



Mekong Water Resources Development Cooperation Report 2010

July 2011

This report summarises the aid program's progress in 2010 towards the objectives of the Australian Mekong Water Resources Program. The program presents a strategic opportunity to provide development assistance that complements bilateral programs and supports regional objectives. Reports1 on the program's performance in previous years are available on the Australian Agency for International Development's (AusAID's) website.

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¹ See the 'Annual Program Performance Report: Mekong Water Resources Program 2008' (June 2009) and the 'Mekong Water Resources Program development cooperation report 2009' (September 2010).





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Context

In the Mekong Region (Figure 1) many water resource projects have been completed, are underway or are being planned. Dams, diversions, cities and irrigation expansion are in the mix. While some projects have been celebrated, others lead to disputes and protests, particularly those that disrupt or destroy existing river ecosystems and livelihoods. The transboundary nature of Mekong waters adds a critical dimension: to be fair, decision making needs to be based on regional evaluation of benefits and costs, rather than only on national interests.

The Mekong River and its tributaries are the most important of the water resources of the region. Cambodia, Lao People's Democratic Republic (PDR), Thailand and Vietnam jointly manage the Lower Mekong Basin through the Mekong River Commission (MRC), under the 1995 Mekong Agreement signed by the four governments. China has rapidly developed hydropower on the mainstream in the upper reaches, with little acknowledgement of downstream concerns. China has recently, however, begun to share more data and encourage wide-ranging technical cooperation between its natural scientists and scientists from the wider region.

The Mekong Region depends heavily on its major rivers and tributaries for food, from fisheries, floodplains and irrigated agriculture. There is scope for more development of the region's water resources, however, unchecked, aggressive development could lead to negative impacts on food security, broad-based growth and regional stability.

The governments of the region recognise that their countries' destinies are entwined, and will be shaped in part by the way they extend the collective decision making of the past 20 years—in fields such as intra-regional trade—into the realm of water resources development. This requires tempering traditional conceptions of sovereign rights over development, and accepting regional responsibilities that transcend national borders. There are few places in the world where collective interests on complex, transboundary policy matters have been easy to resolve.



Figure 1. Mekong Region



The Mekong Region encompasses the territory, ecosystems, people, economies and politics of Cambodia, Lao PDR, Burma/Myanmar, Thailand, Vietnam and south-west China.

Source: Map no. 4112, rev. 2, January 2004, United Nations Cartographic Section, New York, United States.

The Mekong Region is already tackling changes in climate which are likely to have significant impacts on water and related resources in the medium to long term. Regional governments are focused on adaptation as the political priority (before mitigation). Delta areas are expected to be severely affected, evoking serious debate about the most appropriate responses. While there are prominent discussions about surface water—due to visibility and the more obviously transboundary character of the resources—groundwater is also increasingly being exploited.

Institutional frameworks for Integrated Water Resources Management (IWRM) in the region remain weak. There continues to be insufficient, reliable, high-quality knowledge to conduct fully-informed decision making. There remains an urgent need for deliberations to be better informed, in a timely fashion, to constructively influence negotiations and policy of public, private sector and civil society actors in the complex political economy of water.

There are many pathways to improve the existing governance regime, targeted by our program's activities. For example, the MRC needs further support and engagement by existing member countries to fully implement its mandate. China should be encouraged to expand its discussions and information sharing with neighbouring Mekong countries. The hydropower industry needs to further improve the economic, environmental and social performance of operations and future projects. And, further attention needs to be paid by governments and industry to constructive, independent analysis produced by non-state actors.





Program objectives

Australia's goal is to promote regional cooperation to achieve sustainable development through better use and management of the Mekong Region's water resources.

This goal is supported by three inter-related strategic objectives:

- strengthening institutions;
- building reliable knowledge that is readily available; and
- ➤ the making of more informed decisions on the region's water resources.

To achieve this, activities supported by Australia address one or more of these priority issues:

- capacity building—technical and social capacity building to enable IWRM;
- environmental change—adapting to climate and other environmental change;
- food security—ensuring there is enough food for vulnerable and marginalised people;
- hydropower assessment—comprehensively assessing options, including alternatives;
- transboundary engagement—engaging more constructively on water-related issues between all six countries of the Mekong Region; and
- corporate social responsibility—encouraging private sector leadership and accountability.

The Australian Mekong Water Resources Program portfolio has been consolidated around nine key activities (Table 1). Other activities, at or near completion, are also reported on here. <u>Most activities contribute to more than one objective but their results are discussed under the objective to which they are most relevant.</u> The exception is the Mekong Integrated Water Resource Management (IWRM) Project, the reporting of which has been split between institutional strengthening and decision-making support objectives because of its critical importance to both.

Not shown in Table 1 are activities already been completed, or phasing out, for example, support to: MRC Navigation Program, MRC Basin Development Program (BDP), Cambodia Development Resources Institute and preparatory work for Lao IWRM support. These are included in the discussion of performance and are noted in Annex C which reports on 2010 milestones.

The dollar amounts in Table 1 are only the Australian contribution approved for activity implementation, after design. The total value of each activity is often substantially greater. For example, the World Bank contributes US\$8 million to the Lao Hydropower Mining Technical Assistance; the ADB has arranged funding of US\$63 million for Cambodian IWRM support; Denmark, Sweden, Luxembourg, Germany and the European Union will augment the MRC CCAI funding after the initial contributions from Australia.

Eight key activities in the program are summarised in Annex A and quality-rated in Annex B.

Annex C reports against all 2010 milestones in more detail. Annex D reports performance against the 2010 Top 5 results. Annex E identifies the 2011 Top 5 results. Annex F is the program's Performance Assessment Framework (PAF) with elaborated results targets and milestones for 2011 and 2012.



Table 1 - Activity portfolio of the Australian Mekong Water Resources Program

Activities				
Institutional strengthening				
MRC Integrated Capacity Building Program (ICBP) (2009–12)	6			
Mekong IWRM Project—water use procedures finalisation (2009–12)	7			
Lao Hydropower Mining Technical Assistance, with World Bank (2010–13)	3			
Lao IWRM support through Lao National IWRM Support Project, with Asian Development Bank (ADB) (2011–2013)	3.2			
Cambodian IWRM support through Cambodian WRM Sector Development Program, with ADB (2011–2013)	5			
Knowledge availability				
MRC Climate Change Adaptation Initiative (CCAI) (2009–12)	3			
Challenge Program on Water and Food (CPWF) Mekong Phase II (2011–13)	5.5			
Decision-making support				
Mekong IWRM Project—Implementation of the Procedures for Notification, Prior Consultation and Agreement (PNPCA) (also listed under Institutional Strengthening)				
Exploring Mekong Region Futures with Commonwealth Scientific and Industrial Research Organisation (CSIRO) and partners (2010–13)	3.3			

Progress against objectives

The results for the strategic objectives of the program are in Table 2.

