

STRATEGIC PRIORITY 1

Maintain the ecological function of the Mekong River Basin

OUTCOME 1.1 Adequate water flow and quality for a healthy environment and productive communities

OUTPUT 1.1.1 Guidance for water flow and quality management implemented

1.1.1.1

Revisit PMFM and identify and evaluate potential new or additional flow thresholds (and methodologies) for guiding the monitoring and management of flow conditions in the mainstream (incl. for rapid river level fluctuations, minimum flood season, and maximum dry season flows)

1.1.1.2

Implement PMFM guidelines including any updated or additional flow thresholds

1.1.1.3

Develop methods for identifying and monitoring water quality related emergency incidents (informed by recent experience) and emerging water quality issues (e.g. plastics) in accordance with the PWQ

1.1.1.4

Implement PWQ guidelines including any new monitoring methods and parameters

1.1.1.5

Support implementation of the Regional Action Plan for Sustainable Transport of Dangerous Goods

1.1.1.6

Implement PWUM using upgraded DSS connected to ground, global and satellite datasets

OUTPUT 1.1.2 Guidance and measures for impact mitigation of water infrastructure implemented

1.1.2.1

Support use and integration of Preliminary Design Guidance in regional and national regulatory frameworks

1.1.2.2

Support implementation of Joint Action Plans for all mainstream hydropower projects

1.1.2.3

Support implementation of RSAT in Mekong tributaries

1.1.2.4

Support application and mainstreaming of the Guidelines for Transboundary Environmental Impact Assessment into national Environmental Impact Assessment systems and regulations

OUTCOME 1.2 Sediment transport managed to mitigate bank erosion and maintain wetland and floodplain productivity

OUTPUT 1.2.1 Basin-wide sediment management plan developed and implemented

1.2.1.1

Undertake a study on sediment transport throughout the basin including on the sources and fate of sediments, the impact of existing and planned infrastructure and sediment extraction activities, and the extent and distribution of bank erosion

1.2.1.2

Identify options for reducing sediment trapping at existing and planned dams and for reducing sand mining, taking into account the interacting factors that lead to bank erosion (for input to basin-wide scenario assessments)

1.2.1.3

Prepare a basin-wide sediment management plan

OUTCOME 1.3 Ecosystem services from wetlands and watersheds ensured

OUTPUT 1.3.1 Limits of acceptable change for key river and connected wetland habitats identified and implemented

1.3.1.1

Identify and assess limits to adequately protect key regional environmental assets (i.e. wetlands) including consideration of ecosystem functions and services, through engagement of scientific expertise, national agencies and local communities

1.3.1.2

Support Member Countries in updating, developing and implementing management plans for key regional environmental assets identified in the SBEM and other regional environmental strategies

OUTPUT 1.3.2 A basin-wide planning and management framework for watersheds agreed and implemented

1.3.2.1

Identify good practice institutional, governance and regulatory arrangements for the management of watersheds with opportunities for harmonisation and capacity building between countries

1.3.2.2

Develop a basin-wide planning and management framework for watersheds that are key regional environmental assets due to their role in providing regionally significant ecosystem services

STRATEGIC PRIORITY 2

Enable inclusive utilisation of the basin's water and water-related resources

OUTCOME 2.1

Strengthened water, food and energy security for basin community well-being

OUTPUT 2.1.2 Capture fisheries regulatory frameworks improved and implemented

2.1.2.1

Incorporate important fisheries habitats into the network of key regional environmental assets

2.1.2.2

Support enhanced institutional, governance and regulatory arrangements within national and provincial fisheries management frameworks

2.1.2.3

Support agreed transboundary fisheries management projects including stock assessments

OUTPUT 2.1.3 Risks to capture fisheries productivity and diversity minimised

2.1.3.1

Evaluate the effectiveness of existing fish passages for hydropower and irrigation structures and potential alternative designs in relation to the unique fish ecology of the basin

2.1.3.2

Support national uptake of recommended actions and guidelines for improving fish passage or other adaptation measures for hydropower and irrigation structures

OUTPUT 2.1.4 Gender and vulnerability aspects of basin water, food and energy security addressed

2.1.4.1

Undertake a desk review and analysis, in collaboration with relevant partners, of the gender and vulnerability aspects of basin water, food and energy security identifying specific needs, challenges and opportunities and including recommendations on cost effective and priority gender disaggregated data and vulnerability mapping requirements

2.1.4.2

Coordinate national disaggregated data collection and mapping efforts on gender and vulnerability, as part of the implementation of the Data Acquisition and Generation Action Plan, SIMVA and SDG reporting

2.1.4.3

Analyse data and information and provide recommendations on improving equity for vulnerable groups

