Mekong Water Dialogue - MWD

Consultancy Services:

Scoping and planning of the MWD Integrated Water Resources Management (IWRM) and River Basin Management (RBM) Component in Lao PDR and Thailand

FINAL REPORT

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August 2011

Introduction

The Mekong Water Dialogue (*MWD*), supported by the Government of Finland and executed by the International Union for the Conservation of Nature (*IUCN*), has completed a First Phase and is currently in its Second Phase.

One of the stated results of the Second Phase is to contribute to advance Integrated Water Resources Management *(IWRM*) at the river basin level, including supporting the development in the region of River Basin Committees/Organizations (RBCs, RBOs). In the Proposal the result of this Component (Component 2, commonly referred to as the "IWRM/RBM Component", or rather the "IWRM/RBM Component"[1]) is formulated as follows: *"Livelihood concerns of local communities are integrated into decision making in the areas of river basin management through multi-stakeholder dialogues to address livelihood improvement at the project pilot locations"*[2]

Component 2 activities in the Proposal that specifically refer to IWRM/RBMs include:

- Stakeholder analysis (2010-2011)
- Set up and run the multi-stakeholder dialogue(MSD) process (2011 ->)
- Identify areas for policy and institutional change (2012 ->)
- Develop action plan for policy advocacy and promotion of institutional reform (2013 ->)
- Participate in meetings and consultations with policy making bodies and government authorities at provincial and national level (2011 ->)

The proposed geography for implementation of Component 2 now includes:

- Vietnam: Upper Srepok
- Cambodia: No Component 2 activity envisaged at this point
- Lao PDR: Nam Lik Sub-basin in Nam Ngum River Basin
- Thailand: RBCs nationwide - methodology for assessment of status and experiences

[1] River Basin Management (*RBM*) is an essential component of IWRM. Proper RBM, based on IWRM principles, becomes "*Integrated River Basin Management" (IRBM)*. However, to avid too many acronyms this report will address and talk about "RBM" from the assumption that the goal of "RBM" is "IRBM". In implementing RBM formal and/or informal coordination structures are required at the basin level. These may range from informal to formal River Basin Committees (*RBC*) to formalized River Basin Organizations (*RBO*) that can be either advisory or executive. Hence RBCs/RBOs are a means to an end, not the end itself, and focus in this report will be on RBM

[2] According to IUCN the stated result focus on "project pilot locations" is not considered appropriate for an IWRM/RBM component which necessarily needs to have a broader institutional focus, i.e. the stated "result" for this aspect needs to be considered more broadly

Scope of the Consultancy Services

The present *Final Report* is prepared by the Consultant to MWD *Prof. Torkil Jønch Clausen.* Based on a rather limited time input[3], and with agreed focus on Lao PDR and Thailand only, some of the information provided, and views expressed, are those of the Consultant only, not necessarily endorsed by IUCN.

The report is the product of the Consultancy as described in the Consultancy Services Contract (May 2011), with the Terms of Reference included as Annex 1 of the Contract. Following a series of meetings with IUCN/MWD a *Draft Inception Report* was submitted in June 2011, and a *Draft Report* in July 2011. The present *Final Report* incorporates the comments made by IUCN to the Draft Report.

The present Consultancy Services Contract is entitled: "*Scoping and planning of the MWD IWRM/RBM component in Lao PDR and Thailand*". Additional activities in Vietnam and Cambodia have been discussed in the preparatory phase/meetings but are not yet (August 2011) ready to start[4].

The agreed objective of the assignment is to assist MWD in identifying a clear and specific niche, and recommended entry points, that add value to current efforts and addresses the intended MWD results for IWRM/RBMs in Lao PDR and Thailand.

The agreed *outputs* of this assignment include:

- Assessment of status of IWRM/RBM[5] development nationally in Thailand and Lao PDR,
- Assessment of the role/niche of the MWD to advance IWRM/RBM in the two countries, with specific focus on multi-stakeholder dialogue (MSD)
- Recommendations for regional knowledge sharing/learning[6]
- Recommendations for next steps of the IWRM/RBM Component in each of the two countries

The *activities* have included:

- Preparatory meetings in Hua Hin (Regional Advisory Group Meeting, November 2010); Planning Meeting in Bangkok (January 2011); meeting in Ho chi Minh City, Vietnam, to 'mentor' the MWD National Working Group on IWRM/RBM (January 2011); MWD Team Meeting in Khon Kaen (June 2011), including meetings with Nam Chi River Basin Committee[7]
- Preparation of Inception Report

[3] The total time input by the Consultant, including preparatory activities, two meetings in Thailand, one meeting in Ho Chi Minh City, one meeting in Khon Kaen, and preparation of Draft and final report is *18 days*.
[4] Linkage between MWD Component 2 activities, and the Swiss funded/ IUCN executed program for RBO development in the 3S basin, as well as Mekong River Commission (MRC) supported RBO development in this basin, is necessary. The 3S program is still in the Inception Phase
[5] Special focus on the RBM aspects, i.e., general assessment of national IWRM mainly as basis for RBM development
[6] As e.g. the proposed Mekong Chapter of NARBO
[7] The outcomes of these meetings have been summarized in the ToR, and in IUCN Meeting Reports.

- Planning and participation in the execution of the first Nam Lik Sub-basin Multi-stakeholder Workshop (19-20 July 2011)
- Discussion with senior Thai officials in Bangkok on the experience of the Thai RBCs and the proposed methodology for the assessment of their performance and lesson-learned to date
- Reporting

Assessment of IWRM/RBM status in the Mekong region

IWRM and River Basin Management (RBM)

The principles of IWRM address sustainable *land and water resources development and management at all levels*, from the smallest catchment through sub-basins, basins/tributaries to the major trans-boundary river basins. The national policy, strategy and implementation level is the most important in setting the overall framework (*vertical integration*).

The rationale for identifying Component 2 of the MWD to address "IWRM/RBM" is the general international acceptance of the catchment/river basin as the fundamental management unit for IWRM, and thus that RBM is essential to translate the principles of IWRM into practical implementation on the ground. This is true world-wide, as e.g. in Europe where the European Water Framework Directive stipulates water resources management at the 'water district/basin level' as *law* for the 27 member states, but RBC/RBOs exist or are being developed in all other continents as well. In the Asia-Pacific region RBM, and in many countries associated BRC/RBOs, is developing rapidly, not least in Southeast Asia.

It is *not* the intention, or purpose, of this report to go into detail with the theory and practice of IWRM and RBM. Reference is made to the literature with specific focus on the publications and ToolBox of the Global Water Partnership (GWP)[8], two recent Handbooks on 'IWRM at the basin level'/RBM launched at the World Water Forum in Istanbul (2009)[9], as well as the series of IUCN Publications FLOW, RULE, NEGOTIATE etc.

RBM in the Asia-Pacific region is being strongly supported by e.g. Asian Development Bank (ADB)[10], and the Network of Asian River Basin Organizations (NARBO)[11]. ADB and IUCN is about to release a book on RBM in Asia-Pacific with more than 50 concrete cases.