Table 2: Quality ratings—strategic objective level

OUTCOME/IMPACT SOUGHT Regional cooperation to reduce poverty and achieve sustainable development through equitable and efficient use and management of the water resources of the Mekong Region. STRATEGIC OBJECTIVES 2009 2010 Objective 1: Strengthened institutional framework to improve integrated water resource management in the Mekong Region Objective 2: Improving availability of reliable knowledge about water resources use and further development Objective 3: Informed deliberations so as to constructively influence negotiations and policy of public, private sector and civil society actors

Objective 1: Institutional strengthening

The objective is unlikely to be achieved within the timeframe.

Strategic objective: Strengthening the institutional framework to improve integrated water resource management in the Mekong Region.

The rating has declined from 2009 because of concerns Australia has about finalising and implementing the full suite of MRC procedures and guidelines.

We are investing in strengthening organisations such as: the MRC, the Lao Water Resources and Environment Administration (WREA), the Lao Ministry of Energy and Mines (MEM), National



University of Laos (NUOL), Cambodian Ministry of Water Resources and Meteorology (MOWRAM), Cambodian Development Resources Institute (CDRI) and the Institute of Technology of Cambodia. We are also supporting experiments by the governments of Lao PDR and Cambodia in establishing river-basin organisations (RBOs), including for the Nam Ngum and Tonle Sap basins. We are also supporting the creation or finalisation and institutionalisation, of new policies, processes and protocols, such as new:

- · water resources policy and strategy in Lao PDR
- high-level water apex body in Cambodia for inter-ministerial coordination of national water resources issues
- transnational hydropower sustainability assessment protocol with the potential to improve the quality of hydropower planning, project selection, implementation and compliance.

Mekong River Commission

In 2008 we recognised that the MRC was a relatively marginalised organisation in the sphere of regional water resources management. By 2010 the MRC had moved to centre stage, at least temporarily, catalysed by regional drought, proposed mainstream dam building and new interventions by the MRC that heightened its relevance. The latter include the First MRC Prime Ministers' Summit, the preparation and release of a Strategic Environmental Assessment of Lower Mekong mainstream dams, and the activation of the PNPCA, with the precedent it set for all future proposals for mainstream dams (see Decision-making for more information).

The principal vehicle for strengthening the MRC is the **Integrated Capacity Building Program**. The ICBP is at the centre of some of MRC's greatest current challenges, including the drive for full 'riparianisation' of the MRC Secretariat workforce, with all positions to be filled by qualified nationals from MRC member countries. ICBP's objective is that staff in the MRC Secretariat, national committee secretariats and line agencies be better equipped to work in multicultural settings on complex issues requiring appreciation of different disciplines and national perspectives. The ICBP is also responsible for achieving better gender outcomes across the MRC program. Progress to date has been only satisfactory. A review in late-2011 will provide detailed assessment which will be used to determine areas to improve.

Rules are an important aspect of the institutional framework. The MRC 1995 Agreement is the highest-profile 'rule' or treaty that guides cooperation between the four Lower Mekong countries. However, it has been recognised since the negotiations which led to the agreement that more detailed operating procedures and guidelines are also necessary. Hence, the Water Utilisation Program was developed and implemented from 2000–2007. AusAID is now funding the next phase of the Water Utilisation Program through the regional component of the Mekong IWRM project.

The program is supported by five procedures and implementation guidelines, for these key topics: PNPCA; water quality; data and information exchange and sharing; water use monitoring; and maintenance of flows on the mainstream. There are technical and political challenges relating to testing, finalising and institutionalising procedures and guidelines for all five topics. MRC has focused on PNPCA and the water quality procedures, each of which still face challenges. The other three topics are moving too slowly and without sufficient push from senior management in the MRC Secretariat. In some cases, implementation is hampered by obstruction on the part of governments due to the sensitive issues involved. Despite these challenges, the Joint Committee of the MRC, the Steering Committee of the Mekong IWRM project, as does AusAID.



Lao hydropower governance

In April 2010 AusAID joined with the World Bank in supporting the MEM to improve **hydropower governance** and, in so doing, contribute to a more transparent and sustainable hydropower industry in Lao PDR. This technical assistance support is for the hydropower and mining sectors, both of which are highly politicised. We recognise the risks and have already drawn salutary lessons from a difficult Lao land-titling project, also with the World Bank. Early implementation progress is satisfactory. The working relationship between AusAID, the World Bank and the Government of Lao PDR is sound. Some restructuring of MEM in 2011 will require adjustments to activity implementation.

Lao IWRM support

Existing Lao IWRM support to WREA, contracted through and supervised by ADB, made good progress on national policy and strategy work and completed in 2010. Additional work to assist WREA prepare for what is intended to be a multi-donor **Lao IWRM Support Project** also progressed satisfactorily in 2010 through AusAID and ADB quality at entry (QAE) processes. AusAID has committed a further \$3.2 million to WREA for work in 2011–2013. A parallel contribution from the World Bank to the project has not yet come forth. Nevertheless, we note a substantial and constructive institutional reform process in Lao WRM through which significant steps have been taken to develop national policy, strategy and an action plan for 2011–2015. New legislation has been passed to establish RBOs, and staff have been re-assigned for implementation. The new activity starting in 2011 will contribute to sustaining this reform process, but will require close attention from AusAID. Government reforms in 2011 are seeing WREA become a part of a new Ministry for Natural Resources and Environment, and changes in Ministers. With ADB, AusAID will carefully monitor the impacts of these changes.

Cambodian Integrated Water Resources Management

AusAID has joined and made a commitment to contribute \$5 million into a partnership with the ADB, the Nordic Development Fund and the Organization for the Petroleum Exporting Countries Fund for International Development to contribute to a **Cambodian IWRM Support Program**. This has been developed over the past few years with MOWRAM and the Ministry of Economy and Finance. Given potentially massive inflows of low-condition funds to Cambodia from new donors (Korea, Kuwait, Qatar, China and India) for irrigation and hydropower development, at this juncture AusAID considers a strategic IWRM partnership with the Government of Cambodia an important opportunity.

The support program complements and reinforces existing bilateral activities funded by Australia, including the Cambodia Strategy for Agriculture and Water, the Cambodia Agricultural Value Chain Program, and support to CDRI. ADB's leadership of the funding partners, and its handling of negotiations with the Government of Cambodia, has been impressive.



Codes of conduct

AusAID continues to build modest links with the **banking industry** active in the Mekong Region in the area of water resources development, including ANZ Bank which we brought to the MRC Summit. ANZ has provided finance to the Nam Theun 2 project in Lao PDR and is the lead bank in the consortium funding the Lao Theun Hinboun Expansion Project. ANZ is proactively using transnational codes of conduct, such as the Equator Principles, and has its own progressive water policy. A representative from China Export – Import Bank is participating in the regional dimensions of CSIRO-AusAID Mekong Futures.

AusAID has been building a working relationship with **hydropower developers**— such as Theun Hinboun Power Company, Nam Theun Power Company, Italian-Thai, Sinohydro, Huaneng and others in the Chinese hydropower industry—recognising their influential roles in the institutional framework. An important facet of the relationship with the Chinese industry has been trialling the Hydropower Sustainability Assessment Protocol.

