



Mekong River Commission

Climate Change and Adaptation Initiative
Framework Document for Implementation and Management

November 24th, 2009

Executive Summary

The countries of the Lower Mekong Basin (LMB) are recognised as among the most vulnerable countries to climate change in the world. Their economies, ecosystem sustainability and social harmony are at risk. LMB countries are committed to a collaborative regional initiative, which would support them in adapting to the new challenges posed by climate change by building a systematic process of planning, implementation and learning. The Mekong River Commission (MRC) has been identified as the appropriate organisation to lead in the management of the Climate Change and Adaptation Initiative (CCAI), supported through a multi-donor partnership. In 2007, the MRC Council at its 14th meeting asked for development of a cooperative regional initiative to provide knowledge, tools and capacity building and other assistance to the Member Countries to better adapt to climate change. The MRC Joint Committee (JC) at its 29th meeting in Thailand 25-27 March 2009 endorsed the CCAI concept and framework set out in this document.

The overall scope of the CCAI is climate change impact assessment and adaptation planning and implementation within the Mekong River Basin. The overall outcome of the CCAI is the contribution to achieving the Millennium Development Goals, poverty eradication and improved food security. The main focus of this regional initiative is the basin wide integrated approach consistent with IWRM and the MRC 1995 Agreement.

The CCAI would run over four phases ending in 2025, with the objective of guiding climate change adaptation planning and implementation through improved strategies and plans at various levels and in priority locations throughout the LMB. This CCAI Framework Document provides the detailed design for the first two phases: an Intermediate Phase until end of 2010 and the first five-year Phase from 2011-2015 with the following two five-year phases being developed based on implementation experiences. The Intermediate Phase will synchronise the CCAI with the MRC strategic planning cycles commencing with the MRC Strategic plan 2011-2015. The proposed budget for the first two phases of the CCAI is close to \$US 15 million.

The CCAI will pilot and demonstrate adaptation planning and implementation throughout the region including the processes of climate change impact and vulnerability assessments. It will develop the tools and provide information to support the adaptation planning process. Local demonstration sites will be established to test the methodologies, build capacity, start implementation and provide lessons learned. Basin scale activities will address climate change impacts and adaptation options at basin planning level through integration with the Basin Development Plan as well as addressing transboundary issues. The CCAI will improve capacity to adapt from local to national levels including in the use of tools for different adaptation planning stages and methods. It will support LMB governments in introducing and improving strategies and plans for adaptation at various levels and their integration with appropriate development plans. It will ensure that adaptation performance and the status of climate change is monitored and reported on a regular basis, including support to a Mekong Climate Change Panel of experts who will issue a triennial report on Status of Climate Change and Adaptation in the Mekong River Basin as a benchmark of progress and assessment of risks.

It will achieve those outcomes through regional cooperation, exchange and learning based on partnerships, working under the umbrella Mekong Climate Change Adaptation Strategy. Implementation will involve core implementing partners with expertise and experience in the Mekong River Basin, and engage a wider network of partners and a range of identified stakeholders. As a multi-donor initiative, donors are invited to participate both in the provision of funds and through technical guidance. The CCAI needs to retain the overall integration and balance between its various outputs and activities. All ingredients of the CCAI need to move forward together with donors supporting the entire package, rather than individual elements.

1 Background and context

1.1 Introduction

This Mekong River Commission (MRC) Climate Change and Adaptation Initiative (CCAI) resulted from a decision of the 14th MRC Council meeting in 2007, calling for a regional cooperative initiative to address the challenges of climate change.

As a first step a Concept Note was prepared early in 2008 which set out various initial climate change adaptation activities, including the development of a long-term MRC CCAI based on an extensive in-country and regional consultation process to identify the current status of climate change and adaptation, the gaps and the Lower Mekong Basin (LMB) country priorities. This initial work was supported by AusAID with the intention that it leads to a broad multi-donor collaboration.

This draft CCAI framework document was forged on the basis of a series of consultative steps involving Member Countries, development partners and other international organisations, the preparation of national review reports and a regional synthesis report including:

- Establishment of National Expert Teams (NET) in each of the LMB countries which prepared the national reports identifying needs and gaps and priorities and supported the Mekong River Commission Secretariat (MRCS) in developing the guiding principles for the design of the CCAI Framework
- Two rounds of national consultations and round table discussions involving the National Mekong Committees (NMCs), line agencies and the NETs
- The Regional Climate Change and Adaptation Forum 2-3 February 2009, Bangkok, with more than 200 participants including country delegations, regional organisations, development partners, universities, research organisations, NGOs and interested individuals
- Round table and other discussions with potential partners including regional organisations, research organisations and development partners

Within the MRCS, the Environment Division has taken the lead in developing the CCAI. It is an initiative that will involve all the relevant programmes and sectors for which MRC has a mandate, and be focused on the planning and implementation of climate change adaptation in the LMB related to water resources management. It is intended to foster close partner relations with other technical organisations working on climate change issues within the Mekong River Basin. The CCAI is planned to extend for at least three five year phases and be integrated with the MRC Strategic Planning cycles.

This CCAI framework document is prepared to provide the vision and outcomes of the Initiative and to detail its scope and activities. The document outlines the processes, features and implementation arrangements for the CCAI. The CCAI framework document builds on and is supported by the document “Climate Change Adaptation in the Lower Mekong Basin Countries – Regional Synthesis Report” (MRC, 2009) prepared through contributions from the NETs and a broad consultation process. This report should be read as a companion volume to the CCAI framework document.

1.7 Need for the CCAI in the LMB

There is high demand among stakeholders for better understanding of the potential impacts from climate change. The subregion is likely to be highly vulnerable to the effects of climate change,

such as natural disasters, health threats and food supply disruptions. Climate change related articles appear frequently in newspapers and other media outlets.

The Second Greater Mekong Sub-region (GMS) Environment Ministers' Meeting held in Vientiane 28-30 January 2008, addressed the climate change challenge. Participants recognised that climate change would cost more to developing than to developed countries, and that the absence of information on climate change vulnerabilities within countries might increase its impact. Delegates agreed that sub-regional programmes need to be in place to help GMS countries to better prepare for needed actions against climate change, as well as equip them with the capacities to adhere to international conventions to promote sound environmental management.

At the Regional Climate Change and Adaptation Forum 2-3 February 2009, Bangkok, organised by MRC, the importance of maintaining as the overall impact of the CCAI the contribution to achieving the Millennium Development Goals, poverty eradication and improved food security was stressed. The main focus of a regional initiative should be assessment of climate change impacts and identification of adaptation measures. In the MRC context, the emphasis should be the basin-wide integrated approach consistent with IWRM approaches and the MRC 1995 Agreement. MRC was also asked by the Regional Forum to facilitate the regional sharing of climate change data, information and experiences which would evolve in the years to come. The LMB countries and international partners called on the MRC to help identify adaptation options and develop adaptation strategies and plans to be implemented at appropriate levels and scales according to the needs of the Member Countries.

