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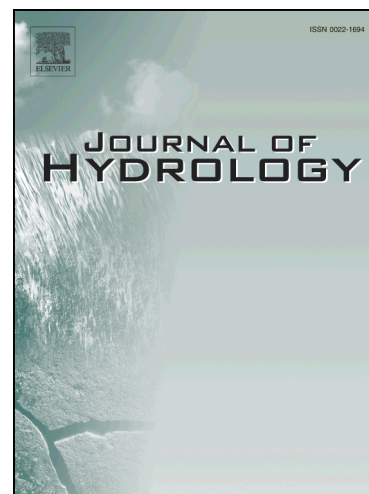
Anoulak kittikhoun, Denise Michèle Staubli

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Water diplomacy and conflict management in the Mekong: from rivalries to cooperation

Anoulak KITTIKHOUN^a, Denise Michèle STAUBLI^b

^a Mekong River Commission Secretariat, 184 Fa Ngoum Road, Sikhottabong District, P.O. Box 6101, Vientiane, Laos, e-mail: anoulak@mrcmekong.org

^b Swiss Agency for Development and Cooperation, seconded to the Mekong River Commission Secretariat, 184 Fa Ngoum Road, Sikhottabong District, P.O. Box 6101, Vientiane, Laos, e-mail: denise.staubli@gmail.com

Correspondence to: Dr. Anoulak Kittikhoun, anoulak@mrcmekong.org

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Abstract

The Mekong region, home to one of the world's great rivers – the Mekong – is also one of the world's most geostrategic regions, featuring seemingly conflicting interests among regional states including Viet Nam, Thailand, Myanmar, Laos and Cambodia and world powers such as China and the United States of America.

For nearly a century, some of the riparian states have developed parts of the basin in their territories – to great benefits and harm – and recently the remaining late developing countries are catching up with water and related resources development plans to dam, withdraw and use the mighty Mekong to fund national progress and alleviate poverty.

World leaders, academics, NGOs, media and even some government officials have warned that the current rush to development is not only bringing a sure death to a great previously untamed river, potentially displacing millions of people, and threatening livelihoods, but would also usher in an era of aggravated tensions and possibly even conflict. The Mekong River Commission (MRC), tasked to

manage the river for the sake of the environment and the people, is failing its mission with work that has been ineffective, uninfluential and wasted, critics say.

Yet this scenario is both wrong in its thesis about Mekong development and misleading in its understanding of MRC's role and work. While past and current water resources development in the region has brought challenges and risks associated with changes in the river system, these have not led to widespread destruction of livelihoods and conflict among riparian countries.

A critical factor preventing conflict and managing tensions as well as supporting optimal and sustainable development is the MRC and its water diplomacy framework, which has a technical core to provide objective scientific advices and legal, institutional and strategic mechanisms that facilitate and support negotiated solutions to complex water and related problems. While the challenges remain for the MRC as an organization, its water diplomacy framework has gradually been established and strengthened as the cases of managing tensions and potential conflicts in the Mekong for the past twenty years illustrate.

Keywords: Mekong River, Mekong River Commission, water diplomacy, conflict management, Prior Consultation, hydropower, geo-politics

1 Introduction

The Mekong region is a geo-political hotspot, featuring seemingly conflicting interests among regional states including China, Viet Nam, Thailand, Myanmar, Laos and Cambodia. Furthermore, various regional and international powers have, for centuries, shaped its fate. The Mekong River, as a natural resource, has received international attention on many occasions, be it for research missions on its immense biodiversity, its exploitation for development purposes or for its protection as one of the last almost untamed great rivers on the planet. Various plans and perceptions clash, resulting in tensions and possibly even conflict.

Not enough credit is given to the regional institutional frameworks in the Mekong Basin in the management of tensions and disputes on transboundary water resources. In this regard, while there are other actors, only one organization in the region has the legal mandate from the Lower Mekong Basin countries to coordinate, jointly plan and balance socially and environmentally just development of the catchment including its protection and the conservation of resources.¹ This is the Mekong River Commission (MRC), headquartered on the shore of the mighty river in Vientiane with national coordinating offices of its four member countries in Phnom Penh, Vientiane, Bangkok and Hanoi as well as Ho Chi Minh City. Its framework and tools in operation have, however, not been well understood by many actors and stakeholders. Its conflict management role is rarely recognized.

Tasked as the river manager, the MRC draws different expectations as regards its role, mandate and responsibility. Some viewed it as a (failed) “regulator” of the river, some as merely a “research organization”, and others as a “talk shop” without any teeth. In reality, far from being an “onlooker”

¹ Although the paper is focused on the primary, unique and critical role of the MRC in Mekong water governance and development, we acknowledge the important roles of other actors in the region including non-governmental ones. See, for example, (1) Lebel, L., Dore, J., Daniel, R., Koma, Y.S., 2007. Democratizing water governance in the Mekong Region. In: L. Lebel, R. Daniel (Editors), M-power book series on water governance in the Mekong region. Mekong Press; Unit for Social and Environmental Research (USER), Mekong; and (2) Dore, J., Lebel, L., 2013. Transboundary water diplomacy in the Mekong region. In: J. Griffiths, R.B. Lambert (Editors), Free flow. Reaching water security through cooperation. UNESCO Publishing; Tudor Rose, Paris, London, pp. 31–34.

(Dore and Lazarus, 2009, p. 361), the MRC has succeeded in bringing together its member countries, partners and stakeholders from the region and elsewhere to jointly discuss water and related issues and take action. This was, however, frequently overshadowed by sporadic unsuccessful attempts in reaching agreement on development matters.

The purpose of this paper is to demonstrate how MRC's role has evolved over time as a technical knowledge hub and a platform for water diplomacy facilitating water related negotiations in the region. After a short overview on the Mekong River Basin, the Mekong is put into its historical context. Not only have riparian countries been in hostility for centuries, global powers also intervened and exercised their influence. Research and development plans on the Mekong River to grasp and cultivate its prosperity have gone hand in hand with Mekong institutional development and the path leading up to the establishment of the MRC of today. To illustrate the MRC's water diplomacy framework in action, four cases are presented: i) the Yali Falls project on a significant Mekong tributary; ii) China's development of the Upper Mekong iii) the first three mainstream projects in the Lower Mekong Basin; and iv) navigation between Viet Nam and Cambodia.

2 The Mekong Basin

The Mekong River with a length of approximately 4,800 km is the 12th longest river in the world. It flows from its source in the Tibetan Plateau through China, Myanmar, Laos, Thailand, Cambodia and Viet Nam via a large Delta into the sea, draining a basin area of 795,000 km². In the Upper Mekong Basin, the Mekong, known as the Lancang in Chinese, decreases in altitude by about 4,000 meters. South of China's Yunnan Province., the Lower Mekong Basin begins, which is home to over 65 million people.

The mean annual discharge of the Mekong is approximately 475 km³. Most flow is contributed from tributaries in the Lower Mekong Basin. Flow from the Upper Mekong contributes only a small portion to the annual flow of the Mekong. But in the dry season, it is significant, constituting up to 40%. On average, China contributes 17%, Myanmar less than 1%, Laos 41%, Thailand 15%, Cambodia 19% and Viet Nam 8% to the annual discharge.

A distinct characteristic for the Mekong is its high seasonal flow variation due to the Southwest Monsoon generating wet and dry seasons. Usually, the flood season lasts from June to November and the dry season from December to May. Many key ecosystems and fish depend on these seasonal changes. During the dry season many fish species migrate to deep pools in the mainstream. For spawning, they return to nutrient rich grounds. At Phnom Penh the seasonal changes of water level cause the water flow reversal to and from the Tonle Sap Lake, one of the most unique hydrological processes in the world (MRC, 2016, p. 17).²

3 A history of conflicts

3.1 Mekong riparian rivalries

The Mekong region is in fact a historically conflictual region. In one time or another conflicts and wars have broken out between pre-modern nations, kingdoms and states of Myanmar, Thailand, Laos, Cambodia, Viet Nam and China.

Pre-modern Myanmar (i.e. the Burmese kingdoms of Toungoo and Konbaung) and Thailand (i.e. Siamese kingdoms of Ayutthaya, Thonburi, and Rattanakosin) fought back and forth about twenty times from the 1540s to 1850s.³ For pre-modern Thailand and Viet Nam, historical antagonism and rivalries (early to late 18th century) turned into open military confrontations in the 1830s and 1840s.⁴

² For recent assessments on the Mekong flow regime see, for example, (1) Hoang, L.P., Lauri, H., Kumm, M., Koponen, J., van Vliet, M.T.H., Supit, I., Leemans, R., Kabat, P., Ludwig, F., 2016. Mekong River flow and hydrological extremes under climate change. *Hydrol. Earth Syst. Sci.* 20 (7), 3027–3041.; (2) Li, D., Di Long, Zhao, J., Lu, H., Hong, Y., 2017. Observed changes in flow regimes in the Mekong River basin. *Journal of Hydrology* 551, 217–232.; and (3) Räsänen, T.A., Someth, P., Lauri, H., Koponen, J., Sarkkula, J., Kumm, M., 2017. Observed river discharge changes due to hydropower operations in the Upper Mekong Basin. *Journal of Hydrology* 545, 28–41.

³ See (1) Harvey, G. E., 1925. *History of Burma: From the Earliest Times to 10 March 1824*. Frank Cass & Co. Ltd, London.; (2) James, H., 2004. *Burma-Siam Wars and Tenasserim*. In: Keat Gin Ooi (Editor), *Southeast Asia: a historical encyclopedia, from Angkor Wat to East Timor, Volume 2*. ABC-Clio, Santa Barbara, Calif.; (3) Rajanubhab, D., Baker, C. (Editors), 2001. *Our Wars with the Burmese: Thai-Burmese Conflict 1539–1767*. Translated by Aung Thein. White Lotus Co. Ltd.; (4) Wyatt, David K., 2003. *Thailand. A short history* (2 ed.). Yale University Press.

⁴ See (1) Kirk, D., 1971. *Wider war: The struggles for Cambodia, Thailand, and Laos*. Praeger, New York.; and (2) Whitmore, J. K., 1970. *The Thai–Vietnamese struggle for Laos in the nineteenth century*.

For Laos and Thailand, the history for these two peoples with so much in common in terms of origins, culture, religion and language, is peculiar and complex.⁵ For a long period of time, the Siamese and the Lao would respectively build more or less equally powerful kingdoms. The Lao kingdom of Lane Xang – first consolidated under King Fa Ngum in 1353 and reaching its peak under King Suriyavongsa in the 17th century composing of modern day Laos and northeastern Thailand – was one of the largest kingdoms in Southeast Asia for over three centuries. The Mekong River ran through its entire territory after leaving China and before entering Cambodia. While relations were “happy” until the 18th century (Ngaosyvathn, 1985, p. 1251), military conflict occurred between the two in the late 1770s when Lane Xang was incorporated into the Siamese kingdom for over a hundred years until the early 1890s.

