Battery of Asia?

The rise of regulatory regionalism and transboundary hydropower development in Laos

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525758-L-bw-Chattranond
Processed on: 29-10-2018

This dissertation is part of the research programme of CERES, Research School for Resource Studies for Development.

The research was funded by the Office of the Higher Education Commission (OHEC) of Thailand.

ISBN 978-90-6490-094-5

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The rise of regulatory regionalism and transboundary hydropower development in Laos

Batterij van Azië?
De opkomst van regulerend regionalisme en grensoverschrijdende ontwikkeling van waterkracht in Laos

to obtain the degree of Doctor from the
Erasmus University Rotterdam
by command of the Rector Magnificus

Prof.dr. R.C.M.E. Engels

and in accordance with the decision of the Doctorate Board

The public defence shall be held on
Thursday 06 December 2018 at 16.00 hrs

by

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List of Acronyms

ADB: Asian Development Bank
ASEAN: Association of Southeast Asian Nations
BDP: Basin Development Plan
CK: Chor Karnchang Public Company Limited
EdL: Electricité du Laos
EGAT: Electricity Generating Authority of Thailand
GMS: Greater Mekong Subregion
GoL: Government of Laos
HPP: Hydroelectric Power Project
ICCS: International Cooperation and Communication Section (MRC)
IPP: Independent Power Producer
ISH: Initiative for Sustainable Hydropower (MRC)
Lao PDR: Lao People's Democratic Republic
LMB: Lower Mekong Basin
LNMCS: Lao National Mekong Committee Secretariat
MC: Mekong Committee
MRC: Mekong River Commission
NGO: Non-governmental organization
PNPCA: Prior Notification, Prior Consultation and Agreement
PPP: Public Private Partnership
SEA: Strategic Environmental Assessment
TNMCS: Thai National Mekong Committee Secretariat
TWG: Transboundary Water Governance
UMB: Upper Mekong Basin
XPCL: Xayaburi Power Company Limited

Acknowledgements

This dissertation cannot be completed without great support from so many people both within and outside International Institute of Social Studies (ISS). I am very grateful to my promoters, Prof. Wil Hout for his tireless supervision that attentively groomed and improved my theoretical thinking and academic writing; as well as Prof. Bram Büscher for his consistent critical ideas and comments that gradually pushed this work to be more structured and solid. Constructive comments from other scholars, such as Dr. John Cameron, Dr. Thanh-Dam Truong, Dr. Karim Kniou, and Dr. Jeroen Warner, also contributed to developing my research.

I would like to thank the Office of the Higher Education Commission of Thailand that financially sponsored this study as well as Mahasarakham University, colleagues and friends in Thailand that constantly facilitate my further education. I extend my gratitude to all informants in Thailand and Laos, including academics, government officials, social activists, local people, and staff at the Mekong River Commission Secretariat. They did not only provide useful data for the research but also invaluable experiences in social understanding.

Many thanks for countless support and friendship from PhD fellows, staff, and friends at the ISS, in The Hague, and other places in the Netherlands. They made my time there enjoyable and warm particularly during the winter. Moreover, I could not imagine how I can complete this tough and long journey without firm support and encouragement from my family – Praphada and Akara Chattranond, as well as Oukham Solaphom.

Finally yet importantly, this dissertation is dedicated to three departed men; my father, Woraphob Chattranond who provided his best efforts for my education; and two mentors - Dr. Karel Jansen (ISS, the Netherlands), and Dr. Kajit Jittasevi (Thammasat University, Thailand) - who guided substantial ideas for my academic interests and development of this research at the early stage.

Abstract

Regionalism has become a major trend in economic development in Southeast Asia since the end of the Cold War. In the Lower Mekong Basin, riparian states use water for hydropower, which is one of important potentials of the river. This strategy supports the regionalization of economic activities that is promoted by policies of regionalism, which is aiming for more participation of the private sector and the creation of an integrated regional market. However, large-scale hydropower projects, especially on the transboundary watercourse of the Mekong mainstream, potentially have critical impacts – something that draws attention to the existing arrangements for transboundary water governance (TWG). The dissertation draws on fieldwork conducted in Laos and Thailand and a case study of the Xayaburi Dam in Laos, the first hydropower project on the Lower Mekong mainstream, to illustrate the relationships between TWG and regionalism.

The research found that emerging marketization of water for energy through so-called 'regulatory regionalism' is an essential element of hydropower development in the Lower Mekong Basin, especially in Laos. The idea of regionalism is connected essentially to the transformation of the state, which implies that regional development policies have been incorporated into national governance without the creation of strong, centralized regional governance. This process enables states to embrace the political project of regionalism, without transferring power to regional institutions. Therefore, TWG of hydropower development in the basin seems to be more an aggregation of governance mechanisms, diffused across agencies of national governments, instead of a unified structure of regional institutions. By instituting new regulatory mechanisms, the states and their collaborating private developers can take advantage of regionalism as a strategy to achieve their goals of water nationalism and political legitimacy, while stimulating regional market building at the same time.

Samenvatting

Regionalisme is sinds het einde van de Koude Oorlog een belangrijke trend in de economische ontwikkeling in Zuidoost-Azië. In de benedenloop van de rivier de Mekong gebruiken oeverstaten water om hydro-elektriciteit op te wekken. Ze benutten daarmee een van de belangrijke potentiële functies van de rivier. Met deze strategie wordt de regionalisering van economische activiteiten ondersteund. Het beleid van regionalisme is gericht op een grotere participatie van de particuliere sector en het creëren van een geïntegreerde regionale markt. Grootschalige waterkrachtprojecten, vooral op de grensoverschrijdende waterloop van de hoofdstroom van de Mekong, kunnen echter ernstige gevolgen hebben. In dit verband is het interessant om te kijken naar de bestaande regelingen voor grensoverschrijdend waterbeheer (transboundary water governance, of TWG). Dit proefschrift is gebaseerd op veldwerk in Laos en Thailand en op een casestudy van de Xayaburi-dam in Laos, het eerste waterkrachtproject in de benedenloop van de Mekong. Met dit onderzoek wordt de relatie tussen TWG en regionalisme geïllustreerd

Uit het onderzoek blijkt dat de opkomende commercialisering van het gebruik van water voor energie door middel van het zogenaamde 'regulerend regionalisme' een essentieel onderdeel is van de ontwikkeling van waterkracht in de benedenloop van de rivier de Mekong. Dit is vooral in Laos het geval. Het idee van regionalisme hangt wezenlijk samen met de transformatie van de overheid. Dit impliceert dat het regionale ontwikkelingsbeleid is opgenomen in het landsbestuur zonder dat er een sterk, gecentraliseerd regionaal bestuur is gevormd. Hierdoor kunnen overheden het politieke project van regionalisme omarmen zonder macht over te dragen aan regionale instellingen. Daarom lijkt TWG met betrekking tot de ontwikkeling van waterkracht in het stroomgebied meer een bundeling van bestuursmechanismen die zijn verspreid over de verschillende overheidsinstellingen, dan een homogene structuur van regionale instellingen. Door nieuwe reguleringsmechanismen in te stellen, kunnen de overheden en hun private ontwikkelingspartners profiteren van regionalisme als strategie om waternationalisme en politieke legitimiteit te realiseren, terwijl ze tegelijkertijd de regionale marktontwikkeling stimuleren.