STRATEGIC PRIORITY 3

Enhance optimal and sustainable development by increasing regional benefits and decreasing regional costs

OUTCOME 3.1

Increased economic growth of all basin countries from more proactive regional planning

OUTCOME 3.2

Enhanced inclusive growth and sustainability in irrigated agriculture, hydropower, navigation, environment and fisheries sectors

OUTPUT 3.1.1

The Basin Development Plan and associated national plans for water resources development are informed by the findings of a more proactive regional planning approach

3.1.1.1

Assess options for increasing natural and constructed water storage, using GIS/EO technology and field work

3.1.1.2

Formulate alternative basin-wide development scenarios and update the existing BDP assessment methodology

3.1.1.3

Assess the agreed alternative basin-wide development scenarios and the distribution of benefits and costs

OUTPUT 3.2.1

Investment and associated measures in irrigated agriculture implemented

3.2.1.1

Coordinate development of guidelines on sustainable transboundary groundwater management and support implementation through country-to-country capacity building

3.2.1.2

Identify opportunities, promote and provide guidance on irrigation development opportunities, for adaptation to climate change, improved food security, and reduced inequity

OUTPUT 3.2.2

Sustainable hydropower development strategy and related regional energy plans implemented in synergy

3.2.2.1

Support implementation of the SHDS and coordinate and promote alignment with regional energy plans (incl. GMS and ASEAN)

3.2.2.2

Assess alternative cost-effective regional energy/water system integration options related to water (e.g. floating solar with hydropower, seasonal storage, cross basin and regional generation efficiency, etc.) within the context of broader energy sector plans including solar and wind and as informed by comprehensive regional options assessment(s) by countries and other regional actors (ASEAN, GMS, etc)

OUTPUT 3.2.3

Investment and associated measures in basin navigation plans implemented in synergy

3.2.3.1

Support the implementation of the MRC Masterplan for Regional Waterborne Transport in the Mekong River Basin in alignment with the JCCCN Development Plan on International Navigation on the Lancang-Mekong River (2015-2025) in consultation with all basin countries

3.2.3.2

Facilitate the harmonisation of navigation rules and regulations between LMB countries and support national implementation

3.2.3.3

Facilitate and coordinate navigation investments in accordance with existing or updated plans

OUTPUT 3.2.4

Investment and associated measures in regional environmental strategies and programmes implemented in synergy

3.2.4.1

Support the implementation of the SBEM and support the preparation of identified investment projects and associated measures for wetlands and watersheds

3.2.4.2

Raise awareness and build capacity in leveraging ecosystem services from wetlands and watersheds through alternative financial mechanisms including carbon offsets, and ecotourism

OUTPUT 3.2.5

Investment and associated measures to adapt to changes in fish populations and catch composition identified and implemented

3.2.5.1

Support the implementation of investments and associated measures to enhance fisheries consistent with the BFMS including raising awareness, building capacity and supporting adaptation to likely future fish populations (incl. in reservoir and rice field fisheries, stock enhancement, and sustainable aquaculture)

3.2.5.2

Explore alternative futures for fish populations and catch composition resulting from water resources development and climate change and identify options to adapt to these changes and maintain viable fish populations

3.2.5.3

Evaluate investments and other options to maximise fisheries production under changed river conditions as a result of water resources development and climate change, and support the preparation of identified investments

STRATEGIC PRIORITY 4

Ensure water security by managing and mitigating floods and droughts

OUTCOME 4.1 Better informed and prepared basin communities against changing river conditions, and more frequent and severe floods and droughts

OUTCOME 4.2 Better disaster management and adaptation to water resources development and climate risks

OUTPUT 4.1.1 A core river monitoring network for the mainstream and remaining national river monitoring networks consolidated

- 4.1.1.1** Assess, redesign and develop the basin's river monitoring networks, incorporating JEM, for regional and national planning and management based on a comprehensive network analysis informed by current and future needs
- 4.1.1.2** Enhance monitoring methods for erosion, sedimentation, and transport of sediments (incl. by using modern earth observation technology) as part of the core monitoring network
- 4.1.1.3** Implement river monitoring network, analysis and reporting activities (hydro-meteorological, discharge and sediment, water quality, fisheries, and ecological health) including agreed components of the Joint Environmental Monitoring of mainstream hydropower and other water infrastructure

OUTPUT 4.1.2 Integrated data and information systems for more effective basin-wide data management and sharing

- 4.1.2.1** Complete inventory, standardisation, harmonisation and update of data, information and documents and migrate them into integrated databases with improved QA/QC procedures
- 4.1.2.2** Upgrade remote sensing and satellite imagery repository and develop capacity of handling and using satellite products for water resource application
- 4.1.2.3** Operate and maintain integrated databases, information, systems and tools