Typical RBM functions include

[8] The GWP literature includes technical papers and policy briefs on IWRM, and a ToolBox with more than 50 concrete tools for 'implementing IWRM' and associated case studies, see www.gwpforum.org

[9] Two RBM Handbooks were launched: one by the International Network of Basin Organization (INBO) and GWP, another by UNESCO, both available through their websites

[10] Reference is made to the website of ADB, including the link to the system of "Asia-Pacific Water Knowledge Hubs" of which the Hub in Solo, Indonesia, is the center for RBM. This center, the CRBOM, has produced a series of "Small Publications" on RBM that cover many essential aspects of RBM in Asia, and many relevant case studies

[11] Reference is made to the NARBO website which among other things have a proposed "scorecard for RBOs"

- Basin planning
- Water allocation
- Pollution control and environmental flows
- Flood and drought management
- Economic and financial management
- Information management
- Monitoring
- Stakeholder dialogue and participation
- Conflict resolution

The raison d'être and *'niche' for MWD/IUCN in RBM* is the multi-stakeholder dialogue (MSD) aspect for which IUCN has particular competence and experience. The essence of IWRM/RBM is to manage land and water in a holistic, cross-sectoral manner, in close dialogue with relevant stakeholder groups. While IWRM at the national level focuses on policies, strategies and legislation, activities at the local level need to focus on problem identification and solution in close dialogue with relevant stakeholders: government, civil society, private sector, NGOs, academia etc. Both levels are important, and interact in a manner in which *'top-down' meets 'bottom-up'*. The particular contribution of the MWD is to promote and support local dialogue processes, but do so in the context of, and in close coordination with the national regional (trans-boundary) levels.

IWRM and RBM in the Mekong region

Figure 1: Lower Mekong River Basin

The Terms of Reference for the consultancy covers Lao PDR and Thailand only. However, a partial overview of the status of IWRM/RBM for the four countries Cambodia, Laos PDR, Thailand and Vietnam is necessary for several reasons:

- The four countries are all members of the Mekong River Commission (MRC), and within this framework IWRM and RBM is being discussed among them, not only related to the Mekong River basin per se, but also more generally , not least with respect to the overall IWRM framework at national level
- More than 80% of the territory of Cambodia and Lao PDR falls within the Mekong River Basin, so for these countries the MRC framework, including the recently adopted "IWRM-based Basin Development Strategy"[12], is critically important. For Thailand most of the Northeast, and for Vietnam the Central Highlands (Upper Sesan and Srepok) and the Mekong delta, are within the Mekong River Basin
- Parts of the Terms of Reference include recommendations for next steps of the MWD RBM component which will include all four countries and thus build on present status in all four.

Figure 2 below illustrates the horizontal and vertical integration as it applies to the Mekong River Basin and region. The Figure is contained in, and explained, in the Report from the recent (March 2011) International Watershed Management Conference in Chiang Mai ("From Local Watershed Management to Integrated River Basin Management at National and Trans-boundary Levels"), co-convened by MRC and IUCN among others.

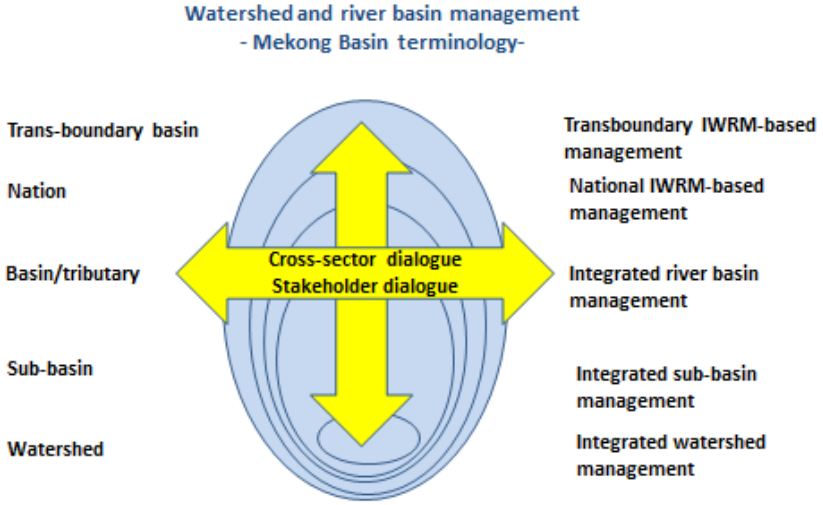

Figure 2: Mekong River Basin: vertical and horizontal integration

[12] Adopted by the MRC Council of Ministers in Ho Chi Minh City in January 2011

The approximate status[13] of IWRM and RBM in the four countries is as described in Table 1:

COUNTRY	IWRM at national level	IWRM at river basin level[14]
Cambodia	• National Water Resources Policy 2004 • Law on Water Resources Management 2007 with specific reference to IWRM • No functioning national Water Apex Body • MOWRAM as ministry responsible for *both* IWRM *and* irrigation/flood control etc.	• Pilot RBM/RBC in 4-P by Cambodia Water Partnership/CNMC • Draft Sub-Decree on RBM, May 2011, now being discussed • Pilot RBC development under MOWRAM being considered
Lao PDR	• National Water Resources Policy, Strategy and Action Plan 2011-2015 approved by LNMC, pending Government approval • National water law under revision • LNMC as national Water Apex Body (dual national/Mekong role) • New MonRE established 2011, replacing WREA as responsible for IWRM[15]	• RBC Decree adopted June 2010 • 5 priority RBCs being developed: Nam Ngum (top priority), NamTheun-Kadin, Xe Bang Fai/Xe Bang Hien, Sekong, Nam Ou
Thailand[16]	• National Water Resources Strategy 2000 • National Water Law being drafted (first draft considered by Parliament) • National Water Resources Committee as Water Apex Body • MonRE/DWR created in 2002 as responsible for IWRM	• 25 RBCs operational, the first starting in 1999 • Role and functions of RBCs possibly being revised with new National Water Law
Vietnam	• National Sector review, leading the National Target Program (NTP) for Water resources, still not adopted • Water Law of 2002 being revised • National Water Resources Commission as Water Apex body	• RBO-type structures established in many basins under MARD (including upper Srepok Council) • RBO Decree adopted in December 2008 (MoNRE) • So far no new RBO/RBC created under the new RBO Decree (Dong Nai just about ready to meet)

Table 1: IWRM at national and basin level in the Mekong region

[13] Time allocation for this consultancy does not allow research into details; hence Table xx is on overview based on personal knowledge

[14] English copies of Vietnam, Lao PDR and Cambodia RBC Decrees are available

[15] Cambodia is the only country in the Mekong region that has not yet separated "water resources management" and "water service provision" (- including the major water user: irrigation)

[16] Reference to DWR Annual Report 207 and 2010

Nam Lik Sub-basin activities and multi-stakeholder workshop

The Nam Lik/Nam Ngum River Basin

The *Nam Ngum River Basin* (NNRB) is one of the most significant and important river basins in Laos. It is the second largest river basin both in terms of annual flow and population (9% of the country population), and the fifth largest in terms of area (7% of Lao PDR). The Nam Ngum's annual flow is 21 billion m^3 which is 14% of the total flow of the Mekong River. This plentiful water resource underpins an unusually large number of industries and communities. Important industries in the basin include hydropower, irrigation, aquaculture, mining, navigation, manufacturing, tourism and recreation. In addition, a reliable and high quality water supply is essential to the health and well-being of the many urban and rural communities as well as for maintaining the biodiversity in the river basin. Overall, the current water and related resources in the NNRB river basin are plentiful and still in good condition, although dry season water shortages and land degradation are challenges locally. There are both future opportunities for development as well as future risks which could degrade water environment conditions or threaten the established rights of existing water users and uses including the environment.

