%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>12,429,272</td>
<td>100%</td>
<td>15,249,803</td>
<td>100%</td>
<td>20,578,805</td>
<td>100%</td>
</tr>
</tbody>
</table>

The table above details the total income received from all sources from 2015. It should be noted that the Member Countries’ contribution has gradually increased over time. However, actual income for 2017 decreased by 18% compared to 2016.

**EXPENDITURE**

Total expenditure for the period ending December 2017 was USD 12,337,543, which represents 70% of the planned budget as displayed in table 1 above. This is considered a big jump if compared with the figure of USD 4,937,159.35 reported in June 2017.

**Expenditure for the Basket Fund (BF):** Table 3 below displays the expenditures by output for the BF for the period ending December 2017. It is indicated that MRCS spent 77% of the planned budget. This incurred a budget variance of $2,351,801. This is because this figure was actual expenditure and does NOT include obligated amounts where the obligated activities will be settled in the following year.

The table also displays budget achievements by each output for the period ending December 2017. The majority of outputs reached 60% and above in budget performance while the rest of the outputs were works in progress.

**Expenditure for the Earmarked Fund (EF):** The table below also displays information on expenditures for the EF by output. The table also indicates the percentage of output per the given period. Overall, MRCS has a budget achievement of 62% toward the planned budget.
Expenditure for the Administration Reserve Fund (ARF): Over the year, the Reserve Fund has been disbursed on the office relocation from Phnom Penh to Vientiane. Many of the relocation activities have been completed; however, there are some activities that are still ongoing and works in progress, such as office renovation at both the Vientiane and Phnom Penh Offices, and the upgrading of IT networking equipment. The Administrative Reserve Fund (ARF) balance as of 31 December 2017 was $4,367,981. This is the accumulated balance of the ARF since 2001 under the old structure.

