



CHAPTER III

INSTITUTIONAL CHANGES WITHIN THE MEKONG RIVER BASIN

3.1 Introduction

This section first describes the physical, political, and economic geography that characterizes the Mekong River Basin. It then provides a historical analysis of transboundary cooperation within the Lower Mekong Basin, beginning with the Mekong Committee. It then analyzes the Mekong Agreement and the Mekong River Commission, looking in depth at where the MRC is currently focusing its work and attention.

3.2 Characteristics of the Mekong Basin

3.2.1 Geography

The Mekong River is the twelfth longest river in the world, the eight largest in terms of flow, and 21st largest in terms of river basin area (MRC, 2003, p.3). The 4,800-kilometer long Mekong (referred to as the Lancang in China) originates from the Tanghla Shan Mountains in eastern Tibet, meanders through Yunnan province in southwest China, crosses into Burma, forms the border between Thailand and Laos, feeds into the Tonle Sap Great Lake in Cambodia, and divides into nine tributaries at the Mekong delta in Vietnam before emptying into the South China Sea. The drainage area of the Mekong River basin is 795,000 km², and the river has an annual flow of approximately 475,000 MCM/year (MRC, 2003, p. 3).

The river holds different levels of importance for each riparian according to the amount of water each state contributes, and the extent each state lies in the watershed. For instance, the Mekong River forms an important part of Yunnan province, but only a

minor part of China as a whole. It crosses only a portion of Myanmar; however, the river forms a large of portion of the Thai-Laos border. While only the northeastern portion of Thailand rests in the basin, almost 80% of the Laos and Cambodian territory falls within it (MRC, 2003, p. 4). Lastly, only a small portion of Vietnam lies within the basin, but this is crucial in terms of agriculture and aquaculture production. Further, states contribute unevenly to the mainstream runoff, with each contributing different amounts to the overall flow of the river, and in different seasons. As an annual average, Laos contributes the highest proportion of runoff with roughly 35%, followed by Thailand and Vietnam (18%), China (16%), Cambodia (11%), and Burma (2%) (MRC, 2003, p.7). However, it is estimated that China contributes 40 per cent of the flow in the dry season.

Table 2: Percentage of flow and catchment area for riparian states.

	China	Myanmar	Lao PDR	Thailand	Cambodia	Vietnam	Total Basin
Area (km ²)	165,000	24,000	202,000	184,000	155,000	65,000	795,000
Catchment as % of country	2	4	97	36	86	20	NA
% of MRB	21	3	25	23	20	8	100
Average flow (m ³ /sec)	2,410	300	5,270	2,560	2,860	1,660	15,060
Rainfall as % of total in basin	16	2	35	18	18	11	100

Note. From *State of the Basin Report*, by MRC, 2003. Copyright by the Mekong River Commission Secretariat, Phnom Penh.

One important feature of the Mekong River is the annual flood “pulse” of the river, which rises and falls with the wet and dry season (Sneddon, 2005; Osborne, 2004; Phillips, 2006). The river is fed during the wet season by melting snow in the upper reaches of the Mekong River in China. The annual flood waters carry along important silt and other nutrients for fertile agriculture, while washing away harmful “build-ups” like alkaloids and saline (Sneddon, 2005; Osborne, 2004). The delta areas and flood plains along the Mekong serve as important spawning ground for over 90 percent of the species of fish found in the river (MRC, 2003, p. 18). As a result, the flood pulse is an

important feature for over 40 million people dependent on the fisheries for their livelihood (MRC, 2003, p. 101). The importance of the flood pulse is particularly apparent in the case of Cambodia's Great Lake, where waters from the Tonle Sap inundate the area, expanding the lake to as much as 13,000 square kilometers wide, and almost 10 meters in depth (Osborne 2004, p. 4). The course is reversed during the dry season, with water naturally flowing from the Great Lake through the Tonle Sap River.

3.2.2 Needs of the River

In comparison to other international river basins, the Mekong River Basin is relatively undeveloped due to decades of conflict in the region, as well as an inhospitable terrain for largescale development. The river loses 1,780m in elevation as it flows from Tibet to the South China Sea, limiting agriculture and irrigation development for much of its course. For instance, China's 2,161 kilometer stretch of the of the river passes through a series of gorges and steep elevation drops, making it difficult terrain for agriculture or human settlement, but ideal for hydropower development. Tapping this potential, China has already built two dams on the mainstream, with one near completion, and as many as twelve dams in the planning stages. China is not the only country capitalizing on the elevation changes of the river. Whereas Myanmar uses the river for small-scale hydropower development, for Laos, the Mekong represents a key to alleviate poverty through the export of energy derived from hydropower development. Laos already has five dams on various tributaries of the Mekong, most notably Nam Ngum built in 1965 and Nam Theun II, now under construction (Sneddon, 2005). Vietnam also has also built hydropower dams on its tributaries, most notably on the Se San River. Thailand has used the river for interbasin water transfers to irrigate its water parched Korat Plateau in northeastern Thailand, where it also has a large agricultural sector, as well as to transfer water into the Chao Praya Basin.

Vietnam and Cambodia rely on the river's hydrological regime and ecological system for fishing and agriculture. Vietnam relies on the river for over 50 per cent of its

rice production located in the Mekong delta, while the Tonle Sap provides 70 per cent of the protein intake for 75% of the Cambodian population (MRC, 2003, p. 101). It is estimated that nearly eight out of ten who live in the basin live in rural areas and rely on the river's ecological system for their livelihood, either through fishing, agriculture, or river bank cultivation (MRC, 2003, p. 101). All the states rely on the river for navigation and trade, but to varying degrees (See table 3).