The MRC Council asked at its 14th meeting in 2007 for development of a Climate Change and Adaptation Initiative for the Mekong aiming at providing knowledge and tools and capacity building assisting the Member Countries to better prepare for the needed actions towards climate change adaptation. The MRC Joint Committee (JC) at its 29th meeting in Thailand 25-27 March endorsed the CCAI concept and framework.

The approach of the CCAI support in response to the Member Countries request would involve providing support at the various steps in the adaptation planning process (UNDP 2004) including:

- **Scoping the adaptation framework**, so that a Mekong Adaptation Strategy addresses the highest priorities and can be integrated into national and regional policies for sustainable development of the Mekong River Basin.
- **Assessing current vulnerability** involves an assessment of the present situation, including the current status of people and institutions with respect to vulnerability to existing climate risks and assessments of efforts to adapt to them. Particular attention will be paid to addressing gender issues and the significant vulnerability of women, children and older members of the population.
- **Assessing future climate risks** involves developing scenarios on future climate, vulnerability, socio-economic and environmental trends as a basis for assessing future climate risks
- **Formulating a LMB adaptation plan** involves the creation of a set of flexible adaptation policy options and measures in response to current vulnerability and future climate risks
- **Continuing the adaptation process** - building on the existing adaptation activities, support will be given to adaptation implementation, monitoring and evaluation
- **Engaging stakeholders in the adaptation process** creating and sustaining an active dialogue among affected people and groups. Stakeholder involvement is crucial for the successful implementation of adaptation strategies

- **Assessing and enhancing adaptive capacity** involves the assessment of existing capacities for adaptation and providing capacity building to strengthen existing efforts to better cope with climate change.

2.2 *Stakeholders and target beneficiaries*

The **main stakeholders** in the CCAI implementation will be:

- the national climate change focal agencies,
- national line agencies of key MRC sectors
- the NMCs and NETs,
- representatives of national and international NGOs,
- private sector
- representatives of local authorities and communities
- the programmes of MRC,
- core implementing partners (see section 4.2) which are technical organisations with competences and programmes in the Mekong region in climate change adaptation work
- the coalition of development assistance agencies which support the CCAI through financing and technical guidance.

The **main beneficiaries** of the CCAI will be:

- The national climate change focal points e.g. MONRE in Viet Nam and Thailand, MOE in Cambodia and WREA in Lao PDR, which are responsible for facilitating and promoting implementation of the national climate change target plans throughout government and the community;
- The NMCs and sector agencies in the four LMB countries which are tasked with planning and implementing adaptation options in all their development policies and activities;
- Local government authorities and local communities in areas where the CCAI will support demonstration activities and pilot projects.

The **ultimate target beneficiaries** of the CCAI are the people of the LMB, especially the poorest and most vulnerable communities living along the river banks and floodplains of the Mekong mainstream and its tributaries. Women, children and the aged are vulnerable sections of the community, and adaptation measures may have to be specially designed to take into account their needs and vulnerability.

Climate change threatens all sectors to a greater or lesser degree and the line agencies in each of the key MRC relevant sectors (agriculture, irrigation and forestry; hydropower; navigation; floods and droughts; fisheries) in each of the LMB countries are key stakeholders, with coordination through the NMCs. It is important to include and bring on board the private sector in key sectors.

The importance of stakeholder engagement in the adaptation planning process is acknowledged and built into the implementation of the CCAI at various levels. Stakeholders will be involved through, for example participation in (i) the demonstration projects at local level, (ii) the pilot assessment at the basin-wide and trans-boundary levels, (iii) regional climate change forums, and (iv) regular meetings, workshops and seminars of the CCAI technical group.

2.5 *Regional and national priorities*

The studies on national needs and gaps and the national and regional consultations conducted in the preparations of this CCAI framework document identified the following general guidance and expectations:

- Adaptation strategies and measures need to be integrated with development planning considering the rapid development context of the LMB.

- Adaptation occurs at different levels; local, community, national and regional – and those activities need to be integrated and coordinated.
- The Mekong adaptation strategy must be flexible due to climate change uncertainty.
- The adaptation implementation process is as important as the adaptation strategy and measures and emphasis should be on the adaptation practice rather than just getting the policies in place.
- Adaptation should build on what is already known and practiced including local level knowledge and practice.
- CCAI must employ an implementation strategy that ensures sustainability of efforts in the long-term e.g. the adaptation process should extend beyond the project implementation period.

The MRC adaptation related activities should be laid out as a structured approach aiming to formulate and facilitate implementation of adaptation strategies, policies and measures. At a more concrete level, there are some differences in requirements and expectations of each country, but there is also considerable similarity:

1. At the **policy making level**, tools for advising and instructing policy makers, understanding the necessity of mainstreaming climate change in all sectors and support to implementation of climate change policies e.g. the NAPAs and NTPs, were raised as priorities for regional support. Coordination in developing policies, plans and programmes in sectors and areas, and sharing experiences and lessons learned is a key issue raised by Member Countries and by regional organisations and development partners.
2. **Knowledge, data and tools** including reliable climate change data, analytical studies on climate change impacts, prediction and assessment tools to support the adaptation planning process are other key elements raised.
3. **Capacity building and awareness raising** for organisations and in the general population is a priority for all four countries. This covers improved technical knowledge and adaptive capacity of sectors and communities. Awareness of climate change has to be enhanced in the general population and in policy makers at different levels and will be one element in increasing adaptive capacity. The lack of climate change literature and information in local languages makes awareness-raising difficult.

3. Objective and CCAI Programme Design

3.1 CCAI goals, objective and outcomes

The CCAI goal: “An economically prosperous, socially just and environmentally sound Mekong River Basin responsive and adapting to the challenges induced by climate change” reflects the MRC Vision. Inherent in the goal is a commitment to poverty reduction, gender responsiveness and ecological sustainability in adapting to climate change. Those concerns underpin all aspects of the CCAI as reflected in the Design and Monitoring Framework (Annex 1). The CCAI design summary including objective and outcomes is listed in Table 2 along with the indicators and means of verification used in monitoring their performance.