1 Introduction

1.1 Research Background

1.1.1 Research issues

In the dry season of early 2010, a drought crisis exposed the vulnerability of the Mekong River and its riparian population. Extremely low levels of the Mekong mainstream not seen in decades in northern Laos and northern Thailand aroused more public concern than ever. This led to controversy in Thailand, where the first summit of the Mekong River Commission (MRC) was concurrently held in April 2010. The celebrated summit among governments in the Lower Mekong Basin - Cambodia, Laos, Thailand and Vietnam - gave unclear responses to the crisis. In the wake of growing hydropower development in the Mekong Basin, the crisis highlighted the contradiction between the objective of enhancing economic prosperity by expanding regional cooperation among states and the need to protect people from potential harmful transboundary impacts. This tension is the starting point of this study on current issues of international development in the Mekong Basin in the context of economic regionalism.

This introduction aims to identify three connected issues regarding the expansion of hydropower development and regionalism in the Mekong Basin. Firstly, the ongoing development of the hydropower sector exposes the connection between regionalization and regionalism, i.e., the process of using water resources to serve transnational/regional markets, and the international/regional institutionalization aimed at integrated water management and market building. Secondly, regionalism in hydropower development originates from the skewed power distribution between regional institutions, especially the MRC, and the states that try to manipulate regional governance in order to promote and protect their interests. This tension reveals a complex interplay between techno-managerial and power-based perspectives of transboundary water governance (TWG). Thirdly, the relatively weak

regional institutions reflect the weakness of regionalism, which is unable to provide a governance mechanism in the face of state transformation that involves the rearranging of market-state relations and the blurring of domestic and international affairs. This complexity limits the options for the TWG of the hydropower development that is currently being revived and expanded in the region. The case study of hydropower development in Laos serves to illustrate the limits to TWG.

Regionalization of hydropower in the Mekong Basin

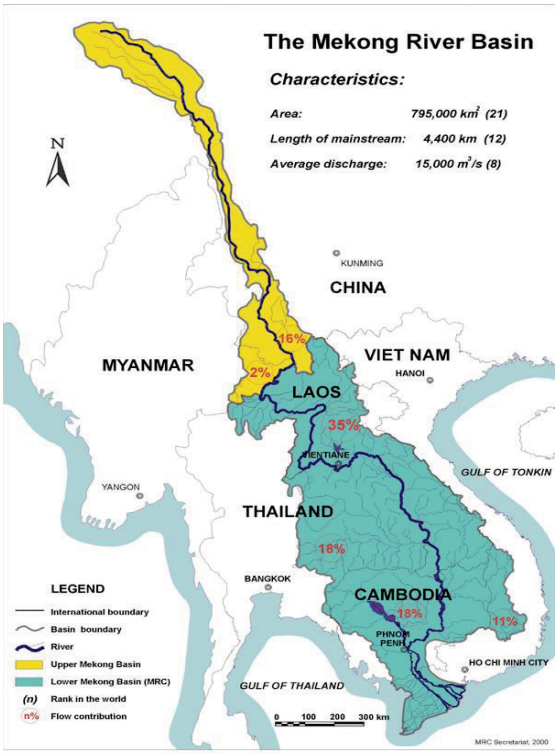
The Mekong is the longest river in Southeast Asia and one of the longest international rivers in Asia. It flows southward for around 4,400 km. from the source in the Tibetan Plateau through southern China, Myanmar, Laos, Thailand, Cambodia and Vietnam before flowing into the South China Sea. The first half of the river, which flows within China, is called 'Lancang', while the rest is internationally known as 'Mekong' (derived from its name in Thai and Lao) (MRC 2011a). The river is considered to be an international watercourse in Laos, Thailand, Cambodia and Vietnam, as reflected in an international agreement; this status is not legally recognized in China and Myanmar. Even though the Mekong is hydrologically integrated, its governance is politically fragmented among riparian states and between the upper and the lower basins.

The *Mekong Basin* is the land surrounding the watercourses that flow into the Mekong; it covers an area of 795,000 km^2. This huge basin is geographically divided into two parts. The Upper Mekong Basin (UMB) covers an area of around 186,000 km^2 in southern China and a small part of northeastern Myanmar and northern Laos. The Lower Mekong Basin (LMB) begins at the so-called Golden Triangle, where the Mekong meets the border of Burma, Laos and Thailand, and covers northern and northeastern Thailand, almost all of Laos and Cambodia, as well as one-fifth of central and southern Vietnam. The total area of the LMB is three times that of the upper one: it is approximately 609,000 km^2 or seventy-seven percent of the total basin area (MRC 2011a).

As one of the most important rivers in Asia, more than sixty million people or one-third of the population in Thailand, Cambodia, Laos and Vietnam reside along and depend on the Lower Mekong's mainstream and its tributaries for consumption, irrigation, transportation and hydropower generation. The basin covers one-third of the cultivated area in Thailand

and almost all of Laos. It sustains the Great Lake (Tonle Sap) in Cambodia, which is one of the largest freshwater fisheries sources in the world. In the delta, the fertile plain generates more than half of total rice production in Vietnam (UNDP 2006). Because of these significant features, any large-scale development of water resources in the basin is a sensitive issue for both the livelihood of local people and the relations among riparian states.

Map 1.1 the Upper Mekong Basin and the Lower Mekong Basin
source: Mekong River Commission, http://www.mrcmekong.org



Chapter 1

The Mekong Basin is one of the fastest growing economic regions in the world and is endowed with a high potential for hydropower. So far, there have been hydropower projects on many tributaries of the Mekong as well as the mainstream of the Upper Mekong in China, but until recently there was none on the Lower Mekong mainstream. Although up to twelve dams have been planned, the Lower Mekong has never been dammed until the Xayaburi Hydroelectric Power Project formally started in 2012. The project is only one of several large dams recently started in Laos, a country endowed with the biggest hydropower potential in the LMB. This feature has led the government to brand the country as the 'Battery of Asia' – a power hub for hydropower generation and export to the country's neighbors and the wider region.

Several companies from Thailand, Laos' neighbor and the biggest importer of hydroelectricity from Laos, mainly invest in the project in order to export electricity to their home country. Power export is not only a strategy of the government of Laos (GoL) to sustain economic growth and poverty alleviation: the developer stresses several other benefits of the dam, including efficient water utilization, reliable energy generation, global warming mitigation, and cooperation among countries in the Lower Mekong Subregion (XPCL 2012). The Thai government, meanwhile, claims that the sourcing of hydropower from its neighbor is a tool to achieve energy security because it leads to diversification, while the sources are secure, accessible and affordable (EPPO 2013).The dam, however, has become a regional issue because it is not only the first dam ever built on the Lower Mekong mainstream, where it is expected to produce transboundary environmental impacts, but also because it is the first project submitted to the international consultation process of the MRC. While the governments of Laos and Thailand have supported private companies that aim to develop the project for cross-border power trade, the governments of downstream countries (i.e., Cambodia and Vietnam), and civil society organizations have voiced concerns about the harmful impacts of the large dam, particularly on fisheries and sediment allocation. The construction of this dam is also seen as a starting point for other projects. The building of a series of dams would divide the Mekong into several parts and may lead, as Osborne (2011) has shown, to the transformation of the river into a series of unproductive lakes, and to serious ecological degradation.