Table 3: Detailed Expenditure by Output

<table>
<thead>
<tr>
<th>Output codes</th>
<th>Output</th>
<th>EXPENDITURE</th>
<th>Basket Fund</th>
<th>Planned BF</th>
<th>Actual BF</th>
<th>Variance BF</th>
<th>BF %</th>
<th>Planned EF</th>
<th>Actual EF</th>
<th>Variance EF</th>
<th>EF %</th>
<th>Planned ARF</th>
<th>Actual ARF</th>
<th>Variance ARF</th>
<th>ARF %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Drought / Crop production study</td>
<td>1,404,473</td>
<td>908,069</td>
<td>493,404</td>
<td>65%</td>
<td>691,067</td>
<td>666,369</td>
<td>24,698</td>
<td>96%</td>
<td>(94,367)</td>
<td>94,367</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1.2</td>
<td>Study on transboundary impacts</td>
<td>40,518</td>
<td>40,518</td>
<td>1</td>
<td>100%</td>
<td>43,000</td>
<td>17,186</td>
<td>25,814</td>
<td>40%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2.1</td>
<td>Review regional power demand and pricing</td>
<td>30,000</td>
<td>13,847</td>
<td>16,153</td>
<td>46%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2.2</td>
<td>Update flood management strategies</td>
<td>60,000</td>
<td>60,000</td>
<td>0%</td>
<td>690,530</td>
<td>248,497</td>
<td>442,033</td>
<td>36%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2.3</td>
<td>Basin-wide Fisheries Management</td>
<td>52,714</td>
<td>33,476</td>
<td>19,237</td>
<td>64%</td>
<td>47,273</td>
<td>12,206</td>
<td>35,067</td>
<td>26%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2.4</td>
<td>Regional benefit sharing &amp; transboundary basin</td>
<td>64,241</td>
<td>34,442</td>
<td>29,799</td>
<td>54%</td>
<td>2,599,606</td>
<td>1,664,459</td>
<td>945,147</td>
<td>64%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2.5</td>
<td>Mekong Adaptation Strategy and Action Plan</td>
<td>6,825</td>
<td>6,825</td>
<td>1</td>
<td>100%</td>
<td>463,542</td>
<td>376,026</td>
<td>87,516</td>
<td>81%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2.6</td>
<td>Basin Development Strategy (BDS)</td>
<td>24,848</td>
<td>4,848</td>
<td>20,000</td>
<td>20%</td>
<td>-</td>
<td>-</td>
<td>0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2.7</td>
<td>Support Joint Platform and Procedures</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0%</td>
<td>89,577</td>
<td>80,264</td>
<td>9,313</td>
<td>90%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2.8</td>
<td>Prepare Strategy for basin-wide env</td>
<td>28,800</td>
<td>3,300</td>
<td>25,500</td>
<td>11%</td>
<td>-</td>
<td>-</td>
<td>0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2.9</td>
<td>Drought management strategy</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0%</td>
<td>62,826</td>
<td>54,580</td>
<td>8,246</td>
<td>87%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3.1</td>
<td>Review Preliminary Design Guidance for MRCS</td>
<td>819,664</td>
<td>593,204</td>
<td>226,460</td>
<td>72%</td>
<td>-</td>
<td>-</td>
<td>0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3.2</td>
<td>Waterborne transport guidelines</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0%</td>
<td>66,719</td>
<td>38,487</td>
<td>28,232</td>
<td>58%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3.3</td>
<td>Support sustainable hydropower on MRCS</td>
<td>92,700</td>
<td>67,517</td>
<td>25,183</td>
<td>73%</td>
<td>-</td>
<td>-</td>
<td>0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3.4</td>
<td>Watersheds management</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0%</td>
<td>45,152</td>
<td>45,012</td>
<td>140</td>
<td>100%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3.5</td>
<td>Wetlands management</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0%</td>
<td>75,11</td>
<td>86,708</td>
<td>18,803</td>
<td>31%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3.6</td>
<td>Guidelines for sustainable management of MRCS</td>
<td>51,203</td>
<td>32,983</td>
<td>18,220</td>
<td>64%</td>
<td>73,514</td>
<td>36,831</td>
<td>36,683</td>
<td>50%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3.7</td>
<td>Guidelines for fish-friendly irrigation</td>
<td>1,111</td>
<td>1,111</td>
<td>0</td>
<td>100%</td>
<td>49,388</td>
<td>36,864</td>
<td>12,524</td>
<td>75%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3.8</td>
<td>Transboundary EIA guidelines</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0%</td>
<td>276,774</td>
<td>253,128</td>
<td>23,646</td>
<td>91%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4.1</td>
<td>Support implementation of Procedures</td>
<td>8,000</td>
<td>8,000</td>
<td>0</td>
<td>100%</td>
<td>11,335</td>
<td>14,02</td>
<td>2,693</td>
<td>14%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4.2</td>
<td>Support Joint Platform and Procedures</td>
<td>351,555</td>
<td>317,551</td>
<td>34,004</td>
<td>90%</td>
<td>92,863</td>
<td>64,177</td>
<td>28,686</td>
<td>69%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5.1</td>
<td>Strengthening cooperation with Dia</td>
<td>60,000</td>
<td>40,543</td>
<td>19,457</td>
<td>68%</td>
<td>-</td>
<td>-</td>
<td>0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5.2</td>
<td>Partnerships with ASEAN, Mekong and MRC</td>
<td>25,416</td>
<td>17,166</td>
<td>8,250</td>
<td>68%</td>
<td>-</td>
<td>-</td>
<td>0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5.3</td>
<td>Regional Stakeholder Forum establishment</td>
<td>70,364</td>
<td>70,094</td>
<td>269</td>
<td>100%</td>
<td>-</td>
<td>-</td>
<td>0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6.1</td>
<td>Routine monitoring and forecasting</td>
<td>905,410</td>
<td>449,709</td>
<td>455,701</td>
<td>50%</td>
<td>986,712</td>
<td>425,100</td>
<td>561,611</td>
<td>43%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6.2</td>
<td>Information system and database management</td>
<td>96,490</td>
<td>71,422</td>
<td>25,068</td>
<td>74%</td>
<td>71,422</td>
<td>25,068</td>
<td>46,353</td>
<td>65%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6.3</td>
<td>Update modelling, analysis and assessment</td>
<td>80,000</td>
<td>58,937</td>
<td>21,063</td>
<td>74%</td>
<td>132,305</td>
<td>22,789</td>
<td>109,516</td>
<td>17%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6.4</td>
<td>SOE and technical reporting</td>
<td>206,211</td>
<td>15,038</td>
<td>191,173</td>
<td>7%</td>
<td>124,158</td>
<td>65,499</td>
<td>58,659</td>
<td>53%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6.5</td>
<td>Data portal management and knowledge services</td>
<td>24,528</td>
<td>21,658</td>
<td>2,870</td>
<td>88%</td>
<td>-</td>
<td>-</td>
<td>0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7.1</td>
<td>MRCS structural reform</td>
<td>30,000</td>
<td>30,000</td>
<td>0</td>
<td>100%</td>
<td>-</td>
<td>-</td>
<td>0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7.2</td>
<td>MRCS human resource reform</td>
<td>77,933</td>
<td>35,958</td>
<td>41,975</td>
<td>46%</td>
<td>-</td>
<td>-</td>
<td>0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7.3</td>
<td>MRCS financial reform</td>
<td>145,904</td>
<td>69,667</td>
<td>76,238</td>
<td>48%</td>
<td>-</td>
<td>-</td>
<td>0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7.4</td>
<td>M&amp;E and reporting systems</td>
<td>98,574</td>
<td>86,893</td>
<td>11,681</td>
<td>64%</td>
<td>-</td>
<td>-</td>
<td>0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7.5</td>
<td>SP preparation and support of final IWRM</td>
<td>38,288</td>
<td>24,955</td>
<td>13,334</td>
<td>65%</td>
<td>-</td>
<td>-</td>
<td>0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>A.1</td>
<td>Operational Costs</td>
<td>5,141,709</td>
<td>4,632,950</td>
<td>508,759</td>
<td>90%</td>
<td>309,456</td>
<td>228,350</td>
<td>81,106</td>
<td>73%</td>
<td>414,699</td>
<td>304,452</td>
<td>110,247</td>
<td>31%</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