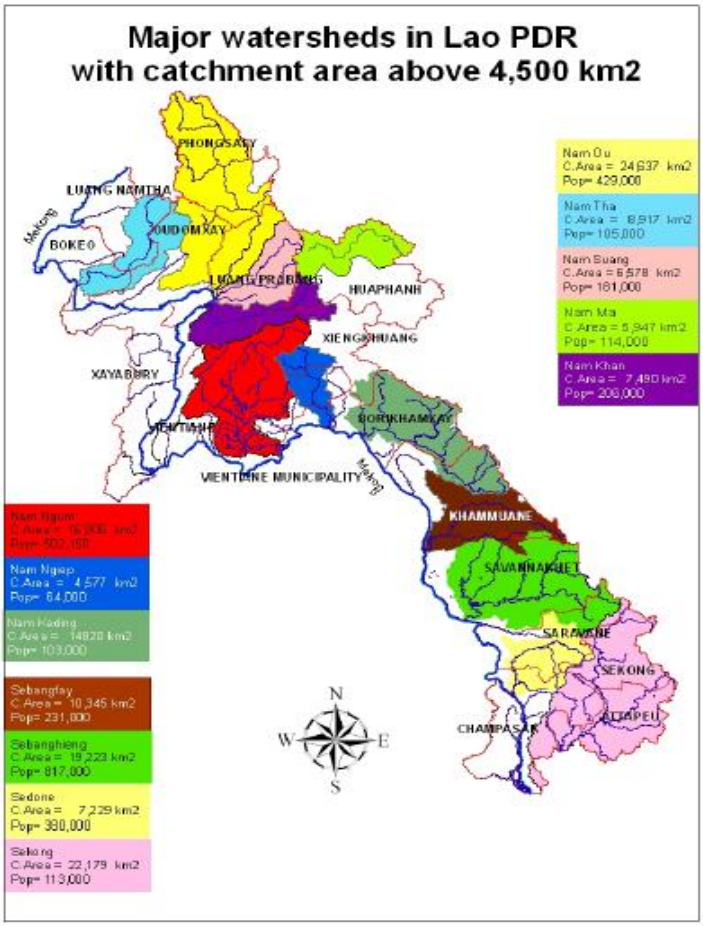

Figure 3: Major river basins in Lao PDR (Nam Ngum in red)

As in the rest of the Mekong region hydropower development tops the water resources agenda. There are currently four hydroelectricity related schemes in or diverting to the Nam Ngum River Basin with a total storage capacity of almost 7,300 million cubic meters (mcm) and an electricity generation capacity of 255 MW. The largest of these dams, Nam Ngum 1, has a storage capacity of around 7,000 mcm. An additional six dams are at various stages of planning and construction and a possible barrage across the lower Nam Ngum River is being investigated. From the 255 MW operational in 2007, projected development in Nam Ngum is estimated at between 1,500 and 1,800 MW of installed hydro-electric generating capacity by 2020, and bringing the total storage volume to more than 17,000 mcm.

Nam Lik Sub-basin is one of the 18 sub-basins which is located in the west part of the Nam Ngum River Basin. It is divided into two parts: Upper Nam Lik (Yotlik) and Lower Nam Lik (Nam Lik). The Nam Song sub-basin (downstream tributary of Nam Lik) is considered a separate sub-basin of the Nam Ngum Basin, see Figure 5. The Nam Song sub-basin profile has been updated in 2009. The Nam Lik sub-basin profile has been updated as part of the present MWD support; reference is made to this document (*attached*) . The area of Upper Nam Lik sub-basin is 1890 sq.km. the majority of which is mountainous and has sloping land and covered by the natural forests. Lower Nam Lik Sub-basin has an area of 1510 sq.km. , mainly mountainous and flat plains along the river. The present Nam Lik Hydropower station with an installed capacity of 100 MW started operating in 2010; addtional hydropowe development downsteram is being being planned.

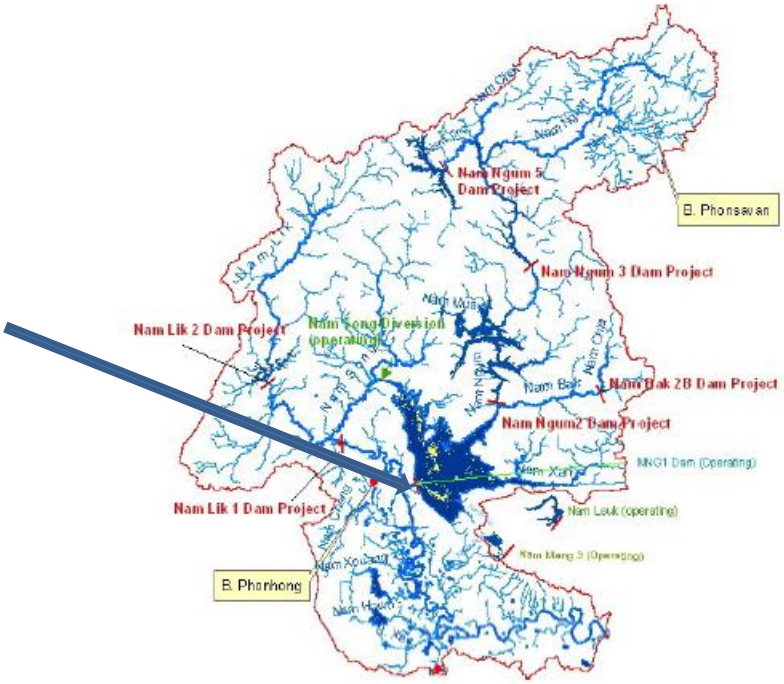

Figure 4: The Nam Ngum River Basin (arrow shows Nam Lik/Nam Ngum confluence)