Until well after the Second World War, the Mekong River was almost untouched by international politics. The Mekong Committee (MC), which included Cambodia, Laos, Thailand and (formerly South) Vietnam, was initiated by the United States in 1957 under the supervision of the United Nations Economic Commission for Asia and the Far East (UN-ECAFE). Damming the water channel in the Mekong Basin for electricity was a major objective of the MC as was control of flooding. However, political turbulence in those countries during the Cold War between the 1950s and 1980s stood in the way of any significant outcome of the committee. Only smaller domestic projects had been implemented, but not large dams on the Mekong mainstream (Tana 2008: 108-109).

The changing geopolitics of the post-Cold War period has driven regionalism and development in the Mekong Basin. Since the 1990s, the regional context has changed dramatically, as chronic political conflicts have made way to dynamic economic cooperation (see Hirsch 2009; Goh 2007; Nguyen 2006, Sisowat 2006; Osborne 2004; Öjendal 2000). The Mekong Committee was transformed into an independent intergovernmental agency, the Mekong River Commission (MRC), in 1995. Other international development schemes have been promoted under the regional framework, most notably the Greater Mekong Subregion Economic Cooperation Program (GMS), which is an initiative promoted by the ADB since 1992. By 2000, all of the Mekong riparian states, except China, had acceded to the Association of Southeast Asian Nations (ASEAN)[1]

Several studies on that context of regionalism observe increasing engagement of new actors in the hydropower sector with participation of transnational firms, private financiers, and social movements, especially from within the region, since the late 2000s (Merme et al 2014; Myint 2012; Molle et al 2009; Middleton et al 2009). Meanwhile, the state-centric approach to intergovernmental cooperation, which offered only limited public participation, has continued to dominate public policy making in the region and has led to fragmented regional governance and weak regulatory power of the MRC (Dore et al 2012; Suhardiman et al 2011; Foran et al 2010; Sokhem et al 2007; Hirsch and Jensen 2006). The studies on regionalism and hydropower all seem to reach the same

[1]ASEAN currently comprises ten member states: Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam.

conclusion on the issue of the overexploitation of water and the underdevelopment of institutions of transboundary water governance (TWG).

Contested TWG in the Mekong Basin

As noted by Molle et al (2009), intensifying water development makes the Mekong waterscape increasingly contested, because it involves issues of economic interests, livelihoods, food security and so on. These issues do not concern only the technical aspects of water governance but also relate to fundamental issues reflecting the international political economy of regional development and economic integration, particularly in case of the transboundary watercourse. The pioneer Xayaburi project on the Mekong mainstream is challenging TWG as its transnational characteristics have mirrored dynamics of regionalism that somehow impede the supranational governance of water resources.

The recent revival of hydropower development on the Mekong mainstream has increased the tension between TWG and regionalism. Existing regional integration schemes are promoting the use of transboundary water resources for economic purposes, especially by producing tradable electricity to meet growing regional energy demands and support related economic activities. The 'region' is essentially constructed by states and international development agencies to transform the river basin into a developmental area and a regional market, supported by the rearrangement of regional institutions and the rescaling of geographical boundaries (Glassman 2010; Sneddon and Fox 2006; Bakker 1999). Although there is the MRC that promotes the joint management of shared water resources, Hirsch and Jansen (2006) have noted that the role of the Commission is essentially limited to providing technical support rather than directly intervening in decision making. The Xayaburi case challenges both the raison d'être of the MRC and the domestic governance in the Mekong states, as it puts into question how states manage economic, social, and ecological issues, as well as serve national and regional interests.

International cooperation in transboundary basins does not address water issues neutrally. Although international armed conflicts about water resources are rare and usually result from territorial disputes and global politics (Katz 2011; Turton and Earle 2005; Allan 2000; Wolf 1998,

1999), the absence of water wars does not mean there are no water conflicts: on the contrary, these conflicts are widespread because of the impact of water issues on power relations (Zeitoun and Warner 2006). Cascao and Zeitoun (2010: 29-30) identify two important issues attached to the international cooperation on water. Firstly, there is a question regarding the distribution of water, which is directly linked to both quantitative and qualitative aspects of water management, i.e., water allocation among users and sectors as well as the control of water-related pollution. Secondly, there is the issue of how to cope with the fluid nature of water, which passes through several territorial entities and thereby fuels competing interests of actors to control the use of water. The second issue is relevant to this study, as we focus on hydropower development across multiple layers of governance, which is a feature that makes the control of water resources more complicated.

A focus on the technical aspects of water governance is insufficient to answer the question. As Allan and Mirumachi (2010) have shown, attempts to implement regional/basin cooperation often overemphasize technical solutions to water flows derived from hydrology and engineering, as well as legal solutions for the regulation of shared water resources. Demographic pressures and consumption practices often make the mobilization of water flows for food production in water scarce countries more difficult when governments try to manage water within national boundaries. In response to this, Allan and Mirumachi (2010) argue that trade in virtual water, which reflects the embedding of water volumes in food products and hydroelectricity, may be a solution to problems of water scarcity and thereby reduce unnecessary international conflicts.[2]

Based on that idea, developers including state agencies and private firms could consider water in the form of hydroelectricity as a tradable good that encourages the expansion of trade and investment in regional markets. This development needs some kind of regional governance, such as regional/basin-wide planning, information sharing, prior consultation, transboundary assessment and other integrated regulations, to realize not only the efficient use of water but also the creation of an organized and predictable transnational market where states are not the

[2] One of the cases is the absence of armed conflict over transboudary water in the Middle East during the 1970-80s when Egypt could silently import grains to relieve water scarcity and avoid more expensive war (Allan and Mirumachi 2010: 24).

sole players because water experts, private companies, international donors, and NGOs have an increasing role.

Ideally, TWG requires that regional governance mechanisms manage common resources with a view to the equitable sharing of benefits over riparian countries (Huitema and Meijerink 2014). According to Hirsch (2012), better integration of activities among states would accommodate TWG at the regional basin-wide level, as well as produce integrative governance across sectors such as in the water-food-energy nexus. However, it is good to realize that hydropower projects tend to produce uneven benefits and costs for specific actors or areas and tend to favour those actors that dominate water governance. For this reason, technocratic approaches to TWG do not respond sufficiently to the political tensions that exist among riparian states, as well as between state and non-state actors, because these approaches are too much focused on producing efficient solutions that are expected to be beneficial to all.

Problematizing regionalism and TWG in the Mekong Basin

The rearrangement of international relations in the Mekong Basin has led to a form of TWG that evolved along with the process of regional water marketization. Marketization is not only about the commodification of water as tradable hydroelectricity but also about transferring domestic resources into private and foreign hands, frequently through public-private partnerships, in a region where most states have recently replaced their centrally planned economic system by systems that aim to connect and integrate with global and regional markets. The state has concentrated on regulatory roles, by creating and controlling rules that facilitate private developers to expand regional markets (Jayasuriya 2015, 2013; Jarvis 2014; Carroll and Jarvis 2013). In Laos, for instance, the state enterprise, Electricité du Laos, has worked closely with private firms from neighbouring countries in the development of hydropower projects for export using the regional scheme of cross-border power trade.