OUTPUT 4.1.3 Compatible Decision Support Systems in line with reinvigorated data, modelling, forecasting, and communication capabilities

- 4.1.3.1** Further study the design, management and use of the region's DSS's and plan a regional system of compatible DSS's (MRC's and member countries', as well as linkages to DSS's in Upper Mekong River Basin countries)
- 4.1.3.2** Upgrade the MRC Decision Support Framework to the MRC Decision Support System with the latest international standards and technologies in order to serve both planning and operational management purposes, building on the reinvigoration of MRC's data, information, modelling and communication systems
- 4.1.3.3** Maintain and operate modelling and analysis tools including the updated ones as part of the upgrade to a DSS (e.g. production of spatial datasets)
- 4.1.3.4** Maintain web-based DSS (including communication tools, improved MRC Web Portal, and development of apps) in support of decision-making and active public communication
- 4.1.3.5** Support capacity building and promote the development of reinvigorated and compatible DSS's in all basin countries

OUTPUT 4.1.4 Integrated basin-wide flood and drought forecasting and early warning

- 4.1.4.1** Identify member country requirements and develop an improved and integrated regional system for basin-wide flood and drought forecasting and early warning (extension to monthly forecast, three to six monthly and seasonal outlook)
- 4.1.4.2** Implement improved and integrated flood and drought forecasting and early warning information to basin countries through compatible DSS's, enhanced exchange of data, consolidated water monitoring networks, and agreed communication protocols
- 4.1.4.3** Enhance flash flood guidance to basin countries through reinvigorated and compatible DSS's, enhanced exchange of data, consolidated water monitoring networks, and agreed communication protocols

OUTPUT 4.1.5 Joint State of Basin Report and Basin Development Strategy

- 4.1.5.1** Implement the Data Acquisition and Generation Action Plan to enable preparation of the 2023 State of Basin Report with improved consistency and alignment of basin-wide datasets
- 4.1.5.2** Prepare the 2023 State of Basin Report with all six basin countries as a mid-implementation report on the BDS 2021-2030

OUTPUT 4.2.1 Coordinated water infrastructure operations for multiple benefits including disaster mitigation and management

- 4.2.1.1** Continue review of existing dam operating rules and governance arrangements and identify opportunities for coordinated flow management to increase efficiency, reduce impacts and help mitigate floods and droughts
- 4.2.1.2** Develop protocols for coordinating and communicating existing dam operations to optimise regional benefits and minimise regional costs
- 4.2.1.3** Develop protocols for coordinating and communicating the operation of additional dams and other water infrastructure to optimise regional benefits and minimise regional costs
- 4.2.1.4** Develop and implement information sharing and communication protocols for water-related emergencies including water quality, navigation and dam safety

OUTPUT 4.2.2 Climate change adaptation, flood and drought management mainstreamed at national levels

- 4.2.2.1** Support mainstreaming of climate change adaptation to increased climate risks, floods and droughts into regional and national strategies, plans and projects
- 4.2.2.2** Coordinate enhanced access to international climate finance
- 4.2.2.3** Support implementation of the drought management strategy including finalisation and implementation of drought adaptation guidelines
- 4.2.2.4** Support implementation of flood mitigation and management strategy
- 4.2.2.5** Further identify and facilitate implementation of transboundary projects on climate change adaptation and water resources management (including pilot projects to improve knowledge, management, systems and cooperation in response to increased floods and droughts)

STRATEGIC PRIORITY 5

Strengthen cooperation among all countries and stakeholders

OUTCOME 5.1 Strengthened Mekong River Commission for more effective implementation of the Mekong Agreement

OUTCOME 5.2 Increased joint efforts and partnerships for more integrated management of the entire river basin

OUTPUT 5.1.1 Implementation of the MRC Procedures enhanced

- 5.1.1.1** Synthesise evaluation results, lessons learned from emerging work on the implementation of the MRC Procedures, and develop a comprehensive technical proposal for their improved implementation through the Joint Platform
- 5.1.1.2** Based on the agreed proposal, improve the Technical Guidelines (TG) for implementing the PNPCA
- 5.1.1.3** Based on the agreed proposal and the implementation experience of MRB IF and DAGAP, improve the Technical Guidelines (TG) for implementing the PDIES
- 5.1.1.4** Implement the PNPCA taking into account the updated TG and related technical guidelines for other Procedures
- 5.1.1.5** Implement the PDIES, taking into account the updated TG and related technical guidelines for other Procedures, through the MRB IF and DAGAP