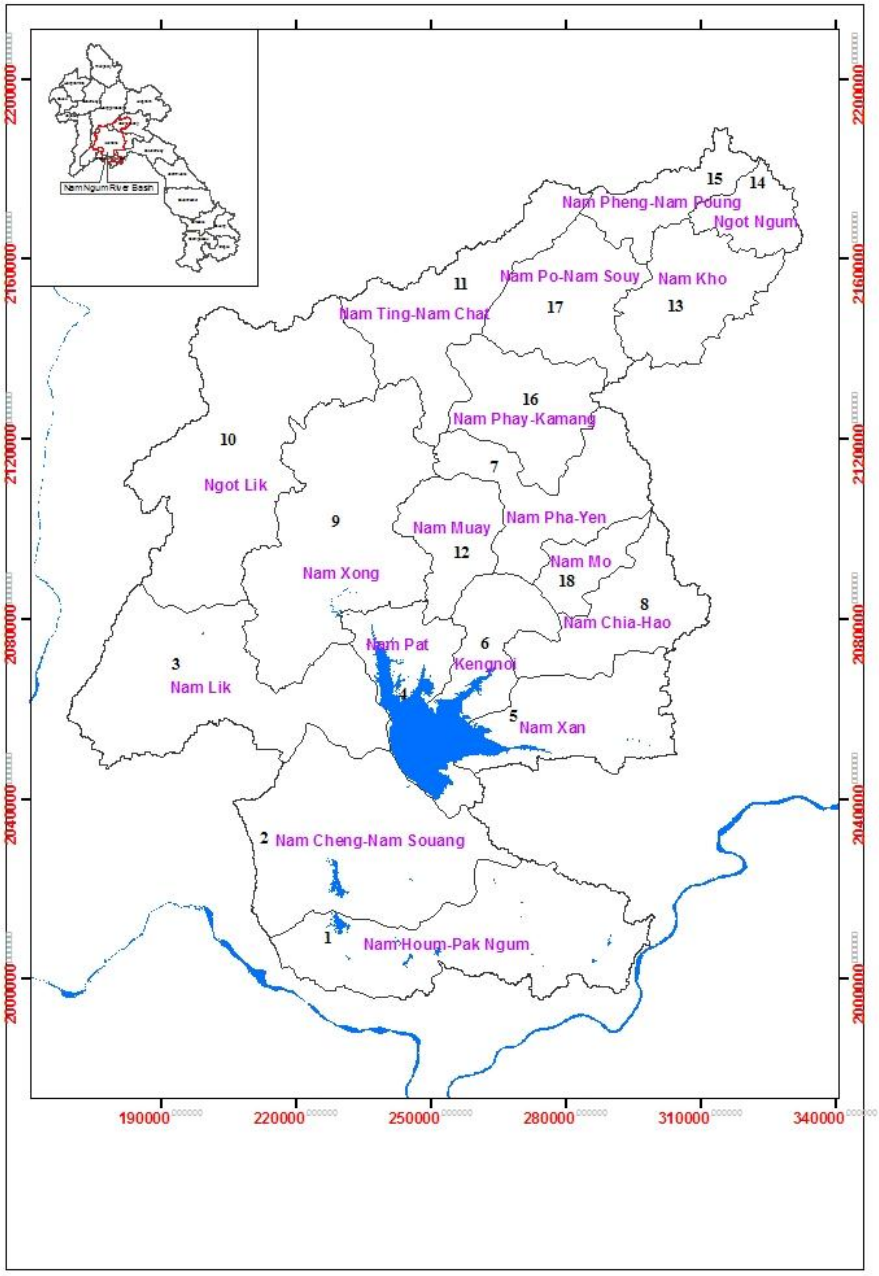

Figure 5: Sub-basins of Nam Ngum River Basin

The population of the Nam Lik sub-basin is some 112,000 people, inclduing the ethnic groups Lao Lum, Kummu, Mong and Mien. There are 146 villages in 7 disticts in the sub-basin , with Feuang District covering almost 50%, and Hinheup 30%, of the area.

River basin planning and management in Nam Lik/Nam Ngum

A document entitled "Nam Ngum River Basin Challenges, approaches and financing" (2010) is attached for a brief overall description of the NNRBC development.

As mentioned above, development of RBM in Nam Ngum has started 'bottom up', focusing on identification of issues and challenges at *sub-basin level* in cooperation with the districts. The rationale for this has been two-fold:

- The Nam Ngum Basin as a whole is too large to manage 'close to people'. Hence the need to break it down to smaller hydrologic units, or sub-basins
- The composition of the NNRBC according the RBC Decree is at province level (provincial governors/vice-governors, heads of province offices of line ministries etc.); districts are not represented on the NNRBC itself. Hence a sub-basin process is required to make the link to the district/local level

As described above the essence of sub-basin development is dialogue across sectors – and with stakeholders – at the local level, i.e. the type of multi-stakeholder dialogue process (MSD) that is the focus of the MWD. The process has started with sub-basins in the two large provinces of the basin: *Nam Song* (with Vang Vieng, itself a tributary to the Nam Lik) in Vientiane Province, and *Nam Kho* in Xiengkuang Province. The *Nam Lik* sub-basin has been high on the priority list, mainly because of new and planned hydropower development and the contribution of Nam Lik to flooding in the Vientiane Plans.

A parallel 'bottom-up'/sub-committee activity has been the development of the *"Nam Ngum Hydropower and Mining Forum"* in an attempt to get the major ministries (MoNRE, MAF, MEM) and the major private developers to the same table to discuss mutual challenges and cooperation. The same developers have been encouraged to participate in meetings and workshops at sub-basin level.

As described in the attached paper, development in the NNRB is far from starting from scratch. The *Nam Ngum River Basin Development Sector Project (NNRBDP)* has been implemented with the assistance of the Asian Development Bank (ADB) and the French Agency for Development (AFD) over several years. It has been an important step in the progressive implementation of IWRM in Lao PDR. The project's long term goal was optimal use of water resources, especially in the NNRB. Two immediate project objectives were (1) to foster and institutionalize IWRM in the mainstream planning process of the Government at the central and provincial levels, and (2) to support investment interventions in relatively degraded parts of the NNRB to provide sustainable livelihood opportunities for poor and ethnic communities.

An important output was an *IWRM Plan for the NNRB*, adopted by the Lao PDR government in 2009. This plan is briefly described and summarized in the attached "Nam Ngum River Basin Challenges, approaches and financing" (2010).

While the various products for the NNRBDP are very useful to underpin further development in the basin, including the NNRB IWRM Plan, they do not adequately reflect local knowledge, priorities and aspirations. Consultations have been held during the NNRBDP, but not sufficiently, and there is a need to 'restart' local consultation processes in order to develop realistic plans for all parts of the NNRB. In fact, consultations at province and district levels have shown that the NNRB IWRM Plan may be a useful overall framework for planning, but that it requires 'field verification' and stronger linkages to local priorities, including the five-year province and district development plans. Hence the contribution by the MWD to do so in the Nam Lik sub-basin, through support to multi-stakeholder dialogues, is both needed and timely.

In keeping with the above, the planning process for NNRB and its sub-basin can be visualized as in Figure 6 below, linking all relevant plans for the development in the basin with stakeholder consultations to produce the new NNBR Plan[17]:

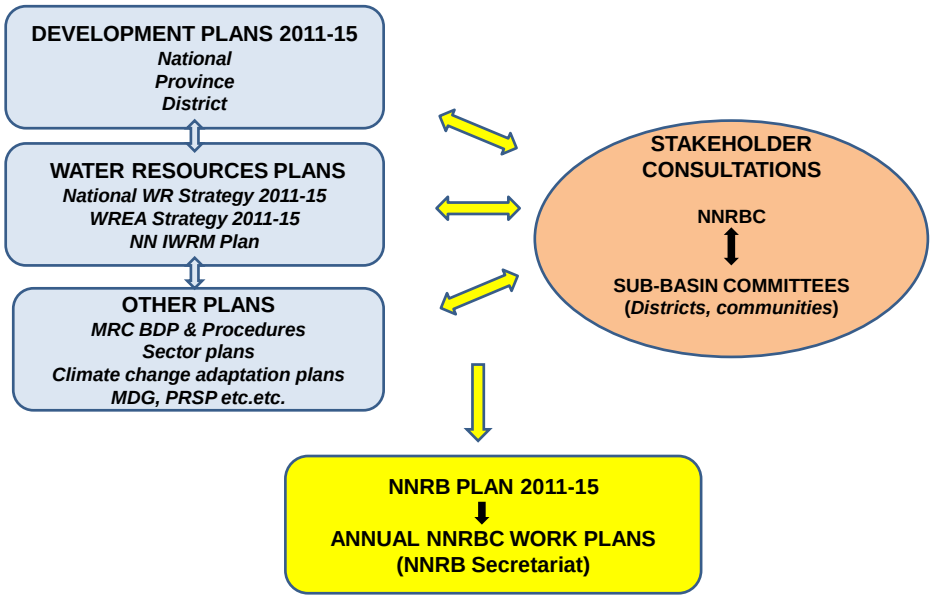

Figure 6: Planning process in Nam Ngum Basin and sub-basins

[17] The current planning period in Lao PDR is 2011-2015. But better late than never …

In the Nam Lik MWD project some[18] of this exercise has been completed, as described below.

This consultancy

Nam Lik is a sub-basin of the Nam Ngum River Basin which in turn is one of the most important tributaries of the Mekong River, contributing 14% of its annual flow. Nam Ngum River Basin is the top 'priority pilot basin' in Lao PDR for implementing the Decree on River Basin Committees, and the Nam Ngum RBC (NNRBC) Secretariat was the first to be established in 2010. The development of the NNRBC has started 'bottom-up' by addressing issues at sub-basin/district level (Nam Song and Nam Kho sub-basins being the first), and the government of Lao PDR and the NNRBC were keen to cooperate with the MWD in this process. This has been the rationale for choosing Nam Lik as the priority sub-basin in Lao PDR for the MWD to address.