Twinning

The next phase of the cooperation between the MRC and the **Murray-Darling Basin Authority** was organised, with an official memorandum of understanding signed on 13 May 2011. The Adelaide-based International Centre of Excellence in Water Resources Management was delegated by the Authority's Chief Executive Officer to work with the MRC to organise the most pragmatic and mutually beneficial means to progress this cooperation. The initial action plan will focus on: basin-wide planning; mitigating floods and droughts; irrigation; salinity; assessing environmental needs and impacts boundaries; and public consultation processes and awareness-raising.

Objective 2: Knowledge availability

Strategic objective: Improving availability of reliable knowledge about water resources use and further development.

The CCAI is underway with a strong implementing team. Mekong countries are particularly vulnerable to the predicted effects of climate change. The CCAI will help Mekong countries cooperate in their learning and planning for adaptation. AusAID was responsible for initial support to the MRC to develop the CCAI, but now other donors have also engaged. Australia's founding contribution of \$3 million (in addition to \$1 million for the design phase) is now exceeded by pledges from other donors, namely Denmark, Sweden, Luxembourg, Germany and the European Union. There have been some issues in the initial phase with the CCAI, specifically some concern of MRC member countries as to how the initiative should be governed and where it should sit within the program structure of the MRC Secretariat. The Mekong Panel on Climate Change is also not yet operational. Without sufficient coordination by the CCAI there is a risk of duplication with some other adaptation initiatives underway in the region. We continue to work closely with the CCAI team to address these types of concerns.

We have worked with the **Challenge Program on Water and Food** to design an activity to contribute to improving water resources governance, with an emphasis on hydropower governance in Cambodia, China, Lao PDR and Vietnam. AusAID has negotiated a funding agreement for \$5.5 million with the CPWF to augment its Mekong program with fellowships, more research and scaled-up policy engagement activities. The CPWF will conduct research and publish a significant volume of papers, and seek to achieve development outcomes from this research within the



lifespan of the activity (before the end of 2013). The CPWF has a strong network of partners in government and industry and is focused on actively engaging in research and associated activities.

We continued co-management with AusAID Cambodia of the **Cambodia Development Resources Institute** water governance research and policy capacity building activity. CDRI progress had been of concern, but mid-term corrections and a substantial effort by institute and its partners—the University of Sydney, Royal University of Phnom Penh and the Institute of Technology of Cambodia—is seeing them approach the finishing line in 2011 in much better shape.

The ongoing impact of the earlier-funded Australian work with the MRC **Appropriate Hydrological Network Improvement Project** remained evident in 2010. Although the Lower Mekong hydro-meteorological system still pales in comparison to that in operation in Yunnan², the new monitoring stations enabled the MRC to engage in substantial debates between China and Lower Mekong countries about the impact of droughts vis-à-vis dam-filling regimes. This culminated in the new agreements for data sharing announced at the First MRC Summit and implemented throughout 2010.

Objective 3: Decision-making support

Strategic objective: Informed deliberations so as to constructively influence negotiations and policy of public, private sector and civil society actors

Australian funding of \$7 million over four years for the regional component of the Mekong IWRM Project builds on the MRC's previous work to develop basin-wide water resources management tools and **water use rules**, albeit couched in soft language of procedures and guidelines. Complementary national and transboundary components prepared over several years by the World Bank are now articulated in a project appraisal document but approval and funding has not yet been forthcoming.

The outputs of a strategic environment assessment (SEA) of Lower Mekong mainstream³ dams by independent consultants and the scenarios prepared by the MRC's BDP provided the MRC and member countries with key decision making information and tools. Both reported by the end of 2010. Though AusAID was not required to fund it, the Mekong Water Resources Unit engaged actively in the SEA process, and negotiated the terms of reference for an independent panel of experts to review a draft of the associated MRC Basin Development Strategy. We did this because of the crucial importance of the SEA and BDP to the implementation of MRC procedures.

For the MRC decision-making facilitation to be credible, its own knowledge inputs to consultation must be of high quality. By the time the SEA was completed it was of good quality, the BDP scenarios were robust (although narrowly focused on 'more or much more hydro, and more or much more irrigation') and the Basin Development Strategy was an adequate anchor for MRC strategic planning.

Both outputs provided a basis for the initial deliberations under the first activation of the 'prior consultation' aspect of the **Procedures for Notification, Prior Consultation and**

² Appropriate Hydropower Network Improvement Project (HNIP) funded 17 hydro-met stations on the Mekong mainstream. The Huaneng Lancang Hydro company receives data from ~200 stations in Yunnan and Tibet.

 $^{^3}$ The MRC commissioned an assessment of the environmental impact of 11 planned hydropower dams on the mainstream Mekong River.



Agreement, facilitated by the MRC. The Lao Government activated the PNPCA in September 2010 for a proposed dam on the mainstream of the Mekong River in Sayaboury Province. In the following months, after a slow start, the MRC demonstrated its ability to convene a transparent evaluation of a major proposal with expected transboundary impacts. This is seen as a positive outcome considering it was unchartered territory for the MRC. The first PNPCA experiment is ongoing, with serious engagement by all Lower Mekong countries.

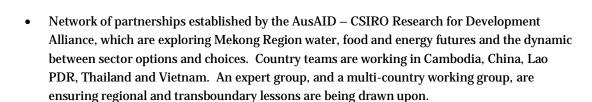
A strong effort in 2010 resulted in an established network of partnerships to enable the **AusAID** – **CSIRO Research for Development Alliance** to proceed with implementing the Exploring Mekong Region Futures activity. The activity's core ideas have been discussed by regional partners for several years. Alliance funds, and the additional expertise of CSIRO, are allowing the work to proceed. Teams are fielded in Vietnam's Mekong Delta, Cambodia's Tonle Sap, northeast Thailand, Lao PDR and Yunnan.

Program quality

Successes

Australian Mekong Water Resources Program 2010 successes include:

- Substantial contribution to, and Australian visibility at, the First Mekong River Commission
 Summit which elevated water resources policy discussions between the six Mekong Region
 countries to the highest political level.
- Promising experimentation underway by Lower Mekong countries (Cambodia, Lao PDR, Thailand, Vietnam) with the Procedures for Notification, Prior Consultation and Agreement, the deliberations process facilitated by the MRC. The Lao Government activated the PNPCA in September 2010. In the following months, after a slow start, the MRC demonstrated its ability to convene a transparent evaluation of a major proposal with transboundary impacts. The first PNPCA experiment is ongoing, with serious engagement by all Lower Mekong countries.
- Expanded data-sharing between downstream Mekong countries governed by the MRC
 Procedures for Data Information and Exchange being tested as part of the Mekong IWRM
 Project. In addition, expanded cooperation, including increased data-sharing with China, has
 been important in informing the MRC's SEA and BDP scenarios.
- Institutional reforms in Lao PDR, including endorsement by the Government of a new national
 water resources policy, strategy and action plan for 2011–15, and enactment of progressive
 new legislation establishing River Basin Committees and strengthening environmental and
 social impact assessment, which consolidate the role of the new Ministry of Natural Resources
 and Environment.
- Revised the National Policy on Sustainable Hydropower by the Lao Government and formulated standard environmental and social obligations for hydropower projects.
- Agreement by the Royal Government of Cambodia to establish a high-level Water Apex Body
 to provide inter-ministerial coordination of water resources decision making. This is part of
 the agreement reached between ADB and the government for the start of the new IWRM
 project, in which AusAID is a partner.