Table 1: Summary design with Objective, outcomes and indicators

Objective	Indicator	Data sources/reporting
Climate change adaptation planning and implementation is guided by improved strategies and plans at various levels and in priority locations throughout the Lower Mekong Basin	<ul style="list-style-type: none"> (i) The MRC Joint Committee and Council recognise the influence of the CCAI in improving strategies and plans (ii) Strategies and plans reflect influence of the CCAI (iii) CCAI adaptation approaches replicated and up-scaled 	<ul style="list-style-type: none"> ▪ JC and Council minutes ▪ Survey of adaptation strategies and plans conducted every three years ▪ Triennial report on Status of Climate Change and Adaptation in the Mekong River Basin
Outcomes	Indicator	Data sources/reporting
1. Adaptation planning and implementation is piloted and demonstrated throughout the region drawing lessons learned from existing practices and demonstration with feed back to improve performance and influence strategies and plans	<ul style="list-style-type: none"> (i) CCAI demonstration projects and pilots are established and implemented (ii) Lessons from pilot implementation are defined on a three yearly basis (i) Adaptation performance improved in pilot/demonstration activities (ii) National policies and plans are revised in response to lessons from CCAI demonstration activities (iii) Adaptation measures bring recognised benefits to target communities 	<ul style="list-style-type: none"> ▪ Reports on progress and achievements from each demonstration site and pilot study ▪ Triennial report on Status of Climate Change and Adaptation in the Mekong River Basin ▪ National policies and plans
2. Improved capacity to manage and adapt to climate change at different levels in the Mekong including in the use of tools for different adaptation planning stages and methods	<ul style="list-style-type: none"> (i) Institutions, budgets and staffing dedicated to climate change adaptation are in place at appropriate levels (ii) Adaptation tools are used at CCAI demonstration sites and by government at various levels 	<ul style="list-style-type: none"> ▪ National offices of climate change reports ▪ Triennial report on Status of Climate Change and Adaptation in the Mekong River Basin
3. Strategies and plans for adaptation at various levels are in place and/or regularly updated and integrated with appropriate development plans, with implementation monitored and reported on a regular basis.	<ul style="list-style-type: none"> (i) A Mekong adaptation strategy is adopted (ii) The BDP integrates climate change and adaptation concerns (iii) Evidence of the MRC CCAI influence reflected in national and local strategies and plans (iv) Regular reports on adaptation performance in the CCAI demonstration projects issued (v) All reports on progress include gender responsiveness indicators (vi) The triennial Climate Change Forum is held 	<ul style="list-style-type: none"> ▪ MRC Council minutes ▪ National plans ▪ BDP IWRM strategy ▪ Records of the national climate change offices ▪ Triennial report on Status of Climate Change and Adaptation in the Mekong River Basin ▪ CCAI and local demonstration project monitoring reports
4. Regional cooperation, exchange and learning implemented through partnerships in a fully gender responsive initiative for at least three five-year phases with a developed longer-term sustainability strategy	<ul style="list-style-type: none"> (i) Continued adequate financing which maintains the strategic integrity of the CCAI (ii) MRC continues to meet its CCAI targets (iii) Partnership agreements in place including actions to address gender responsiveness (iv) Partners express satisfaction with the networking process (v) Integration with the MRC Strategic Plan to reflect ownership and sustainability 	<ul style="list-style-type: none"> ▪ Donor and LMB country commitments ▪ Regular progress reports ▪ Minutes of the annual meeting ▪ MRC Strategic Plan 2011-2015 ▪ Partnership agreements

The Objective shows how the goal may be achieved by using the climate change adaptation planning process to improve strategies and by building the necessary capacities. Pilot studies and demonstration projects will ensure that the efforts support governments, local authorities and communities in their endeavor to tackle the challenges of climate change. This objective is then reflected in the four outcomes. Mainstreaming gender is a key strategy towards sustainable development expressed in the MRC Strategic Plan. Both the CCAI goal and objective statements assume that the Initiative's success, efficiency and sustainability is dependent on it being developed and managed in a gender responsive manner.

The first outcome is demonstration of the adaptation planning process focusing on tangible outputs through pilots and demonstration sites. Member countries are concerned to see appropriate adaptation options identified to increase resilience to climate change. It emphasises the need for demonstration, exchange and learning to improve performance and help shape adaptation plans. Effective implementation is based upon careful assessment and planning and hence the importance of developing and refining tools for the adaptation planning process. Implementation of the adaptation planning process will be promoted at both the local level leading to demonstration of adaptation measures, and at the basin level where it will be applied at the development planning level (BDP), at the sectoral level for principal MRC sectors, and for basin wide and transboundary issues e.g. wetlands, water quality, livelihood of people. A very important aspect in this respect is to use existing experiences and knowledge as a starting point and to feed back the lessons learned from implementation in pilots and demonstration sites into adaptation strategies, plans and specific adaptation measures.

The second outcome is concerned with building the capacity of LMB institutions, specialists, programmes and communities in adaptation planning and implementation, including the application of planning and assessment tools developed under Outcome 1 and the adaptation measures demonstrated in the pilot and demonstration projects. This will ensure that capacity is built in measures that are appropriate to conditions in the LMB countries. Capacity building is not just about the provision of training courses, but involves a variety of different mechanisms, including on-the-job advising and mentoring and exchange visits. The preparation of training and advisory manuals for the tools is an essential component. The general lack of knowledge and the general uncertainty about climate change impacts call for awareness raising as an important element of building capacity.

The third outcome is improved policy frameworks to promote adaptation and, most important, to integrate adaptation as a key ingredient in development planning at different levels (e.g. in the BDP). An important aspect is a monitoring and reporting system to make governments and communities aware of the progress they are making in adaptation and where gaps remain. Appropriate communication of the results to support the awareness raising and disseminate knowledge, tools and lesson learned is integrated with this.

The fourth outcome recognises the long term nature of adaptation to climate change and the need for steady and continuous support to Member Countries through partnerships and networking facilitated by the CCAI. The outcome also relates to the longer term sustainability of the initiative for which alignment with the MRC Strategic Plan is a key aspect as is the wider partnerships and networks that are so important for coordination of efforts and development and sharing of ideas.

The establishment of the Mekong Panel on Climate Change (MPCC, see section 4.2) made up of experts from the member countries – a regional equivalent of the IPCC with a scope focusing on climate change adaptation and water resources management in the Mekong River Basin is seen as a strong point to improve regional capacity, credibility and dissemination of regional achievements in relation to climate change and adaptation for the Mekong River Basin.

There are close linkages between the four outcomes – all support and feed back into the others. Implementation depends upon the building of capacity to assess, plan and develop adaptation measures, and the demonstrations feed into improving the performance and effectiveness of strategies and plans at basin, national and local levels. All the first three outcomes depend upon the partnerships and the networks.