OUTPUT 5.1.2 Organisational development of the Mekong River Commission

- 5.1.2.1** Prepare and implement an organisational development plan for the MRC towards 2030 (including the Council, JC, MRCS (and RFDMC), NMCs, NMCSs and Expert Groups) based on agreed vision of future capacity, diversity and gender, revised ROPs, organisational structure, function, and personnel, and operating arrangements
- 5.1.2.2** Coordinate and build capacity for national implementation of decentralised CRBMs to achieve regional objectives, planning and management including through joint basin expert groups
- 5.1.2.3** Institutionalize 'uptake of Outputs' as part of the development and implementation process for all MRC products and services based on the Uptake Guidelines
- 5.1.2.4** Establish a staff secondment programme between regional level and national implementing agency levels (all 6 countries) building on the Junior Riparian Professional Programme
- 5.1.2.5** Manage human resources and procurement in-line with HR and Procurement Manuals and Fraud Prevention and Anti-Corruption (FPAC) Mechanism
- 5.1.2.6** Operate the new financial management information system in line with Finance Manual and FPAC, and in support of work planning, budget monitoring and reporting
- 5.1.2.7** Enhance internal controls, including operationalization of the Audit Committee and Internal Auditor
- 5.1.2.8** Organise and coordinate MRC governance meetings including 2022 Summit, Council, Joint Committee, Joint Committee Task Force, and Budget Committee
- 5.1.2.9** Prepare the multi-year work plans to implement the MRC SP
- 5.1.2.10** Support the preparation and implementation of the National Indicative Plans to implement the BDS 2021-2030 and MRC SP 2021-2025 and 2026-2030
- 5.1.2.11** Prepare the MRC SP 2026-2030 to implement the remaining five years of the BDS 2021-2030
- 5.1.2.12** Monitor, evaluate and report on the implementation of the MRC SP, NIPs and the contribution of water-related activities (projects and programmes) of Mekong-related regional cooperation mechanisms to the BDS

OUTPUT 5.2.1 Common understanding on the potential future institutional arrangements for entire basin management

- 5.2.1.1** Further clarify mandates, areas of common interests, and comparative advantages in the changing basin context for Mekong related regional cooperation mechanisms and frameworks
- 5.2.1.2** Explore and evaluate in a participatory manner the institutional options for managing the Mekong River Basin by 2030

OUTPUT 5.2.2 Significant joint infrastructure projects and national projects of basin-wide significance and associated measures agreed based on consideration of trade-offs, benefit sharing and risks

- 5.2.2.1** Facilitate consideration of proposed joint projects and national projects of basin-wide significance including trade-off and benefit sharing discussions, and the comparison with benefits and costs of existing national plans for river and floodplain development
- 5.2.2.2** Support the preparation of concept notes for agreed significant joint infrastructure projects and national projects of basin-wide significance

OUTPUT 5.2.3 Mekong water-related cooperation mechanisms and relevant partnerships implemented in synergy

- 5.2.3.1** Implement and enhance partnerships between MRC and Dialogue Partners as well as the Mekong-Lancang Cooperation on Water, including agreements for year-round data sharing on river flows and dam operations
- 5.2.3.2** Implement and enhance partnerships between MRC and other Mekong water-related programmes of regional cooperation mechanisms (including ASEAN, GMS, ACMECS, LMI, Mekong-Japan and Mekong-ROK)
- 5.2.3.3** Implement and enhance partnerships towards BDS Strategic Priorities between MRC and all other relevant partners, including development partners, international organisations, RBOs, research institutes and universities, non-governmental organisations and the private sector
- 5.2.3.4** Explore the options for establishing a Mekong Fund mechanism through multiple partnerships and financing sources for the benefit of environmental assets and vulnerable social groups

OUTPUT 5.2.4 Joint Basin Expert Groups

- 5.2.4.1** Building on the current MRC Expert Groups (which will be dissolved), establish Joint Basin Expert Groups with representatives from all six basin countries starting with groups for: basin management coordination, and DSS related activities (incl. information management and communications), and later for entire basin-wide planning and strategy coordination
- 5.2.4.2** Coordinate and support the operations of the Joint Basin Expert Groups

OUTPUT 5.2.5 Harmonised basin-wide stakeholder platform

- 5.2.5.1** Develop a Multiple Stakeholder Platform for the whole basin with MLC Water and in consultation with other relevant partners (to consolidate and align) including clear objectives and guidelines on participation and contribution
- 5.2.5.2** Coordinate and support the management and operations of the Multiple Stakeholder Platform (including the regional stakeholder forum) including consistent recording, reporting and impact tracking procedures in response to stakeholder input
- 5.2.5.3** Implement proactive engagement and communication with stakeholders, the media, and the public