International Hydropower Association (IHA) members adopted a revised Hydropower
Sustainability Assessment Protocol in December 2010 as a tool to measure and guide
performance in the hydropower sector. The protocol is the product of considerable effort by
parties represented in the Hydropower Sustainability Assessment Forum, including Oxfam
Australia. AusAID-funded engagement in Mekong countries contributed substantially to the
review process and final product.

Quality of aid activities

Following on from a review of the Australian Mekong Water Resources Strategy 2007–11 in late 2008, an updated Australian Mekong Water Resources Program Delivery Strategy 2009-2012 was prepared, peer reviewed, improved and endorsed in March 2009. The delivery strategy guided the Australian Mekong Water Resources Program through further program shaping and quality processes that saw the approval of all activities for the forward program to 2013.

The quality of the program at implementation is being assessed through monitoring and evaluation at program, partner and activity levels. The Performance Assessment Framework (PAF) is at Annex F. It is the key tool to measure impact and effectiveness at program level.

A table showing quality reporting system scores is at Annex B. Several activities are new in 2010. One activity is showing consistently modest quality scores: the ICBP. This activity has met varied obstacles to progress, which reflects its ambitious task of improving capacity of the MRC Secretariat, the National Mekong Committee secretariats and line-agencies in member countries. Developing an understanding of the needs of the program in member countries has been challenging. Staffing shortages with the program have worked against progress. A mid-term review is scheduled for late 2011; AusAID will work to ensure clear recommendations are made to alleviate challenges where possible.

Next steps

The program responded to most management responses set for 2010. A key task, successfully achieved, was to complete design and start implementation of all remaining activities in the Australian Mekong Water Resources Program portfolio. 2010 saw increased cooperation with Department of Foreign Affairs and Trade (DFAT) and external partners. There is still more to be done on improving monitoring and evaluation and gender outcomes within activities.

Management tasks for 2011 include a rapid evaluation of the program's progress to date and determining a forward strategy for the program, in the context of the changing political economy of water resources in the region, and the proposed increase in size of the Australian aid program.



Management actions identified in the 2009 Annual Program Performance Report⁴

Reflections on 2009 performance, plus some emerging opportunities, dictated the priority management consequences and response areas for 2010 to be:

Improving availability of knowledge and transparency of decision making: The program's delivery strategy includes the goal of 'improving the availability of reliable knowledge about water resources use and further development'. Improving the foundation of scientific knowledge on which to make decisions is one component of this. The other is making such knowledge as widely available as possible, which represents the greater challenge in the Mekong.

The program is aware there is a dearth of knowledge on groundwater in the Mekong Region. In 2010, it was expected that WREA would request Australia for assistance, via ADB, in groundwater resource mapping and management, as part of the Lao IWRM activity being shaped. Australia will seek more demand-driven opportunities in this sector.

<u>2010 Response:</u> The groundwater component was included in the new Lao IWRM Support Project. It will be implemented by the Water Resources and Environment Institute, within WREA. Supporting the SEA process has also assisted the production and dissemination of knowledge, in addition to information—belatedly made publicly available—through the first PNPCA. New research via CPWF and CSIRO will further augment the regional knowledge base.

Final program building quality at entry processes: Three activities needed to pass AusAID quality processes to complete the transition from program building to implementation.

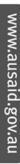
<u>2010 response:</u> Three remaining activities passed AusAID quality processes: CPWF, Lao IWRM support, and Cambodian IWRM support. Management will now focus on supporting successful implementation, and constructive political engagement.

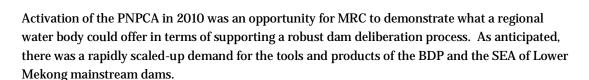
Ensuring effective implementation of activities by program partners: Experience had shown that program partners, especially the multilateral development banks, had not sufficiently followed through with all agreed program designs, especially with approaches to gender equality and monitoring and evaluation. We intended to provide assistance by feeding relevant input from AusAID's Canberra-based advisers, and draw on new and existing sources of expertise, such AusAID's Office of Development Effectiveness and the gender standing contracts.

<u>2010 response:</u> We have been working closely with the World Bank, ADB and MRC on gender and monitoring and evaluation, but are not yet entirely satisfied with the results.

Mekong IWRM Project and the MRC PNPCA: It was expected there would be a formal notification from Government of Lao PDR for a Mekong mainstream dam project in 2010 and that the 'prior consultation' aspect of the PNPCA would then be activated for the first time. We knew this would be an important moment for MRC to demonstrate how it chose to activate the MRC Secretariat to carry out its mandate.

⁴ Management actions identified in the 2009 Annual Program Performance Report and an assessment about whether they were addressed in 2010.





As it turned out, there was no disjunct between the PNPCA activation and the availability of the MRC tools and products needed to support a deliberative process.

<u>2010 response:</u> Most of what we anticipated did occur. We engaged with issues, to the greatest extent possible, throughout the year. We worked closely with the MRC Secretariat when and where appropriate and we asked our DFAT colleagues to work with AusAID to ensure appropriate representations were made during the PNPCA process.

Australian partnerships: We signalled attempts would be made to explore with AusAID Beijing opportunities to better use the program and the Australia — China Environment Development Partnership to capitalise on China's increased engagement with Mekong neighbours on water resources issues.

<u>2010 response:</u> The program expanded the level of briefings to Australian Ambassadors in Cambodia, Thailand and Lao PDR. We could do more in Vietnam, and perhaps China and Myanmar. The program also strengthened its engagement with AusAID Beijing, and assisted in directing some funding from the China program to the Upper Mekong Basin.

As anticipated in last year's Development Cooperation Report (DCR) on this program:

- We have supported a modest renewal of the Mekong and Murray-Darling cooperation as part of MRC's ICBP.
- We maintained our 'local' oversight of Mekong Futures to ensure the CSIRO received assistance to build and maintain relationships with Mekong actors as part of the CSIRO – AusAID Research for Development Alliance. This is requiring much more time than originally envisaged.
- We followed up discussions with the Royal Government of Thailand to develop bilateral cooperation in several areas, including drought management and water resources planning. A Thai delegation visited Australia in October 2010, and a return visit to Thailand by Australian officials is expected in 2012.

Performance assessment of the program: We said the PAF would be augmented to include fixed objectives for the end of the current program (end-2012), with milestones set for the next year through the DCR process.

<u>Response in 2010:</u> The PAF update was completed until the preparation of this DCR. The PAF includes milestones for 2011, 2012 and beyond where applicable. Fixed objectives remain embedded in the approved design documents of all of the program's eight key activities.



Management actions identified in this report⁵

The management structure of the AusAID Subregional Program altered by the end of 2010, with the withdrawal of the Counsellor position, which had oversight of the Australian Mekong Water Resources Program. The Second Secretary and Senior Water Resources Adviser now directly report to the Minister Counsellor (Mekong and Regional). To further bolster the Australian Mekong Water Resources Program, it would be prudent to reinstate this Counsellor position.