Nonetheless, neither the regional supranational institutions nor the TWG body, the MRC, directly rule over regional water-related developments, since decisions are ultimately taken by the national governments. As a consequence of this, the influence TWG is often overlooked because of the weak and informal nature of regional

institutions. This is the case particularly for the relatively new riparian states in the LMB, which became independent and underwent political regime changes during their recent history.[3] Narine (2002: 3) has argued that this circumstance has created a tension between the creation of regional institutions in Southeast Asia and nation-state building, because the very member states of the regional bodies are highly attached to their sovereignty and committed to non-interventionism.

This argument is applicable to the case of Laos, where state building has been a top priority of the incumbent regime because the power of the state in Laos had collapsed and has been re-built only after the revolution in 1975. Hydropower development seems to play a significant role in the control over natural resources and the population in remote areas as well as for the provision of infrastructure and public welfare. Regionalism of hydropower development in Laos cannot be studied separately from national governance because of the state's water nationalism - the belief that the nation-state obtains its strength from its ability to control water resources for development and to affirm national sovereignty over water in its territory (Allouche 2005: 114). In the case of Laos, it seems that water nationalism is inseparable from regionalism, which is a strategy for gaining political legitimacy, as it provides a justification of the right to rule by the state.

Weigand (2015: 16) has argued that two sources of legitimacy essentially relate to state building. These are instrumental legitimacy that derives from the perceived effectiveness of service delivery by the state, and substantive legitimacy that supports the right of the state to exercise social control on the basis of factors such as cultural traditions or legal-rational authority. In the case of Laos, the state may acquire instrumental legitimacy by focusing on regionalization that leads to the attraction of foreign investment and expansion of the energy market, while it may claim substantive legitimacy through engaging with regional schemes that provide normative frameworks for regional policies and regulations.

[3] Laos, Cambodia, and Vietnam formally gained independence from France in 1953-54, but revolutions changed the political regimes of all three countries towards communism in 1975, while market-oriented economic reforms started in the late 1980s. Unlike the other countries, Thailand has never been colonized and its current state dates back to the nineteenth century. Thailand allied with the US during the Cold War and rapidly developed a market system since the 1960s.

This thesis argues that when strong authority and efficient governance for development are lacking at the national level, the state tends to depend on regional governance and regional resources for strengthening its own relevance in national development. Technocratic forms of TWG accommodate marketization and transformation of the state; regionalist institutions, in their turn, promote the deepening of transnational relations among private developers and state agencies by regionalizing power trade and facilitating cross-border investment in the hydropower sector. In this way, regionalism becomes a strategy of the state to underpin its water nationalism and strengthen legitimacy in national development. Exploring transboundary hydropower development from this perspective, therefore, potentially contributed to explaining the relationship between regionalism and TWG in the Mekong Basin.

1.1.2 Research relevance

This thesis purposely views hydropower development as a reflection of the existing regionalism that does not only produce a rearrangement of international relations among states but deeply relates to the transformation of the state itself. The thesis argues that hydropower development on the Mekong mainstream changes transnational relations between public and private actors, domestic and international forces, and economic and socio-ecological interests. Hydropower development leads to a particular form of regional governance, and this exposes three important matters of development in the Mekong Basin.

First, the Mekong Basin is not only the biggest transboundary basin in Southeast Asia but it is located in one of the fastest growing economic regions in the world. Its regional cooperation has even been cited as a successful model for developing countries (Jacobs 2002; Phillips et al 2006). Although the basin is divided between the Upper and the Lower Mekong, its fragmented governance has not halted economic development in both parts, linked with regional economic integration frameworks such as ASEAN and the GMS. This development, however, has consequences that can be seen as two sides of the same coin. While the development promises shared prosperity and deeper economic cooperation, it also intensifies the transnational exploitation of water resources and produces international tensions as potential transboundary social-environmental impacts are becoming one of the regional concerns.

Second, the Mekong mainstream hydropower projects have been controversial and they attract much attention from the public because of the potentially large transboundary impacts. Regarding governance, the Xayaburi project may be a pioneer for both regional governance in the MRC and national governance for managing the effects of mainstream dam construction, which significantly affects the livelihoods of millions people in the basin. Certainly, studying this highly dynamic case is challenging, but the findings may contribute to a better understanding of this kind of transboundary development, which is increasingly prevalent not only in the region but around the world.

Third, this is not only a study of hydropower development, but also an effort to overcome the theoretical limits of the traditional division between international and domestic affairs in the discipline of International Relations (IR). Hammier (2013) argues that most IR approaches are based on so-called methodological nationalism, which creates an analytical duality between foreign/international and domestic/national affairs, and that this characteristic discourages a fruitful debate on regionalism beyond issues of form and institutionalization. As noted by Söderbaum (2012), theoretical approaches to regionalism mostly focus on formal regional institutions, and are dominated by state-centric and problem-solving perspectives. These characteristics often leave us with debates that focus excessively on the transfer of power from states to supranational institutions, and underrate the influence of regional governance on national or local development. Hence, there is a need for alternative explanations of the process of changing regional governance that is emerging in the Mekong Basin, which is mixed up with public and private interests, and is blurring the boundaries between domestic and international/regional affairs.

1.2 Research Objective and Questions

This study intends to understand how political-economic relations, involving regionalism and TWG, relate to the transformation of the state and its relations to other actors, as seen in the ongoing hydropower development on the Mekong mainstream. Instead of focusing on institutionalization of the region, which usually ends up with an explanation of ineffective TWG, this study attempts to understand the existing regionalism in the Mekong Basin from international political

economy and governance perspectives, following the structure and process of hydropower development across international and national levels.

Although this is a study about the 'state', which seems to be a crucial element in the building of market-led regionalism in Southeast Asia, it does not exclusively view the state as a unified or independent actor in IR. The research project focuses on hydropower development and its related TWG that combines state and non-state actors and is taking shape both in between and within the 'space of the state'. Following Jayasuriya (2015) and Hameiri (2012) we focus on the process in which regional policies, shaped by global and regional forces such as capitalism and marketization, are operationalized through economic and governance systems in transforming, rather than reducing, state power. This may explain the relationship between TWG and regionalism as a part of regional market building and state transformation, which are processes that ultimately change the relations between states and non-state actors. Based on this objective, the research questions are as follows:

Main question:
How does hydropower development on the Lower Mekong mainstream influence the relations between transboundary water governance and regionalism in the Mekong Basin?

Sub-questions:
1) Which are the dynamics of hydropower development that shape the pattern of transboundary water governance in the Mekong Basin?

2) Which are the linkages between the regionalist frameworks of GMS, ASEAN and MRC, particularly their implications for the transboundary water governance of hydropower development in the Mekong Basin?

3) How and why does the state, especially in the case of Laos, and related actors define and pursue their interests in hydropower development under the structure of existing regionalism?

4) Which opportunities and threats does regionalism create for state and non-states actors regarding the issue of transboundary water governance of hydropower development?

1.3 Research Methodology

To study regionalism, we need to be clear what it means, especially when the study purposefully applies a perspective of international political economy (IPE) that focuses on the transforming market-state relations. According to (Hettne 2005), IPE perspectives on regionalism perceive the current wave of the creation of regional groupings as a phenomenon related to the transformation of the world economy, which is making regional integration projects market-driven and outward looking. Such interpretations differ from, neoliberal views that focus on the revival of protectionism in economic policies.