The history between Cambodia and Thailand is also deep, going back as far as the 13th century when the Siamese kingdom of Soukhothai broke away from the Khmer empire of Angkor. Subsequently various Siamese and Khmer kingdoms would engage in wars and interventions in the mid-14th century, mid-late 15th century, late 16th century, early 17th century, early and late 18th century, and early 19th century. Cambodian-Vietnamese rivalry also dated back to the 13th century when the Khmer empire came gradually under Vietnamese influence and direct control by the 19th century.

3.2 *Mekong sites, global battle ground*

On top of this history of warring nations and states is the fundamental fact that the Mekong region is located in Southeast Asia, which is classified in political geography as one of a few regions on earth as a “shatterbelt” – “a large, strategically located region that is occupied by a number of conflicting states and is caught between the conflicting interests of adjoining Great Powers” (Cohen, 1963, p. 83). This means that national and regional processes could not be developed or understood purely

In: N. S. Adams & A. W. McCoy (Editors), Laos: War and revolution. Harper and Row, New York, pp. 53–66.

⁵ See Anoulak Kittikhoun, 2008. Small State, Big Revolution: Geography and the Revolution in Laos. *Theory and Society*, 38 (1), 25-55.

independently without taking into account external influences. Major powers throughout time from Britain, France, the United States, Soviet Union/Russia, to Japan and China intervened one time or another in the region. The region has rarely been left to its own fate.

One can see this intervention clearly when Britain colonized Burma in the 19th century (and basically put an end to warring Burmese-Siamese relations), France colonized Viet Nam, Cambodia and Laos in the same century (and pulled half of Lan Xang – the left bank of the Mekong River – for incorporation into French Indochina – and giving the other half, the right bank of the Mekong, to Siam), leaving Thailand un-colonized and as a buffer state between the two external powers at the time. It was also during French colonization that the Khmer kingdom “lost” much of its southern cone, including a large chunk of the Mekong Delta.

Outside players would hitherto shape the course of history of the region and the Mekong: from the 2nd World War in which the Japanese occupied the region (and displaced the British and the French) to the post-war era in which Americans, Soviets, and Chinese directly sponsored, supported and intervened on different sides of the Indochina/Viet Nam/Laos/Cambodian-Vietnamese wars of the 1970s to 1990s. Lastly, even in the contemporary period, border skirmishes and confrontations sometimes flared up among the Mekong riparian states including between Cambodia and Viet Nam (1975-1977), Thailand and Viet Nam/Cambodia (1979-1989), Viet Nam and China (1979), Laos and Thailand (1987-1988), and Cambodia and Thailand (1950s, 2008-2011).

Under the context of these historical altercations and contemporary scimmages complicated by additional layers of outside meddling, no wonder every time tension popped up among the countries, critics prophesized that it would lead to conflicts. The Australian historian Milton Osborne even subtitled his popular book about the Mekong – “turbulent past, uncertain future” (Osborne, 2000).⁶

⁶ See also his earlier book: Osborne, M., 1999. River road to China. The search for the source of the Mekong, 1866-73. Atlantic monthly Press, New York.

The coming conflicts were assumed to be particularly fierce as the competition over scarce resources such as water – the source of all life – would spare no one.

4 Attempts at peace and prosperity

Yet contemporary Mekong history is full of attempts to turn this region of wars into a region of peace and prosperity.⁷ In the modern era, much of it started with the attempts by the United Nations (UN) and the United States of America, again a world superpower, in the 1950s.⁸

The UN Economic Commission for Asia and the Far East's (ECAFE – now the UN Economic and Social Commission for Asia and the Pacific ESCAP) Bureau for Flood Control presented a first report in 1952 on Mekong flood control and water resources development, proposing studies to fill knowledge gaps.

Five years later, ECAFE released a landmark report on “Development of Water Resources in the Lower Mekong Basin” proposing irrigation and hydropower plans as well as an institutional framework that would lay the ground for the creation of the Mekong Committee with Cambodia, Laos, Thailand and Viet Nam as members in 1957 – the first institutional cooperation framework for the Lower Mekong and the predecessor of the MRC. The 1957 report drew up initial mainstream dam projects of Pa Mong, Khemerat, Khone Falls, Sambor and Tonle Sap.

Not to be outshined, American agencies and institutions were also influential in the early post-war days. Considered the first Mekong Basin planning document, the 1956 “Reconnaissance Report –

⁷ For history of Mekong development, see for example, (1) Secretariat of the Interim Committee for Coordination of Investigations of the Lower Mekong Basin, 1989. *The Mekong Committee: a historical account (1957-89)*. Secretariat of the Interim Committee for Coordination of Investigations of the Lower Mekong Basin, Bangkok.; and (2) Hori, H., (2000). *The Mekong. Environment and development*. UN University Press, Tokyo, New York, Paris. For a more critical reading, see (3) Molle, F., Foran, T., Käkönen, M. (Editors), 2009. *Contested waterscapes in the Mekong Region. Hydropower, livelihoods and governance*. Earthscan, London.; (4) Matthews, N., Geheb, K. (Editors), 2015. *Hydropower development in the Mekong Region. Political, socio-economic and environmental perspectives*. Routledge, London, New York.; and (5) Blake, D.J.H., Robins, L. (Editors), 2016. *Water governance dynamics in the Mekong Region. Strategic Information and Research Development Centre, Selangor*.

⁸ See Chapter 4 in: Mekong River Commission, 2013. *The Basin Development Plan Story*. Mekong River Commission, Vientiane. The lead author was one of the contributors to this publication.

Lower Mekong Basin” of the US Bureau of Reclamation, Department of Interior, called for extensive data gathering and studies on agriculture, fisheries, navigation and education.

Another famous American agency – the US Army Corps of Engineers (USACE), Department of Defense – conducted a mission led by General Raymond Wheeler in 1958 that saw “the great potential of the Lower Mekong for service to the riparian countries in the fields of navigation, hydro-power generation, irrigation and other related water uses”. He recommended Pa Mong, Sambor and Tonle Sap as the top three dams.

In 1962, the US Ford Foundation sent out a mission led by the distinguished environmental geographer Gilbert White to explore the Mekong. It concluded with a report, “Economic and social aspects of Lower Mekong development”, stating that the Mekong scheme “has a great potential for transforming the life of peoples of the basin”. Four years later, the US Bureau of Reclamation undertook a Comprehensive Feasibility Report of the Pa Mong mainstream multi-purpose dam, a 4,800 Megawatt flagship project upstream of Vientiane that would spur and symbolize the development of the mighty river.

US and UN passions to turn the Mekong from a region of war to a region of prosperity were not limited to technical agencies but a matter of high politics. American President Lyndon Johnson at that time espoused that the US wanted a Mekong River program that would “dwarf the Tennessee Valley Authority”, while UN Secretary General U Thant proclaimed the “Mekong river project as one of most significant actions undertaken by UN”.

Hence from early missions, investigations and studies that influenced the Mekong Committee, came the ambitious Indicative Basin Plan of 1970 with some 180 projects. The Plan commissioned by the Committee proposed a short-term \$2 billion program to 1980, including 700,000 ha of irrigation expansion and 3,273 Megawatt of hydropower on tributaries; a \$10 billion long-term program for 1981-2000, comprising a cascade of mainstream dams (part of a list of 17 mainstream projects) for 17,000 Megawatt. The Indicative Basin Plan foresaw major benefits in terms of flood control,

expansion of power and irrigation development as well as extension of navigation by about 800 km.

This was not to be – at least not yet.

While some tributary projects were implemented and substantial funding gained for plan implementation, mainstream projects that required active cooperation among the riparians could not materialize due to returning instabilities and fighting in Indochina in the 1970s. Once again, conflicts decimated hopes and desires for development and prosperity. In addition, a legal hurdle was put up with the 1975 Joint Declaration of Principles by the Mekong Committee, in which article X states “Mainstream waters are a resource of common interest not subject to major unilateral appropriation by any riparian State without prior approval by the other Basin States through the Committee”.

This clause, on the one hand, contributed to the prevention of mainstream development and for a long time saved the Mekong as one of the last great rivers that was free flowing. On the other hand, some argue it also stifled economic growth, while the Western world benefited from water resources exploitation before and during the same period.

Take the United States, for example, which has about 80,000 dams, of which about 8,000 are large dams. The Colorado river, a transboundary river with Mexico, was extensively developed throughout the 20th century; as was the case with the large Columbia river shared with Canada. Or Australia, which as a federal system gives its states rights and control over water resources, that has built almost 500 large dams, three fourths of which came after 1950. Or Japan, which has built nearly 450 large dams for flood control and hydropower. Or even small Norway, which became known as a hydropower powerhouse in Europe with about 1,110 hydropower plants totalling 29,000 Megawatt of installed capacity – more or less the entire potential of the Lower Mekong.

In the Mekong case, due to conflicts on the backdrop of external power struggles, the 1970 Indicative Basin Plan, with only 16 out of 180 projects implemented, was revised down and scaled back in 1987 with a cascade of smaller dams along the mainstream, divided into 29 projects, 26 of which were

national in scope. Contrary to the multipurpose nature of the 1970 plan, the focus became hydropower with secondary benefits for other sectors. The largest project was still the mainstream Pa Mong, with modifications called 'Low Pa Mong' dam. The 1987 Indicative Basin Plan was put out by the Interim Mekong Committee, interim because Cambodia was not a member due to internal political instability, keeping the country away from Mekong cooperation for more than ten years from the late 1970s to the early 1990s.

When peace returned to Cambodia with the signing of the Paris accords in 1991, the country joined the other three lower riparians of Laos, Thailand and Viet Nam to negotiate a new Mekong cooperation treaty: the Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin of 5 April 1995 (the 1995 Mekong Agreement). A new inter-governmental framework for cooperation, one outside the UN system, was established: the MRC.