With greater clarity around the parameters of growth of the Australian aid program, the Australian Mekong Water Resources Program will need to scope, in 2011, its future portfolio of activities. To do so, it is proposed that the program take these steps before the end of 2011:

- Based on this DCR, conduct a rapid review of the delivery strategy to determine whether the strategic objectives and desired impact remain relevant.
- Identify new program foci.
- Identify potential ways of working (for example, through multilateral development banks, nonstate actors, facilities or directly with governments).
- Identify suitable funding sources in the Australian aid program's new budgetary environment.

With new program foci:

- In late 2010 and early 2011 the Government of Vietnam indicated interest in receiving
 assistance from Australia on improving their IWRM capacity. In 2011 the Mekong Water
 Resources Unit will conduct missions with Hanoi Post to explore this request.
- A strategy for engaging with the Union of Myanmar will need to be considered when the policy on the potential scope of development cooperation is clear.
- The MRC's programs have defined work plans and associated budgets up to 2015. Extensive funding gaps remain in all programs except the CCAI, presenting an opportunity for AusAID to determine where best to direct support for this regional organisation. We must learn lessons, of course, from the current engagements, which are of varying quality.
- There is insufficient knowledge on the potential application of non-dam hydrokinetic technologies in the Mekong Region— technologies that do not require a barrier across the river, or river channel, to produce electricity and technologies that do not draw energy from the potential energy of an impoundment dam, but rather the kinetic energy of the water's flow. These technologies therefore have little, if any, impact on sediment transport or fish migration. There may be room to fund applied research in this field, with potential partners being the United States Agency for International Development (USAID) and the Asian Environmental Compliance and Enforcement Network.

Working through multilateral development banks, particularly on national institutional support, will remain a key approach. However, these banks have a patchy performance record to date in the design and commencement of programs—mainly due to limited capacity—and alternative ways

⁵ Management actions identified in this report to be undertaken by AusAID in 2011.





may need to be considered. Without doubling numbers in the Mekong Water Resources Unit (a highly unlikely prospect), it will not be possible to manage direct delivery of substantial programs. One alternative may be to deliver through facilities managed by contractors, preferably with dedicated staff in regional capitals. Choices on ways of working will be influenced by the size of the program budget and in the context of the scale-up of the Australian aid program.

There is a clear need for the program to shift from flexible base funding to drawing from budget measures not immediately collinear with the program's strategic objectives. We will therefore have to consider innovative ways of drawing on funding for economic growth (infrastructure), health (water, sanitation and hygiene), climate change, and food security.

Other water resources management activities are arising in the Australian aid program, including in Southern Africa, South Asia and Afghanistan. As it is the most established, the Australian Mekong Water Resources Program has the greatest resources—particularly the expertise and networks of the AusAID Senior Water Resources Adviser—and we are providing ad hoc assistance to other programs.





Acronyms

ADB Asian Development Bank

AHNIP Appropriate Hydropower Network Improvement Project

BDP Basin Development Planning (MRC)

BDS Basin Development Strategy (MRC)

CCAI Climate Change Adaptation Initiative (MRC)

CDRI Cambodia Development Resources Institute

CPWF Challenge Program on Water and Food

CSIRO Commonwealth Scientific and Industrial Research Organisation

DCR Development Cooperation Report

DFAT Department of Foreign Affairs and Trade

HMTA Hydropower and Mining Technical Assistance activity in Lao PDR

HSAP Hydropower Sustainability Assessment Protocol

ICBP Integrated Capacity Building Program (MRC)

IHA International Hydropower Association

IWRM Integrated Water Resources Management

MEM Ministry of Energy and Mines (Lao)

MOWRAM Ministry of Water Resources and Meteorology (Cambodia)

MRC Mekong River Commission

NUOL National University of Laos

PAF Performance Assessment Framework

PNPCA Procedure for Notification, Prior Consultation, and Agreement (MRC)

QAE quality at entry

QAI quality at implementation

RBO River Basin Organisation

SEA Strategic Environmental Assessment

USAID United States Agency for International Development

WRM Water Resource Management



Annex A—Program overview

The program for 2009–13 has eight key activities underway with three partner groups (the MRC, national governments in the Mekong Region and non-state actors). This annex describes the key activities by partner group:

Mekong River Commission

- The regional component of the Mekong IWRM Project builds on previous MRC work to
 develop water resource management tools, procedures and guidelines essential for making
 informed decisions on the reasonable and equitable use of water across the Mekong Basin
 (Article 5 of the 1995 Mekong Agreement).
- The CCAI is building knowledge and improving the capacity of Mekong governments to adapt to and manage climate change.
- The ICBP is developing a critical mass of Mekong nationals qualified to improve the capacity of the MRC and other players to be able to operate more effectively in multi-cultural, transboundary, water resource management arenas.

National governments

Lao hydropower governance

With the World Bank, Australia is supporting the Ministry of Energy and Mines, NUOL and
polytechnic institutes to: improve the mining and hydropower sectors; increase the efficiency
and transparency of hydropower governance; and provide professional training and share
information on hydropower development.

Lao IWRM Support Program

• In partnership with the ADB, a new program of support for the Water Resources and Environment Administration, and the NUOL, was developed to: assist Lao PDR formulate and implement national policies and strategies and reform legislation; implement river basin management; and educate the next generation of Lao water experts.

Cambodian IWRM Support Program

• In partnership with the ADB, Australia has agreed to fund a Cambodian IWRM Support Program, to be implemented by the MOWRAM and the Ministry of Economy and Finance in partnership with others (such as the Institute of Technology of Cambodia).

Non-state actors

- AusAID is augmenting the CPWF Mekong Program Phase 2 to support non-state actors who
 contribute to Mekong water governance policymaking. Start-up funding to CPWF has
 activated teams of non-state actors across the region to explore, with governments and private
 sector, the potential of a new Hydropower Sustainability Assessment Protocol.
- As part of the Alliance between AusAID and the CSIRO, the Exploring Mekong Region Futures
 project is focusing on the nexus between water use, food security and energy production in the
 Mekong Region to contribute to better planning decisions in and between these sectors.





Annex B—Quality reporting system

	Activity	Relevance	Effectiveness	Efficiency	Monitoring and evaluation	Sustainability	Gender equality	Implementation assessment (Average quality at implementation [QAI] score)
Me	ekong River Commission							
1.	Mekong IWRM Project	5-	5↑	4↓	4↑	5↑	3-	4-
2.	Integrated Capacity Building Program	5-	3↓	4↓	3-	4-	4↑	4-
3.	Climate Change Adaptation Initiative	5-	4↓	4↓	4↑	4-	4-	4-
Na	tional governments, with multilateral	devel	opmer	nt bar	nks			
4.	Lao hydropower and mining governance^	6↑	4	4	4-	4↓	4	4-
5.	Lao IWRM support*	5	4	4	4	4	4	4
6.	Cambodian IWRM support*	5	4	4	4	4	4	4
No	Non-state actors							
7.	Challenge Program on Water and Food*	6	4	5	4	5	5	5
8.	Exploring Mekong Region Futures	For assessment by broader AusAID-CSIRO Alliance process						

Notes:

↑ score improved against 2009 QAI; ↓ quality declined against 2009 QAI; − quality constant

- * Quality at entry (QAE)scores are used for activities that have not yet reached their first QAI assessment point.
- ^ QAI comparison made with scores in QAE report. Standard indicators in the templates changed such that not all QAI indicators have a suitable predecessor in the QAE template.