Further, there are important differences among terms related to regionalism, although such terms are often used interchangeably in the literature. While *cooperation* simply refers to collective action by states to solve specific problems or achieve some goals, *regional integration* implies changes to sovereignty as a result of the decision of individual states within a given geographical area to join a larger whole and establish regional agreements, rules and institutions. Regional integration is related but not similar to *regionalization*. The latter is the formation of a region through increasingly complex cross-border activities, consisting of commercial and human transactions in a defined geographical area, whether consciously planned or not. Such processes may be based on the idea of *regionalism*, which is a tendency and a political commitment to organize the world in terms of regions; more narrowly, regionalism refers to a specific regional project. It may express a common sense of identity and purpose, which guides the creation and implementation of institutions for collective action within a region (Hettne 2005: 545).

It should be noted that regionalism and regionalization are usually distinguished on the basis of their driving forces. Whereas regionalization is a process that brings about integration and is driven and primarily carried out by private individuals acting on their own, regionalism refers to a political movement based on awareness of and loyalty to a region and is driven by government policies and actions of political authorities (Frost 2008: 14-15). This dissertation purposely

employs the term regionalism to underscore the regional market building policies led by state agencies and the existing process of regionalization driven by market forces. A form of state-led regionalism that heavily promotes and facilitates regionalization of the market would produce a particular kind of regionalism and engender state transformation (see diagram 1.1).

Diagram 1.1 Pathway of regionalism and regionalization

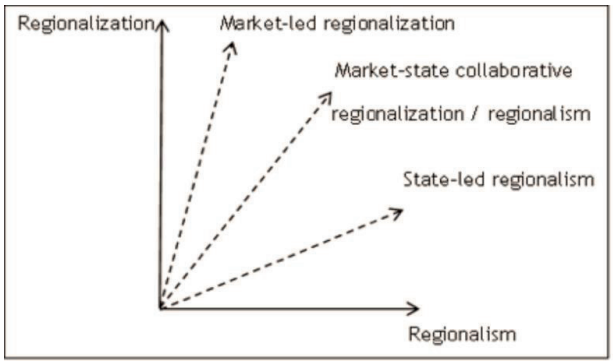


Diagram 1.2 Degree of regionness in relation to regionalization and regionalism

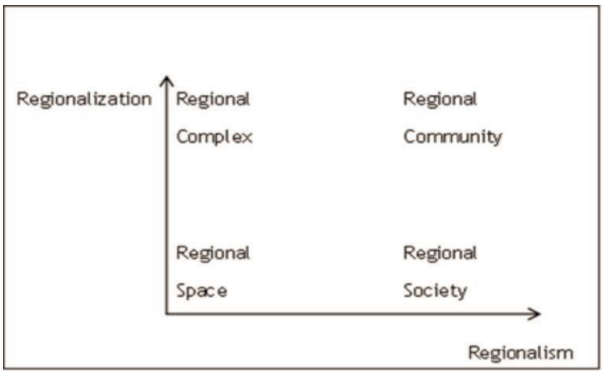


Diagram 1.2 shows Hettne and Söderbaum's (2002: 39-45) classification of forms of *regionness*. These authors note that the relationship between regionalism and regionalization expresses *regionness* - the degree of regional capacity to tackle common problems. The evolution of regionness in specific regions is not always hierarchical, but can be uneven across areas or sectors, and relates to the degree of and balance between regionalism and regionalization. An increasing degree of regionalization, such as may result from intensifying economic transactions, could transform a *regional space* – a bounded geographical and ecological unit – into a series of interdependent communities that make up a *regional complex*. It needs political will and an institutionalization of regionalism to create a *regional society* based on formal cooperation among states. Deeper regionalization, as a reflection of shared values among states and societies, enhances the regionness to the degree of a *regional community*, which may ultimately evolve into a regional state and a new supranational community. The evolutionary process of regionness could result in state transformation, with the state adopting a regulatory role in the process of regional market building (further details will be discussed in chapter 2).

On the basis of the conceptual framework sketched in this section, this study attempts to analyze interactions among actors in the TWG of hydropower development in order to explain the transformation of the state and the nature of relations between states and non-state actors that influence regionalism, and vice versa. We can empirically study hydropower development and regionalism by focusing on existing physical projects, investment volumes, as well as written policy documents and regulations. However, a deeper understanding requires a theoretically informed interpretation of the governance processes involved, with attention for their conceptual and historical background. Thus, we attempt to uncover the mechanisms of social relations that can explain the empirical events, including through a case study.

1.3.1 The case study

This research project uses a case study of transboundary hydropower development on the Lower Mekong mainstream in Laos, in particular the Xayaburi HPP. This approach is "an empirical inquiry that

investigates a contemporary phenomenon within its current context when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used" (Yin 2009: 18). According to Sayer (2000), this is a type of intensive research that aims for the causal explanation of certain events like the decision making process on the Xayaburi HPP, which illustrates the governance of hydropower development in the region. The case is selected because of four reasons.

In the first place, the recent pattern of transnational hydropower development is reflected well in the case. By 2012, it was the first and only dam that was being developed on the Lower Mekong mainstream. Although the Xayaburi dam is located in Laos, it is substantively a Thai project. The government of Thailand, through the state-owned Electricity Generating Authority of Thailand (EGAT), has agreed to purchase most of its electricity while Thai banks have financed the project and a Thai company, Ch. Karnchang, has been building the dam (Bangkok Post 2012). Hence, the Xayaburi's consultation process in the MRC as well as its governance – i.e., regulations and investment patterns – could be a pilot for following projects on the Lower Mekong.

Secondly, The Xayaburi project is a milestone for regional cooperation, because it is the first project on the Lower Mekong mainstream for which the MRC's consultation process has been used. According to the Procedures for Notification, Prior Consultation and Agreement (PNPCA) of the Mekong Agreement 1995, member countries must at least notify the MRC's Joint Committee when they want to develop any major infrastructure such as hydropower dams on the Mekong mainstream or its tributaries, particularly if that development may cause significant transboundary impact on people or the environment downstream (MRC 2011). When this research design was originally developed in 2011, the project had been hotly debated by downstream governments because of their concerns about transboundary impacts as well as by civil society, which brought this issue to the attention of a regional forum of ASEAN.

Thirdly, Laos is a distinct case for the study of regionalism from both international political economy and governance perspectives. Firstly, although it is the smallest country both in terms of population and economy in the region, Laos is the biggest source of water flowing into the Mekong. The country's great hydropower potential, in particular, has

made it much more important in terms of water and energy development. Secondly, Laos is landlocked, centrally located in the region, and surrounded by China, Vietnam, Myanmar, Cambodia and Thailand, which are among the fastest growing economies in the world. Therefore, its political economy highly depends on its regional location, and forces the government of Laos to employ regionalism as a grand strategy for development. Thirdly, as a relatively new state, which has implemented capitalist economic and governance reforms since the late 1980s, the transformation of the state and the market in Laos is obviously dynamic.

