| Strategic Priority 1: Maintain the ecological function of the Mekong River system | | | | | | |
|---|--|--|--|----------|--|--|
| Mekong River Basin Indicators | Status, Needs & Issues | Outcomes | Outputs | Comments | | |
| - Water flow conditions in the mainstream - Condition of riverine, estuarine and coastal habitats | SOBR: Managing impact of decreased wet season flows, increased dry season flows and increased water level fluctuations; take urgent action to better manage remaining assets and fisheries; continue monitoring Basin Needs & Issues: Better river flow management. Lack design and management of hydropower cascades. MTR: Focus on uptake of outputs and adopting TbEIA and PDG | 1.1 River flows support a healthy environment and productive riparian communities` | 1.1.1 Water flow conditions in the mainstream managed within agreed limits 1.1.2 Impact assessment and mitigation guidance and measures for sustainable hydropower implemented | | | |
| - Changes in sediment transport - Condition of riverine, estuarine and coastal habitats | SOBR: Address the impacts of reduced sediment concentrations to better manage sediment flows and better mitigate transboundary impacts of reduced concentrations; continue monitoring CS: Projected changes in sediment transport due to water resources development SHDS: Opportunities to avoid, minimise or mitigate adverse transboundary impacts Basin Needs & Issues: Lack regional sediment management mechanism and plan MTR: Further work needed on emergency response aspect of PWQ | 1.2 Sediment transport helps mitigate bank erosion and land subsidence | 1.2.1 Basin-wide sediment management plan developed and implemented 1.2.2 Water quality managed to meet guidelines for relevant parameters | | | |
| - Extent of wetland area - Condition of riverine, estuarine and coastal habitats - Condition and status of ecologically significant areas | BEMS: Identifying limits of acceptable change for 12 priority environmental assets Other: priority joint projects include watershed management; MC concerns about flash flooding; SDGs to finance mobilisation for conservation incl. reforestation; addressing water level fluctuations Basin Needs & Issues: National projects of basin-wide significance, such as: watershed projects (for flow maintenance, enhancing the lifetime of storage reservoirs and contributing to reducing GHG); the preservation of wetlands including riverine habitats (for enhancing ecosystem services, biodiversity, capture fisheries, and tourism); | 1.3 River and wetland habitats and watersheds provide important ecosystem services | 1.3.1 Basin planning informed by limits of acceptable change for key river and connected wetland habitats 1.3.2 A regional planning and regulatory management framework for watersheds agreed and implemented | | | |

| | Strategic Priority 1: Maintain the ecological function of the Mekong River system | | | | | | |
|---|---|--|--|----------|--|--|--|
| Mekong River Basin Indicators | Status, Needs & Issues | Outcomes | Outputs | Comments | | | |
| - Condition and status of fisheries and other aquatic resources | sobr: Signs of overfishing; Need for joint strategies and action plans for fisheries; continue monitoring CS: Projected changes in fish populations and species mix due to development impacts BFMS: Focus on conservation of key habitats, fisheries co-management, fisheries enhancement, aquaculture development, monitoring, studying and risk mitigation for mainstream dams; improve national water resources development and management; need for guidelines | 1.4 Fish populations support food security and livelihoods of dependent people | 1.4.1 Basin fisheries managed sustainably 1.4.2 Risks to capture fish productivity and biodiversity minimised 1.4.3 Adaptation measures implemented in response to changes in fish populations and catch composition | | | | |