Leading up to the creation of the new organization and shortly afterwards, international support and influences remained palpable. The UN Development Programme (UNDP) supported the negotiation of the 1995 Mekong Agreement.⁹ A year before the MRC was born, with the anticipation that the new body would take the work further, France's Compagnie Nationale du Rhône (CNR) led a study for the Interim Mekong Committee called the 1994 "Mekong Mainstream Run of River Hydropower", which advocated run-of-the river hydropower projects on the Mekong mainstream, a strategic shift of the 1987 plan of storage dams, which were not implemented much anyway. Nine projects were considered sound from economic, social and environmental points of view at the time, including the planned mainstream dams Don Sahong, Sambor, Pak Beng and Xayaburi. The 1994 plan, however, was not really discussed again in formal MRC meetings, mainly due to differences of views by the Mekong countries as to what would be the Basin Development Plan and the influence of key donors during the early years of the MRC.

⁹ With the MRC out of the UN system in 1995, UN organizations have played minor roles in Mekong water affairs ever since.

Even though conflicts and instabilities in the region prevented much of Lower Mekong mainstream development, some development did take place – mostly in tributaries of the Thai and Vietnamese parts of the basin. In Thailand’s northeast, construction of dams for irrigation and hydropower took off in the 1960s. In Viet Nam’s part of the Delta, downstream of Cambodia, irrigation was extensively developed much earlier; and in the central highlands, many large hydropower dams were constructed, upstream of Cambodia.

It was not until the 1990s however that these developments drew public attention for the tensions that they had ignited – the Pak Mun dam in Thailand and the Yali Falls dam in Viet Nam were visible cases of public contention. A major development also came this decade when China began building dams on the mainstream Upper Mekong River, completing six so far: Manwan (1992), Dachaoshan (2003), Jinghong (2009), Xiaowan (2010), Gongguoqiao (2012), and Nuozhadu (2014). The 1,750 Megawatt Jinghong dam is the last of the Yunnan cascade closest to the Lower Mekong, while the 4,200 Megawatt Xiaowan and 5,850 Megawatt Nuozhadu are two large storage dams that are already influencing the natural flow regime of the Mekong.

Into the 21st century, with more political stability, economic growth and international finance, late developing countries Laos and Cambodia followed China with plans to implement mainstream projects. The ideas were not new – the previous basin plans especially the 1994 report became influential in these countries and the private sector. Nearly 60 years after investigation and planning, the first mainstream project on the Lower Mekong was proposed for implementation in 2010: a Lao-Thai joint investment for the 1,285 Megawatt Xayaburi hydropower project in northern Laos.

[Figure 1: Dams in the Lower and Upper Mekong Basin. Data source: MRCS →to be printed in color]

[Figure 2: Percentage of district area under irrigation in the Lower Mekong Basin. Data source: MRCS (BDP2, 2011)→to be printed in color]

Xayaburi, along with Don Sahong and other planned mainstream dams and projects with potential harmful effects, have undergone scrutiny by the MRC member countries and stakeholders. While

there is no veto right or unilateral right to proceed by member(s), the MRC has since its inception gradually established a water diplomacy framework (not called as such at the time) that would help to inform negotiations, manage tensions and resolve disputes, essentially keeping the Mekong free from water related conflicts. What is the MRC's water diplomacy framework and how it has been utilized are the subjects of the next sections.

5 MRC water diplomacy framework in theory

The MRC water diplomacy framework has at its core the *technical* cooperation on water:

data/information collection, management and sharing, monitoring and forecasting, state of the basin reporting, studies and assessment, and technical guidelines that serve as a basis to understand and tackle issues from a scientific viewpoint. Based on this solid technical foundation and understanding, three distinct but inter-related mechanisms facilitate and support negotiated solutions to water disagreements, tensions and disputes: *legal*, *institutional* and *strategic*.

[Figure 3: The MRC water diplomacy framework. The MRC water diplomacy framework addresses complex water and related challenges and opportunities through interlinked legal, institutional and strategic mechanisms based on sound technical knowledge. For the MRC and others operating in the water cooperation space, *water* diplomacy can be distinguished from traditional diplomacy in that water diplomacy makes greater use of scientific data, assessment and knowledge as a fundamental basis to negotiate solutions via legal, institutional and strategic mechanisms and tools of diplomacy.]

In legal terms, the 1995 Mekong Agreement, along with the five MRC Procedures that were subsequently developed to monitor and deal with maintenance of flows, water quality, water use monitoring, data and information sharing, and consultation on infrastructure projects, lay solid legal foundations in terms of international obligations in sharing and utilizing a transboundary river. No other developing basins have such comprehensive rules for the management of their transboundary rivers. Individually and collectively these procedures are ahead of the curve for their time and place and demonstrate the countries' commitment to work together.

One of the main ones, or certainly most visible, the Procedures for Notification, Prior Consultation and Agreement, known as PNPCA, was adopted in November 2003. The PNPCA is a set of three different processes (Notification, Prior Consultation and Agreement) undertaken by MRC member countries under the facilitation of the MRC Secretariat (MRCS) for certain projects using water from the Mekong Basin, which may significantly alter water flow or water quality of the mainstream. Such projects may include large-scale irrigation, hydropower and flood control. Lasting six months, unless extended, the Prior Consultation focuses on assessing and discussing transboundary impacts of proposed development projects and what can be done to avoid, minimize and mitigate these. The Procedures allow national information about commercial projects to be shared internationally, scientific assessments by independent experts to be carried out, and discussions and debates to be held by stakeholders. It is a legitimate platform where different views can be heard openly, and tensions managed and addressed in a transparent fashion.

In terms of institutions, the MRC is well established with a Council of ministers meeting once a year, a Joint Committee (JC) of heads of department in charge of Mekong affairs meeting twice or more a year as needed, and a strong Secretariat acting as a technical knowledge hub and water diplomacy platform facilitator. Linking up with the MRC at the regional level and coordinating Mekong issues at the national levels are the National Mekong Committees and their secretariats. The national committees are chaired by the minister in charge of water management and compose of vice ministers and heads of departments from key line agencies including foreign affairs, planning and investment, environment, and water related sectors (energy, agriculture, transport, fisheries, etc).

In 2010, the MRC was recognized and given highest political commitment with the first Summit of prime ministers – this was repeated four and eight years later. At their latest Summit, the Mekong leaders upheld the MRC's role as "primary and unique" in Mekong development. Starting from 2017, regional and national linkages were strengthened with the establishment of expert groups in basin planning, environmental management, data modelling and forecasting, and for the first time in Mekong history, in strategy and partnership – in essence a group devoted to water diplomacy and

cooperation. The MRC also has established regional stakeholder engagement in the forms of regular Regional Stakeholder Forums and specific forums for certain issues or groups that bring in voices of non-state actors including NGOs, CSOs, private sector and others.

[Figure 4: MRC governance structure including expert groups and other existing working group arrangements. EG stands for Expert Group. Source: MRCS]

While the legal foundations legitimize the institutional mechanisms (MRC bodies), the institutions in turn are the vehicles that prepare and endorse strategies and plans from the basin as opposed to national perspectives. The basin-wide strategies and plans provide directions and guidance to address basin-wide needs, challenges and opportunities that one country cannot do alone. This strategic aspect therefore rounds out the water diplomacy framework, and directly supports the implementation of the 1995 Mekong Agreement – the legal foundation.

In MRC's case, the main common strategy is the Integrated Water Resources Management (IWRM) - based Basin Development Strategy, first approved in 2011, and updated and agreed again in 2016. The Strategy sets out shared understandings about development opportunities, medium and long term risks, and priorities for development and management. The Strategy is being implemented by MRC through the MRC Strategic Plan and by the countries through the National Indicative Plans 2016-2020. In addition to the Basin Development Strategy, the MRC also has sector or thematic focused strategies on climate change, hydropower, navigation and fisheries.

The role of MRC in providing a water diplomacy platform and its Secretariat as the "honest broker" gradually evolved with the organization's legal, institutional and strategic strengthening. The cases below illustrate some of the more visible challenges and tensions among the riparians on water and related developments and the role of MRC in managing these.

6 MRC water diplomacy in action: managing water and related tensions in the Mekong

6.1 Damming the Lower Mekong tributaries: Yali Falls

The 720 Megawatt Yali Falls dam was the first hydropower plant to be constructed in the Se San River, a major and significant tributary of the Mekong. The dam is situated in the Krong Poko in central Viet Nam, approximately 70 km upstream of the Cambodian border (Hirsch and Wyatt, 2004, pp. 53-54; Fisheries Office, 2000, p.3). Its former plans were reassessed by the Interim Mekong Committee and Viet Nam in the 1980s, when electricity was in high demand (SwedPower, 1986; Thim, 2010 pp. 1-2).

In 1990, the Vietnamese Ministry of Energy concluded a feasibility study for the Yali Falls (Thim, 2010, p. 69). After its assessment, the Interim Mekong Committee asked for further environmental considerations that led to the “Environmental and Financing Studies on the Yali Falls Hydropower Project” by the Swiss Electrowatt Engineering Services Ltd. in 1991/92 (ibid.; Electrowatt Engineering Services Ltd., 1993). Without any further objections, the construction of the Yali Falls dam began in 1993 by Vietnam Electricity (EVN) (Thim, 2010, p. 69).

Since 1996, however, riverbank communities along the Se San claimed to experience detrimental impacts from the dam construction (Fisheries Office, 2000). The first turbine trial run in February 2000 led to several loss of life, livestock, property and environmental damages (ibid.; Thim, 2010, pp. 2, 72). This turbine incident brought the Yali Falls dam international attention and scrutiny through a number of reports by various local and international news agencies (Roeun and Mockenhaupt, 2000; Saroeun and Stormer, 2000; Bainbridge, 2002), and mobilized NGOs to support and engage with affected communities (Fisheries Office, 2000; Baird et al., 2002; Rutkow et al., 2005).

The Cambodia National Mekong Committee immediately contacted the MRCS to submit concerns to the Viet Nam National Mekong Committee, which led to several interventions by the MRCS – contrary to widespread perception of its inaction in this particular case. The MRCS sent a team to the affected Ratanakiri province in Cambodia to assess the caused damages. The results from the fact-finding mission were discussed at the 11th MRC JC meeting in March 2000 and during an informal meeting between the JC members of Cambodia and Viet Nam, where the two parties agreed to visit

the project site. Later in April 2000 at the Yali Falls site, the MRCS facilitated negotiations on possible mechanisms for information exchange in an effort to minimize downstream effects. Five agreed measures were then implemented and followed up by the Cambodia-Viet Nam Joint Committee for the Management of the Se San River established by the MRC (See Thim, 2010, pp. 2, 139-152).