Table 3: Diverging interests in the Mekong River Basin

Country	% of Downstream Flows	Varying Interests
Laos	35%	Hydropower for Export Commodity; Navigation
China (Yunnan Province)	16%	Hydropower for Domestic Energy Supply; Export Commodity; Navigation
Myanmar	2%	Small-scale Hydropower; Navigation
Thailand	18%	Irrigation; Hydropower; Navigation
Cambodia	18%	Fisheries; Tonle Sap
Vietnam	1%	Agriculture; Aquaculture from Delta; Hydropower for Domestic Supply

3.2.3 Political and Economic Structure

Over 70 million people within the Mekong basin – and 55 million in the Lower Mekong River Basin alone – are dependent on the water's resources for their livelihood (MRC, 2003, p. 11; Osborne, 2004, p. 2). The population of the lower Mekong basin is expected to reach 90 million by 2025, due to population booms in Cambodia and Laos,

and general population expansion in Thailand and Vietnam (Osborne, 2004, p. 2). All of the basin countries, except perhaps Myanmar, have a market-oriented economy, though at varying stages. In per capita GDP terms, Thailand is by far the strongest of the basin economies, with Laos and Cambodia the poorest. As these economies grow, so too will the energy demands. It is estimated that the energy demands of the Lower Mekong countries will quadruple between the years 2000-2020 (MRC, 2003, p. 210). Politically, Thailand is also the most progressive in terms of civil society engagement where well informed civil society networks have emerged that link NGOs, epistemic communities, scientists, and practitioners throughout the region. Groups like TERRA and IUCN, for instance, have protested against the construction of large-scale dams, and have advocated for a new contract that advocate participation and transparency in water-related development projects. China, Myanmar, Laos, Cambodia, and Vietnam all still restrict civil society activity to varying degrees.

Despite economic growth in many of the basin countries, poverty rates within the basin remain high, with one third of the basin's population living on less than \$2 per day. For instance, 35 % of the population in Cambodia below the poverty line, while 16% of Laos, Vietnam, and Thailand's population within the basin falling below the poverty line (Osborne, 2004). The situation is similar for upstream countries. In Yunnan province, one of China's poorest provinces, half of the population earns \$80 a year (Makonnen, 2005).

3.3 Cooperation over the Mekong's Resources and the Emergence of the Mekong Committee

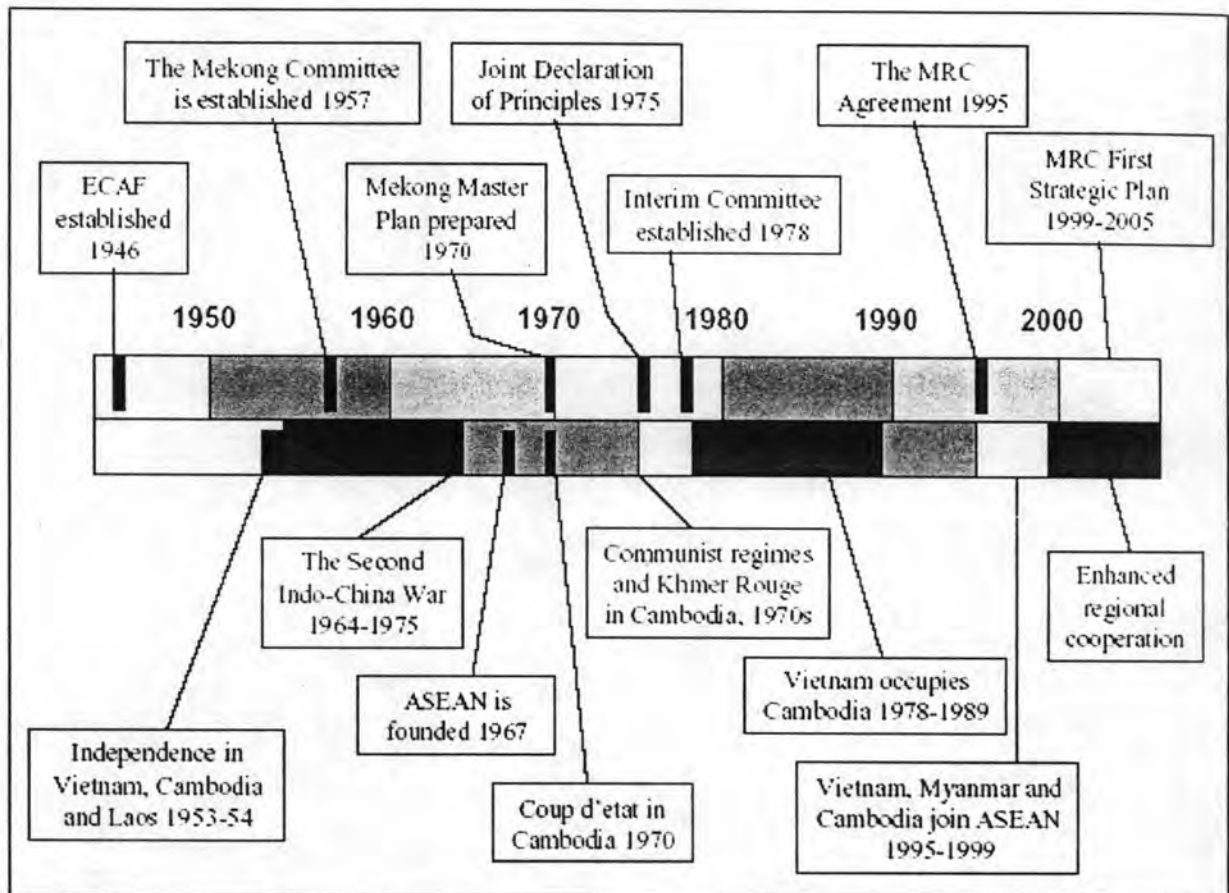
The preceding paragraphs characterize a growing basin, with multiple and divergent needs emerging that potentially conflict in terms of utilization of the Mekong's water resources. Given these demands, cooperation has taken on new meaning in the region. Early stages of cooperation for the Lower Mekong states were largely driven by a

need for economic development and to create a forum for diplomacy amidst politically tumultuous times. Geopolitics in the form of Cold War ideologies served to suppress regional tensions by converging interests around exploiting the river's natural resources through largescale infrastructure projects. As China was on the other side of the Iron Curtain, it was never invited to partake in basin-wide planning. The impetus for cooperation over water changed in the 1990s with the end of the Cold War, and the emergence of new interests amongst the Lower Mekong states. China was invited to become a Member of the MRC in 1995, but was not allowed to partake in the negotiations leading up to the Agreement due to objections raised by Vietnam. (This will be addressed later in the chapter.) With this as a backdrop, the next sections look into the history of cooperation within the Lower Mekong Basin.

3.3.1 The Mekong Committee

Cooperation as a catalyst for political cooperation corresponds to Type IV cooperation in Sadoff and Grey's cooperation continuum. Here, cooperation is mostly centered towards creating amity and diplomatic space for a potential spill-over effect into other political arenas. During the 1940s and 1950s, the Mekong Basin underwent political changes with the decolonization and subsequent entrance of three capitalist states in Vietnam, Cambodia, and Laos (Thailand was also a capitalist country). This coincided with the emergence of Mao Zedong and the Communist party in China in 1949. Cooperation over water, especially economic development, was seen as one area in which states in the basin could negotiate amidst a politically tense environment. This division between capitalism and communist countries would drive the extent of basin-wide cooperation (See Figure 3).