| | Strategic Priority 2: Enable inclus | ive utilisation of the basin's water | and water-related resour | ces |
|---|--|--|--|----------|
| Mekong Basin Indicators | Status, Needs & Issues | Outcomes | Outputs | Comments |
| - Food Security | SOBR: More information needed to understand how living conditions and wellbeing | 2.1 Basin communities are food, water and energy secure, strengthening climate | 2.1.1 Access and supply of safe water to people in | |
| - Water Security - Access to | are impacted by water resources development; develop and implement DAGAP; | resilience | vulnerable situations improved | |
| electricity | social data collection needs to be a core function | | 2.1.2 The gender and vulnerability aspects | |
| | CS: Projected changes in fisheries and risks to food security due to water resources | | of basin water, food and energy security are identified and | |
| | Other: SDG 6 on access to clean water and sanitation; | | addressed by policy makers | |
| | addressing gender equality; lag in access to clean water and electricity in rural areas, malnutrition very high in some | | | |
| | areas Basin Needs & Issues: The trade-offs between the | | | |
| | economic and environmental dimensions of water resources development regional planning | | | |
| | has been generally limited to assessing the acceptability of the transboundary impacts of | | | |
| | national plans, formulated largely in isolation from the other riparian countries. | | | |
| | | | | |
| - Employment in LMRB water- related sectors | SOBR: Need for spatially disaggregated and gender disaggregated data; to develop gender-balanced development | 2.2 Employment and livelihoods of both men and women reduce poverty and inequality through less direct | 2.2.1 Alternative livelihood strategies for poor, resource dependent | |
| - Economic security | strategies; more information needed to understand how livelihoods are impacted; develop and implement DAGAP | dependence on river and wetland resources | communities impacted by water resources development | |
| - Gender equality in employment and economic engagement | CS: Projected impacts on poor, resource dependent communities in different river reaches | | developed and mainstreamed at national levels | |
| | Basin Needs & Issues: To operationalize proactive regional planning | | | |

| Mekong Basin Indicators | Status, Needs & Issues | Outcomes | Outputs | Comments |
|----------------------------|--|---------------------------------|-----------------------------------|----------|
| - Contribution of | SOBR: Adoption of pro-active | 3.1 The economic growth of | 3.1.1 National plans are | |
| LMRB water- | regional planning to promote | each country and the region is | informed by the findings of a | |
| related sectors to | optimal and <i>equitable</i> | higher as a result of proactive | proactive regional planning | |
| pasin, national | development through | regional planning | approach | |
| and regional GDP | increased cooperation and to | | | |
| | identify opportunities for | | 3.1.2 Significant joint projects | |
| Contribution of | both socio-economic | | and national projects of basin- | |
| MRB water- | development and | | wide significance identified, and | |
| related sectors to | environmental protection | | project preparation in progress | |
| food and energy | consistent with these aims | | | |
| supply | | | | |
| | CS: Projected impacts of | | | |
| | planned water resource | | | |
| | development have high trade- | | | |
| | offs, likely to be suboptimal | | | |
| | | | | |
| | SHDS: Document alternative | | | |
| | hydropower development | | | |
| | strategies for more optimal | | | |
| | and sustainable development; | | | |
| | opportunities to enhance | | | |
| | benefits beyond national | | | |
| | borders and avoid, minimise | | | |
| | or mitigate adverse | | | |
| | transboundary impacts | | | |
| | | | | |
| | Basin Needs & Issues: To | | | |
| | operationalize proactive | | | |
| | regional planning and more cooperative Joint projects. | | | |

| Mekong Basin Indicators | Status, Needs & Issues | Outcomes | Outputs | Comments |
|---|------------------------|---|---|----------|
| - Economic value of LMRB water- related sectors | | 3.2 Enhanced value from key economic sectors including agriculture, hydropower, navigation, environment and | 3.2.1 Investment and associated measures in irrigated agriculture implemented | |
| | | fisheries, through implementation of regional strategies | 3.2.2 Sustainable hydropower development strategy and related regional energy plans implemented in synergy | |
| | | | 3.2.3 Investment and associated measures in basin navigation plans implemented in synergy | |
| | | | 3.2.4 Investment and associated measures in regional environmental strategies and programmes implemented in synergy | |
| | | | 3.2.5 Investment and associated measures in regional fisheries strategies and plans implemented | |

| | Strategic Priority 4: Ens | ure water security by mitigating floods and | d droughts | |
|---|---|--|---|----------|
| Mekong Basin Indicators | Status, Needs & Issues | Outcomes | Outputs | Comments |
| - Flood protection measures | SOBR: Adoption of pro-active regional planning to address climate change and | 4.1 There is sufficient flow in the dry season to support livelihood activities and mitigate salinity intrusion; and | 4.1.1 Significant joint projects and national projects of basin-wide | |
| - Drought protection measures | promote optimal and equitable development through increased cooperation; | reduced flood peaks in the wet season through strategic use of natural and constructed infrastructure | significance to adapt to climate change by reducing the impacts of flood and drought, identified and assessed | |
| | continued monitoring and assessment of current and potential future impacts; adaptation factored into basin planning | | 4.1.2 Coordinated reservoir operations for flood and drought mitigation | |
| | MASAP: transboundary adaptation measures; develop new transboundary adaptation projects | | | |
| | MTR: Operational coordination; need for cascade operating rules; data sharing and response protocols for reservoir operations | | | |
| | Basin Needs & Issues: Better management of emergencies and hydropower cascades. | | | |
| Vulnerability to loods, droughts and storms | SOBR: Continued hydro-meteorological monitoring; continued climate change monitoring | 4.2 Basin communities are better prepared for more frequent and severe floods and droughts as a result of climate change | 4.2.1 Cooperative socio- economic and spatial planning on the floodplain | |
| | ISP: Severe impacts from uncoordinated floodplain planning | | 4.2.2 Integrated basin- wide early warning and emergency response system implemented | |
| | MTR: Operational coordination, enhanced flood management and mitigation capabilities, forecasting and early warning; communications | | 4.2.3 Climate adaptation, including measures to adapt to flood and drought, mainstreamed at national levels | |