First, it was agreed that information on the reservoir operation, particularly water releases from the Vietnamese dam under normal and extreme conditions, be exchanged in advance of planned releases through appropriate channels. Similarly, information on the river situation in Cambodia should be transmitted in the same manner. Second, water releases from the Yali reservoir should be gradual, giving inhabitants along the Se San River advance notice of water level changes and to take precautions accordingly. Third, it was agreed that under normal circumstances, 15 days advance notice of water releases should be given through National Mekong Committees, relevant provincial authorities, and the MRCS. Forth, under emergencies and extreme flood situations, advance warning should be immediately disseminated to relevant levels. Finally, further environmental mitigation studies, if needed, would be discussed later with the participation of the MRC.

To implement the five agreed measures, the Cambodia-Viet Nam Joint Committee met annually from 2001 to 2003 to establish the water release notification system, conduct water quality analysis, and draft Terms of Reference for hydrodynamic modelling and Environmental Impact Assessment of the Se San River. The Committee met again in 2008 to discuss the results of previously conducted studies. Nevertheless, some NGOs and other stakeholders criticized MRC's response, claiming that measurements taken were insufficient and the notification system did not work properly due to a lack of communication infrastructure in the affected villages. Several representatives of civil society, NGOs and scientists took the MRC to task for, in their view, failing to meet the needs of affected communities in the Se San River Basin (Hirsch and Wyatt, 2004; Rutkow et al., 2005).

The MRC's role as a facilitator at the time should be understood in the context of preferences by member countries Cambodia and Viet Nam to conduct bilateral negotiations instead of further

internationalising the issue. Indeed, some even argue that bilateral negotiations fortified Viet Nam's position (see also Wyatt and Baird, 2007; Saroeun, 2000) and that Cambodia had limited resources to ensure the effective implementation of the Joint Committee's conflict resolution efforts (Thim, 2010, p. 144).

In retrospect, the MRC did create an enabling environment for other regional actors to step in and contribute to building provincial and local resilience. In fact, the events of Yali Falls, devastating as they were to local communities who were impacted, served to activate and mobilise local, provincial, national, regional, and indeed international actors in the region. The case particularly catalysed the MRC's engagement with tributary areas, implementing a range of water management measures that provided the foundation for increased transboundary cooperation and stakeholder engagement in the Se San Basin for years to come.

6.2 Development of the Upper Mekong: Chinese dam cascade

When China started with the construction of its first dam, the Manwan, on the Upper Mekong in 1986, downstream countries did not publicly raise concerns (Richardson, 2009, p. 1). Some would say they had little or no information. Since the 1990s, however, there are ongoing debates about the potential impacts of the Chinese cascade of hydropower dams in the Lower Mekong Basin (Li et al., 2011, p. 329). While studies have acknowledged the potential benefits of dry season flow increase on irrigation expansion and flood/drought management, concerns remain. These mainly have to do with the consequences of an altering flow and sediment regime on the Mekong's ecosystems and livelihoods (International Centre for Environmental Management, 2010; Mekong River Commission, 2016; MRC and Ministry of Water Resources of the People's Republic of China, 2016; Räsänen et al., 2017). Moreover, after the occurrence of extreme or unusual downstream flood or drought events, sections of the public speculated about the influence of the Chinese dams.

In 1993 and 1997, some Mekong governments raised concerns when local communities related the uncommonly low water levels limiting navigation in the Golden Triangle area with the commissioning of the Manwan dam (Yeophantong, 2014, pp. 711-712). During the dry season of 2004, a Mekong

crisis nearly arose when Thai farmers in northern provinces were affected by unusual droughts. In 2008, environmental organizations and local communities in Thailand and Lao PDR suspected the Chinese dams and their blasting of rocks for navigation purposes as partially responsible for the heavy floods (Gunn and McCartan, 2008, p. 3; Yeophantong, 2014, p. 712). The 2010 drought that coincided with MRC's first Summit, where China responded to allegations by the indignant public, received wide media attention (Ahuja, 2010; Fuller, 2010; Leitsinger, 2010; Yeophantong, 2014, pp. 712-713). An acute water level peak in December 2013 and water level fluctuations in February 2014 again evoked speculations around Chinese dams among Thai and Lao riverside communities (MRC, 2013; MRC, 2014a).

While many of the extreme events were mainly related to unusual meteorological and hydrological patterns, environmental organizations and riverside communities have stuck to their perceptions about the influence of the Upper Mekong dams. NGO Coalitions such as International Rivers, based in California, the United States, or the Thai People's Network for Mekong have challenged arguments otherwise and asked for more transparency from China's side.

For the MRC, China is a long-standing dialogue partner,¹⁰ with cooperation in regular yearly formal dialogue meetings, data sharing and technical exchanges. Since the signing of the agreement on the provision of hydrological information of the Lancang River during the flood season in April 2002, China has been sharing hydrological data on a daily basis from two stations, one located at Yunjinghong on the Mekong mainstream and one on a tributary at Manan, between June 15 and October 15. This agreement was renewed in 2008 and 2013, with the period in the latest agreement extended by 30 days from 01 June to 31 October (Kittikhoun, n.y.). In this regard, China often states that it shares more data with MRC than with any other parties it shares international rivers with.

MRC studies and assessments point to both potentially positive and negative effects of Upper Mekong development on the lower part. Analysis comparing the "natural" versus the flow under the

¹⁰ The other MRC dialogue partner is Myanmar.

influence of Chinese dam operations have shown that the water flow tends to be higher during the dry season and lower during the flood season (MRC and Ministry of Water Resources of the People's Republic of China, 2016; Räsänen et al., 2017).

During the 2004 drought event, the MRCS CEO at the time actively worked to ease tensions, including visiting the Commission on Foreign Affairs of the Thai House of Representatives to discuss the benefits and possible adverse impacts from China's dams on Thailand. With data from China during the flood season and its own data from monitoring networks in the dry season, the MRC has studied drought and flood situations in the basin including possible impacts by Upper Mekong dams (MRC, 2008b; MRC, 2013). When necessary, it asked for more detailed information from China. This was the case in 2004, 2010 and 2014 (MRC, 2010a; MRC, 2014a). In 2010, due to queries and concerns raised by MRCS and Mekong countries, China invited a delegation of Lower Mekong government officials and MRCS for a visit to the Xiaowan and Jinghong dams, followed by discussions with the Chinese government in Beijing on enhanced cooperation modalities (MRC, 2010b).

A breakthrough of sorts came in 2016, in the face of the severe drought situation in the Mekong in the dry season between December 2015 and May 2016, when China released supplementary water at Jinghong during the months of March, April and May. Joint observation and analysis by China and the MRCS were conducted for the first time, revealing some positive effects of the release: Increased water level and discharge along the Mekong mainstream and decreased salinity intrusion in the Mekong Delta. For this joint analysis, China shared water level and discharge data from one Lancang mainstream and one tributary station for the 2015/2016 drought season. In addition, long term average monthly water level and discharge data for 1960-2009 and 2010-2015 were exchanged (MRC and Ministry of Water Resources of the People's Republic of China, 2016).

This cooperation gave further momentum to the MRC and China to conduct other joint work. During a visit of the Chinese Vice Minister of Water Resources to the MRCS in Vientiane in November 2014, China committed to work with MRC in analysing past water fluctuations affecting the Lower Mekong

Basin (MRC, 2014b). In April 2016, the MRCS, China and the International Water Management Institute (IWMI) agreed on a joint research proposal on the effect of the Lancang cascade of dams on extreme events, starting with the droughts of 2009-2010, flash flood of December 2013, and drought of 2015-2016. It is expected that the results would come out in 2018 (MRC, unpublished, 2017a, pp. 62-63). At the 3rd MRC Summit of April 2018, the Chinese Minister of Water Resources opened more doors for China-MRC cooperation, including strengthening synergy and connectivity among regional and national development strategies, and collaborating among Mekong related cooperation frameworks such as the Asian Development Bank's Greater Mekong Subregion program and the new Mekong Lancang Cooperation.

6.3 *Developing the Lower Mekong mainstream: Xayaburi, Don Sahong and Pak Beng*

6.3.1 Xayaburi Hydropower Project

The first mainstream dam in the Lower Mekong Basin has caused lively debates among the MRC member countries, donors, civil society, non-governmental and international organizations. Several years ago it was not imaginable that an actual large dam would come to fruition in the Lower Mekong. Surely this gave rise to plenty of alarm bells about the coming conflict over the Mekong – this time actually primarily about the river. The Xayaburi Hydropower Project was submitted to MRCS for Prior Consultation in September 2010.

From the beginning, the Lao government and its lead Thai developer CH Karnchang have presented their project as being environmentally friendly (Lao PDR JC Working Group, 2011, p. 1; MRC, unpublished 2017b, p. 3). Xayaburi was prioritised in previous Mekong Committee studies and is part of the six planned mainstream projects above Vientiane that was assessed in a cumulative fashion by the MRC Basin-wide Assessment of Development Scenarios in 2010 to be among those whose adverse impacts on Cambodia and Viet Nam may, due to distance and other factors, be less significant than from those further downstream. The more specific MRCS Technical Review of the project identified gaps in the submitted documents and in knowledge on migratory fish species and asked – among others – for further measures on fish and sediment management (MRC, 2011b).

Concerns about impacts on fisheries resource have already emerged during a MRC regional multi-stakeholder consultation on perspectives and interests related to hydropower development in the Mekong Basin in September 2008 (MRC, 2008a, pp. 10-11). There, a group of international experts on fisheries and fish friendly dam design and operation reported the results of their assessment, arguing that existing fish passage technologies are unlikely to allow a satisfactory migration of the diverse fish species with large numbers in the Mekong (Dugan et al., 2010).

As the MRC's first six-month Prior Consultation from December 2010 to April 2011 was drawing to a close, some member countries asked for more time for transboundary impact studies and consultations, especially Cambodia and Viet Nam (Cambodia National Mekong Committee, 2011; Ministry of Natural Resources and Environment, Thailand, 2011; Viet Nam National Mekong Committee, 2011). The Strategic Environment Assessment (SEA) of mainstream dams recommended a ten years deferral (ICEM, 2010). The SEA, which was carried out by a consulting company for MRC and did not have all MRC members' official endorsement, was frequently cited by the media and NGOs for the project to be put on hold.

Laos took the position not to extend the Consultation period, but showed willingness to conduct further studies to address issues raised by the MRCS Technical Review and concerns from stakeholders (Lao PDR JC Working Group, 2011). In their understanding, the process was complete as they had met all MRC standards as confirmed by a study by their international consulting and engineering company Pöyry, headquartered in Finland. As MRC governance bodies, the JC and Council, were not able to reach a common agreement in April and December 2011 respectively, the issue was referred for resolution by the governments following the conflict resolution clause stipulated in the 1995 Mekong Agreement (MRC, 2015a, p. 22).