Activities have included[19]:

- Assistance to Lao PDR- MWD dialogue and project proposal
- Start-up meetings with IUCN-Laos[20] and the NNRBC Secretariat
- ToR and guidance and supervision of the local consultant, Mr. Khamkeng Chantavongsa, in carrying out his main duties defined as
    - Collection and analysis of existing sub-basin profiles and Nam Ngum IWRM Plan
    - Collection and analysis of the 'water components' of relevant district and province development plans, along with national sector plans etc. affecting Nam Lik
    - Update of the Nam Lik profile, with focus on sub-basin challenges and required actions, based on the above
    - Field visits to the 5 districts, and with relevant other stakeholders, by local consultant and NNRBC staff to supplement a-c above
    - Preparation of first Nam Lik Sub-basin Multi-stakeholder Workshop, held on 19-20 July 2011
- Guidance and supervision of the local consultant and NNRBC staff in the above mentioned development of the updated Nam Lik Profile (collection and analysis of plans, and field visits), and the planning of the Workshop, including participation in relevant meetings in Vientiane
- Participation in the Workshop
- Guidance and review of Workshop Report by the local consultant

The Multi-Stakeholder workshop on the Nam Lik Sub-basin Planning and Management

The workshop

The workshop was held in the District Meeting Hall in Feuang District on 19-20 July 2011. Reference is made to the *attached* (draft) report from the workshop for details, including agenda, presentations, and prioritized issues for each of the districts.

[18] With a short time frame, and a total MWD budget for this phase of Nam Lik of 15,000 USD, only 'first steps' could be taken at this point. However, these have been important first steps.

[19] Time allocation for this activity has been 4 days, including workshop in Feuang District on 20 July

[20] Key IUCN/MWD contact person in Lao PDR has been Mr. Christoph Muziol

The purpose of the workshop was to (1) present and discuss on the issues regarding the Nam Lik Profile based on the data available from the districts located in the Nam Lik sub-basin, and (2) discuss issues related to the implementation of IWRM in the Nam Lik Sub-basin, with participation by multi-stakeholders from 6 districts, including the public, private sectors and communities.

The workshop was chaired by Mr. Chanthanet Boualapha, Director General of DWR and NNRBC Secretariat, and Mr. Khamphouthone Thepsouphon, Acting District Governor of Feuang District

Participants attending this workshop were from the DWR, MWD NWG, provincial offices of the Water Resources and Environment Office (PWREO) and related sectors of Vientiane Province, as well as representatives of the communities and private sector, in total 66 participants.

In addition to presenting the key water resources issues in each of the districts, all districts introduced their solution procedures and activities. However, those activities still require further work and clarification. The representatives of the workshop working group advised that in order to solve the issues of each district, the solution measures should be introduced/applied in parallel with the awareness raising**.**

Summary of issues

As a flavor of the types of issues raised and discussed, a summary is presented as follows (ref. draft meeting report):

- Chemicals used for agricultural activities- herbicides, pesticides and shell killer
- Scattered waste and solid waste
- Slash and burn cultivation practice for rice and rubber trees plantation
- Water quality of Nam Lik river and its tributaries degraded
- Waste water drainage from the industrial factories, houses, mining
- Erosion of Nam Lik river Banks
- Beaches flooded caused 5 tourist sites disappeared
- Mining activities- gravel-sand extraction
- Development of the infrastructures
- Unpredictable water release from the Nam Lik ½ dam
- Destructive fishing methods

Development of Nam Lik Sub-Committee

All district representatives agreed to propose the establishment of a "Nam Lik Sub-Committee" of the NNRBC to be the entity that will help managing the Nam Lik Sub-river Basin. Most of the districts selected Feuang District to be the Coordination Center for this committee. While the development of the sub-committee was considered necessary for managing the Nam Lik sub-river basin, more discussion is required on how to develop such a committee.

As part of the further development it was agreed that districts need to collect additional information regarding the administration, socio- economic data etc. by filling forms developed of this purposes. The filled forms and data sheets will be collected by NNRBC Secretariat Team and the local consultant.

Next Steps for the Nam Lik IWRM planning and project proposals
It was proposed to prepare the IWRM Planning of Nam Lik sub-basin by the districts. In order to carry out these activities, the districts need to collect more information regarding their issues and then formulate their district's IWRM Plans.

It was also proposed to prepare project proposals regarding the district's plans. However, districts request the Nam Ngum River Basin Committee Secretariat (NNRBCS) to provide the project proposal format, as well as training courses on the project proposal writing.

Next steps for the Nam Lik sub-committee development
It was agreed to prepare for the Nam Lik Sub-Committee development by districts authorities and line agencies in collaboration with NNRBCS.

Detailed discussion with the districts located in the Nam Lik sub-basin needs to be conducted in order to develop the sub- committee, such as the number of members, mandates, secretariat, coordination center, secretariat staff etc.

Proposed methodology for RBC assessment in Thailand

IWRM and RBM in Thailand
The status of IWRM and RBM in Thailand has been described in a report to MWD entitled "Implementing IWRM: based on Thailand's experience" by Dr. Apichart Anukularmphai. This report describes the development of IWRM in Thailand over the last 15 years, at the national and river basin levels; describes the Chao-Phraya River and Yom River Basin case studies; and concludes with some important lessons learned and recommendations.

At the *national level* a National Water Vision and National Water Resources Policy were adopted in 2000; the Ministry of Natural Resources and Environment (MonRE), with the DWR was established in 2002[21], and the drafting of a National Water Resources Law was commissioned in 2004. This law is still (July 2011) awaiting government endorsement which with the recent change of government may require some re-drafting and result in further delays.

[21] In 2007 DWR is an organization with 2,700 persons, divided almost equally between 10 central 'Bureaus' and 10 Regional Offices (- now reduced to 9)

At the *river basin level* three pilot RBCs were proposed by the National Water Resources Committee (NWRC[22]) in 1999. After a period with 29 "sub-committees" for each of the 25 major river basins of the country, a system of 25 RBCs was appointed by the NWRC in 2007. The RBCs are composed by three groups of members: government, 'stakeholders' and resource persons (academia , NGOs). They are chaired by a Provincial Governor, and the Regional Offices of the DWR act as secretariat. Each of these RBCs in turn operates through a system of sub-basin committees, often quite many[23].

Four of the 25 Thai RBCs fall within the Mekong River Basin: Nam Chi (04) Nam Mun (05), Mekong North (02NE) and Mekong North (02N) , see *attached map*.

Overall the RBCs are responsible for water resources management coordination and regulation of the river basin, as well as the budgetary system for water resource projects in the basin. Hence, water sector project and budgets requests coming from various agencies must first be approved by the RBC before final processing.