Annex C—Australian Mekong Water Resources Program: milestones for 2010

Strategy objective	Milestones 2010			
	✓ Achieved ½ Achieved in part × Not Achieved			
<u>INSTITUTIONS</u>	Integrated Capacity Building Program			
Strengthening the institutional framework to improve IWRM	1/2 Gender toolkits completed for nine MRC programs and available in English + four Mekong languages to drive gender mainstreaming across the organisation.			
in the Mekong Region	Rather than produce a tailored kit for each MRC program, gender mainstreaming products and follow-up is being targeted to: senior decision-makers, program managers, and field workers. Gender mainstreaming tools will comprise 3 volumes: decision-making; program management; and field work levels. The volumes have been completed in 2010, and will be translated into Mekong languages in 2011.			
	1/2 Competency framework established and applied across all MRC Secretariat positions.			
	Partly completed, expect to finish in 2011 as part of decentralisation of core functions of MRC.			
	✓ Re-establishment of Junior Riparian Professional program, with another intake.			
	✓ Commence new phase of MRC Murray Darling Basin Authority cooperation, with support from the International Centre of Excellence in Water Resources Management.			
	Lao PDR Integrated Water Resources Management			
	with Ministry of Energy and Mines, via the Hydropower Mining Technical Assistance (HMTA) managed by the World Bank			
	✓ HMTA concessioning review and reform process mapped out, led by Lao Department of Energy Promotion and Development.			
	✓ HMTA transboundary hydropower governance exchange between Lao PDR and China in Kunming.			
	✓ HMTA project implementation manual completed and being used.			
	1/2 HMTA gender elements strengthened, led by World Bank.			
	World Bank recognises the need to strengthen how practical gender outcomes will be achieved. This will be a high priority task for 2011.			
	1/2 HMTA M&E strengthened, led by AusAID.			
	Assistance provided by AusAID to MEM to shape milestones for the project that drawn down from the objectives. Still need to finalise this in the World Bank Results Framework.			
	1/2 HMTA political economy analysis undertaken to provide baseline, commissioned by AusAID.			
	Analysis of issues in hydropower governance conducted. HMTA has not yet conducted analysis of mining sector, however, industry and research counterparts (International Council on Mining and Minerals, CSIRO) have produced relevant analytical products—with input from MEM, AusAID, the World Bank and mining companies - that go some way to illustrating the current situation.			
	with the Lao WREA			
	✓ Lao national water resources policy updated and endorsed by WREA			
	✓ Lao national water resources strategy developed and endorsed by WREA			
	✓ Lao decree passed authorising formation of RBOs			
	✓ Nam Ngum RBO established, to be forerunner of other basins in Lao PDR.			
	Cambodia Integrated Water Resources Management			
	Commencement of program, following successful design and appraisal.			



Strategy objective	Milestones 2010			
	✓ Achieved ½ Achieved in part × Not Achieved			
KNOWLEDGE Improving availability of reliable knowledge about water resources use and further development in the	MRC Climate Change Adaptation Initiative ✓ Environment and Climate Symposium convened in Ho Chi Minh City, April 2010, raises awareness and shares approaches on key environmental issues in the Mekong River Basin			

Mekong Panel on Climate Change, based on the model of Intergovernmental Panel on Climate Change (IPCC), is established and convenes.

MPCC had some difficulties with establishment due to concerns of MRC member countries about preventing duplication with IPCC and other bodies (including one funded by USAID, and another by SIDA).

National Climate Change Adaptation Plans all revised and informed by Mekong River Basin and wider Region perspectives.

Behind schedule. Pilot sites have commenced, and will inform adaptation plans.

MRC Appropriate Hydropower Network Improvement Project (AHNIP)

Upgrade 17 AHNIP stations to international standards in order to integrate AHNIP hydro-met network into the broader Mekong hydro-met network.

MRC Basin Development Plan

- ✓ Mekong independent Panel of Experts (regional and national) evaluates all key BDP outputs—facilitated by AusAID.
- ✓ Mekong Basin Development Strategy to guide decision-making in the Mekong Basin, is presented to MRC Council, and accepted.
- Mekong Basin Development Scenarios, outlining nine (9) possible futures for hydropower and irrigation in the Mekong Basin, presented to the MRC Council, and accepted.

MRC Navigation

Mekong Region, especially in the

Mekong River Basin.

 $\frac{1}{2}$ Risk analysis study on oil spills and navigation hazard in ports and waterways along the Mekong River in Lao PDR and Thailand.

To be finished in September 2011. Currently repairing regulations/guidelines and management strategies for each of the member countries.

Cambodian Development Resources Institute

Nine (9) research papers and nine (9) policy briefs in the 3 streams of the activity are completed, peer reviewed and published.

CDRI had not met this output target by end of 2010, but are, in 2011, finalising their output papers.

- ✓ Two (2) more Masters students graduate from University of Sydney.
- New water governance curriculum designed for teaching at Royal University of Phnom Penh.

Challenge Program on Water and Food

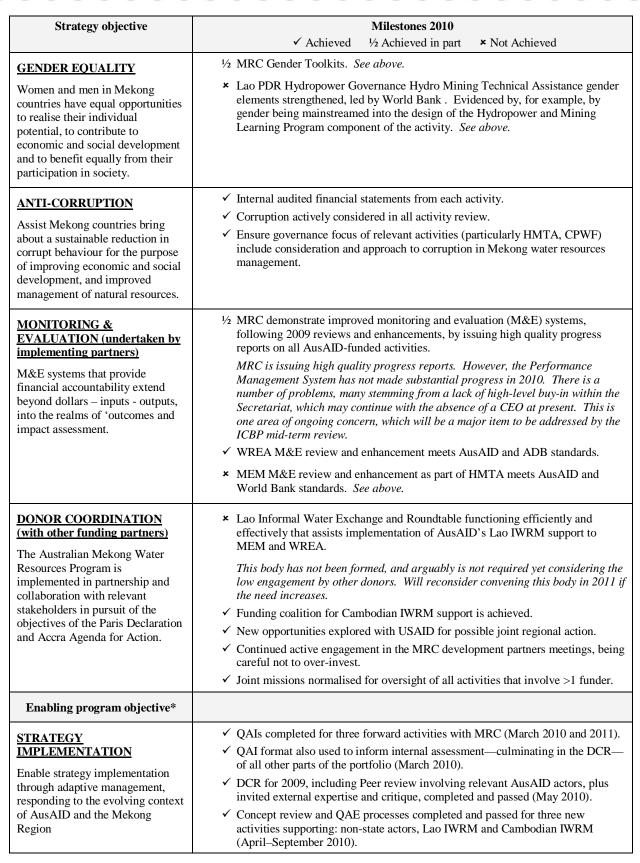
1/2 Commencement of activity, following successful design and appraisal.

Design passed appraisal in November 2010, funding secured March 2011 and agreement signed in June 2011, with activity commencing immediately following agreement activation.