Figure 3: Timeline of important hydropolitical events.



Note. From “Trans-boundary Water Cooperation as a Tool for Conflict Prevention and for Broader Benefit-sharing”, by D. Phillips et al., 2006. Copyright Swedish Ministry of Foreign Affairs.

The United Nations Economic Commission for Asia and the Far East (ECAFE) was created in 1947 in order to assist in the economic development of the newly decolonized states. In 1952, ECAFE drafted a study on the hydroelectric and irrigation potential of the Mekong basin. The US Bureau of Reclamation also drafted a detailed study of the basin, which advocated for the joint management of the river. Despite early disagreements between the two bodies, a joint development plan was agreed upon. The tenets of the proposal noted the possibilities of hydropower development, irrigation expansion, flood mitigation, and navigation that could occur through joint management

of the river (Jacobs, 2002; Makim, 2002). Agreeing in principle to this vision, Thailand, Vietnam, Laos, and Cambodia formed the Committee for the Coordination of Investigations of the Lower Mekong Basin (known as the Mekong Committee) on 17 September 1957 at the behest of ECAFE, the U.S. Bureau of Reclamation, and other regional donors.

Though ostensibly, the Mekong Committee was established to provide technical support and guidance regarding the Mekong river resources, it served more as a theater for Cold War politics, and a tool to secure support for the western campaign against Communist insurgents in Vietnam, and elsewhere in the region. The US government, for instance, invested heavily in 1950s in an effort to lock-in cooperation between basin states as a way to prevent further incursion of Communism into the region.

The Mekong Committee was to “promote, coordinate, supervise, and control water resource development projects in the lower Mekong basin” and to examine possible avenues for cooperation in hydroelectric power development, irrigation, flood control, drainage, navigation improvement, watershed management, and sharing water supply. (MRC, 1995a, p. 5). This approach was reflected in the Indicative Basin Plan (1970) and the Joint Declaration (1975), which identified the specific development arrangements for the regime. The Indicative Basin Plan, for instance, called for “a ‘cascade’ of dams consisting of seven major mainstream dams, and between 100 and 200 tributary ones, turning the Mekong into a fully regulated river” (Makim, 2002, p. 8). The Joint Declaration of Principles for Utilization of the Waters of the Lower Mekong Basin Agreement viewed the water resources as a single system requiring that the resources be shared on a “reasonable and equitable” basis and that all projects require prior consultation and approval by all four riparian states. (Articles IV and V) This essentially gave states a veto over development projects considered as a threat to their own use of the resources.

Relations between the lower Mekong countries became strained after Communist victories in Laos, Cambodia, and Vietnam in 1975, which threatened to end Mekong cooperation. Though Cambodia's Khmer Rouge refused to continue cooperating with the Mekong Committee, the remaining members sustained at least technical cooperation with the creation of the Mekong Interim Committee (IMC) in 1978 (Nakayama, 2002). However, political tensions relegated cooperation from 1978 to 1991 to mostly technical areas and data collection on basin hydrology, geology, flood forecasting, and the socio-economic aspects of water resource development (Jacobs, 2002). This period was characterized by violent conflicts and border wars within the basin. China's support for the Khmer Rouge government contributed to tension between China and Vietnam, which ultimately ended with Vietnam invading Cambodia, and a border war in 1979 between the two states (Hirsch, 1996). Likewise, Thailand and Laos engaged in a violent conflict in 1988 over border demarcation issues.

The political climate within the region offered little space for cooperation towards the joint management the river. The weakened state of the IMC is but one reflection of this. Unlike the Mekong Committee, under the IMC rules, the Mekong Committee did not have the authority to regulate water resources planning, and states were not obligated to consult with the IMC on related development projects (Browder, 2000; Makim, 2002). Tensions between Member states, especially Vietnam and Thailand, grew as a result, with information on projects restricted between the states.

The end of the Cold War in 1991 allowed for new attention towards exploiting the relatively untouched hydroelectric and irrigation potential of the Mekong, and for calls towards economic reformation in the form of Vietnam's 'Doi Moi' and Thailand's Prime Minister Chatichai's turning "battlefields into a market places" (Hirsch, 1996; Browder, 2000). With the fall of the Khmer Rouge, Cambodia, previously outside the IMC structure, asked to re-inaugurate the Mekong Committee in 1991. China ended its support for the Khmer Rouge as a result. However, despite newfound interest in reviving the Mekong spirit, the 1990s marked a period of tension as states proceeded with projects

unilaterally. With the artificial Cold War-induced consensus on water management removed, specific water use and allocation issues emerged. Tension between Thailand and Vietnam over the principle of equitable use threatened yet again to end cooperation. Broadly speaking, Vietnam advocated maintaining the stricter standard for development projects like that of the Joint Committee, which gave each state a right of veto against potentially harmful projects. Thailand, on the other hand, promoted a broader standard that would allow it to engage in hydropower development and interbasin transfers on the main-stem. Thailand's position was to do away with the previous veto; others, most notably Vietnam, disagreed. Thailand also wanted to open the agreement to Myanmar and China. In 1992, Thailand suggested an informal meeting with all six riparian states to look into the possibility of basin-wide cooperation. Vietnam, however, boycotted the March meeting in Chiang Mai, Thailand on the grounds that China would shift the balance of power to the upper Mekong states (Browder, 2000). Also, as late as 1989, Vietnam and China were engaged in a bloody border war, which may have influenced Vietnam's reluctance to allow China into the process. According to Browder, the meetings were unproductive (Browder, 2000).

After a series of intense negotiations, Cambodia, Laos, Thailand, and Vietnam agreed to replace the Mekong Committee and the Interim Mekong Committee with the 1995 Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin (known as the Mekong Agreement) and the Protocol for the Establishment and Commencement of the Mekong River Commission. It is notable that the MRC's predecessor, the Mekong Committee, sustained cooperation in the area of infrastructure development during tumultuous times in the region. Water was used as a tool to create conditions of amity between states with potential opposing ideological agendas.