3.2 *Key features of the CCAI*

Figure 2 shows the climate change adaptation steps applied in the **adaptation planning process**. That process leads directly into the choice and development of adaptation options. This process

can be applied at different development planning levels and to different sectors. It needs to be an intensely participatory process. The CCAI will focus initially on the basin-wide level, addressing basin wide and transboundary issues and the sectors for which it has a mandate and experience, as reflected in the different programmes of the MRC. At the same time it will seek to demonstrate and support the adaptation planning and implementation at other levels, both through its government partners and the core implementing partners. Basin wide pilots as well as local demonstration projects (some already up and running) provide the main vehicle for demonstration and testing.

Figure 1: The adaptation planning steps that should be applied at different levels and sectors



The priority aspects for the **basin wide pilots** comprise:

- **Basin-wide assessments** including climate modeling and scenario building, hydrological modeling (basin and sub-basin water balance and hydrodynamics), sediment transport etc..
- **Sector assessments** for the MRC focused sectors as part of adaptation planning and development guidelines for hydropower, agriculture and irrigation, forestry and watershed management, fisheries and navigation. The impacts of climate change on various combinations of sector development needs to be assessed in an integrated manner.
- **Studies on transboundary concerns** including livelihood for vulnerable groups, gender, natural systems (e.g. wetlands), biodiversity and protected areas, flood and drought, water quality, and transboundary impact assessment arrangements such as EIAs and SEAs.

The application of the adaptation planning and implementation process in a number of **local demonstration sites** is a key feature of the CCAI and its implementing partners. Some demonstration sites may be selected because of existing projects or activities, which provide an easy entry point. In such cases the climate change adaptation process will complement and support these activities. In other demonstration activities may have to be freshly established.

The initial demonstration site selection process will be undertaken in the inception phase of the CCAI. Robust selection criteria will be established covering e.g.:

- **Relevance:** to be within the scope of the CCAI as defined by the scoping of the adaptation framework,

- Representative: in relation to ecosystem types, economies and communities
- Vulnerability: facing real challenges from climate change impacts
- Lessons learned; providing a potential for up-scaling or replicating the adaptation planning process or elements hereof

These local demonstration projects should address adaptation to some of the threats and impacts of climate change. The process of selection will also depend on an analysis of sites which best demonstrate the likely affects of climate change.

The sharing of experiences and exchange visits will be encouraged between these demonstration sites with networking between the sites. Three types of projects might be considered as part of these demonstration sites:

- (i) Those run by the wider CCAI partners who come together and share experiences on a regular basis (at least every three years). These may even be drawn from areas in the Mekong basin outside of the LMB.
- (ii) Those run by core implementing partners whose climate change adaptation activities are supplemented and enriched by the CCAI. Typically these will be projects already established in key local areas
- (iii) Those established with LMB member government agencies with direct technical and financial support from the CCAI, involving core implementing partners as required.

The work in the demonstration sites would start with and application of the adaptation planning tools to test and improve the impact assessment tools and develop or enhance adaptation options. They would focus on integrated water resource management, livelihood and food security and ecosystem enhancement and restoration. The vision for the networking of these demonstration sites would be that they form a platform for sharing experiences, lessons learned and replication and up-scaling of adaptation strategies. Up-scaling is promoted through the development of tools, training in their use and the review of national and local policy frameworks against demonstration and pilot outputs and lessons. New adaptation initiatives will only follow extensive adaptation planning (including vulnerability assessment), cost benefit analysis of options and proven effectiveness.

As a result of the lessons learned from the pilots and demonstration sites **a compendium of adaptation options** will be developed, so that choices can be made for different situations. These options will include those drawn from local experience that can be replicated and upscaled. The aim of these adaptation options is to increase resilience in vulnerable communities, development sectors and areas, through different approaches that may include: Engineering options (e.g. dykes and drainage systems); traditional local strategies; social responses (e.g. resettlement, “autonomous” actions and gender responsiveness); land use planning (e.g. zoning and development controls); economic instruments (e.g. subsidies and tax incentives); natural systems management (e.g. rehabilitation, enhancement); sector specific adaptation practices (e.g. agriculture – crop varieties, planting patterns and irrigation regimes); institutional and administrative innovations.

The experience gained in developing adaptation strategies will feed into and influence climate change adaptation policy development and refinement in the four LMB countries through **policy frameworks and guidelines**. Initially this will be based upon developing the Mekong adaptation strategy and action plan. It will draw upon the modeled regional climate change scenarios (integrated with the BDP development scenarios), and lead into a number of guidance materials, for example a Mekong adaptation strategy; guidelines for local adaptation plans, including responses for vulnerable communities and women; guidelines for integrating adaptation into SEA and EIA; guidelines for sector specific adaptation plans and design standards; guidelines for transboundary natural systems.

3.3 Outputs

This section summarises the outputs associated with each of the four outcomes. It clarifies the links between the outputs, highlighting the logic of the Design and Monitoring Framework in Annex 1. A more detailed description of outputs and the activities contributing to them appear as Annex 2 including a discussion on how the activities will be undertaken and who should be responsible. Detailing and planning of the activities will be part of the annual work planning process.

Outcome 1: Adaptation planning and implementation is piloted and demonstrated throughout the region drawing lessons learned from existing practices and demonstration with feed back to improve performance and influence strategies and plans.

There are four outputs which contribute to Outcome 1:

- **Output 1.1:** Tools for assessment and adaptation planning developed and the climate change database for the Mekong basin established
- **Output 1.2:** Local demonstration activities and projects in adaptation are established and working
- **Output 1.3:** Basin-wide sector and trans-boundary adaptation plans/guides are prepared and piloted building on existing activities where feasible
- **Output 1.4:** Lessons and outcomes of the CCAI adaptation demonstration activities replicated and up-scaled through local, sector and national development planning

These four linked outputs support mainstreaming of climate change adaptation into development planning. They do that by developing and testing adaptation planning tools and creating a database on climate change in the basin (output 1.1). They support adaptation planning and implementation in demonstration sites (output 1.2) and in basin-wide, sector and transboundary pilots addressing critical issues of shared concern to LMB countries (output 1.3). Adaptation implementation means taking practical actions to increase the resilience of communities and sectors to climate changes. Climate change adaptation should build on past and current approaches to disaster risk reduction and management.

Output 1.4 provides for specific learning from the experiences of pilot and demonstration activities, and encourages replication and upscaling into different levels of development planning. Output 1.4 also links with the outputs associated with Outcome 3, feeding the lessons learned into the policy formulation frameworks and guidance at appropriate stages.

Outcome 2: Improved capacity to manage and adapt at different levels in the Mekong including use of tools for different adaptation planning stages and methods.