Stuatogy objective	Milestones 2010				
Strategy objective	✓ Achieved ½ Achieved in part × Not Achieved				
	1				
DECISION-MAKING Supporting water resources development decision making	MRC Mekong Integrated Water Resources Management Project ✓ Procedure and Guideline for evaluating the merits of Lower Mekong mainstream dams are activated for the first time by the Lao Government, and				
processes with more informed deliberation that constructively influences negotiations and policy	implemented effectively and transparently with strong guidance and support to all Mekong governments from the MRC. Specifically, this is referring to the PNPCA.				
of public, private sector and civil society actors in the Mekong	➤ Procedures for Maintenance of Flows on the Mainstream are complemented by a formal agreement on the technical Guideline required to operationalise.*				
Region.	MRC Secretariat proposed alternative methodologies to member countries for determining significance in March 2011. The MRC Secretariat is trying to seek agreement on one outstanding methodological issue by member countries. This is a very sensitive issue for all parties, and hence negotiations may be protracted.				
	✓ Facilitation toward the approval of the Procedures for Water Quality and its technical Guidelines to deal with emergencies.*				
	 Build consensus among member countries on which are the most significant Mekong River tributaries. 				
	Some progress, but further analysis of assessment methodologies is required before this work is completed and agreed by the member countries.				
	CSIRO-AusAID Alliance Exploring Mekong Region Futures				
	✓ All local teams contracted to lead work focused on Vietnam's Mekong Delta, Cambodia's Tonle Sap, northeast Thailand and southern Lao PDR.				
	½ Preliminary alternative futures developed for each local area, using key entry points, for example, proposed Lao PDR-Thailand water transfers.				
	All except Lao PDR, which has had some establishment issues stemming from sensitivity of the topic selected.				
	✓ Methodology for regional work conceptualised and tested.				
	✓ Regional team contracted to integrate local work into Mekong Region water- food-energy policymaking arenas.				
	✓ Field work instrument developed and tested.				
	½ Preliminary alternative futures developed for the Mekong Region, using a key entry point, for example, Lao PDR decisions about mining lignite and bauxite.				
	Teams established and research topics defined. Lao PDR now looking at intra- basin water transfers. Preliminary alternative futures to be developed in 2011.				

^{*}Note that Procedure for Water Monitoring and Procedure for Water Quality are reported under 'Decision-making' for this milestones table, following the structure set by the DCR 2009; however, in future these will be measured under 'Institutions' reflecting the new structure of the PAF.



^{*}Achievements of cross-cutting and enabling program objective milestones have been reported for 2010, but have not been included in the revamped PAF and will not be reported against separately for DCR 2011. Instead they will be reported where relevant in the assessment of performance against the strategic objectives.





Annex D—Australian Mekong Water Resources Program: Top 5 results performance for 2010

Oh	jective 1: Institutional strengthening	Assessment of performance
1.	Government of Lao PDR agrees to a roadmap for reform of hydropower concessioning (from strategic planning to licensing and compliance) to make more transparent present conflicts of interest, and clarify the responsibilities of the MEM and WREA.	Partly achieved As part of the Hydropower Mining Technical Assistance activity, the Government commissioned an analyst to look at the state-of-play of the concessioning process. The serious concerns highlighted by the analyst have caused the Government to pause as it determines its response. However, there is other evident progress in hydropower governance, for example, through the revision of the National Policy on Sustainable Hydropower (by MEM), and the development of standard environmental and social obligations by WREA.
2.	MRC Secretariat produces gender toolkits for nine MRC programs, available in English and four Mekong languages to drive gender mainstreaming across the organisation.	Partly achieved Rather than produce a tailored kit for each MRC program, gender mainstreaming products and follow up is being targeted to senior decision makers, program managers and field workers. Gender mainstreaming tools will comprise three volumes: decision making; program management; and field work levels. The volumes were completed in 2010, and will be translated into Mekong languages in 2011.
Ob	jective 2: Knowledge availability	
3.	Increased hydrological data-sharing between China and downstream Mekong countries, resulting from regularised sharing of data as part of AHNIP and BDP, confidence-building through the Navigation Program, and engagement in the First MRC Summit.	Expanded data-sharing between downstream Mekong countries governed by the MRC Procedures for Data Information and Exchange are being tested as part of the regional component of the Mekong IWRM Project. In addition, there is expanded cooperation, including increased data-sharing, with China that has been important in informing the MRC Strategic Environmental Assessment and basin development planning scenarios.
Oh	jective 3: Decision-making support	
4.	MRC Secretariat demonstrates it can convene and lead a transparent evaluation of a Mekong mainstream dam following Government activation for the first time of the PNPCA—expected to be Government of Lao PDR notification of the Sayaboury dam.	Achieved Government of Lao PDR activated the PNPCA in September 2010. After a slow start, the MRC Secretariat demonstrated its ability to convene a transparent evaluation of a major, proposed development project, with likely transboundary impacts. The first PNPCA experiment is ongoing, with serious engagement by all Lower Mekong countries.





 The IHA adopts a four-part protocol for improved hydropower governance, with rollout in the Mekong Region by hydropower developers to assess and improve hydropower sustainability.

Partly achieved

IHA members adopted a revised Hydropower Sustainability Assessment Protocol in December 2010 as a sustainability assessment tool to measure and guide performance in the hydropower sector. It is not yet rolled out in the Mekong Region. IHA is in a sensitive constituency building process with Mekong governments and developers. In this regard, the AusAID-funded preparatory/exploratory work is very important.

Annex E—Australian Mekong Water Resources Program: Top 5 results planned for 2011

Objective 1:Institutional strengthening

New institutions

Establishment and demonstrable operation of a new Inter-Ministerial Water Resources Committee in Cambodia, chaired by the Prime Minister.

Objective 2: Knowledge availability

Gender

Cambodian IWRM commissions specific analysis of water resources-related gender issues, and develops a Gender Action Plan in response.

HMTA completes gender issues identification and analysis for hydropower and mining sectors in Lao PDR, and acts on those considered high priority.

CPWF awards fellowships or commissions new research with an emphasis on gender and hydropower decision-making.

Hydropower governance:

A Chinese hydropower company engages in a full trial of the IHA Sustainability Protocol on a Mekong mainstream dam, and commits to sharing the results of its analysis.

Objective 3: Decision-making support

PNPCA

MRC Council affirms the integrity of the first PNPCA process at its end-of-year meeting, drawing on an objective evaluation of the initial testing in the Sayaboury case.

Mekong Futures

Scenarios work in one or more Mekong countries demonstrably and constructively contributes to a major public policy decision.