The context in which the MRC exists is vastly different from that of its predecessor. All six riparian states are in various stages of developing market-oriented economies, and of economic development in general. Indeed, some of the poorest

communities are found within the Mekong Basin. As economies expand, greater attention has been afforded to developing the river. Despite diverging interests within the Lower Mekong Basin, states were able to agree to a common vision for the joint management of the river. This vision expands cooperation to issues of sustainable development. In reference to Sadoff and Grey's continuum of cooperation, the four LMB countries opted to continue joint management of the river, focusing not only on economic development, but also on the social and ecological sustainability of the river and the basin at large. The MRC seeks to balance between Type I ecological sustainability, and Type II exploitation of natural resources for economic development. Whereas in the past, economic development was the priority, new awareness to the impacts of development on the river motivated MRC states to include a holistic view of the river. The following sections analyze the Mekong River Commission in depth, first looking into the legal instrument that establishes the rights and responsibilities of cooperation, and then turning to the management vision of the basin.

3.4 The 1995 Mekong Agreement

The 1995 Agreement differs significantly from the 1957 and 1975 agreements in its approach to basin management. Whereas earlier forms of cooperation concerned mostly water allocation, the new MRC Agreement expanded the reach of the committee to include issues involving irrigation, hydropower development, flood control, fisheries, timber floating, and recreation and tourism (Article 1, MRC). Article 2 highlights the emphasis placed on joint development of the basin, and calls for the development of a basin development plan to "identify, categorize and prioritize the projects and programs to seek assistance for and to implement at the basin level" while Article 3 stresses the need to ensure that development projects do not negatively harm the environmental and ecological balance of the basin (Article 3, See Appendix 1).

Like its predecessor, the Mekong Agreement is centered on the concepts of sovereignty and territorial integrity (Article 4) and does not preclude its members from

having other bilateral or multilateral agreements so long as they do not contravene the provisions proscribed under the Agreement (Article 38). Unlike its predecessor, it leaves room for China and Myanmar to someday become a party to the Agreement (Article 39). It is considered a framework agreement in that provisions within the Agreement do not set forth specific details, for instance on water utilization, that would bind members to set river conditions. Two of the more contentious provisions are in Articles 5 (reasonable and equitable use) and 6 (maintenance of flows on the mainstream). Whereas the Joint Declaration considered the entire river as a unitary system, and required members to seek approval from the Committee for development projects, Article 5 draws a distinction between projects along tributaries and the main stem. It also provides for two levels of approval, an easier one (notification) for intra-basin diversions during the wet season, and a more restrictive one (prior consultation, which requires a meeting of the Joint Committee), for intra-basin development during the dry season, or inter-basin diversions. However, for the dry season, “any inter-basin diversion project shall be agreed upon by the Joint Committee through a specific agreement for each project prior to any proposed diversion” (Article 5, See Appendix 1). The Agreement stipulates that interbasin diversions could proceed subject to prior consultation in the event of a surplus quantity of water “in excess of the proposed uses of all parties in any dry season, verified and unanimously confirmed as such by the Joint Committee” (Article 5, See Appendix 1).

In November 2002, Member states adopted the “Preliminary Procedures for Notification, Prior Consultation, and Agreement”. Currently, notification goes through the MRC’s Chief Executive Officer based in the Secretariat, which is then distributed to other countries and then on to the Joint Committee. The MRCS does not undertake impact assessments on the proposed development project upon its own initiative, but can be required to do so if requested by the Joint Committee. The lack of formal guidelines for notification procedures, as well as a limited mandate for the MRCS to assess the impact of developments, has led to a number of problems, including most notably loss of life when, for example, Vietnam carried out flushing exercises with its Yali Falls dam

on the Se San river, and the subsequent rush of water killed many downstream and caused severe economic damage (Dore, 2004).

Finally, the Agreement specifies in Article 6 that minimum and maximum flows are to be protected, in order to sustain the ecological balance of the river and the natural flow regime going into the Tonle Sap. Despite these broad principles, no volumetric allocations were defined within the Agreement, leaving negotiations over the technical aspects for a later date. These issues are addressed in Article 26, which serves as an exit strategy for countries to agree on the principles, and leave the more difficult details for another time. It calls on the Joint Committee to develop Rules for Water Utilization and Inter-Basin Diversions as well as procedures for notification. On June 27, 2006, Ministers of the four countries signed an agreement on the procedures concerning the maintenance of flows, which “clarify the related provisions of the Mekong Agreement through further defining the objectives, principles and scope of their application, as well as the roles and responsibilities required of the various parties for their implementation, including the MRC Council, the MRC Joint Committee, the National Mekong Committees and the MRC Secretariat” (Thai Press Reports, 2006).