Outcome 2 is an increased capacity of the LMB countries, government agencies and communities in the process of adaptation to climate change. Three interlinked outputs are needed to reach the outcome:

- **Output 2.1:** Institutional capacity strengthened in policy making and planning for climate change adaptation in the LMB Countries
- **Output 2.2:** Tools for adaptation planning and implementation are documented and capacities built in their application
- **Output 2.3:** Capacity to monitor and report on progress and performance on climate change and adaptation of LMB governments at all levels and of the MPCC members is built

This outcome and the related outputs seek to build capacity of institutions throughout the basin in responding to climate change. Output 2.1 addresses the need to engage stakeholders and the direct means of capacity building, through training courses, on-the-job training and mentoring, exchange visits and study tours. Output 2.2 expands expertise and experience in applying the adaptation planning and implementation tools. Output 2.3 relates specifically to developing the capacity of the LMB government agencies and the MPCC to report on the status of climate change and performance of adaptation measures.

Outcome 3: Strategies and plans for adaptation at various levels are in place and integrated with appropriate development plans, with implementation monitored and reported on a regular basis.

Outcome 3 is the policy framework, addressing the influence of the CCAI on the formulation or refinement of regional, national and local strategies and plans for dealing with climate change and adaptation. There are three outputs contributing to this outcome:

- **Output 3.1:** Policy frameworks to facilitate and guide adaptation are in place
- **Output 3.2:** A system for monitoring and reporting on the status of climate change and adaptation in the Mekong region is implemented
- **Output 3.3:** A CCAI communications plan is prepared and implemented

These outputs draw on the outcomes 1 and 2 which provide the evidence and the skills needed for developing adaptation strategies. Output 3.1 provides the overall framework - the Mekong adaptation strategy and action plan - and guidance in developing other strategies and plans. Output 3.2 provides for the development of the climate change and adaptation monitoring systems, which will be the subject of capacity building in Output 2.3. Output 3.3 contains the CCAI communications plan so that the best climate change messages are disseminated and well targeted, especially to senior policy makers but also to local communities to raise awareness more generally. The communications plan should ensure that all CCAI products are understandably and accessible to stakeholders and the wider community.

Outcome 4: Regional cooperation, exchange and learning implemented through partnerships in a fully gender responsive initiative for at least three five-year phases with a developed longer-term sustainability strategy.

Outcome 4 covers partnerships and networking needed for the implementation and long term sustainability of the CCAI. There are five related outputs:

- **Output 4.1:** Partnership agreements and working relations are established and maintained with the CCAI core implementing partner organisations
- **Output 4.2:** Appropriate institutional arrangements, staffing and capacities are in place within the MRCS and NMCs
- **Output 4.3:** A harmonised system is set up for regular CCAI reporting on progress and plans to the MRC JC and Council, donors and partners
- **Output 4.4:** Financing for the CCAI is secured for the three five year cycles
- **Output 4.5:** Regular review and revision of the CCAI

These are relatively straightforward outputs covering the partnership arrangements, institutional and management arrangements, reporting systems, sustainable financing and regular review and updating of the CCAI. Output 4.1 covers the development and management of the partnership arrangements which is an important part of the CCAI implementation strategy. This will involve the development of MOUs for each of the Core Implementing Partners (section 4.1) reaching

agreement on the roles and responsibilities for these partners, and where appropriate preparing partner contracts for specific work to be undertaken.

Output 4.2 covers the establishing of the Office of Climate Change within the Environment Division as an interim arrangement and integration within the current MRC Strategic Plan 2006-2010. Output 4.3 covers the development of a harmonised reporting system for the CCAI. As a multi-donor initiative, it is important for the integrity of the CCAI and for ease of reporting that the 6 monthly progress reports are harmonised and produced as unified reports for MRC JC and Council meetings, donors and implementing partners in line with the MRC procedures and plans for donor harmonisation. Output 4.4 covers the sustainable financing of the CCAI. As a contribution, a separate study will be undertaken to consider the longer-term sustainability of the CCAI, including the progressive devolution of components to the LMB member governments. Output 4.5 covers the regular review and revision of the CCAI.

4. Management and Implementation

4.1 Implementation strategy

The CCAI has five main groupings of organisations for implementation as illustrated in Figure 3. At the heart are the CCAI Climate Change Office and its permanent working linkages with each of the MRC Programmes. The CCAI Climate Change Office and the MRCS as a whole have a continuing and two way interaction with four networks, each with distinct characteristics and roles in implementation of the CCAI:

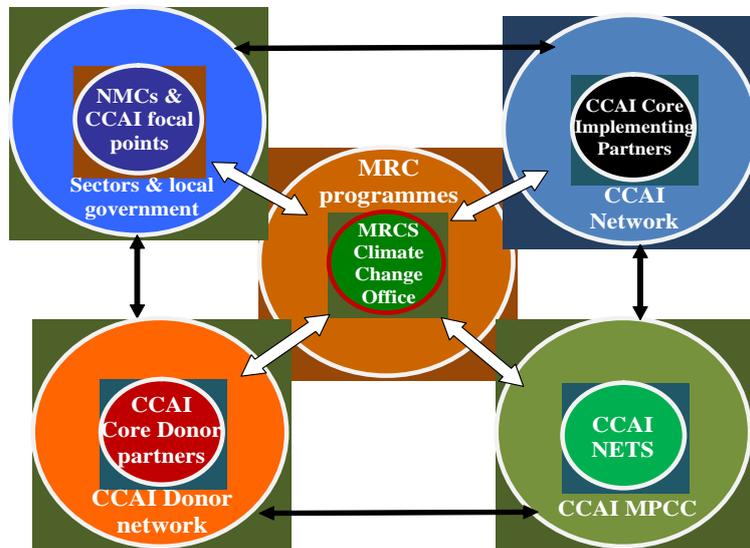
1. The line agencies in particular the national climate change focal points, the NMCs and local government at demonstration sites
2. The CCAI National Expert Teams and the Mekong Panel on Climate Change
3. The Core implementing partners and the wider network of technical organisations
4. The donors supporting the CCAI with technical and financial inputs, and the broader donor network which is briefed and involved through meetings and seminars.

Engagement of a wider range of stakeholders reflected in section 2.3 will be ensured at all appropriate stages of implementation facilitated by the stakeholder engagement plan developed to achieve output 2.1.

National Climate Change focal points, line agencies and NMCs: The NMCs act as a catalyst and facilitator of the commitment and involvement of line agencies in particular the national climate change focal points and local government in demonstration, capacity building and monitoring and reporting on progress in adaptation through their respective sectors and areas. The line agencies and NMCs have an important facilitating role in up-scaling and replication of the CCAI demonstration activities and in their integration with development planning.

The CCAI NETs and MPCC: Their distinctiveness is they are groups of individuals brought together because of their special skills and knowledge in climate change and adaptation. The NETs provide technical advice to the NMCs and line agencies. The NET members participate in the broader MPCC along with other individual experts from the LMB Countries, international organisations and other regions. The MPCC provides the intellectual guiding force for the CCAI and will take the lead in independent reporting on the status of climate change in the region, its impacts and the adaptation response of Mekong governments and communities.