protocols for dam safety MASAP: Enhance monitoring, data collection and sharing, forecasting and early warning, promote awareness and mainstreaming of BWAs and update national plans and policies; climate proof MRC sectoral strategies **DMS:** Improvement of drought monitoring (incl. groundwater), forecasting and early warning

| Strategic Priority 5: Strengthen cooperation among all basin countries and stakeholders | | | | | |
|--|--|--|--|----------|--|
| Mekong Basin Indicators | Status, Needs & Issues | Outcomes | Outputs | Comments | |
| - Proportion of benefits derived from cooperation relative to total net economic value (Cost of cooperation relative to value created and delivered) | Basin Needs & Issues: Alignment of the MRC and LMC Water Resources Cooperation. | 5.1 Higher benefits and lower costs from the integrated management of the entire river system | 5.1.1 Consensus on the future institutional arrangements for basin management | | |
| - Proportion of MRC budget funded by national contributions | MTR: Enhancement of procedures incl. PDIES, PWUM, PNPCA; strengthen capacity building for decentralisation including through country-to-country mechanisms; organisational capacity development for MRC | 5.2 A Strengthened Mekong River Commission supports the achievement of higher regional benefits, lower regional costs and increased water security | 5.2.1 Implementation of the 1995 Mekong Agreement procedures enhanced 5.2.2 A core water-related monitoring network for the mainstream and remaining water-related monitoring | | |
| | Basin Needs & Issues: Better management of emergencies, data sharing, information technologies (Mekong Management System). To improve management of the mainstream, this strategy promotes that a core monitoring network of stations and sampling locations on the Mekong mainstream and main tributaries will be managed by the MRC. MRC will establish a central monitoring coordination function to promote harmonization across the region and support the basin countries in the collection and storage of various types of data: hydrometeorological, discharge and sediments, water quality, fish catch and effort, riverine health (plankton, invertebrates etc.), and on wetland and forest habitats. MTR: review of core monitoring network; upgrade information systems and modelling capability; advance cooperation | | s.2.3 Compatible Decision Support Systems with reinvigorated data and information management and sharing, modelling, forecasting, and communication 5.2.4 Organisational development of the Mekong River Commission | | |

| Strategic Priority 5: Strengthen cooperation among all basin countries and stakeholders | | | | | |
|---|--|--|--|----------|--|
| Mekong Basin Indicators | Status, Needs & Issues | Outcomes | Outputs | Comments | |
| | All Regional Strategies: Strengthen capacity building – drought, climate change adaptation, flood management and mitigation, fisheries, environmental management | | | | |
| - Joint efforts on projects of basin- wide significance and with potential transboundary impacts - Extent of knowledge sharing activities | MTR: clarify MRC's role with changing landscape of regional cooperation; enhance dialogue and engagement with broader stakeholders; MASAP: MRC to support and help access to climate change financing MASAP: strengthen cooperation with ASEAN and MLC on climate change | 5.3 Cooperation among all relevant regional water-related mechanisms based on need and complementary strengths | 5.3.1 Areas of complementary strength identified, integrated into each mechanism's strategic and work planning processes and implemented 5.3.2 Joint State of Basin Report and Basin Development Strategy | | |
| - Partnerships between the MRC and other parties | change Other: reinvigoration of decision support and data management systems; enhanced cooperation between MRC and LMC through MoU | | 5.3.3 Joint Basin ExpertGroups5.3.4 Harmonised basin-wide stakeholder platform | | |