TOTAL EXPENDITURE: 10,034,479 7,682,679 2,351,801 77% 7,186,307 4,444,779 2,723,528 62% 414,699 210,086 204,613 51%
OUTCOME STATUS SUMMARY
2017 was a year MRC made important progress towards achieving its Strategic Plan through the implementation of its Annual Work Plan. Below is a brief self-assessment of the status and likelihood of the organisation achieving its outcomes as defined in the MRC SP as of the end of 2017.

Based on the three types of change explained earlier, the Outcome Status Evaluation Matrix shows the likelihood of achieving particular outcomes by examining the output status (under each outcome) in 2 areas:

1) Output Progress (on-track, delayed, not yet started)
2) Type of change (Awareness, Actions, Policies) a particular output has achieved so far

STATUS AS OF 2017
The overall status of reaching each outcome is as follows:

Outcome 1: Increased Common Understanding and Application of Evidence-based Knowledge
This outcome is about producing policy relevant knowledge that contributes to sound decision making. As of the end of 2017, the achievement of this outcome is possible.

In the MRC SP, 7 outputs (deliverables) were planned. The most important is the Council Study and related assessments such as those on climate change. By the end of 2017, the Council Study, after about 5 years, completed its assessments, delivering basin-wide impact results of present and planned developments in the hydrological, biological resources, and socio-economic areas, as well as sector-specific studies for all the major water sectors. Although 4 of the outputs under this outcome have not yet started and 2 are delayed, the Council Study can be said to cover elements of the studies on livelihoods, biodiversity, fisheries, and irrigation.

Outcome 2: Environment Management and Sustainable Water Resources Development Optimized for Basin-wide Benefits
Outcome 2 is about influencing national plans, prepared mostly for each country’s national context and interest, through basin-wide strategies so that transboundary benefits are optimized and costs reduced. The likelihood of achieving this outcome is possible.

As of 2017, three sectors or thematic strategies are prepared and approved – navigation, fisheries, and climate change. One – sustainable hydropower – is being updated to reflect the latest assessments, including from the Council Study. Two new strategies – for drought management and preservation of environmental assets – have faced some delays as these are relatively new work for the MRC.
Outcome 3: Guidance for the Development and Management of Water and Related Projects and Resources Shared and Applied

The intent of this outcome is to improve national management, practice and projects of water and related resources of transboundary significance through the use of MRC guidelines and standards. The likelihood of achieving this outcome is possible.

Of the 12 outputs under this outcome, 6 are on track, 2 are delayed and the rest are yet to be implemented in this Strategic Plan period. 2017 saw 4 key activities making important contributions and changes. The Preliminary Design Guidance of mainstream dams cemented its status as the standard guide in developing mainstream hydropower projects following its use by the hydropower developer for the Pak Beng project and during the prior consultation process in terms of assessment by the MRC and other actors. For the first time in several years the development of the Transboundary Environment Impact Assessment Guidelines is showing momentum and convergence in different perspectives as they move towards finalisation. The watershed project has been completed at the regional level and lessons learned from the pilot project in Laos, which demonstrated results, were shared with Mekong Countries’ watershed practitioners. The exchanges between Lao and Thai communities also led to enhanced capacity and lessons for the pilot project implementors in watershed management. The implementation of RSAT between Cambodia and Viet Nam and at a River Basin in Viet Nam led to better recognition of the challenges and decisions to implement joint actions.

Outcome 4: Effective and Coherent Implementation of MRC Procedures

This outcome targets the contribution of MRC Procedures in mitigating, minimising and avoiding adverse transboundary impacts from development projects. The likelihood of achieving this outcome is almost certain.

2 out of 3 outputs under this outcome are on track. The one that has not yet formally commenced – sharing and learning and enhancing understanding to implement the Procedures – could be said to be carried out during the conduct of the Procedures themselves. For example, during the implementation of the third Prior Consultation process, the intent and scope of the PNPCA became clearer following pro-activeness by the MRC Secretariat, the Member Countries and the lessons drawn from the previous two cases. In fact, the PNPCA process achieved a breakthrough this year in the form of the agreed joint statement by the countries on the Pak Beng project. It is expected that the Joint Action Plan implementation in 2018 and onwards will contribute significantly to mitigating and minimising the potentially negative transboundary effects of the project. Furthermore, other procedures on the maintenance of flows and water quality monitoring, with updated guidelines, continued to be active, and thus support the intent of this outcome.