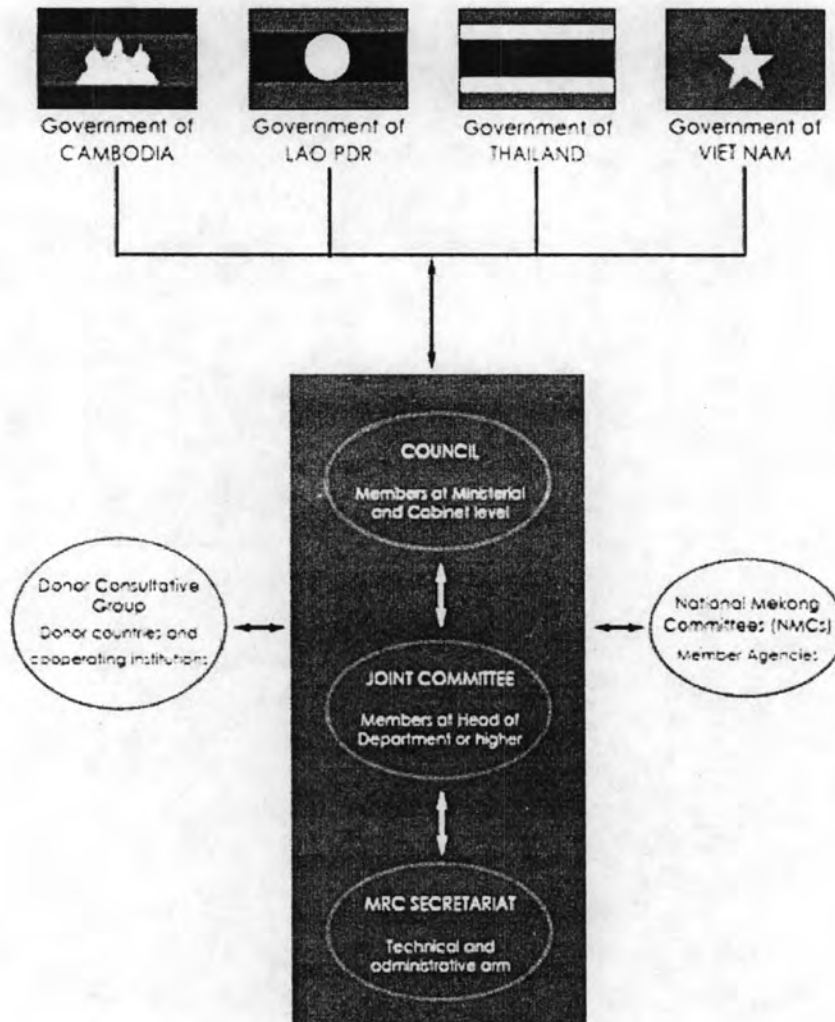
3.5 The Mekong River Commission

The MRC is the institutional mechanism mandated to implement the provisions specified under the Agreement. Unlike its two predecessors, the Mekong River Commission is an independent, inter-governmental body, which does not operate under the auspices of the UNECAFE (now called UNESCAP). The MRC is comprised of three permanent bodies -- the Council, the joint committee, and the Secretariat – and is supported by National Mekong Committees (See Figure 4). The Council, which consists of one member from each riparian state at the Ministerial and Cabinet level, meets yearly to develop policies and make decisions (upon unanimous consent) regarding the sustainable development of basin and the implementation of the Agreement’s provisions.

The Joint Committee, composed of one member from each riparian state at no less than Head of Department level (Article 21) meets regularly twice a year to, among other things, “implement the policies and decisions of the Council; formulate the basin development plan, carryout studies assessing the state of the environment and ecological balance of the Mekong River Basin; and to propose for Water Utilization and minimum flows as specified under Article 5 and 6” (MRC, 2006) The Secretariat serves as the technical and administrative arm of the MRC, and falls under the supervision of the Joint Committee. It formulates the annual work program and helps with the creation of the Strategic Plan.



Figure 4: Organizational Structure of MRC.



Note. From the Mekong River Commission website, www.mrcmekong.org, 2006. Copyright by the Mekong River Commission Secretariat, Vientiane, Laos.

The Secretariat is headed by a non-riparian chief executive officer who is supported by about 150 foreign and riparian technical staff. MRC riparian staff are assigned to the Secretariat for no more than two three-year terms based on the terms within Article 33; there are no such stipulations for foreign staff. International experts work alongside riparian staff in order to share expertise and transfer knowledge.

However, since riparian staff must cycle out every six years, the capacity for knowledge transfer is limited.

The National Mekong Committees (NMCs) help coordinate MRC programs at the national level by providing a link between the Secretariat and the various ministries and line agencies that are mandated to implement MRC policies within each riparian country. The Mekong Agreement does not call on nation states to codify provisions within the agreement into their own national laws. Therefore, NMCs and their respective line agencies, implement the MRC provisions to the best of their ability. Due to economic and political disparities, some states are better able to carry out the provisions of the Mekong Agreement than others. Further, the Mekong Agreement does not bestow the MRC Secretariat any regulatory capacity to ensure that provisions of the agreements are upheld. According to an official within the MRC, the former CEO Joern Kristensen attempted to make the MRC rules more binding by having states codify a few important rules within their own national laws. By doing so, over time, the provisions of the Mekong Agreement and the MRC would have more prominence within the region, as principles were included within each country's national laws. Each riparian state is in various stages of developing their own national water laws. National water law is in a nascent stage for all the Member states. Thailand, for instance, is in the process of codifying its national water law, while Vietnam and Cambodia have weak water laws. Water issues have not reached a high level of importance within the Member states; therefore, adopting international standards may also not hold much importance. Though the MRC has advocated harmonizing national laws towards including MRC principles, the issue has not been carried through.

3.6 MRC Mission and Strategic Direction

The Mekong River Commission's mission is to: "To promote and coordinate sustainable management and development of water and related resources for the countries' mutual benefit and the people's well-being by implementing strategic programs and activities and providing scientific information and policy advice" (MRC, 2006). It carries out its direction for transboundary management of the lower Mekong resources through annual work programs, and most importantly, through cyclical Strategic Plans.

The MRC's approach has changed considerably since its early formation. This is partly the MRC's attempt to keep up with the social, economic, and environmental demands of a rapidly changing basin, as well as a reflection of the leadership of the MRC Secretariat. For instance, before 2000, the MRC Secretariat under the leadership of Yasunobu Matoba followed a sector-based approach, which focused on the execution of smaller-scale on-the-ground projects (MRC, 2001b). The 2001 Strategic Plan, however, moved the MRC's direction towards a more basin-wide and holistic approach, emphasizing the science-based monitoring and management of the basin's resources in order to "cope with political, economic and social changes in the basin", and shifting from a project-based approach to a broader programs approach, distinguishing programs into three thematic areas: core, sector, and support (MRC, 2001b, p.1).

The most recent MRC Strategic Plan (2006-2010) proposes an even more consolidated approach. It proposes to replace the previous distinction of core, sector, support with a "sector and cross-cutting programs matrix that feeds into the basin development planning process" (MRC, 2005, 18). This management scheme reflects a pro-poor approach supported by the member states, which calls for the "more effective use of the Mekong's water and related resources to alleviate poverty while protecting the environment" (MRC, 2005, p. 21). Further, it advocates for increase food security through more efficient land and water development, including hydropower development

and better planning for irrigation projects (O. Cogels, personal communications, July 6, 2006).

According to the CEO of MRC, Dr. Olivier Cogels, this change is driven by different dynamics within the Mekong region, for instance the countries' wish for more development and need for external funding. Dr. Cogels has openly called this era the "country ownership era", stressing that the MRCS will be the conduit to carryout countries' wishes. He views the MRCS as "not just a knowledge center; the information it gathers can also be used to help countries" (O. Cogels, personal communications, July 6, 2006).