Actually, the case went up to the highest levels of government, with the four Prime Ministers during the 3rd Mekong-Japan Summit in Bali, Indonesia, in November 2011, agreeing to commission a study on sustainable management and development of the Mekong River Basin including impacts by

mainstream hydropower projects. On 8 December 2011, the MRC Council agreed to implement the study, which became known as the 'Council Study'¹¹ (MRC, 2011a).

After the Prior Consultation process, campaigns against the dam by national and international NGOs continued, and MRC donors helped to leverage stakeholder's requests by urging MRC and Laos to conduct further studies and be transparent about the redesign of the Xayaburi dam. Cambodia and Viet Nam also made representations to the Lao government.

Looking back, one can observe that in terms of the water diplomacy scorecard the MRC has done quite solidly in the technical areas (assessment and guidelines) while the institutional and strategic aspects had room for improvement. For example, anticipating the notification of the first mainstream hydropower project, the MRCS worked on various initiatives, including the analysis of different Mekong development scenarios for the Basin Development Strategy, a SEA of the planned mainstream dams in the Lower Mekong Basin, studies on fish migration and the development of a hydropower program (MRC, 2008a, p. 5). The established MRC Initiative on Sustainable Hydropower then coordinated the drafting process of the Preliminary Design Guidance for Proposed Mainstream Dams in the Lower Mekong Basin (PDG). Endorsed by the MRC JC in 2009, the PDG became an influential guide in the private sector community with plans to develop hydropower in the Mekong mainstream.

This PDG served as the main tool the MRC used to assess the documents submitted by Laos on the Xayaburi Hydropower Project. For this purpose, the MRCS formed a task group to facilitate and support the work of the special JC working group that was established to advise the MRC JC during the Prior Consultation. The Prior Consultation roadmap, scope of assessment, site visit, mode of national consultations, coordination issues and the findings of the assessment were discussed in

¹¹ MRC conducted the Council Study from 2012 to 2017. The final report of more than 3'600 pages was released beginning 2018, following numerous technical consultations at the regional and national levels as well as stakeholder fora. The study assessed the environmental, social and economic costs and benefits of existing and planned water resources developments in the Lower Mekong Basin. Since its completion, MRCS has reported key findings and messages in a series of national meetings to the member countries.

three sessions of the JC working group. A special JC session in April 2011 and a Council meeting in December 2011 were tasked to conclude the process (MRC, 2011b, pp. 3-5; MRC, 2015a, p. 22).

During the whole process, the MRCS task group, with the support of a sediment and fisheries expert group and individual experts, provided the most up to date technical knowledge according to international standards with the aim of improving Xayaburi Hydropower Project (MRC, 2011b, pp. 3-4). Relevant information on the Prior Consultation process and its results were put on the MRC website. Remarkably, the MRC JC agreed to disclose and publish the results of the MRCS Technical Review in March 2011 (MRC, 2011a, p. 3).

Member countries conducted national consultations. While regional stakeholder consultations were not held for the first Prior Consultation, stakeholder voices and concerns about mainstream development were heard during the MRC basin development planning process, SEA and other related activities (MRC, 2011b, p.4; MRC, 2015a, p. 22), which helped inform the MRCS review of Xayaburi.

Even though the first Prior Consultation on the Xayaburi dam was perceived as rather unsuccessful by some stakeholders, citing issues ranging from not being able to stop the dam to too few opportunities for public participation, the process allowed for public debates, as well as recommendations from MRC and further studies by the developer that contributed to the improvement of the dam. Laos has invested in redesigning the dam at their own cost of hundreds of millions of dollars. In 2015, it held a workshop to engage the MRCS and countries on their redesign and further measures to address fish and sediment issues (MRC, 2015a, p. 22). The Lao government has also welcomed visits from all corners of the world to Xayaburi for site inspection and mutual learning, and has engaged leading international agencies, such as the US Army Corps of Engineers and Australian Centre for International Agricultural Research to support ongoing design changes, adaptation and monitoring.

Nevertheless, there was only some interaction and data and information exchange between Laos, its developer and the MRCS on the redesign and further measures taken as the post-Consultation process was not formalised (MRC, unpublished 2017b, p. 3). Some information was submitted by Laos to MRCS and MRCS has been reviewing changes in the dam design.¹²

6.3.2 Don Sahong Hydropower Project

The Don Sahong Hydropower Project was the second dam on the mainstream to undergo the MRC Prior Consultation between July 2014 and January 2015. Criticisms about the dam from environmentalist groups and NGO networks were no less fierce than that of Xayaburi. The dam is situated on the Hou Sahong channel on the mainstream in Laos; this channel carries most of the Mekong discharge during the dry season (MRC, 2015b, p. 4)

The Hou Sahong channel is a key route for fish migration. The main concerns raised by the MRCS Technical Review related to whether it was possible to modify the nearby Hou Xang Pheuak and Hou Sadam channels to be used as alternative fish routes. In addition, the possible impact on the Irrawaddy dolphin population, a now iconic specie in the Mekong, was raised (MRC, 2015b, p. 17, 45). On the plus side, the MRCS concluded that the possible adverse transboundary impacts related to water quality, sediment and water flows to Cambodia and the Delta were less significant.

Fisheries and livelihoods issues were the main concerns raised by NGOs and civil society that have campaigned against the dam since its initial plans in 2006. For some stakeholders, the 260 Megawatt production of the small-scale dam will not compensate for its potential negative environmental and social impacts.

During the Don Sahong Prior Consultation process, a complaint against the developer Malaysian Mega First Corporation Berhad (MFCB) was submitted to the National Human Rights Commission of Malaysia and called for an investigation of the transboundary impacts on Thai and Cambodian

¹² For issues on the Xayaburi Prior Consultation process, see as well Rieu-Clarke, A., 2015. Notification and Consultation Procedures Under the Mekong Agreement. Insights from the Xayaburi Controversy. *AsianJIL* 5 (01), 143–175.

communities (International Rivers, 2015). The case even caught the attention of the UN human rights mechanism, with the UN Special Procedures filing a report to the UN Human Rights Council citing allegations that the project may pose a threat to local livelihoods.

Cambodia, lying two kilometres downstream of the dam, asked for more time to conduct transboundary environmental impact assessments to consider the most appropriate mitigation measures. Cambodia referred to article 7 of the 1995 Mekong Agreement urging Laos “to make every effort to avoid, minimize and mitigate harmful effects that might occur to the environment [...]” (Cambodia National Mekong Committee, 2015). Viet Nam was of the same view and asked for a prolongation of the Prior Consultation Process until the end of 2015 (Viet Nam National Mekong Committee, 2015). Thailand indicated that a six-month extension would be appreciated to conduct further impact assessments (Ministry of Natural Resources and Environment, Thailand, 2015).

In the Lao view, the risks related to the project are low, as the project would only use one of several channels in the area, minimizing disturbances to the hydrology and sediment transport. The MRCS Technical Review also pointed out that these two issues were not significant. Laos wished to close the Prior Consultation process after six months as they have undertaken every effort to mitigate potential negative transboundary impacts (Ministry of Natural Resources and Environment, Lao PDR and Lao National Mekong Committee Secretariat, 2015). During the course of the project they have also submitted additional documents (MRC, 2015b, p. 44). Similar to the Xayaburi Hydropower Project, the MRC JC and Council could, however, not agree on how to move forward with the proposed Don Sahong dam and according to the 1995 Mekong Agreement, the governments were asked to step in using their diplomatic channels.

The proceedings for the Don Sahong Hydropower Project have taken longer than those for Xayaburi, as the former was first submitted to the MRCS as a Notification in September 2013. After the notified MRC countries asked for a resubmission for Prior Consultation, the MRCS conducted a pre-assessment of the documents from October to December 2013, which was considered during a

special JC session in January 2014. In November 2013 as well as March 2014, based on invitations from the Lao government, site visits were conducted to Don Sahong by MRCS and country representatives. In June 2014, Laos informed the MRC that they would submit the project as a Prior Consultation (MRC, 2015b, p. 4).

As was the case with the first Prior Consultation, a MRCS Task Group worked on the Technical Review with the support of independent international experts. The JC working group met three times and the JC once to discuss the proceeding and results of the assessment. In addition to national consultations, the MRCS organized one regional public consultation in Pakse, in southern Laos (MRC, 2015b, pp. 4-6).

In the case of Don Sahong, the MRCS' strength lies in providing technical expertise and recommendations. The MRCS also proposed extending the Prior Consultation period to consider and assess additional documents submitted by Laos (MRC, 2015b, p. 44). While the three notified countries supported this, it proved difficult to have unanimous agreement as the modalities for a justified extension have not been clarified, given the experience from Xayaburi (MRC, unpublished 2017b, p. 4).

Timely provision of relevant information to the public and their participation opportunities have improved, but remained at an "informing" stage (MRC, unpublished 2017b, p. 4). In November 2016, the Cambodian Prime Minister aired the view that the Don Sahong project would not likely cause significant transboundary impact to Cambodia after inspecting the project site. Although the post-consultation process has still not been formalized, the MRCS has managed to bring together the governments of Laos and Cambodia to agree to work on a joint project in the Khonefalls area, which includes a joint environmental monitoring program for Don Sahong project under MRC.

To improve the MRC PNP/PCA and other MRC Procedures, the MRCS established a Joint Platform in 2013, which has held a number of meetings and workshops with the objective to address recognized challenges in the implementation of the MRC Procedures (MRC, unpublished 2017b, p. 2). Convened

by the MRCS, the February 2017 dialogue workshop on lessons learned for PNPCHA, bringing together practitioners from the countries and well-known international legal experts, was particularly instructive in making recommendations that will be crucial for future project assessments and negotiations.

6.4 Pak Beng Hydropower Project

While the Pak Beng Hydropower Project, a Lao project with investment from China, did not face a high degree of public opposition like the first two cases, issue of cumulative impacts nevertheless engendered media headlines such as “Killing the Mekong, dam by dam”. As the dam in Laos is also far upstream from Cambodia and Viet Nam, most concerns came from Thai riverine communities, whose vocal representatives had already taken the Xayaburi case to court and are doing similarly with Pak Beng.

The main concerns of the MRCS Technical Review were related to sediment management, the design of the fish passage and navigation lock. Furthermore, the report recommended studying upstream impacts into Thailand and socio-economic impacts downstream (MRCS, 2017, pp. 71-79).

Stakeholders were most concerned about fish, sediment and dam cascade coordination issues.

The three notified countries provided feedback with regard to technical issues but also concerning availability of information and data. They asked for more in-depth studies on transboundary and cumulative impacts and mentioned monitoring and other follow-up work (Cambodia National Mekong Committee, 2017; Ministry of Natural Resources and Environment, Thailand, 2017; Viet Nam National Mekong Committee, 2017). Laos showed commitment in taking into account raised issues (Lao National Mekong Committee Secretariat, 2017).