Finally, the case is seen as a good candidate to demonstrate how the transforming roles of the state and its relations with other states and non-state actors – i.e. international/regional organizations, transnational companies, NGOs and local communities – reflect processes of governance and regionalism. The case study approach emphasizes a detailed contextual analysis of a limited number of events by focusing on how and why these state and non-state actors have interacted around the project, especially in its decision making process.

1.3.2 Data collection and data analysis

Although the research focuses on hydropower development, data collection does not only follow the construction of the dam itself but also focuses on policies, decision making processes, and signs of support and resistance in government agencies, international organizations and civil society concerning the growth of hydropower. The data required for this research was predominantly qualitative, and was obtained from documents, interviews, and field observations, which were supported by secondary quantitative data on variables such as energy demand and the rate of economic interdependence, reflected in trade volumes and levels of foreign direct investment. Because the research project has spread over several years, and fieldwork was conducted mainly in 2013–2014, statistical data is included only until 2016.

Data collection includes *documentary research*, involving the interpretation of key legal and policy documents, press releases, related books, and academic articles. Because some primary data was unavailable or was not reflected fully in available documents, *qualitative (semi-structured or open-ended) interviews* were held to gather information about policy

implementation, norms, and perceptions about the subjects. This research project also employed *direct observation* to collect more contextual data on physical settings as well as informal interaction, e.g., with staff at the secretariat of the Mekong River Commission, the Xayaburi dam's construction site and in resettled villages. Further, data were collected about the symbolic representation of hydropower development in local media in Thailand and Laos. Such observations supported the proper interpretation of documents and interviews. Fieldwork comprised interviews and observation in Thailand and Laos including in:

1) Bangkok, Thailand
   - Energy Policy and Planning Office, Ministry of Energy
   - Department of Treaties and Legal Affairs, Ministry of Foreign Affairs
   - Department of Water Resources, Ministry of Environment and Natural Resources
   - Electricity Generating Authority of Thailand (EGAT)
   - Mekong Energy and Ecology Network (MEE-NET)
   - Institute of Asian Studies, Chulalongkorn University
   - International Rivers representative
2) Chiang Mai, Thailand
   - Living River Siam Association (formerly known as Southeast Asia River Network)
3) Chiang Rai, Thailand
   -Institute of Natural Resources and Environmental Management, Mae Fah Luang University
4) Chiang Khong, Thailand
   - Rak Chiang Khong Group (a local NGO)
   - Chiang Khong District Office
   - Vieng Chiang Khong Municipality
   - Vieng Municipality
5) Mahasarakham, Thailand
   - Mahasarakham University
6) Vientiane, Laos
   - Mekong River Commission (MRC)
   - ADB Resident Mission
   - Electricité du Laos (EdL)

- Department of Energy Policy and Planning, Ministry of Energy and Mines (MEM)
- Department of Energy Business, MEM
- Lao National Mekong Committee Secretariat (LNMC)
- Department of Water Resources, Ministry of Natural Resources and Environment
- Faculty of Law and Political Science, National University of Laos (NUOL)
- Xayaburi Power Company
- PT Development Company

7) Xayaburi, Laos
- Xayaburi Hydroelectric Power Project (construction site)
- Resettlement Management Unit (RMU)
- Ta Lan village
- Na Tor Yai village

The interviews aimed to trace the actors that were involved and the ways in which they engage each other, particularly in the development process of the Xayaburi project. Forty-two formal interviews were conducted during this research project. Most of the interviews took from thirty minutes to one hour, but some discussions lasted for three to four hours, while some informants were visited several times. Only when the informants gave their explicit permission, the conversation was digitally recorded and identified in the dissertation. Some informants, especially in government agencies, preferred off-the-record interviews or requested anonymity for some part of the interview – a circumstance that reflects the sensitivity of the ongoing project. I posed at least three common questions in a semi-structured interview, including:

1) What are the goals and roles of your agency in the decision making process on hydropower development, especially related to the Xayaburi HPP?
2) How do you work with other agencies in this case?
3) Do you know about and what do you think of the regionalization of hydropower through regional power trade and transnational investment in the framework of GMS and ASEAN?

These main questions aimed to get a deeper understanding of three points: the roles of actors in hydropower development, the relations among these actors and actors' perspectives on regionalism in relation to

their agencies. Moreover, various specific questions, related to background stories and current issues, generally followed on the three main questions in order to obtain more details from each informant.

The researcher was a visiting researcher at the Initiative for Sustainable Hydropower Unit (ISH) of the Mekong River Commission Secretariat (MRCS) in Vientiane from March to April 2014. The ISH is a crosscutting hydropower policy and planning unit that coordinates related MRC programs in the field of fisheries, environment, flood management and basin development planning. The position at ISH was useful for understanding the practical perspective of professionals in an international organization on water governance. The researcher was introduced to staff of other units that were relevant to this study, including the International Cooperation and Communication Section (ICCS), which is the focal point in the public consultation process on the Xayaburi dam, and the Basin Development Plan Program (BDP), which is the MRCS's coordinator for policy planning, and is responsible for integrating water and energy sectors as well as other regional development frameworks.

Data was processed through interpretative analysis, on the basis of which perceptions and practices of actors related to the case study were interpreted (Andrade 2009; George and Bennett 2005). Based on the conceptual framework, the analysis identified actors involved in governance, with a focus on decision-making processes. Secondary data, including statistics and excerpts from books and articles, were used to validate the interpretation of interviews and observations. Historical analysis proved helpful for interpreting the structure of relations among actors and the causal mechanism underlying empirical events.

1.4 Structure of the dissertation

The dissertation is organized into six chapters. After this introduction, the second chapter presents a discussion of various theoretical approaches and discusses three groups of concepts. The first section presents the political economy of water nationalism and marketization in relation to TWG and its application to hydropower development. The second section discusses the transformation of state and the way in which the state facilitates market building. This discussion focuses on the concept of the regulatory state, especially in developing countries. The

third section explains how emerging regionalism and regionalization provide the conditions for market building and state transformation. Finally, the chapter concludes with the formulation of an analytical framework, which integrates the concepts in order to understand the relations between TWG and regionalism in the Mekong Basin.

The third chapter presents the political economy of hydropower development, with a focus on the Mekong Basin. It firstly gives some background on the global trend of large dam construction and hydropower development and shows why this particular sector has recently met support from some actors and opposition from others, especially in the developing world. The next part describes the Mekong Basin as a region with fast growing hydropower development. The case of the Upper Mekong dams in China is mentioned in order to understand its influence on projects on the Lower Mekong. The background, perceptions and potential impacts of the Xayaburi project are discussed to demonstrate how the global trend of hydropower development is reflected in recent developments in the Lower Mekong Basin.

The attention to dam construction in the Lower Mekong Basin is linked to broader discussions of regionalism and regional water governance, particularly in hydropower development – this is the theme of the fourth chapter. Chapter 4 contextualizes regionalism in the Mekong region, referring to the notions of old and new regionalism, but argues that existing Mekong regionalism is mixed and has developed in its own way. The chapter discusses three major regional institutions in the basin: the GMS, ASEAN, and the MRC. The chapter presents the roles of the former two institutions, and their emphasis on regional market building, especially in the energy sector. The MRC, the sole TWG framework in the region, is discussed with regard to its governance and its significance for the hydropower sector. The particular case of the regional consultative process of the Xayaburi project is presented in the final part to illustrate how existing regional governance frameworks deal with the increasing importance of transboundary aspects of the dam.