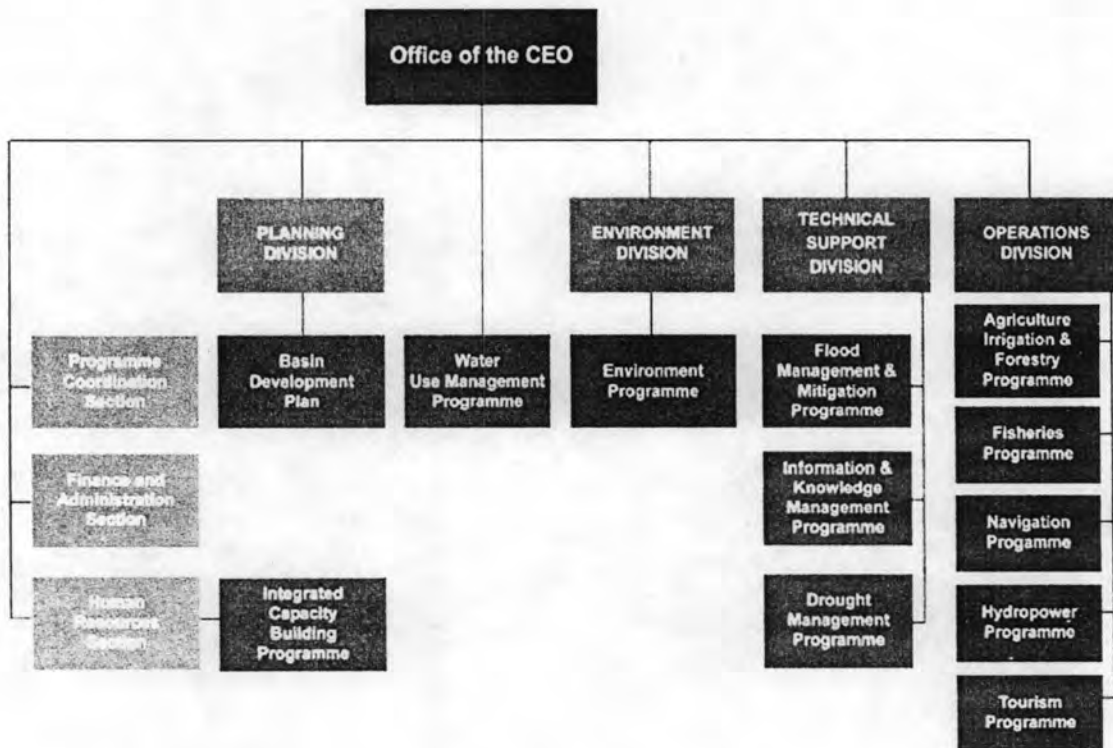
However, NGOs and members of the donor community have raised concern that, in an interest to help countries and perhaps compete with other regional actors like the ADB's GMS initiative, the MRC is moving away from its original mandate and too much into the area of investment promotion (P. Hirsch, personal communications, August 8, 2006). Indeed, earlier drafts of the 2006-2010 strategic plan emphasized this as a possible new direction for the MRC. A former member of the Cambodian delegation to the MRC said that it seems the Strategic Plan is bringing the MRC back full circle to the times of the Mekong Committee, when countries advocated big development projects (P. Sokhem, personal communications, July 18, 2006). Due to donor objections, mostly but not exclusively from Denmark, the MRC has backed away from the "investment facilitator" approach; however, some argue that this still remains the vision of the CEO (P. Hirsch, personal communications, August 8, 2006).

3.7 MRC Work Program

The MRC structures its work through three core programs – the Basin Development Plan (based on the original 1970 Basin Indicative Plan), the Water Utilization Program (as specified under Article 26), and the Environment Program

(addresses sustainable development issues) (See figure 5). They are supported by five sector programs, and one support program centered on capacity-building. Each program has within it various sub-projects, activities, and objectives that are in line with the 1995 Agreement, and the MRC's Mission. These programs are in various stages of development based on the political will to carry them through, and the level of funding available. Further, program activities are often modified according to "emerging knowledge and shifting priorities, as well as to the needs and perceptions of the key stakeholders" (MRC, 2005, p. 17). Data collection for the work programs is carried out by international consultants and individual line agencies from member countries; the MRC Secretariat serves as the "depository".

Figure 5: Organizational Structure of Mekong River Commission Secretariat.



Note. From the Mekong River Commission website, www.mrcmekong.org, 2006. Copyright by the Mekong River Commission Secretariat, Vientiane, Laos

3.7.1 Basin Development Plan

The Basin Development Plan (BDP) operationalizes the MRC's goal towards trying to create positive-sum outcomes within the basin. It is the main program to carry out Integrated Water Resource Management (IWRM) or the MRC's vision for water governance. IWRM is "a process, which promotes the coordinated development and management of water, land and related resources in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems" (MRC, 2005, p. 2). IWRM was adopted by the MRC in December 2005 as an approach for developing and managing water and related resources. Using the principles of IWRM as described in the MRC's Strategic Direction, the BDP "aims to achieve a balance between socio-economic development and environmental concerns and to create a framework for development with emphasis and preference on joint and/or basinwide projects through the formulation of national and basin-wide planning scenarios and modelling of the water needs of the Lower Mekong Basin" (MRC, 2005, p. 21). The first phase of the BDP began in October 2001 and was to last three years, but was extended 22 months in order to fulfill some of the key outputs and prepare for phase II (MRC, 2005). It seeks to create a region-wide plan for the utilization and allocation of the available water resources (Phillips, 2006). In attempting to optimize benefits derived from the river, the BDP has created 10 sub-areas defined by the basin catchment areas in the lower Mekong basin, and has created development scenarios that take into account the present water availability, water demand, and possible future intervention (Phillips, 2006). The BDP's main purpose is to identify and prioritize projects by establishing a project database for the entire Mekong region. This database system lists portfolio projects (long list) and priority projects (short list) that are then approved by the Joint Committee. Currently, there are over 400 projects listed. The BDP team is in the process of shortlisting these to send to the Joint Committee for review (T, Vu, personal communications, July 5, 2006).

3.7.2 The Water Utilization Program and the Environment Program

The MRC's Water Utilization Program was initiated in 2000 as a follow-up to key provisions provided under Article 26. The WUP comprises four components. The most important include a computerised database system known as the Decision Support Framework (DSF), which provides support to the BDP in basin planning and impact assessment activities; drafting of Procedures for Water Utilisation (Article 26); and the Environmental and Transboundary Impact Analysis, which provides technical support for the procedures on flow maintenance and water quality (MRC, 2005).

The DSF database compiles information provided by the National Mekong Committees and relevant line agencies on terrain elevation, land use, land cover, river tributaries and watersheds, crops planted, physical data (such as river cross sections), rainfall, evaporation, temperature, discharges and water levels (MRC, 2005). This data feeds into three modelling devices to demonstrate the possible transboundary impacts of various development and environmental scenarios. The hydrological model uses data on the quantity of runoff water and water coming from tributaries to determine how development projects and climatic changes may impact the hydrological regime. The water management model looks at water needs for irrigation and hydropower development during certain times of the year. Finally, the hydraulic model focuses on salinity and erosion issues for the the flood plains, delta areas, and Tonle Sap system.