The third MRC Prior Consultation from December 2016 to June 2017 was perceived as more successful by the MRC and stakeholders than the first two ones. After the submission of the Pak Beng Hydropower Project in November 2016, there were clear expectations from the member countries, stakeholder and development partners. As mentioned, lessons learned were captured by the MRC on

the first two cases with recommendations that would form the basis to prepare for the third PNPCA.¹³ After the reform of the MRCS in 2016, it also emerged stronger with key management, strategic and technical staff that were fully committed to ensuring a good process and outcome.

Three factors were decisive. Firstly, stakeholders were better informed and more engaged in the process. Regional forums were held openly in addition to many informal interactions and meetings with key stakeholders. Secondly, the process has been more transparent and better managed with clearly defined steps for the preparation phase, prior consultation and post-consultation process. Thirdly, a clear end result of the prior consultation was envisioned, which succeeded in concluding a negotiated and agreed Statement of the member countries in June 2017 (MRCS, 2017, p. 1; MRC, unpublished 2017b, p. 5). The MRC's donors applauded the process and outcome of the PNPCA Technical Review and welcomed the agreed Statement by the MRC member countries facilitated by the Secretariat.

As in the previous two cases, the timeline was tight. To prepare and discuss the Technical Review conducted by the MRCS task group and international experts, the JC working group met three times during the six-month Prior Consultation period. National experts supported the review process and provided inputs at the national level. National, and two regional public consultations organized by the MRCS considered stakeholders' comments (MRCS, 2017, pp. 11-12).

The MRC has had the opportunity to influence the final design and operation of the dam, as Laos submitted the project at feasibility stage. In addition to sharing technical expertise, the MRCS has made strategic use of its networks within the member countries to lobby for an agreement on the Prior Consultation process for the first time. Focus on Article 7 "to make every effort to avoid, minimise and mitigate harmful effects [...]" of the Mekong Agreement has helped to develop the

¹³ Lessons learned covered key issues such as timely notification, completeness of information, period of consultation, the consultation preparation phase and post-consultation process and stakeholder engagement, among others.

joint Statement (MRC, unpublished 2017b, pp. 5-6), a definite milestone achievement for the MRC and its member countries.

The agreed Statement formed the basis for the development of a Joint Action Plan for the Pak Beng project. This formalized post-Prior Consultation process has been received positively by stakeholders (MRC, unpublished 2017b, p. 6). The Joint Action Plan will ensure regular exchange between the developer, Laos, and MRC during the finalization of the design, construction and operation phases of the dam. The Plan will be implemented and further adapted over time to meet changing needs and circumstances (MRC, unpublished, 2017, p. 2).

To further improve future PNPAs, the joint Statement asked to “incorporate the key findings from the Pak Beng Hydropower Project PNPA process in the development of Commentaries to the Procedures for Notification, Prior Consultation and Agreement through its work with the MRC Joint Platform [...]” (MRC, 2017, p. 4). The main purpose of the commentaries is to further provide a common understanding on the PNPA. Moreover, the PDG will be updated based on the newly developed MRC guidelines for hydropower impact mitigation and risk management considering lessons learnt and new critical topics (MRC, unpublished, 2017a, p. 32).

In short, MRC’s Prior Consultation process has improved in term of organizational aspects.

Stakeholder engagement has evolved from informing, to consulting towards collaboration on how to address concerns and therefore contributing to diffusing tensions.

6.5 Waterway transportation agreement between Cambodia and Viet Nam

While hydropower development in one of the great rivers of the world would naturally ignite a great deal of attention and therefore the water diplomacy work of the MRC, this is not the only sector the organization works on. Plans to enhance waterborne transport in the Mekong have also been controversial due to potential environmental and social impacts.

Within the frame of MRC’s mandate to enhance freedom of navigation in the basin, the MRC has been successful in addressing challenges of transboundary cooperation between Cambodia and Viet

Nam cross-border trade and the efficiency of waterborne cargo and passenger transportation. In December 2009, Cambodia and Viet Nam signed a legally binding agreement on waterway transportation, which has been enforced since January 2011 (MRC, 2015a, p. 29; MRC, unpublished, 2017a, p. 35). The MRCS significantly contributed to this historical step and has supported the countries in implementing the agreement.

The agreement was drafted by the MRCS navigation program team with the help of international experts in consultation with relevant entities of the governments of Cambodia and Viet Nam (MRC, 2015a, p. 29). Experiences from the Belgium-Dutch Scheldt Treaty that allowed for improved waterborne transportation and trade on the River Scheldt have helped shape the agreement (MRC, 2009). During the three-year drafting and negotiation phase, the MRCS advised and funded two national legal task forces and facilitated bilateral meetings between the two countries that led to the signing of the agreement (MRC, 2015a, p. 29). This is in contrast to earlier unsuccessful attempts at developing an agreement without the MRC by the two countries from 1998 to 2006 (Guttman, 2013).

7 Conclusion

In a region marred by historical conflicts, superpower rivalries and recurrent tensions, one wonders how the Mekong Basin states have managed to keep it together for almost thirty years now without a conflict over water resources. Tensions and challenges have popped up that could have escalated to active opposition and confrontation as in other regions of the world. This paper argues that the role of an inter-governmental river basin organization, traditionally seen as more of the realm of technical water cooperation, is absolutely critical in not only looking at the issues from an objective scientific perspective, but also in facilitating and supporting negotiated solutions through established legal, institutional and strategic mechanisms. In the Mekong, the riparian countries and their development partners can be proud to have invested in the water diplomacy framework of the MRC.

As the cases of potential conflicts due to conflicting interests in using and developing the transboundary tributaries and mainstream demonstrate, the organization has proven its worth and value in supporting the countries in trying to resolve disputes. A strong and proactive MRC is able to

legitimately make a difference due to the legal foundation of cooperation that it can reference (the Mekong Agreement and Procedures that require some obligations of member states), the institutional support and engagement that it can muster from National Mekong Committees, partners and stakeholders, and the strategic direction that it has been given via the Basin Development Strategy and other basin-wide strategies (e.g. looking beyond national borders and interests, optimizing basin benefits and minimizing/mitigating transboundary impacts).

While challenges for an organization such as MRC remain, one can fairly say that it is one of the most successful cases of transboundary cooperation over a major river in the world in a region that is known as a hotbed of conflicts and rivalries from within and without. A key to this success has been the existence and operation of the different aspects – technical, legal, institutional and strategic – of the MRC's water diplomacy framework, lacking one or another could not be optimal. Underlying all of this is politics – the often-cited political commitment or lack thereof. In the Mekong case, this commitment could be said to be the “Mekong Spirit” – defined in typical Mekong way as a combination of collective courage, statesmanship, perseverance and goodwill among the Mekong states, reflecting their collective desire for mutual understanding and accommodation to achieve a shared vision for the Mekong¹⁴ – an economically prosperous, socially just and environmentally sound river basin.

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¹⁴ See section 4 in: Secretariat of the Interim Committee for Coordination of Investigations of the Lower Mekong Basin, 1989. The Mekong Committee: a historical account (1957-89). Secretariat of the Interim Committee for Coordination of Investigations of the Lower Mekong Basin, Bangkok.

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8 References

Ahuja, A., 2010. China says dams not to blame for low Mekong levels.

<http://www.reuters.com/article/us-mekong/china-says-dams-not-to-blame-for-low-mekong-levels-idUSTRE6341A620100405>. Accessed October 19, 2017.

Bainbridge, B., 2002. Cambodian villagers battle viet dams.

<http://www.phnompenhpost.com/national/cambodian-villagers-battle-viet-dams>. Accessed September 25, 2017.

Baird, I., Baird, M., Cheath, C.M., Sangha, K., Mekradee, N., Sounith, P., Nyok, P.B., Sarim, P., Savdee (Phiap), R., Rushton, H., Phen, S., 2002. A Community-Based Study of the Downstream Impacts of the Yali Falls Dam Along the Se San, Sre Pok and Sekong Rivers in Stung Treng Province, Northeast Cambodia. Se San Protection Network Project; Partners For Development (PFD) Non Timber Forest Products Project (NTFP) Se San District Agriculture; Fisheries and Forestry Office Stung Treng District Office.

Cambodia National Mekong Committee, 2011. Mekong River Commission Procedures for Notification, Prior Consultation and Agreement Form for Reply to Prior Consultation. Xayaburi Hydropower Project. Mekong River Commission, Vientiane.

Cambodia National Mekong Committee, 2015. Mekong River Commission Procedures for Notification, Prior Consultation and Agreement Form for Reply to Prior Consultation of the Don Sahong Hydropower Project. Mekong River Commission, Vientiane.

Cambodia National Mekong Committee, 2017. Mekong River Commission Procedures for Notification, Prior Consultation and Agreement Form/Format for Reply to Prior Consultation. Mekong River Commission, Vientiane.

Cohen, S.B., 1963. Geography and politics in a world divided. Random House, New York.

Dore, J., Lazarus, K., 2009. De-marginalizing the Mekong River Commission. In: F. Molle, T. Foran, M. Kähkönen (Editors), Contested waterscapes in the Mekong Region. Hydropower, livelihoods and governance. Earthscan, London, pp. 357–382.

- Dugan, P.J., Barlow, C., Agostinho, A.A., Baran, E., Cada, G.F., Chen, D., Cowx, I.G., Ferguson, J.W., Jutagate, T., Mallen-Cooper, M., Marmulla, G., Nestler, J., Petrere, M., Welcomme, R.L., Winemiller, K.O., 2010. Fish Migration, Dams, and Loss of Ecosystem Services in the Mekong Basin. *AMBIO* 39 (4), 344–348.
- Electrowatt Engineering Services Ltd., 1993. Environmental and Financing Studies on the Yali Falls Hydropower Project (Basin Wide). Volume 1. Executive Summary. Mekong Secretariat; Ministry of Energy, Socialist Republic of Vietnam, Bangkok.
- Fisheries Office, R.P., 2000. A study on downstream impacts of the Yali Falls Dam in the Se San River Basin in Ratanakiri Province, Northeast Cambodia. Non-Timber Forest Products Project, Ratanakiri Province.
- Fuller, T., 2010. Countries blame China, not nature, for water shortage. <http://www.nytimes.com/2010/04/02/world/asia/02drought.html>. Accessed October 19, 2017.
- Gunn, G., McCartan, B., 2008. Chinese Dams and the Great Mekong Floods of 2008. *The Asia-Pacific Journal* 6 (8).
- Guttman, H., 2013. The Mekong River Basin: practical experiences in transboundary water management. In: J. Griffiths, R.B. Lambert (Editors), *Free flow. Reaching water security through cooperation*. UNESCO Publishing; Tudor Rose, Paris, London, pp. 70–73.
- Hirsch, P., Wyatt, A., 2004. Negotiating local livelihoods: Scales of conflict in the Se San River Basin. *Asia Pacific Viewpoint* 45 (1), 51–68.
- International Centre for Environmental Management, 2010. MRC Strategic Environmental Assessment (SEA) of hydropower on the Mekong mainstream. ICEM, Hanoi.
- International Rivers, 2015. The Don Sahong Dam. Gambling with Mekong food security and livelihoods. International Rivers, Berkeley.
- Kittikhoun, A., n.y. The Mekong River Commission and engagement with China. Mekong River Commission, Vientiane.
- Kittikhoun, A. 2008. Small State, Big Revolution: Geography and the Revolution in Laos. *Theory and Society*, 38 (1), 25-55.