The authority and duties of the RBCs are the following 10[24]:

1. To submit to the NWRC[25] comments on policies, plans, projects, and solutions to any problems or obstacles to the development, utilization, conservation, and any other necessary implementation relating to water resources management as well as any pertinent action of the concerned agencies in river basins
2. To formulate water resources management plans[26]
3. To coordinate the formulation of action plans by relevant agencies in river basins in accordance with water resources management plans under (2)
4. To prioritize water allocation and specify water requirements as well as equitable and efficient water allocation measures
5. To monitor and evaluate performance of agencies relevant to water resources in river basins
6. To compile statistics, data, comments, and recommendation regarding water resources management, development and conservation as well as solutions to water shortage, floods, and water quality problems
7. To conciliate and solve problems
8. To coordinate with other RBCs
9. To conduct public relations, receive comments, and promote understanding among the general public of the performance of work procedure of the RBC
10. To appoint working groups with specific duties and responsibilities

[22] NWRC is the national 'apex body' for water resources management in Thailand
[23] As an example, the Nam Chi, itself a sub-basin of in the larger Chi-Mun River Basin, is divided into 20 sub-basins, 17 of which have sub-basin committees
[24] Copied from the Executive Summary of the 2008 World Bank evaluation of the Thai RBCs
[25] Note that the RBCs report to the NWRC which generally is seen as quite weak
[26] In the evaluation cited below over half of the RBCs are discontent with the performance on this important duty

This consultancy

The national Working Group of the MWD wishes to contribute the experiences and lessons of Thailand's River Basin Committees (RBC) to Component 2 of the MWD based on an assessment of the experiences and lessons of the 25 Thai RBCs over the past 10 years. The purpose of the present consultancy has been to propose a methodology for how to do this.

Activities have included[27]

- Review of existing material, including the report "Implementing IWRM: based on Thailand's experience", prepared for the MWD in 2010 by the President of Thailand Water Resources Association, Dr. Apichart Anukularmphai, and reports from the Thai Department of Water Resources (DWR)[28], and the Executive Summary of the World Bank RBC capacity assessment conducted in 2008[29].
- Visit to and discussion with the Nam Chi RBC in Khon Kaen
- Discussions in Bangkok with Director in the Thai Department of Water Resources (DWR): Ms. Pakawan Chufamanee (Mekong Division, Thai National Mekong Committee, TNMC), Ms. Chadaporn Unphapanee (Participation Promotion Division) and Dr. Apichart
- Consultation with the APWF Knowledge Hub (CRBOM) in Solo[30]
- Reporting

Current assessment of the Thai RBC performance

The 25 RBCs in Thailand have developed and performed quite differently, but no overall assessment is available to document this. The World Bank in 2008 conducted a capacity evaluation of the RBCs (as referenced above) through questionnaires and workshops, exploring how the RBCs had conducted the 10 duties listed above.

On *strengths* of the RBCs the workshops concluded (quote from Executive Summary):

- The diversity of RBCs in knowledge, ability, wisdom, experience and occupation
- The RBC has knowledge and understands the basin , ecosystem and has divers information on water resources
- Coordinate and encourage public participation
- Members of the RBC have quality and sacrifice to solve the basin problems

On the *weaknesses* of the RBCs the workshops concluded:

[27] Time allocation for this activity has been 3 days, including visit to Bangkok 12-13 July

[28] A report (in Thai) describing the RBC system and each of the 25 RBCs – a copy provided to IUCN Bangkok – as well as the DWR Annual Report 2007 (the DWR Annual Report 2010 promised but still pending)

[29] The full, still draft, report has been promised, but not yet provided by DWR. The executive Summary (hard copy only) was given in copy to the IUCN Bangkok Office; text from this is used below in describing the RBC system and their authority and duties

[30] Chief Technical Adviser Dr. Tue Kell Nielsen

- Working separately, meetings infrequently, change of representatives of government officials repeatedly, unsupported rules and top-down command
- Information is deficient because of lacking the information management system to use in management and monitoring
- Members of the RBC lack understanding in RBCs authority and duty
- Insufficient expertise and knowledge of resource and basin management
- No Water Resources Regional Offices in the area
- Inadequate public relation because of underprovided budget
- The implementation of authority is absent

With the RBCs chaired by provincial governors the structure is felt top-down, conflicting with the notion to encourage the public to ne more involved in IWRM.

A few quotes from the conclusion in the Executive Summary ::

- "In conclusion, the RBCs were very much having problems in fulfilling their task in the past …"
- "Such problems of unfulfilling duties are originated from infrequently meeting …."
- "Another obstacle is the budget …"

In consultations with *DWR officials* by the Consultant *three main problems* were pointed out:

- Too much interference from government in the work of the RBCs
- RBCs have too little responsibility and no real power
- Projects proposed by RBCs are 'not good enough' to raise the required budget[31]

The lessons drawn by DWR are that improvements are required to ..

- Support people to develop themselves
- Reduce % of government representatives in the RBCs
- Increase non-government representation on the NWRC[32]

The present water law is seen as too weak to properly empower the RBCs, and a number of improvements have been proposed by DWR in the drafting process which has included more than 10 public hearings. The first draft went through the NWRC and Cabinet to the Parliament that requested a number of changes. Following the recent elections, the second draft will need to go through the new Cabinet before next hearing in the parliament.

[31] The Hang Som Bor sub-basin of Nam Chi reported in Khon Kaen that the vision/strategic plan for the sub-basin contained 560 projects, of which 3 had been implemented. Hence the generation of long and unrealistic 'wish lists' was seen as a major problem

[32] Currently 21 government representatives, plus 9 RBC representatives

Proposed methodology for assessment by MWD

The mentioned capacity evaluation by the World Bank is still "draft", and not used pro-actively in moving the agenda forward. Judging from the Executive Summary it provides useful information, but an analysis of the full document, and its reception and use by DWR/NWRC, needs to be undertaken in order to interpret its value and usefulness properly.

An up-to-date and participatory assessment, supported by the MWD, could serve two important functions:

- *Internally*, in Thailand, to support dialogue between the RBCs themselves, and with the government, in the drafting of the new Water Law, and in internal improvements within DWR and the RBCs
- *Externally*, among countries in the region, and within the MRC system, to draw lessons from the experience of Thailand as the most advanced country in the region in trying to implement IWRM at the river basin level

In designing the assessment it is suggested to seek inspiration from experiences in similar exercises in the region. Two levels of assessment, applied in the region, can be considered:

- A performance *screening*
- A full NARBO performance *benchmarking*.

The first, 'lighter option' is described in the *attached* "Working paper 8: Assessment of river basin organizations" produced under the ADB Regional Technical Assistance RETA 6470 "Managing water in Asia's rivers basins: charting the progress and facilitating investment[33]". This document contains a list of aspects to be considered in a screening, under the general headings of:

- Resource management
- Institutions and regulation
- Supplies and services
- Aquatic environment
- Knowledge base

The second, more substantial benchmarking is described in the attached "CRBOM Small Publication Series No. 15: RBO benchmarking". This publication is based on a NARBO benchmarking exercise that was conducted in 2006-2008 for 10 Asian RBOs: one in Sri Lanka, one in The Philippines, one in Viet Nam, and seven in Indonesia. The benchmarking used a set of 14 performance indicators – see *Table 2* - and was conducted with participation by external peers, for the sake of consistency and knowledge-sharing.

The RBO benchmarking is a structured assessment of performance relative to *'best practices',* considering the stated responsibilities and operation of the RBOs, and made for the sake of improving their performance. This type of benchmarking is now applied as a standard practice for the 26 Indonesian RBOs.

[33] Pilot river basins under this TA are Baitarani in Orissa, India; the 4-P area in Cambodia; the Bengawan Solo Basin in Indonesia; Cebu in the Philippines; and Vu Gia -Thu Bon in Vietnam

Appendix A in the above mentioned “Small Publication” contains an elaborated version of the Table, including proposed “indicators values (1-4)” for each of the stated indicators.