The fifth chapter presents an analysis of Laos and the Xayaburi project as an illustration of how state and non-state actors pursue their interests through regionalism. The chapter starts by presenting the great hydropower potential in Laos encompassing and the relations between

Laos and its biggest partner in power trade, Thailand. The next section explains the structure and process of hydropower governance, both at national and regional level. The final part of the chapter discusses the role of the state in decision making on the project and the relations of the state to non-state actors involved in the project, which are increasingly involved in governance issues across borders as a result of expanding transboundary development.

The last chapter concludes this dissertation and consists of three sections. The first one answers the research questions by paying attention to the revitalization of hydropower development, the building of regulatory regionalism, the transformation of market-state relations, and the opportunities and threats of ongoing processed of regionalism. The second part draws implications from the findings and formulates some lessons learnt for theoretical and policy perspectives that relate to regionalism and the TWG of hydropower development. The third part proposes a potential research agenda by focusing on the implications of the research findings presented in this dissertation.

2 Theorizing Transboundary Hydropower Governance and Regionalism

Introduction

International relations have gradually been transformed as a result of the increasing influence of private firms and social movements, which seems to have limited the role of the state as prime mover of development. In various regions, rapid economic growth and high capital accumulation have led to the expansion of investments by transnational firms in neighbouring countries because of geographical proximity or the availability of cheap labour and natural resources. The growth of economic transactions caused by that investment has intensified regionalization, and this is often supported by policies of states that favour market-led regional economic integration.

While this process seems to reflecting the globalization of the market system, based on a common set of economic policies, including liberalization, privatization and deregulation, the role of the state is not necessarily in decline, but is being transformed. Some states deliberately limit themselves in the execution of developmental functions and focus on providing facilities for the market and for capital mobility, especially by liberalizing the financial system, as reflected e.g., in the securitization of mortgage debt and the creation of derivative markets (Harvey 2010: 85).

This global phenomenon, however, has developed unevenly, particularly in developing countries. In order to overcome the crises resulting from political conflicts, economic downturns or post-socialist reforms in the 1970s and 1980s, many states have accepted international assistance for structural adjustment, which came accompanied by a set of market-oriented policies. The transformation of the state, reflected in its facilitating role for the market, inevitably changes the state's role in the development of natural resources, including water.

In the Mekong Basin, both inter-state institutions such as the ADB and states – national government and their agencies – have eagerly promoted

the involvement of the private sector in hydropower development. One would expect that hydropower development on the Mekong mainstream, as a transboundary watercourse, may lead to international tensions that require transboundary water governance (TWG). Nonetheless, as was discussed in the former chapter, regional governance in the Mekong Basin remains fragmented and loosely organized, despite the rapid growth of economic transactions in the region.

This study attempts to develop an alternative explanation about the relationship between the TWG of hydropower development and regionalism. In order to arrive at such an explanation, this dissertation uses a combination of governance and international political economy perspectives for exploring the structure and process of social interactions and their driving forces in the highly politicized context of regionalism and TWG. Such politicization derives from several forces, from global capitalism to regional economic interdependence, to nation-state building. The governance approach focuses on basic issues in hydropower development, i.e., what are the rules, who creates them, and why and how are they exercised. By focusing on governance processes, for instance related to decision making on hydropower projects, we may transcend the rigid dichotomy between domestic and international affairs that separates debates on regionalism from those on the nature of the state.

This thesis assumes that an interpretation of regionalism in the Mekong Basin needs to be connected to the dynamics of state transformation, as this brings about changes in power relations affecting hydropower governance. Three interconnected questions guide the analysis of state transformation in this study. Firstly, why and how does the transformation of water into tradable hydropower change a river basin into a regional/international market? Secondly, because the state plays an important role in that process, how is the state transformed to facilitate market building, especially in developing countries? Thirdly, why and how is the transformation of the state related to regionalism, which ultimately shapes the TWG in the region? The latter is the primary question of this study.

The chapter discusses the answers to those questions in four sections. The first section presents the political economy of water nationalism and marketization and its influence on TWG, particularly in hydropower development. The second part discusses the rise of the regulatory state. The third section highlights the emergence of regionalism and contrasts

the two waves of old and new regionalism, showing that the latter provides favourable conditions for market building and state transformation. The final part synthesizes for the various elements into an analytical framework for understanding the relations between the TWG of hydropower development and regionalism in the Mekong Basin.

2.1 Transforming water for energy

2.1.1 Water nationalism and marketization

Attempts to Control watercourses with dams and reservoirs have been part of human civilization for a long time. However, the global expansion of large dam construction has begun in the middle of the twentieth century after significant improvements had been achieved in engineering skills, construction technology and hydrologic analysis. Noticeably, that expansion occurred at the same time as the growth of nation-states. Governments have traditionally taken a leading role in the decision-making on and development of large dams because their construction usually involves complex projects that require large-scale funding, sophisticated technologies, a large amount of labour and complicated governance arrangements (McCully 2001).

Moreover, the construction of large dams may be considered as a tool in the process of nation-state building; this understanding may help to explain the interconnected roles of the state in domestic and international politics. At the domestic level, ruling elites may portray mega-infrastructural projects including dams as symbols of national identity and progress, and use this to support their claim to legitimacy on the right to rule the state. At the international level, the damming of transboundary watercourses may lead to tensions among riparian states not only because of the impact of such projects, but also because of the conflict about the sovereignty over water resources that is the result of these activities (Menga 2015, 2016).

Seen in this perspective, transboundary hydropower development on the Mekong mainstream may be influenced by water nationalism, which may be understood as the belief in the state's ability to control and confirm national sovereignty over water. According to Allouche (2005: 14), two processes essentially drive water nationalism. First, the process of nation-building involves the proclamation of sovereignty and the will to

make territory and natural resources national, or in other words, to exclude them from control by other sovereign entities. Second, the process of state-building fuels the desire to gain control over natural resources and territory for economic and security reasons. State-building is connected to the control over water in three ways: it changes water from a local into a national issue, it leads to the centralization of water governance with the establishment of a national administration, and it legalizes water ownership to affirm the legality of the state (Allouche 2005: 115). These processes transform water into a strategic resource for national development.

Water nationalism, however, does not simply lead to a state monopoly over power, nor does it automatically confirm its legitimacy. On the contrary, some states are outward looking and need external actors to support their national ambition, particularly when they are poor and face serious limits in controlling and developing their water resources. In the Mekong Basin, for example, states have reacted to that difficulty by creating regional frameworks for the exchange of resources beyond national borders. As noted above, the government of Laos has portrayed itself as the Battery of Asia and is aiming to export hydroelectricity. At the same time, the government of Thailand launched the Green Isan policy, which aims to develop the drought-prone northeastern region, among others by the development of a water grid that will channel water from Laos (Molle and Floch 2008). Through these dynamics, a transnational market of water is being created.