- Lao National Mekong Committee Secretariat, 2017. Preliminary Responses to the Statement of the MRC Joint Committee on the Pak Beng Hydropower Project. Mekong River Commission, Vientiane.
- Lao PDR JC Working Group, 2011. Annex 1b– Statement by Lao delegation to the 3rd JC Working Group Meeting on PNPCA. Mekong River Commission, Vientiane.
- Leitsinger, M., 2010. Drought grips parts of China, Southeast Asia amid dam concerns. <http://edition.cnn.com/2010/WORLD/asiapcf/04/06/china.mekong.river.thailand.laos/index.html>. Accessed October 19, 2017.
- Li, Z., He, D., Feng, Y., 2011. Regional hydro politics of the transboundary impacts of the Lancang cascade dams. *Water International* 36 (3), 328–339.
- Mekong River Commission, 2008a. Regional Multi-Stakeholder Consultation on the MRC Hydropower Programme. Consultation Proceedings. Mekong River Commission, Vientiane.
- Mekong River Commission, 2008b. Press Statement on Current Mekong Flood Situation. <http://www.mrcmekong.org/news-and-events/news/press-statement-on-current-mekong-flood-situation/>. Accessed October 22, 2017.
- Mekong River Commission, 2009. Cambodia and Viet Nam formally open-up cross-border river trade on the Mekong. <http://www.mrcmekong.org/news-and-events/news/cambodia-and-viet-nam-formally-open-up-cross-border-river-trade-on-the-mekong/>. Accessed October 27, 2017.
- Mekong River Commission, 2010a. Minutes of the thirty-first meeting of the MRC Joint Committee. Mekong River Commission. 2-3 March 2010, Luang Prabang, Lao PDR. <http://www.mrcmekong.org/assets/Publications/governance/31st-JC-Minutes-Structured.pdf>. Accessed October 22, 2017.
- Mekong River Commission, 2010b. Mekong Commission visits China dams and will discuss future cooperation. <http://www.mrcmekong.org/news-and-events/news/mekong-commission-visits-china-dams-and-will-discuss-future-cooperation/>. Accessed October 22, 2017.
- Mekong River Commission, 2011a. Minutes of the eighteenth meeting of the MRC Council. Mekong River Commission, Vientiane.

Mekong River Commission, 2011b. Procedures for Notification, Prior Consultation and Agreement (PNPCA). Proposed Xayaburi Dam Project – Mekong River. Prior Consultation Project Review Report. Mekong River Commission, Vientiane.

Mekong River Commission, 2013. Sudden peak in water levels caused by unusually high rainfall. <http://www.mrcmekong.org/news-and-events/news/sudden-peak-in-water-levels-caused-by-unusually-high-rainfall/>. Accessed October 21, 2017.

Mekong River Commission, 2014a. Mekong water levels higher than average despite local concerns. <http://www.mrcmekong.org/news-and-events/news/mekong-water-levels-higher-than-average-despite-local-concerns/>. Accessed October 21, 2017.

Mekong River Commission, 2014b. China commits to continue and enhance cooperation with the MRC. <http://www.mrcmekong.org/news-and-events/news/china-commits-to-continue-and-enhance-cooperation-with-the-mrc/>. Accessed October 24, 2017.

Mekong River Commission, 2015a. Mekong River Commission. 20 years of cooperation. Mekong River Commission, Vientiane and Phnom Penh.

Mekong River Commission, 2015b. Technical Review Report on the Prior Consultation for the Proposed Don Sahong Hydropower Project, Vientiane.

Mekong River Commission, 2016. Integrated Water Resources Management-based Basin Development Strategy 2016-2020 for the Lower Mekong Basin. Mekong River Commission, Vientiane.

Mekong River Commission, unpublished, 2017a. Mid-Year Report 2017. Pre draft, Vientiane.

Mekong River Commission, unpublished 2017b. Note for Input to the Joint Platform Lessons Learnt from the Prior Consultation processes, and inputs to the PNPCA Commentaries. Mekong River Commission, Vientiane.

Mekong River Commission, 2017. Statement on prior consultation process for the Pake Beng Hydropower Project in Lao PDR. Mekong River Commission, Vientiane.

Mekong River Commission, Ministry of Water Resources of the People's Republic of China, 2016. Technical Report – Joint Observation and Evaluation of the Emergency Water Supplement from

China to the Mekong River. Mekong River Commission; Ministry of Water Resources of the People's Republic of China, Vientiane.

Mekong River Commission Secretariat, unpublished, 2017. Joint Action Plan for the implementation of the statement for the Pake Beng Hydropower Project. Third Draft V3 - 26 September 2017. Mekong River Commission, Vientiane.

Mekong River Commission Secretariat, 2017. Prior Consultation for the Proposed Pak Beng Hydropower Project. Technical Review Report. Mekong River Commission, Vientiane.

Ministry of Natural Resources and Environment, Lao PDR, Lao National Mekong Committee Secretariat, 2015. Statement of the Lao PDR regarding Prior Consultation for the Don Sahong hydropower project. Mekong River Commission, Vientiane.

Ministry of Natural Resources and Environment, Thailand, 2011. Mekong River Commission Procedures for Notification, Prior Consultation and Agreement Form for Reply to Prior Consultation. Xayaburi Hydropower Project. Mekong River Commission, Vientiane.

Ministry of Natural Resources and Environment, Thailand, 2015. Thailand Response to a Prior Consultation of Don Sahong Hydropower Project. Mekong River Commission, Vientiane.

Ministry of Natural Resources and Environment, Thailand, 2017. Mekong River Commission Procedures for Notification, Prior Consultation and Agreement Form/Format for Reply to Prior Consultation, Vientiane.

Ngaosyvathn, P., 1985. Thai-Lao Relations. A Lao View. *Asian Survey* 25 (12), 1242–1259.

Osborne, M.E., 2000. *The Mekong. Turbulent past, uncertain future.* Grove Press, New York.

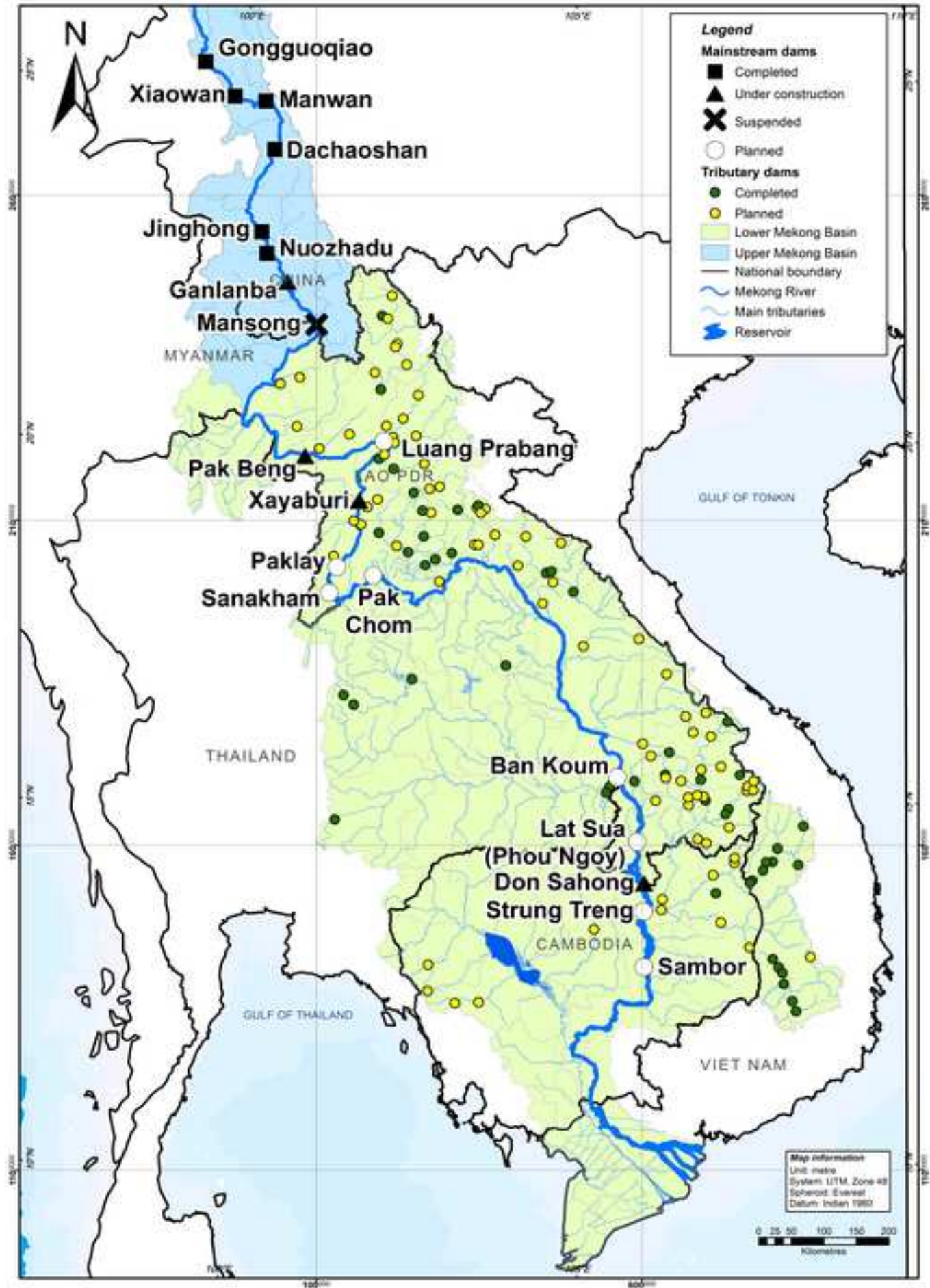
Räsänen, T.A., Someth, P., Lauri, H., Koponen, J., Sarkkula, J., Kumm, M., 2017. Observed river discharge changes due to hydropower operations in the Upper Mekong Basin. *Journal of Hydrology* 545, 28–41.