Critical Performance Area (CPA)	*Objectives*	*Indicators*
A Mission	1. IWRM	Formal RBO status RBO governance
B Stakeholders	1. Customer satisfaction	Customer involvement
		Customer feedback
	2. Environmental conditions	Environmental audits
	3. Livelihoods	Basin livelihoods
C Learning & growth	1. Human resources	Human resources development
	2. Infrastructure	Technical development
	3. System development	Organizational development
D Internal business processes	1. Planning	Planning maturity
	2. Resource management	Water allocation
	3. Information management	Data sharing
E Finance	1. Financial independence	Cost recovery
	2. Financial performance	financial efficiency

Table 2: Benchmark indicators applied in Indonesia

It is proposed that the more extensive benchmarking approach be considered for Thailand, building on the experience already gained in the region, particularly in Indonesia, and possibly in collaboration the RBM Knowledge Hub CRBOM in Indonesia. CRBOM plans a *Seminar 19-24 September 2011 in Solo, Indonesia*, at which the experiences with benchmarking of the 26 Indonesian RBOs will be discussed; Thai participation (representation from the MWD NWG, DWR and selected RBCs) could be considered, to study how Indonesian experience could inspire a similar Thai exercise.

The above table, and the details contained in Appendix A of the attached “Small Publication” should be discussed with respect to its relevance for assessing the Thai RBCs and adapted appropriately for this purpose. The checklist for the lighter screening option can be used to supplement this analysis.

Proposed next steps

It is proposed that Assessment Team appointed by the Thai NWG

- Approaches *Dr. Apichart* as Adviser to support the assessment
- Forms an *RBC Assessment Working Group* composed of
  - the Assessment Team Leader
  - the 9 RBC representatives in the NWRC (one from each of the 9 DWR Regions)
  - a DWR Focal Point
  - a Thai NWG Focal Point
  - Dr. Apichart
- Considers participation in the above mentioned *CRBOM Seminar* on Indonesian RBC benchmarking experiences
- Studies the above mentioned *DWR material*, including the DWR Annual Report 2010, and clarifies outstanding questions with DWR
- Studies the *World Bank draft RBC capacity evaluation report*, and discusses it with DWR
- Based on the above, and the material presented above and attached, prepares a *Draft Questionnaire* for distribution to the 25 RBCs
- Discusses the draft questionnaire with the Working Group and finalizes it
- Distributes the *Final Questionnaire* to the 25 RBCs and DWR
- Supplements the questionnaire survey with *field visits* to selected RBCs[34]
- Analyses the completed questionnaire, and discusses the analysis with DWR and the 9 RBC representatives in NWRC
- Presents the analysis at a *National RBC Workshop*, properly linked to the ongoing national process to draft the new Water Law, and with representatives from other Mekong countries invited

Assessment of MWD role/niche

Stakeholders in IWRM and RBM

The key to operationalizing and implementing IWRM principles at all levels from village to national is to involve stakeholders through *informed and meaningful consultations*. "Stakeholders" in the context of IWRM include government (all relevant line agencies and authorities at both national, provincial and district levels), civil society organizations (such as water user groups), local NGOs, academia (universities and other R&D institutions) and the private sector.

The latter is an increasingly important actor group in the Mekong region at different scales: private developers engaging in *large-scale* hydropower, mining, plantation and irrigation operations; *medium scale* water users such as water utility operators, water-consuming industries, eco-conscious industries with strong CSR policies, tourism, and eco-tourism, operators etc.; and *small scale* enterprises in the water industry. All of these stakeholders have concerns related to IWRM: water quantity, water quality, protection from the effects of extremes (floods and droughts, possibly aggravated by climate change), all of which require access to information, dialogue fora and conflict resolution mechanisms.

[34] Upper Ping Basin was suggested as appropriate by DWR Director Chadaporn.

While engaging stakeholders at national level and local (from district to village) levels is not new, doing so at the river basin/sub-basin level is a new challenge in Cambodia and Lao PDR. Cross-sectoral dialogue, and active and early involvement of concerned stakeholders, is the key to effective RBM and RBC development, and mechanisms for doing so need to be developed. Vietnam has some experience from the river basin councils created in several basins by MARD, but face a challenge in transferring these to operate under the new MoNRE-driven RBC Decree. Thailand has more than 10 years of experience of RBC development, but lessons learned from that need to identified and shared. With the increasing role of the private sector the mix of stakeholders at this level is different from what has usually been the case at the national and local levels.

While Thailand has a long democratic tradition which has made it relatively 'easy' to include various stakeholder groups in the RBC development, Cambodia, Lao PDR and Vietnam face new challenges in addressing multi-stakeholder dialogue in the up-coming RBCs and other RBM processes. The RBC Decrees adopted in Lao PDR and Vietnam do not include any appreciable representation of civil society and private sector in the committee structure per se, so other ways of engaging these groups need to be found. International/regional experience and expertise in this respect is called for to assist in the endeavor.

MWD role/niche

With its traditional concern and focus on the environment, ecosystems and livelihoods, IUCN is in the forefront among international/regional actors in supporting multi-stakeholder dialogues and processes. Although these processes operate differently in dialogues concerning ecosystems, wetlands etc., a lot of basic mechanisms and approaches are the same and can be transferred to the river basin arena.

One such mechanism is that of convening "national working groups" that include key actors across sectors. The *MWD NWGs* have already proven the strength of that experience.

Specifically at the river basin level IUCN has developed a useful record. Through the previous *"Water and Nature initiative" (WANI)* IUCN demonstrated its ability to engage stakeholders at the river basin level world-wide, including on the Huong (Perfume) River in Vietnam, and that experience is now a valuable asset for the MWD's IWRM/RBM Component.

In addition IUCN is among the world's *leading organizations in supporting IWRM,* both conceptually through e.g. the series FLOW, VALUE, CHANGE, RULE, NEGOTIATE etc., and through its work on the ground in many river basins world-wide. In that arena IUCN has a useful tradition for networking and cooperating with other organizations that support countries in IWRM development, such as the Global Water Partnership (GWP), World Wide Fund for Nature (WWF) and others, so making the link to these other actors is easy for IUCN.

Specifically in Asia and the Mekong region IUCN has recently worked closely with ADB on IWRM, at the basin level by compiling a large number of Asian case studies in a book, and at the generic level by working with ADB on water security indicators. IUCN co-convened the recent International Watershed Management Conference

in Chiang Mai which specifically addressed the vertical and horizontal integration in IWRM in the Mekong region.

"IUCN" is a very large organization and although some parts of it have developed the above mentioned expertise that may not automatically apply to all local actors in the Mekong region[35]. Hence IUCN faces a challenge in internal knowledge management and communication in order to tap into the 'corporate strength' of the organization.

Recommendations for next steps of the MWD/RBC component

Thailand

The section above addressing the assessment for the Thai RBC experience is a first and immediate 'next step' for the MWD in Thailand.

However, having completed that, and hopefully executed a successful National RBC Seminar to present this assessment and make recommendations for its use in national legislation and other actions, a number of next steps *within Thailand* could be considered for MWD, such as (1) support to RBCs to improve multi-stakeholder dialogue, including bringing in the 'new actors' in the dialogue processes, and (2) support for mutual learning between the 25 RBCs.

Lao PDR

As for Thailand the first phase MWD Component 2 activity in Nam Lik was merely a 'first step' for this sub-basin in developing an operational sub-basin entity (sub-basin committee or other structure) , and the first multi-stakeholder workshop developed a series of concrete recommendations to be taken forward to a next phase of MWD support for Nam Lik.

Nam Ngum/Nam Lik is the first 'pilot RBC basin' in Lao PDR. Five basins have been identified for RBC development in the period 2011-2015 (Nam Ngum, Nam Theun-Kadin, Xe Bang Fai/Xe Bang Hien[36], Nam Ou[37] and Sekong), all of which need to develop both *'top-down'* by establishing the RBC and *'bottom-up'* through sub-basin level multi-stakeholder dialogues. The experience from Nam Lik will be most valuable for the latter, and in a second phase MWD could add significant value by supporting learning between these basins, as well as direct support to specific sub-basins.