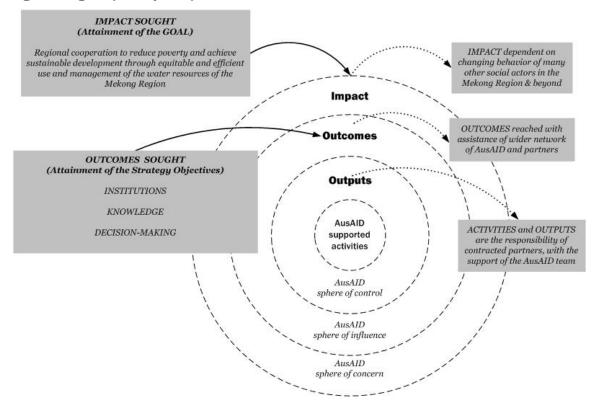
Annex F—Performance Assessment Framework

The logic of the PAF, agreed early 2009, is summarised in Figure 2 showing sought after progression from:

- Outputs, listed as milestones, within the AusAID 'sphere of control' and the responsibility of contracted partners, supported by the AusAID team
- Outcomes within the AusAID 'sphere of influence' but can only be reached with assistance of the wider network of AusAID and partners
- Impact that is the primary AusAID 'sphere of concern', but recognised as requiring changed behaviour by many social actors in Mekong Region and beyond.

This annex reproduces the PAF and includes an assessment of progress in reaching milestones throughout 2010, up to the time of this DCR preparation in May 2011.

Figure 2: Logic of pathway to impact and the Performance Assessment Framework



INSTITUTIONS

Strengthened institutional framework to improve integrated water resource management in the Mekong Region

Outcomes	2011 milestones	End-state milestones
MRC is an effective, efficient, viable organisation and represents a serious attempt to embody IWRM-in-action.	Development of a road map for the decentralisation of the core functions. Development of the competency framework for the riparianisation of the organisation. Develop action plan for implementation of the MRC Procedures and Guidelines. Develop capacity building framework for the Strategic Plan 2011–2015. Mainstreaming products from ICBP are translated and demonstrably rolled out in each Lower Mekong country.	By 2012: MRC institutions have the necessary level of organisational efficiency and technical capacity in IWRM to enable the effective delivery of their mandate. All MRC Procedures and Guidelines accepted and under implementation. The necessary level of integration and coordination is established to ensure the overall effectiveness of sustainable capacity building across MRC. Gender responsive development practices are achieved across the MRC.
Lao Water Resources and Environment Administration is an effective, efficient, viable organisation.	Implement appropriate governance systems for Lao IWRM Project management, monitoring and evaluation. WREA Gender Action Plan prepared and application commences. Nam Ngum River Basin Committee Secretariat consolidates and commences implementation of an ambitious work agenda including: convening hydropower mining forums, future scenarios discussions, and use of rapid sustainability assessment tool to identify problems and inform future agenda setting.	By 2013 five basin plans are published by WREA in collaboration with basin management organisations. By 2014 groundwater management plan is published for major aquifers. By 2015 NUOL graduates a minimum of 10 IWRM bachelors of science per year (25% female) and WREA employs about 50% of the NUOL IWRM graduates. By 2015 five major river basins have IWRM plans fully integrated with province and national plans. By 2020 in five basins there are effective river basin committees operating, investment decisions are consistent with IWRM river basin plans, and water resources use agreements are implemented.
Lao Ministry of Energy and Mines incorporates IWRM perspectives into, and improves strategic management and governance of, the hydropower and mining sectors.	Hydropower Improved compliance with Concession Agreements (CA) of 25% of projects that have signed a memorandum of understanding. Adoption of updated NPSH, with action plan under implementation, and acceptance of proposed procedures for compliance. Planning strategy for data collection at a national level developed, and installation of critical gauge stations along Nam Ou River. Mining Standard agreement prepared and in use for large scale mining investments. Reduce overlapping permit applications by 50% and at least 50 inspections of exploration permits and mine operations.	By 2014: Improved compliance with CAs for 50% of projects that have signed a memorandum of understanding. Improved compliance with NPSH of 30% of operative projects Enhanced capabilities in data collection and development planning to serve the needs of the hydropower sector, and hydrological data processing system in place. Increase in the quality of investments through use of standardised mining investment agreements, improved title issuance and enhanced enforcement of obligations through vigorous inspections. Reduce overlapping permit area by 90%, and inspections of at least 100 exploration and mine operations.



Outcomes	2011 milestones	End-state milestones
Cambodia's water resources sector is capably implementing the IWRM components of the Strategy for Agriculture and Water.	Establishment and operation of an interministerial working group to support the ministerial-level committee. MOWRAM commences a river basin coordination pilot activity in the Stung Sen river basin and one other basin. Development of plan to establish training plan and bachelor and postgraduate level courses in water resources management. Working group established to analyse	By 2013: Ministerial-level national water resources committee established and operating, supported by an interministerial secretariat. River basin committee established in Stung Sen river basin, with replication initiated in at least one other basin. Training plan adopted offering courses in water resources management, with 100 students entering program annually by 2013, of which 30% are women. MOWRAM has completed a review of its organisational structure, capacity, systems and staff
	MOWRAM organisational issues.	resources, and demarcated responsibilities for water resource management and irrigation services.
KNOWLEDGE Improving availabilit	ty of reliable knowledge about water resources t	use and further development
Knowledge generated and decision-maker comprehension increased on possible water-food- energy futures.	All national and regional studies functional and successfully linked. Scenarios work in one or more Mekong countries demonstrably and constructively contributes to a major public policy decision.	By 2012: All projects, in conjunction with local and regional partners, produce final analysis, and lead to multiple instances of contributing to major public policy decisions.
Knowledge generated on political ecology of hydropower decision-making, improving siting and operation of hydropower facilities.	CPWF conducts first call for fellowships/complementary projects, and commences targeted research.	By 2013: All fellowships, research activities and complementary projects are completed. Research outputs adopted and lead to more participatory and informed decision-making by at least one government or regional body.
Increased understanding of climate change and how to adapt to it.	Mekong Panel on Climate Change established and functional. All MRC CCAI demonstration sites operational.	By 2015: Methods and tools for assessment and adaptation planning are developed for basin-wide and transboundary applications. National policies and plans are revised in response to lessons from demonstration sites, and adaptation tools are used by governments at various levels. Next phase of the BDP and Strategic Plan (2016 to 2020) integrate climate change.



DECISION MAKING

Informed deliberations so as to constructively influence negotiations and policy of public, private sector and civil society actors

Outcomes	2011 milestones	End-state milestones		
Regional decision- making is transparent and well- informed.	Resolution of first PNPCA activation, following additional, informed public consultations. Improvement in the rigour of the PNPCA process through review by the MRC of the first activation.	By 2012: Work plan developed, accepted and implementation commenced by MRC (with partners) to fill-in information gaps on trans-boundary impacts of mainstream hydropower.		
National decision- making is transparent and well- informed.	Water Resources Policy Update, Strategy and Action Plan 2011-2015 are formally adopted and implemented by the Government of Lao PDR The Cambodia Government issues either subdecrees or Prakas on Farmer Water-User Communities; (b) river basin management, (c) water allocation and licensing; and (d) water quality.	By 2013: Lao water resources policy, planning and decision-making integrates hydropower, irrigation, ecological and food security concerns. Cambodian water resources policy, planning and decision-making integrates hydropower, irrigation, ecological and food security concerns.		
The private sector improves accountability, consultative processes and transparency of decision-making.	A Chinese hydropower company engages in a full trial of the IHA Sustainability Protocol on a Mekong mainstream dam, and commits to sharing the results of its analysis.	By 2012: Transnational codes of conduct established and applied resulting in improved sustainability of the hydropower industry in the Mekong Region and beyond.		