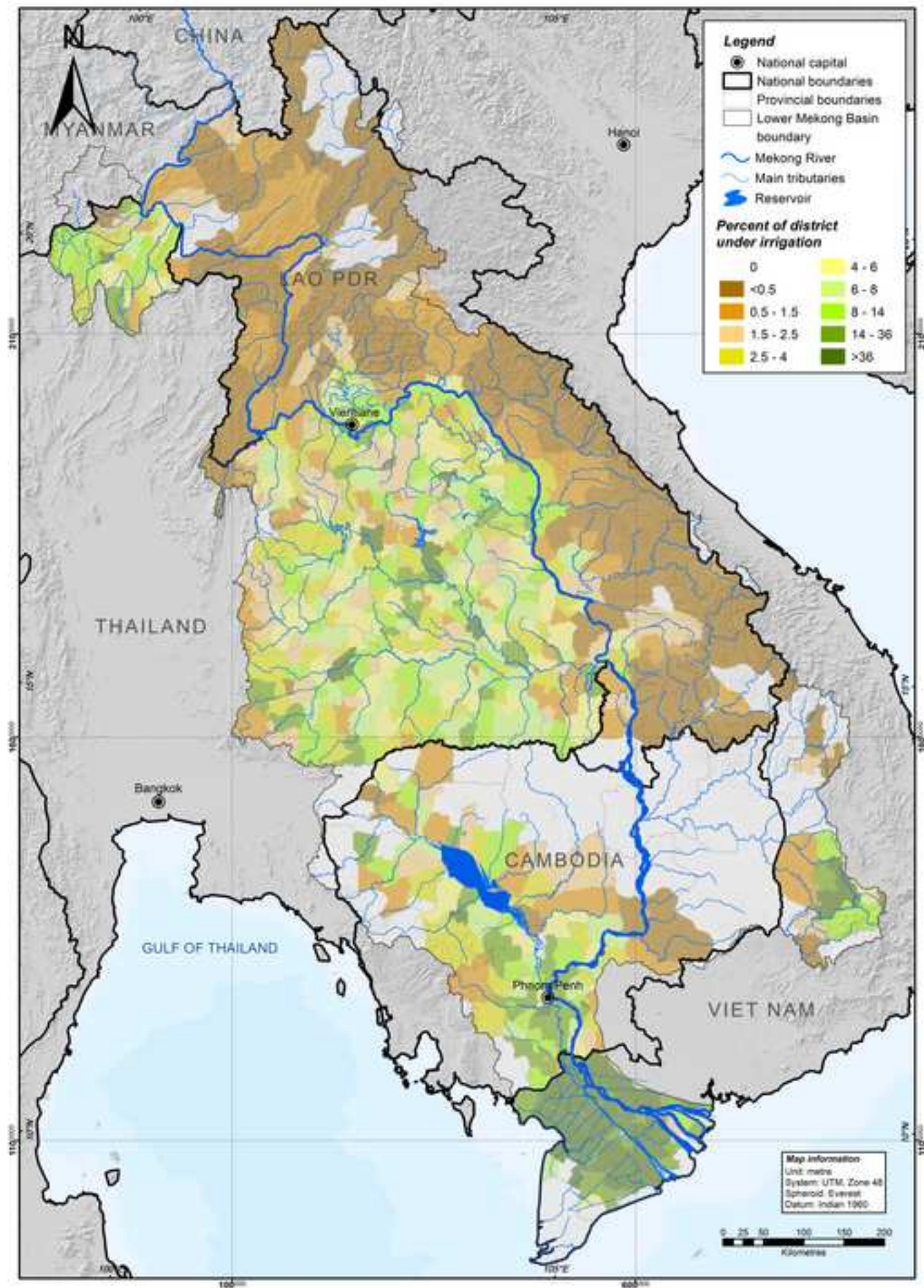
Richardson, M., 2009. Dams in China Turn the Mekong Into a River of Discord: Rivers Know No Borders, But Dams Do. *The Asia-Pacific Journal* 7 (35, No 1).

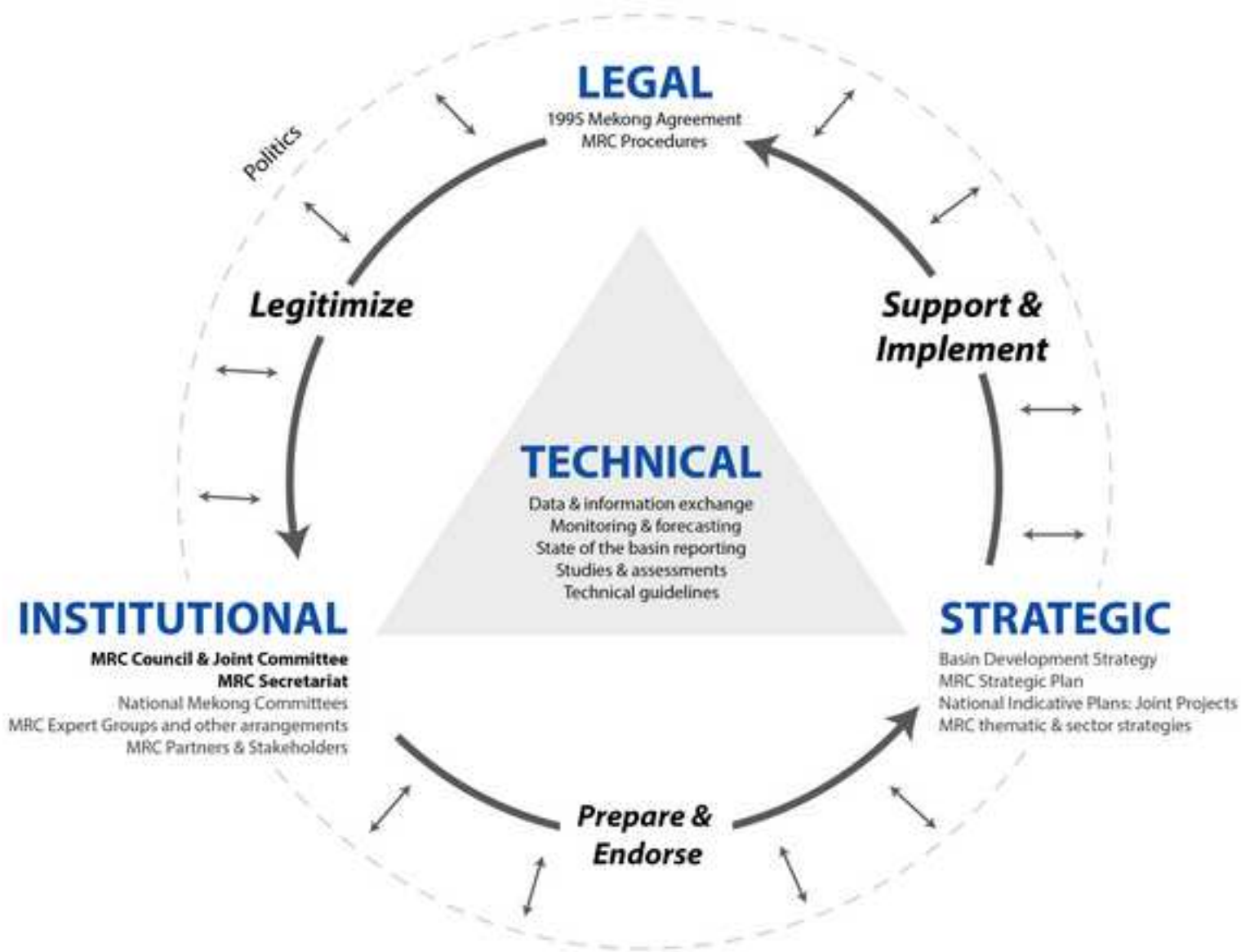
- Roeun, V., Mockenhaupt, B., 2000. Dam in Vietnam Continues to Stir Fears in North Province. <https://www.cambodiadaily.com/archives/dam-in-vietnam-continues-to-stir-fears-in-north-province-88834/>. Accessed October 8, 2017.
- Rutkow, E., Crider, C., Giannini, T., 2005. Down river. The consequences of Vietnam's Se San River Dams on life in Cambodia and their meaning in international law. NGO Forum on Cambodia, Phnom Penh.
- Saroeun, B., 2000. Viets say sorry for Se San flow. <http://www.phnompenhpost.com/national/viets-say-sorry-se-san-flow>. Accessed October 8, 2017.
- Saroeun, B., Stormer, C., 2000. Cambodia ignored in dam environmental study. <http://www.phnompenhpost.com/national/cambodia-ignored-dam-environmental-study>. Accessed September 25, 2017.
- SwedPower, 1986. Appraisal of the Yali Falls Hydropower Project. Main Report. Interim Committee for Coordination of Investigations of the Lower Mekong Basin, Bangkok.
- Thim, L., 2010. Dynamics of planning process in the Lower Mekong Basin: A management analysis for the Se San sub-basin. Rheinische Friedrich-Wilhelms-Universität, Bonn.
- Viet Nam National Mekong Committee, 2011. Mekong River Commission Procedures for Notification, Prior Consultation and Agreement Form for Reply to Prior Consultation. Xayaburi Hydropower Project. Mekong River Commission, Vientiane.
- Viet Nam National Mekong Committee, 2015. Mekong River Commission Procedures for Notification, Prior Consultation and Agreement Form/Format for Reply to Prior Consultation. Don Sahong Hydropower Project. Mekong River Commission, Vientiane.
- Viet Nam National Mekong Committee, 2017. Mekong River Commission Procedures for Notification, Prior Consultation and Agreement Form/Format for Reply to Prior Consultation. Mekong River Commission, Vientiane.
- Wyatt, A.B., Baird, I.G., 2007. Transboundary Impact Assessment in the Sesan River Basin. The Case of the Yali Falls Dam. *International Journal of Water Resources Development* 23 (3), 427–442.

Yeophantong, P., 2014. China's Lancang Dam Cascade and Transnational Activism in the Mekong Region. *Asian Survey* 54 (4), 700–724.

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MRC Member Countries



Cambodia



Lao PDR



Thailand



Viet Nam



Dialogue Partners



China



Myanmar