Due to the possible linkage to the 3S development (see below) the *Upper Sekong Basin in Lao PDR* may be an obvious candidate for future MWD support

[35] A case in point is the WANI experience in the Vietnam. None of the present IUCN staff in the country have the corporate memory' to make use of that experience, which may in fact already be lost

[36] Nam Theun-Kadin, Xe Bang Fai/Xe Bang Hien are supported by the World Bank

[37] A cascade of 6 hydropower dams is planned for Nam Ou, to be developed by a Chinese developer

Cambodia

Cambodia has just drafted a Sub-Decree for RBCs[38], and is about to receive support from ADB in improving IWRM at both national level, including establishing an operational Water Apex Body, and river basin level, including pilot RBC development[39].

So far IUCN/MWD has not engaged with MOWRAM, and a first step would be to discuss possible support with this ministry. As mentioned for Lao PDR support for multi-stakeholder dialogue in one of the *lower 3S basins* (probably Sekong and/or Srepok) might be a possible starting point.

Another possible starting point could be to support the MOWRAM *pilot sub-basin in the Tonle Sap Basin*, hence linking to MWD activity in Tonle Sap.

Vietnam

Following discussions with the MWD NWG in Ho Chi Minh City in January 2011 it has been decided to proposed Upper Srepok sub-basin as a pilot basin for MWD ('proposed' because the selection needs to be agreed with MoNRE). A Srepok river basin 'council' already exists[40], developed with support from MARD, and support to Srepok would assist MoNRE in operationalizing the 2008 RBC Decree (#120) in this basin. At the same time it would contribute to linking MWD activity and IUCN support, funded by SDC, to the overall 3S Basin (see below). A first step would be agreement with and cooperation with MoNRE at central level to proceed.[41]

As mentioned above IUCN has been supporting RBM in the Huong River as part of WANI. The experience from this activity should be included as part of the basis of future MWD activity in IWRM/RBM in Vietnam.

The 3S (Sekong – Sesan – Srepok) Basin

With financial support from the Swiss SDC IUCN is about to start a program to develop RBCs in the 3S basin, both nationally (Upper and Lower Sekong, Sesan and Srepok) and trans-boundary between them individually and/or for the entire 3S Basin. As suggested above such development needs to combine 'top-down' in dialogue with national authorities, and 'bottom-up' in dialogue with stakeholders and local authorities, at both levels cross-sectoral and multi-stakeholder. IUCN may not be able to 'go all the way' in the current SDC supported program, but a substantial contribution can be made in paving the way through proper multi-stakeholder dialogues at both levels.

[38] The 4-P RBM development, including the4-P RBC, has been a 'project' by Cambodia Water Partnership/CNMC, not 'mainstreamed' in a systematic MOWRAM-driven RBM process

[39] In the ADB preparatory process and dialogue with MOWRAM *Stung Sen River basin* (a sub-basin in the Tonle Sap Basin) has been identified as a possible first pilot basin

[40] With support from the then Mekong Secretariat in Bangkok(MRCs predecessor) the RBM process in Upper Srepok started in 1993 with the formulation of a Water Action Plan for the basin

[41] The key person to contact would be MoNRE Vice Minister Dr. Lai

ADB has supported 3S development though a regional Technical Assistance (RETA) 2008-2010 which led to a proposed Road map for 3S development.[42]

It is noted that the *MRC is also involved* in discussions in the 3S Basin which is entirely within the Mekong River Basin, and the only tributary of the Mekong Basin which itself is trans-boundary (Sekong between Lao PDR, Cambodia and a small part of Vietnam; Sesan and Srepok between Vietnam and Cambodia).

Close collaboration and coordination between the IUCN executed MWD IWRM/RBM activities and the 3S 'RBC development' is strongly recommended, including coordination with the MRC.

Regional cooperation

Operationalization of IWRM principles at the river basin level - moving from "RBM" to Integrated River Basin Management ("IRBM") – tops the water resources management agenda in all the four countries of the Mekong region. Some RBM activity has been carried out in all countries for decades, some of it supported by the MRC: Vietnam has established a number of river basin entities under MARD since the mid 1990's; Thailand started the RBC process in 1999, and accelerated it with the creation of MoNRE/DWR in 2002; Lao PDR started with the RBC Decree in 2010; and Cambodia is about to take the same route with the new draft RBC Sub-Decree.

Clearly, the four countries will benefit from sharing experiences in this process, both *internally* between their own emerging RBCs, within the *Mekong region* between the four countries, with *Asia-Pacific* through APWF, NARBO, ADB etc. and *globally* through GWP, IUCN and others.

MWD can contribute at two levels: *nationally* in supporting internal experience sharing, and *regionally* between the four countries within the Mekong region. The latter should be considered in cooperation and dialogue with

- *MRC*: in the IWRM-based Basin Development Strategy MRC proposes an output to "strengthen basin management processes through a network of national WRM agencies and RBOs and enhanced stakeholder participation"
- *NARBO*: some but not all RBCs in the Mekong region are members of NARBO through which they share experiences with other RBBO/RBCs. A "NARBO Mekong Chapter" could be considered as a mechanism for sub-regional sharing which in the broader NARBO context would also benefit from sharing with other Asian members, as well as with the APWF RBM Water Knowledge Hub in Solo (CRBOM)
- The emerging *"RBM Center" for ASEAN in Thailand*, now being formed in cooperation between the Thai Water Resources Association[43], Chiang Mai university, Paya University and Rajapek University

TJC, 30.08.11

[42] Working Paper "3S's Challenge and Roadmap" by Eric Tilman, July 2011
[43] Dr. Apichart, President of TWRA, is the 'champion' in this initiative

REFERENCES

Three types of references support this Draft Report

1. **Annexes** attached to Final Report - available on USB stick or CD
2. Documents proposed to be made available to IUCN through a **Dropbox** (large files)
3. **Links** to websites

PRELMINARY LIST OF REFERENCES	
General material (global, Asia-Pacific)	
Global Water Partnership IWRM and RBM, including IWRM ToolBox	Websites
Handbook on RBM (Istanbul 2009) from INOBO/GWO and UNESCO	
CRBOM Small Publications series, Solo, Indonesia	
CRBOM Small Publication15: "RBO Benchmarking"	ANNEX 1
ADB RETA 6470 Working Paper 8: "Assessment of River Basin Organizations"	ANNEX 2
Lao PDR	
DRAFT National Water Resources Policy, Strategy an Action Plan 2011-2015	Dropbox
Nam Ngum IWRM Plan 2009	Dropbox
DRAFT Report on Nam Lik Multi-stakeholder Workshop 19-20 July (- with attachments)	ANNEX 3
DRAFT Nam Lik Profile	ANNEX 4
RBC Decree, June 2010	ANNEX 5
Thailand	
Map of 25 river basins	ANNEX 6
"Implementing IWRM: based on Thailand's experience", prepared for the MWD in 2010 by Dr. Apichart Anukularmphai	MWD document
World Bank RBC Capacity Evaluation 2008: Executive Summary	Promised by DWR
Report on Thai RBCs, 2009: Thai version with TJC, cover page with IUCN Bangkok	
DWR Annual Report 2007	
World Bank RBC Capacity Evaluation 2008: Full report	
DWR Annual Report 2010	
Cambodia	
DRAFT RBC Sub-Decree	ANNEX 7
Vietnam	
RBO Decree # 120, December 2008	ANNEX 8
3S	
Working Paper "3S's Challenge and Roadmap" by Eric Tilman, July 2011	MWD document