Figure 2: CCAI implementation arrangements and partners



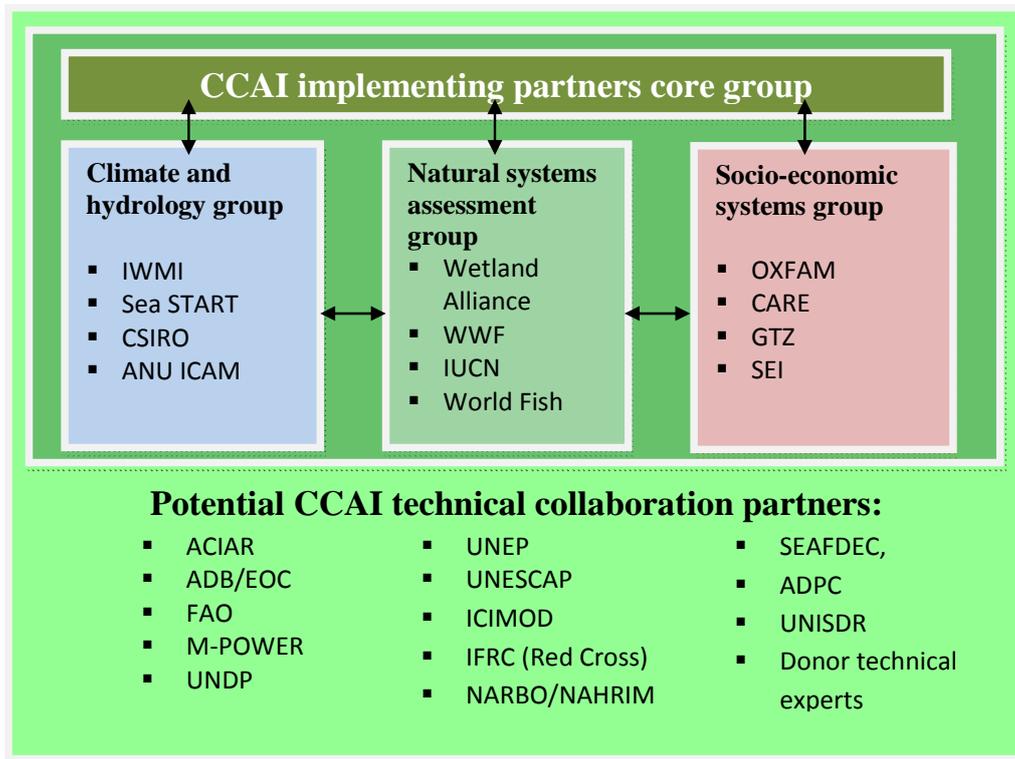
CCAII core implementing partners and wider CCAII technical network: The CCAII is designed to be implemented through partnerships. It builds on promising activities already happening in the region on climate change and adaptation. Many of those activities are undertaken with support from international development and environment organisations with advanced technical capacities in the field. The activities of the most significant existing or potential contributors to adaptation are reviewed in the companion volume to this CCAII Framework Document – the Regional Synthesis Report on Climate Change and Adaptation in the Mekong (MRC, 2009). A focused core group of technical organisations will be the main CCAII implementing partners for demonstration, piloting and capacity building. This core group will have an open ended membership but start small and expand as the implementing partners will have the following characteristics:

- (i) A strong existing programme of work in climate change and adaptation in the LMB
- (ii) Existing projects which could become CCAII demonstration and pilots
- (iii) Specialist expert technical capacity and leadership in climate change and adaptation innovation in the Mekong region
- (iv) A history of collaborative work with the MRC (and even on-going work)

The core partners join a wider technical network of experts and organisations from within and outside the region brought together every three years to share experiences. CCAII networking activities such as the newsletter and interactive website will maintain linkages within the wider group. The CCAII implementing partners will work collaboratively as three technical groups as illustrated in Figure 4 addressing (i) climate and hydrology, (ii) natural systems and (iii) socio-economic systems aspects of climate change and adaptation. Those groupings are for operational purposes rather than sharp technical divisions because inevitably organisations will need to take an integrated approach to their work, especially those managing local demonstration projects as part of the CCAII network. The implementing partners will be intimately involved in the delivery, review and reporting on the CCAII. The wider CCAII technical network partners will be convened for special events focusing on important technical issues of concern to making progress in understanding climate change and in adaptation. At a minimum they will come together every three years at the Regional Forum on Climate Change convened by the CCAII OCC. The first Forum was conducted in February 2009 in Bangkok, Thailand.

MRC Dialogue Partners: The MRC has established relationships with the two Mekong upstream countries, Myanmar and China – the Dialogue Partners – who attend dialogue meetings at least once a year, and with whom there are agreements for hydrological data sharing. The work on climate change envisaged under the CCAI will form a specific area for dialogue with China and Myanmar, together with sharing of information on climate change and adaptation experiences. It is possible that climate change adaptation in demonstration sites of the core implementing partners working in the two upstream countries might be linked with the CCAI demonstration sites downstream.

Figure 3: CCAI open ended network of implementing and collaboration partners



4.2 CCAI phasing

The CCAI is intended to be a long-term initiative with at least three five-year phases, which are directly linked into the cycle of MRC's Strategic Planning process. The next five year cycle starts in 2011 ensuring integration of the CCAI into the MRC planning cycle over the next 1.5 years. The lead up to the first full five year phase will involve a shorter intermediate phase, with an inception period in 2009 and time for establishing the partnerships, pilots and demonstrations in 2010. Development of tools will commence in 2009 building upon on-going work.

The phasing and the focus for each of the phases will be as illustrated in Figure 5. The mentioned aspects under the phases are not restricted to go on in that particular phase, but mainly illustrate the expected progression. The activities will progress at variable speed following their characteristics and complexity and may therefore flow over from one phase to the next. Annual work plans will ensure appropriate scheduling of the work year by year right from the Intermediate Phase.

Figure 4: Illustration of CCAI phasing

2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Intermediate Phase		Phase 1					Phase 2					Phase 3				
<ul style="list-style-type: none"> ▪ Inception ▪ Partnerships ▪ Tools development ▪ Pilots and demonstration sites initiated 		<ul style="list-style-type: none"> ▪ Adaptation planning process ▪ Adaptation implementation – enrichment and new initiatives ▪ Testing and feedback improve tools 					<ul style="list-style-type: none"> ▪ Follow-on implementation ▪ Lessons learned ▪ Replication and up-scaling feed back to improve adaption measures and tools 					<ul style="list-style-type: none"> ▪ Consolidation of adaption measures and sustainability ▪ Regional agreement and institutionalization ▪ Devolution to national agencies 				
MRC Strategic Plan 2006-2010		MRC Strategic Plan 2011-2015					MRC Strategic Plan 2016 - 2020					MRC Strategic Plan 2021-2025				

Intermediate Phase (remainder of 2009 and 2010): Inception; setting up institutional and management arrangements; initialising priority activities; development of tools; putting in place operational systems for monitoring linked with the MRC M&E system; establishing partnerships; identifying pilots and defining demonstration activities.