Outcome 5: Effective Dialogue and Cooperation

The intent of this outcome is to demonstrate close cooperation and collaboration with the MRC’s Dialogue Partners – China and Myanmar – which as the upper riparians of the Mekong are critically important in the overall management of the whole river. No less vital, engagement with other partners and stakeholders – a distinctive mark of Mekong cooperation through the MRC – in an open, inclusive and transparent manner deserves special attention. The likelihood of achieving this outcome is almost certain.

In 2017, while data sharing, the annual dialogue meeting, and exchange of visits continued, the MRC and China undertook more joint efforts in the form of a joint assessment and the organisation of a joint symposium on crucial basin wide issues, such as positive and negative impacts of upstream dams. This followed the groundbreaking collaboration in the joint observation of the water supplement during the drought of 2016. Communication and engagement with stakeholders also increased tremendously.
during the year with half a dozen regional stakeholder forums held and various promotion and dissemination activities of MRC work through traditional and social media. Collaboration with existing and new partners also increased. All provide evidence that the MRC has maintained existing cooperative relationships and fostered new ones.

**Outcome 6: Basin-wide Monitoring, Forecasting, Impact Assessment and Dissemination**

Monitoring, data, information system and modelling are the “engine room” of the MRC – providing science and facts to support water diplomacy and sound decision making. The intent of the outcome is the utilisation of these data and information for those purposes. The likelihood of achieving this outcome is possible.

By the end of 2017, 3 outputs are on track while the other 2 relating to the update and integration of databases and their public interface in the form of the data portal have been delayed. For the three on track, a draft already exists for the new State of Basin Report. Analysis and modelling services for the Council Study and other assessments, and monitoring, while facing some delays for the sediment and issues with some decentralized HYCOS stations, continued to be implemented.

**Outcome 7: MRC Transitioned to a More Efficient and Effective Organisation**

This outcome ensures that the MRC organisational structure, associated mechanisms, work plans and operations are efficient and effective in supporting the work of MRC and IWRM. The likelihood of achieving this outcome is almost certain.

The status as of 2017 is that all five outputs are on track. The new structure is in place, new staff fully recruited, and the expert groups mechanism approved and established. The new structure is based on core functions and IWRM principles, as are the expert groups. The basket fund is in place and is being improved based on experience. HR management has seen the introduction of a host of monitoring measures and performance indicators. Various existing manuals have been updated. Annual work plans are always prepared and approved, with their monitoring in place and operational. The NIP, having integrated basin-wide perspectives into national planning and vice versa - has a mixed record – different countries experienced varying degrees of implementation. The good news is that NIP joint projects have been funded.

**ACTIONS FOR 2018**

The Annual Work Plan 2018 identified actions in terms of activities and tasks under each output in order to have a greater likelihood of achieving outcomes. They are summarised in the figure below.
## Outcome Status as of December 2017

<table>
<thead>
<tr>
<th>Outcome Status Unlikely</th>
<th>Possible</th>
<th>Possible</th>
<th>Almost Certain</th>
<th>Almost Certain</th>
<th>Possible</th>
<th>Almost Certain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likelihood of the output producing change</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Almost Certain</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Possible</td>
<td>2</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unlikely</td>
<td>4</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total # of Outputs under each outcome:**
- 7
- 9
- 12
- 3
- 3
- 5
- 5

### Key Actions to improve Outcome Status based on the Annual Work Plan 2018

- **Disseminate and promote the findings of the CS, esp at policy levels**
- Work with key line agencies on specific areas recommended by CS
- Work with research orgs on further closing gaps
- **Implement the Joint Projects**
- Complete the BFMS action plan with concrete actions that are fundable
- Fund raising for MASAP, Master Plan
- Complete drought and environmental strategies
- Accelerate the completion of the 3 remaining guidelines by 2019.
- Link the use of the guidelines under the NIP National Activities
- Increase technical support on the implementation of the technical guidelines
- Revitalize the PWUM and PDEIS and continue implementing PMFM and PWQ
- Implement the JAP and continually improve PNPCA based on commentary
- Further build understanding and capacity through trainings
- Continue close dialogue, communication and engagement with all partners
- Secure new agreements to work together on joint activities
- Continue regular engagement with stakeholders
- Solve key issues with underperforming monitoring activities and institute KPI
- Increase engagement with targeted data users on routine monitoring
- Focus on the well functioning of the regional & national information systems (Data Portal, National IS, etc.)
- Complete and issue SOBR

### Expected Results from implementing the Annual Work Plan 2018

- Possible
- Almost Certain
- Almost Certain
- Almost Certain
- Almost Certain
- Almost Certain
- Almost Certain