Despite nearly seven years of negotiation on establishing rules for the maintenance of flows and on water quality, little progress has been achieved. The slow pace towards agreeing on rules for the maintenance of flows and water quality reflect the difficulty in balancing sovereignty issues and national interests with basin-wide interests. The MRC Member States all have different uses for the river, and thus, push for different baselines. Those advocating development projects may be interested in establishing a baseline of basic minimum flows, while those wishing to sustain current flows may argue

for baselines that reflect natural average flows. In June 2006, Ministers agreed on a framework to proceed with rules and procedures on the maintenance and flows on the mainstream. China's dam construction and the possible impact it may have on the flow regime may delay the negotiation process even further.

The WUP also works closely with the Environment Program, which is structured by the 1995 Agreement, and is in charge of monitoring the ecological and environmental maintenance of the basin (W. Sukraroeck, personal communications, July 5, 2006). Together, the WUP and EP maintain the Integrated Basin Flow Management (IBFM) to assess basin flows and evaluation of environmental, social, and economic uses of the water. The IBFM was originally funded by the World Bank, but is now funded by different donors.

The EP is also in the process of establishing an Indicative Basin Report Card on environmental conditions, which draws on results of basin-wide monitoring and assessments, and a Transboundary Environmental Impact Assessment System. The EP and the MRC spent three years just to draft the procedures for Member states to agree on together regarding the Environmental Impact Assessment (W. Sukraroeck, personal communications, July 5, 2006). This is an "example of trying to come up with duties that balance between promotion of development and the ecological and environmental health of the river" (W. Sukraroeck, personal communications, July 5, 2006).

3.7.3 Other Programs

Other programs include the Flood Management and Mitigation Program, which is still in the formative phase and has a new center in Cambodia; the Fisheries Program; the Hydropower Program developed in 2004 to help "strengthen member countries' capacity for hydropower by identifying the best options for the Lower Mekong Basin and creating recommendation criteria for prioritization"; and the Navigation Program, which aims to promote the free navigation of the Mekong's waters (MRC, 2005, p.23).

The MRC, through the Information and Knowledge Management Program (IKMP), has developed a database of hydrological information derived from hydrometeorological measuring stations placed along the Mekong (including two in China), which monitor water levels for flood forecasting. The MRC provides the equipment in full or in part while specific line agencies within each country are charged with collecting the data to be provided to the MRC (Chaiyuth, S., personal communications, Jun18, 2006).

In theory, data from the WUP models and hydrometeorological monitoring stations help inform the basin development planning process, but more importantly, help provide accurate accounts of the state of the basin. However, the capacity to conduct thorough and accurate data research is only as strong as the nation states themselves. Each state has its own social and economic structure that places constraints on the ability to conduct data research, and digest the information. Thailand and Vietnam are technically and financially better able to conduct accurate research than Laos and Cambodia.

However, even so, having better capacity does not necessarily guarantee accurate data. Indeed, according to one source within the MRC, data is often altered to paint the river status in a more favorable light (Chaiyuth, S., personal communications, Jun18, 2006). Data is not vetted for accuracy due to political dynamics. Further, in the case of China, hydrological information is only provided during certain times of the year. [This will be addressed further in the next chapter.] The models predicting the impacts of various development scenarios are only as accurate as the data inputs forming them. This calls into question the ability to accurately predict and inform development practices in the basin.

Further complicating the process is that the Joint Committee and the Council “rarely make full use of the data” because of “political constraints” (P. Sokhem, personal communication, July 18, 2006). These bodies are comprised of representatives that may

represent only a small dimension of the country's national interest. For instance, Vietnam is represented by the Ministry of Agriculture and Rural Development, and not the Ministry of Environmental Resources. The people and department comprising the MRC represent the dominant interests at a certain economic and political context. Those representing their countries in this framework are not necessarily representing all the interests of that country, or in perpetuity. Further, those representing their countries may not be the most knowledgeable in terms of technical aspects of water resource management. The picture being painted, therefore, is one of either inaccurate information or a lack of access to accurate information, which frame decisions that may or may not promote the overall mission of the MRC.

3.8 The MRC and Institutional Effectiveness

Though the Mekong River Commission (MRC) has the institutional legacy and legal mandate to be a driving force behind transboundary water governance – it is the only intergovernmental body legally mandated to govern shared water resources in the region – the MRC has suffered intense criticism in its ten-year history as it has not yet been able to carry out many of its functions due to a lack of organizational capacity, a lack of political will amongst its Members towards IWRM, and a weak mandate to enforce rules under the Mekong Agreement (Bakker, 1999). Though the MRC has been relatively successful in establishing technical knowledge of the basin in terms of modelling development scenarios and monitoring the ecological health of the river, it has not been able to move forward in regards to the consolidation of political interests of the Member states.

In many regards, the MRC and MRC-related issues are peripheral to other interests and mainstreaming MRC policies within national sector strategies has not yet been a priority for the MRC Member states. For instance, though Member states are required to implement MRC programs within their national legislation, rarely are the

MRC rules or policies referred to or included within the administrative agencies responsible for water resource management (Hirsh, 2006). For instance, water governance in Thailand is addressed by many agencies, including the Department of Water Resources, the Royal Irrigation Department, and the National Water Resources Committee, and is generally fragmented and uncoordinated (Hirsch, 2006). Vietnam, however, through its National Mekong Committee, has done more to integrate transboundary issues within its own national agenda. The NMC was instrumental in assisting the Vietnamese Prime Minister to “to concretize cooperation plans with member countries of the Mekong River Commission and protect Vietnam’s interests in exploiting water and other resources in the Mekong Basin” (Hirsch, 2006, p. 28). Laos still suffers from fragmented water policies, despite establishing a concrete water law in 1996 known as the Water Resources Law, 1996. Cambodia, on the other hand, has yet to codify water management into their national legislation. Cambodia’s National Mekong Committee is fragmented as authority is distributed amongst ten line agencies. The lack of capacity and integration of IWRM at the sectoral and national level may inhibit broader implementation of MRC policies.

One reason for this is a reluctance on the part of the MRC Members to cede aspects of sovereignty to joint management of the basin’s resources. Ostrom says that each state cooperates in terms of their relative economic strength, perceptions of economic opportunity or costs from development, geographic location, and security considerations (Ostrom, 1999). Each country has its own needs and uses for the water. For instance, Vietnam relies on the river for over 50 per cent of its rice production located in the Mekong delta, while 50 per cent of the fish Cambodians eat – a major protein source – comes from fish caught in the Mekong (Liepman, 2005). In so doing, states undertake national development projects and negotiate bilateral agreements that seemingly contravene obligations under the MRC. For instance, Thailand’s national water plans include a proposal to divert water from the mainstream Mekong in order to irrigate its dry Northeast province. Vietnam’s behavior towards Cambodia regarding the

Yali River is yet another example of how states proceed with developing shared resources according to their own national agendas.