Phase 1 (2011 – 2015): Adaptation planning process and implementation of new initiatives; feed back to improvement of tools

Phase 2 (2016 – 2020): Follow-on implementation, replication and up-scaling; feed back to improvement of tools

Phase 3 (2021 – 2025): Consolidation and regional institutionalisation, devolution to national agencies

The phasing reinforces the four main elements of climate change adaptation – (i) development of tools, (ii) their use in the adaptation planning process, (iii) implementation of adaptation measures and (iv) on-going monitoring and improving performance. Those elements are not necessarily consecutive and may begin working in parallel depending on the characteristics of the issues studied once the CCAI is fully operational.

4.3 Institutional arrangements

The CCAI is truly an all of MRC initiative – with all MRC programmes contributing to its implementation and benefiting from its outputs and with the MRCS, national line agencies and NMCs involved in its implementation. The institutional arrangements needed to achieve that full integration explaining the roles of the different parties involved in the implementation are described below and illustrated in Figure 6. The management arrangements including project oversight and progress evaluation e.g. through provision of a CCAI Steering Committee and a Regional Task Force are described in section 4.4. The institutional arrangements are at this stage described as intermediate covering the Intermediate Phase allowing for the necessary adjustments in connection with the alignment with the next MRC Strategic Plan 2011-2015 for Phase I.

National Climate Change focal points and national line agencies: All four member countries have established key offices and organisational structures to work on climate change aspects in the country. These climate change offices, focal points and committees etc. will be the key national partners for the implementation of the CCAI.

National Mekong Committees: The NMCs will play a critical role in facilitating implementation of the CCAI. The existing EP Coordinators will act as the Coordinators for the CCAI and meet regularly back to back with the current six monthly meetings of the Environment Programme.

National Expert Teams: The NETs in each LMB Country have already had a critical role in shaping the content and approach of the CCAI – including through the preparation of national reviews of adaptation status. These four technical teams will continue to provide technical advice to the NMC and line agencies and to local government. They will be given implementing tasks, especially those relating to capacity building, technical studies and providing policy advice. They will provide the foundation members for the proposed MPCC.

MRCS: The MRC programmes represent key players in guiding the adaptation to climate change in different ways, especially in providing technical services, sectoral viewpoints and overall basin planning and integrated water resource management. Annex 9 shows the complementarities of each of the MRC programmes to the CCAI. The BDP is the peak planning instrument for the LMB. The CCAI seeks to integrate climate change concerns into the basin planning process. Consequently, there needs to be an intimate working relationship between the BDP and CCAI teams within MRCS. During the Intermediate Phase inception period, detailed plans will be developed to coordinate the roles and responsibilities for climate change activities within the MRC.

MoUs with core implementing partners: During the inception Phase I, the Office of Climate Change will enter into a detailed dialogue involving the core implementing partners to define ways of engaging them in the most productive and efficient manner. MoUs will be developed or addendums to existing MoUs will be made with the organisations identified as members of the initial core group in Figure 3. Those MoUs would identify the reciprocal relationship the organisations have with the CCAI – they contribute substantially through existing projects and activities, and they benefit from being part of the CCAI network and process and from its outcomes and products. As one element to the relationship with partners, some partners may be contracted to implement various CCAI activities. Those contractual arrangements can be with individual organisations for specific tasks or consortiums of partners for the purpose of conducting certain CCAI activities for example, the climate modeling and scenario definition for the Mekong.

Mekong Panel on Climate Change: The MPCC is a regional pendant to the global IPCC. It is an independent expert body which is made up of specialists from the four LMB Countries and from other countries and international organisations with climate change expertise of special relevance to the Mekong region. One of the MPCC's main tasks is to draw together and conduct analysis for a report on the state of climate change and adaptation in the Mekong River Basin as a benchmark of climate change knowledge, action and understanding every three years. The CCAI Climate Change Office provides the secretariat and technical backing to the MPCC which meets at least once a year and back to back with the Regional Forum on Climate Change, which is a triennial event. Draft Terms of Reference for the MPCC are provided in Annex 4.

Figure 5: Interim institutional arrangements for the CCAI within the MRC Structure featuring participation of the core implementing partners and the donor partners

Technical Advisor provides support and advice to the OCC to gain maximum benefit of the experiences and networks established during the CCAI formulation phase.

CCAI Coordinating Group: Each MRC Division participates in the CCAI Coordinating Group through its Director who also acts as CCAI anchor for the Division. The CCAI Coordinating Group is chaired by the Director of ENVDD. It meets once a quarter and provides the overall direction and oversight for the CCAI at MRCS level. It is responsible for monitoring of progress and, through the CEO for briefing and progress reports to the MRC Joint Committee and the MRC Council. The CCAI Climate Change Office provides the secretariat functions for the CCAI Coordinating Group.

CCAI Technical Group: The Programme Coordinator of each MRC Programme participates in the CCAI Technical Group. That body is the main implementing force in the MRCS and is linked with technical teams within each programme drawn from existing staff and supplemented through the CCAI as needed. The CCAI Task Leader is the Convener for the CCAI Technical Group meeting once a month.

4.6 Workplan

An implementation schedule according to the activities of the Design and Monitoring Framework is shown in Annex 4. This covers the first two phases; the Intermediate Phase and Phase I. The key activities and products and/or milestones coming out of each phase are described below with more details provided for the Intermediate Phase as compared with the Phase I.