Bilateral and multilateral agreements with China provide yet another example of the lack of political will towards region-wide cooperation on the part of MRC Member states. For instance, in 2001, Thailand and Laos signed the Upper Mekong Navigation Improvement Project (UNMIP) agreement along with Burma and China. The MRC was not invited to participate by Thailand or Laos during the initial agreement negotiations and only became involved after blasting had started in order to conduct an independent EIA, which was never carried through. Further, bilateral arrangements exist between China and the MRC Member states over energy trading from China's Mekong dams. Like the navigation program, these have been negotiated outside the MRC framework. Thailand, for instance, signed a Memorandum of Understanding (MOU) in 2003 to purchase up to 3,000 megawatts from the Jinghong component of the Yunnan cascade.

The MRC and MRC-related policies have been largely marginalized. Member states have not bestowed the MRC Secretariat with regulatory functions to enforce rules negotiated under the Agreement, or to mitigate conflict as it arises, although provisions under the Agreement, especially under Articles 5, 6, and 26, as well as under the MRC's core programs, ultimately point to some regulatory role for the MRC. The MRC does not have sovereign authority to impose its rules on the Member states. Therefore, the MRC is only as effective as the Member states allow it to be, and currently, the Member states have not made the MRC or MRC-related policies a priority. As the MRC lacks the sovereign authority to impose rules and regulations independent of what the states agree to, the direction and capacity of the MRC as an organization is derived from the mutually agreed upon perspectives of four sovereign states.

The relative importance of the MRC as the primary governance scheme in the Mekong river basin has been challenged by a plethora of actors vying for space in the policy-making arena. Whereas before the 1990s, the Mekong Committee constituted the

only intergovernmental arrangement in the region, the MRC now exists simultaneously with other basin governance schemes. The MRC, therefore, not only has to compete for donor attention, it has to compete with governance schemes that may run counter to the MRC's mission, as members belong to various configurations and are obliged to meet other demands accordingly. Examples of regional cooperation initiatives that have had varying degrees of success in the region include: a) ASEAN's Mekong Basin Development Cooperation Initiative (ASEAN-MBDC), established at the ASEAN summit in December 1995 and dominated by Singapore and Malaysia, with the strongest interest in railways; b) Quadrangle for Economic Cooperation (or the quadrilaterals) among China, Laos, Burma, and Thailand to cooperate on international commercial navigation and transportation via the Mekong; and c) State governments and corresponding laws and agencies that impact on water use (Makim 2002; Dore, 2003).

Perhaps the greatest challenge to the MRC's authority is the rise of the Asian Development Bank and the ADB Greater Mekong Subregion (GMS) initiative, which began in 1994. The Asian Development Bank has spearheaded hydropower development projects through the GMS initiative and promotes economic cooperation in energy and infrastructure amongst the six riparian states. As China is not a member of the Association of Southeast Asian Nations (ASEAN), and China and Myanmar continue to exist outside the MRC framework, the ADB's GMS program is the only forum in which all six riparian states participate. The ADB is depicted as neutral in terms of development projects between the six states, and generally more flexible in terms of environmental restrictions that constrain the MRC. Due to conflicting demands and competing discourses on water management, a unified concept of water "governance" has yet to emerge within the basin.

Given these challenges, the role of the MRC has been debated recently as to what role it should assume within the basin, and for whom. Whereas some Member states argue for an increased role for the MRC in terms of facilitating the investment and

sustainable development of basin resources, others, most notably donors, advocate for a regulatory and conservation role for the MRC. A regulatory role would give the MRC the authority to enforce provisions under the Mekong Agreement, which would constrain each State's ability to use the Mekong's resources. Member States have yet to decide how much power and authority the MRC as an organization should have in terms of guiding decisions over water resource management. The MRC Secretariat lacks the authority to intervene or to make use of its technical knowledge to develop an effective decision support framework capable of providing information to states on the potential impacts of development projects. The MRC, therefore, has a limited role in basin negotiations over the Mekong's resources. The adherence to sovereignty and pursuance of national agendas over the needs and interests of the basin as a whole undermines the entire purpose of the MRC, as its chief function is to manage the sustainable development of the river. As states proceed with their development agenda outside the MRC framework, the MRC's relevance as river basin organization established to mitigate risks and attain optimal use of the basin's resources is called into question.

3.9 Conclusion

Several aspects of the MRCs mandate rely on the accurate and transparent flow of information to help form predictive modelling capacities that, in turn, guide provisions on water utilization and environmental protection, and sustainable development for the lower Mekong basin. Accurate information is important for reducing uncertainty relating to each state's behavior, and for basin planning, particularly for dam and irrigation system development, in order to assess the costs and benefits from specific development scenarios. Crucial to this is establishing cooperation with China, especially when considering China's development trajectory and the possible impact its development may have downstream. While Cold War rivalries, as well as a lack of development on the mainstream Mekong, provided little need to include China within the Mekong cooperative framework in the past, the political economy of water utilization is changing

drastically within the region, and especially in China (Phillips, 2006). Within the last decade, the upper Mekong (Lancang River) has become an integral part of China's overall economic and sustainable development strategy, as evidenced by dam building activities and navigation improvement projects on the main stem. Using the concept of securitization, and specifically a securitizing event, the next chapter looks further into the argument that better cooperation is needed between the MRC and China.

This argument is complicated by the lack of cooperation, in general, by MRC Member states towards the principles forming the MRC. For instance, why discuss cooperation with China when cooperation has not been fully embraced by the MRC Members. To be sure, better cooperation and capacity-building is needed between MRC member states for the MRC to be able to fulfill its mandate. However, the MRC's problems do not negate the importance of cooperation within the basin. The interdependencies created by the Mekong River in the context of hydropower development, flood management, wetlands and fishery protection, and irrigation, require basin-wide cooperation in order to balance the interests and needs of the basin's users, while preserving the ecological and social health of the river. The MRC embodies a framework of water governance that has the capacity to balance these interests and help reduce conflict by providing information to build transparency and trust within the basin. China's cooperation is important in this regard. Therefore, China's cooperation must be addressed along with other issues that impinge cooperation between MRC Member states.