Intermediate Phase: July 2009 – December 2010

Key activities:	Key products/milestones
<ul style="list-style-type: none"> ▪ Establishing the Office of Climate Change ▪ Developing the partnership agreements ▪ Defining and implementing funding strategy for CCAI sustainability with donors ▪ Developing baseline and detailed methodologies for monitoring systems at the different levels ▪ Designing the CCAI communications strategy and website ▪ Working with the NET teams to establish the MPCC ▪ Developing and applying the criteria for selection of the demonstration sites ▪ Establishing demonstration sites, and beginning the adaptation planning process ▪ Developing and applying the criteria for selection for the basin wide pilot activities ▪ Detailed planning for Phase I, integrating with the MRC Strategic Plan, including preparing operational budgets for Phase I ▪ Developing climate change assessment and adaptation planning tools ▪ Scoping and developing the Mekong adaptation strategy ▪ Organising at least one seminar of network and donor partners to promote participation in the CCAI ▪ Starting the assessment of adaptation for two basin- 	<ul style="list-style-type: none"> ▪ Office of Climate Change established end October 2009 ▪ Detailed operational budget for Phase II developed by November 2009 ▪ Implementing funding strategy for CCAI sustainability with donor partners ▪ Partnership agreements signed with at least four core implementing partners by end of December 2009 ▪ Website designed and in place by December 2009 ▪ First joint NET meeting organised by November 2009, to develop the operational rules for the MPCC, and to discuss climate change terminology. ▪ At least one demonstration site selected and in each of the four LMB countries by end of December 2009 ▪ At least two basin-wide, sector or transboundary issues selected for application of the adaptation assessment and planning tools by December 2009 ▪ Monitoring system operational for key indicators for progress and performance of the CCAI by December 2009 including baseline ▪ MRC Strategic Plan reflects the CCAI outcomes and activities by beginning of 2011 ▪ Funding secured for Phase I by mid 2010. ▪ At least 4 demonstration sites established (one in each country) and implementation started by end of 2010.

<p>wide/sector/transboundary issues</p> <ul style="list-style-type: none"> ▪ Starting to build the capacity of stakeholders and demonstration site partners ▪ Holding at least one meeting of the MPCC and provide appropriate training in monitoring and reporting ▪ Gathering data for climate change and adaptation monitoring 	<ul style="list-style-type: none"> ▪ Initial adaptation reports produced for two sectors/transboundary issues produced by end of 2010 ▪ Outline of the first report on ‘Status of Climate Change and Adaptation in the Mekong Basin’ agreed to facilitate compilation of information by end 2010 ▪ Trainings organised for the MPCC in climate change reporting and communication
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Phase I: 2011 - 2015

Key activities:	Key products/milestones
<ul style="list-style-type: none"> ▪ Establishing and operating at least six demonstration site activities, and producing regular assessments and analysis of lessons learned ▪ Carrying out assessments of adaptation of at least five basin-wide, sector or transboundary issues and advising on application of the findings and lessons learned ▪ Documenting the planning tools and preparation of manuals ▪ Providing training through a variety of training events and mentoring activities at demonstration sites, and to government agencies ▪ Preparing policy guidance materials ▪ Organising two Climate Change Forum events ▪ Organising at least two high-level climate change round tables for senior decision makers ▪ Reviewing the MRC flood warning system to include other climate change induced risk warnings ▪ Reviewing of the CCAI, and developing Phase II 	<ul style="list-style-type: none"> ▪ At least one report per year on adaptation planning and implementation for pilots and demonstration sites, analysing lessons learned with case studies where appropriate ▪ Two reports on Status of climate Change and Adaptation in the Mekong river Basin produced during Phase I – one in 2012 and one in 2015, ▪ Two Climate Change and Adaptation Forums organised in 2012 and 2015 ▪ Two high level round table events organised in association with the Forums ▪ Compendiums of adaptation mechanisms published by end of 2014 ▪ CCAI Phase II developed by end 2014, and funding secured by end 2015.

4.7 Monitoring and reporting

There are three levels at which monitoring and reporting are required for the CCAI. These are:

- **Status of Climate Change and Adaptation in the Mekong River Basin** – this covers the collection and analysis of data on the status of climate change itself and how far it is progressing in the Mekong basin, e.g. in terms of hydrological flow patterns in the river, extreme events and the impacts of these on the bio-physical environment and socio-economic conditions in the basin. The progress throughout the basin to adapt to these changes and the effectiveness of different measures should also be addressed in the monitoring system. It should be collected and analysed every three years and published by the MPCC as the Status of Climate Change and Adaptation in the Mekong River Basin. Since this is likely to be a high profile, high quality publication, provision has been made to support the MPCC members with a small group of peer reviewers to guide and mentor its content and presentation.
- **Impact of the CCAI on adaptation in the Basin** – this level reflects the achievement of the objective and outcomes, and the indicator framework is included in the Design and Monitoring Framework. The objective indicators try to measure the extent to which the CCAI

has influenced aspects such as national and local policies and plans, awareness of climate change and adaptation, the capacities of institutions to undertake adaptation work, and the sustainability of the overall work of the CCAI. Such indicators take some time to register change, and monitoring and reporting of these should be undertaken once a year. Further refinement during the inception period of the Intermediate Phase I will be required to develop baselines and the methodologies to monitor the indicators. This will be informed and developed in close collaboration with the MRC M&E system.

- **Progress and performance of the CCAI** – this is the normal requirement for any funded project. Monitoring depends upon the clear identification of indicators for the process of implementing the project, and products or deliverables against set targets and dates – the output level indicators. Reporting on progress of the CCAI would be every six months following an agreed, harmonised format for all donors and implementing partners. Where certain activities are undertaken by implementing partners, arrangements for reporting in time for inclusion in the six-monthly progress reports should be included in the partner contracts. The triennial Status of Climate Change and Adaptation in the Mekong River Basin is fed back to guide and improve orientation of the CCAI, ensuring that it maintains a focus on the MRC core functions.

The Design and Monitoring Framework in Annex 1 provides the monitoring framework for indicators and means of verification at the objective, outcome and output levels. During the Intermediate Phase inception period the implementation details for this framework will be developed including establishing the baseline. The MRC is currently developing an organisational M & E system, and the CCAI indicators will be integrated within this. The Objective and Outcome level indicators are shown in Table 2. Output indicators are in the full Design and Monitoring Framework (Annex 1). The following reports will be produced by the CCAI according to the schedule shown:

1. **Six-monthly progress reports** – outlining:
 - what has been done in the past six months,
 - how much has been spent on which activities
 - assessment of changes in progress and performance indicators
 - issues and problems that have arisen
 - work plan for the next six months
2. **Annual assessment** of objective and outcome indicators to be included in the progress reports and annual work plans.
3. **Status of Climate Change and Adaptation in the Mekong Basin.** Report produced by the MPCC every three years, and providing the focus for the three-yearly Climate Change Forum.

The process of review and evaluation of the CCAI are built in as follows:

1. During the Intermediate Phase inception period, the Design and Monitoring Framework will be reviewed by NMCs and partners and adjusted and endorsed.
2. During the Intermediate Phase detailed designs and budgets for Phase I will be produced. This will provide the opportunity for internal review and adjustment where necessary

At the beginning of 2014 an independent review team will evaluate the achievements of the CCAI, and make recommendations for its direction and approaches for Phase II. This will lead into a detailed design process for Phase II, so that it is ready for implementation by the end of 2015, with financing in place for the next Phase.