The transformation of water, from a publicly or freely accessible resource into a tradable commodity, starts from a traditional view on water. Many people are used to see water as renewable and plentiful; however, fears over freshwater scarcity and environmental degradation have increased the awareness about the use of water. Fears are fed by the concept of the tragedy of the commons, which was developed by Garrett Hardin (1968). Hardin argued that that the assumption of the open access of resources by individuals in the pursuit of self-interest leads to the overexploitation of shared resources such as water. Advocates of water marketization argue that the market can respond to the problem by creating more efficient allocation among water users than political units such as states or provinces (Iyer 2008: 27-28). The World Bank (2015a) has argued that effective and efficient water governance mechanisms

should be put in place, including the pricing of water and the financing of water services.

According to McCully (2001), the market entered relatively late into debates of large dams, which typically used to be dominated by struggles of social movements against state-led hydropower development projects. Management of water through the market is only one of four major approaches to water governance, which can be classified on the basis of the perspectives and interests of actors. First, water can be seen as a human right, which implies that it should be equitably and affordably accessible as a basic need to all human beings. Second, water as a socio-ecological good is not only crucial for human beings but also for the environmental integrity of other living creatures that share the ecosystem. Third, water can be seen as an economic good that should be tradable in a market and commoditized for maximum efficient use. Fourth, water may be considered to be a sector in natural resources management, which focuses on the integrated, effective and efficient management of water in relation to other sectors such as land and fisheries, and to natural systems, for instance watersheds or transboundary basins (Miranda et al 2011). The fourth approach of integrated management, which is popular among water experts in river basin organizations, including the MRC (Hirsch 2012), is also influenced by other approaches, particularly the market one.

The marketization concept has become increasingly influential in the water sector as one of the pillars in Integrated Water Resources Management (IWRM), a dominant paradigm of water governance launched at the International Conference on Water and Environment in Dublin as a planning process for the 1992 Earth Summit. The fourth guiding principle of the Dublin Statement on Water and Sustainable Development stated that:

> Water has an economic value in all its competing uses and should be recognised as an economic good…Past failure to recognize the economic value of water has led to wasteful and environmentally damaging uses of the resources. Managing water as an economic good is an important way of achieving efficient and equitable use, and of encouraging conservation and protection of water resources. (Salman and Bradlow 2006: 170-71)

Conca (2006: 215-216) explains that water marketization does not simply refer to the privatization or pricing of water but broadly covers the process of providing economic and policy infrastructures for treating

water as a commodity. He notes that there are visible elements to identify water marketization, including (1) the establishment of private property rights over water use; (2) the pricing of water to recover the full costs of the operation, infrastructure, production, treatment and delivery of water; (3) the creation and utilization of market mechanisms for the exchange of water-related goods and services; (4) the growth of private actor involvement and enhancement of their investment in water-related sectors; (5) the policies of liberalizing or facilitating water trade and transfer across natural basins or international borders; (6) the declining roles of the state in some traditional functions, for instance water service provision, regulation and maintenance.

The process of water marketization is impossible without intervention by the state, at least through regulation. The state, which used to be seen as a traditional water supplier and a provider of public welfare,[4] is crucial for the implementation of those market elements. Water marketization has not only been accommodated by private sectors; in contrast, it has been pushed and supported by regulations and governance of the state agencies, e.g., legislative and judicial bodies, state enterprises, and local authorities. Water marketization can be seen as form of capitalist expansion across social relations, including international affairs. Even though the role of the state may have become less important for delivering welfare and development, the state has become a crucial mechanism in driving marketization.

There are three significant reasons explaining this changing role of the state, especially for governments in developing countries (Conca 2006: 219-226). Firstly, many countries with limited developmental capacity need to attract capital and technology from private and foreign investors to realize their development goals. Secondly, states have become subject to the external influence from international financial institutions (IFIs) such as the World Bank Group, the International Monetary Fund (IMF) and the Asian Development Bank (ADB), which have consistently pushed their neoliberal economic approach of structural adjustment.

[4]According to Edgar (2005: 861) traditional state functions performed by a government or its subcontractors basically have three purposes, including: ensuring public access to essential goods and services; ensuring compliance of service providers to public expectations and constitutional rules; and preventing (private) actors with market power from exploiting their consumers or the public.

The third reason is the liberalization of trade and investment, pushed by both the World Trade Organization (WTO) at the global level and regional integration agreements. This process facilitates the international transfer of goods and services by allowing transnational companies (TNCs) access to domestic markets. Such TNCs have thus become both local providers of electricity and, through their cross-border activities, regional suppliers of exportable hydropower. Price guarantees, investment area promotion, tax exemption and full-cost recovery for provided services are standard instruments of host governments to attract domestic and international private investment in water-related development.

The international water market, where water resources are tradable across national borders, has become increasingly important. Traditionally, water is fundamental for food production and livelihoods in all societies, so it represents a basic source of welfare and national security. Although fresh water is abundant and renewable across the world, the uneven geographical distribution of water causes water deficits in one area and surpluses in another. Without the international market, any country is dependent on local water for the production of food, energy, and related goods. Allan and Mirumachi (2010: 24) note that:

> The invisibles – trade/development and politics – actually underpin and shape political economy of water resources and of international relations over water. Trade in water intensive commodities reduces conflict over water with neighboring riparians and makes armed conflict unnecessary….Water scarce economies have found solutions in global markets. The extent to which an economy can mobilize socio economic development that enables international trade determines its water security and the nature of inter-riparian contention over transboundary water in the world at peace.

The situation is more complicated when a downstream country relies on the water flowing from its neighbour upstream. It makes the domestic management of water more difficult and creates international tensions. To avoid such tensions, a country may choose to improve the efficiency of water use and the productivity of less-water consuming crops, generate water by using technologies like desalination, divert watercourses, or import food or water from other areas (Wachtel 2007:

147). In the eyes of the advocates of the market, trade among countries with different endowments and needs could lessen water tensions and prevent international conflict.

However, the assumptions related to the building of an international market for water are problematic because of some fundamental characteristics of water. Firstly, because water is basic to welfare and customarily attached to the survival of societies, transboundary water trade sounds threatening to national security and the political legitimacy of the state. Secondly, the water system recognizes no borders. Both surface and ground water often runs across political boundaries and make property rights over international watercourses often unclear. Thirdly, originating from the former two problems, states typically provide their people free or affordable access to water at subsidized prices (or indirectly through agricultural subsidies), and this makes it difficult for market-based water pricing to precisely express domestic scarcities (Wachtel 2007: 149-151). Fourth, as commented by Ballabh (2008: 8), water is a bundle of rights that mixes private and public uses. This implies that marketization, which emphasizes the economic value of water, may threaten public access to water when the state enables foreign private developers to exploit water for profit.

The World Bank has embraced a so-called multi-stakeholder approach to natural resources and the environment, which leads to the inclusion of ministries, international organizations and NGOs into its policy networks, and has incorporated 'green' ideas on conservation and sustainability into national governance and development projects. Nonetheless, on the basis of a case study in Laos, Goldman (2005) concluded that the World Bank employs the notion of the 'green economy' to legitimize its development hegemony and neoliberal reforms. Büscher and Fletcher (2014) have argued that, over the last two decades, both public and private actors have increasingly used the environment as part of accumulation strategies in conservation and have claimed that this is a way to counter the negative impacts of capitalism itself. Hydropower, promoted by the World Bank, governments, and private firms as a low-carbon and renewable source of energy, also seems to be an illustration of this trend.

The discussion above illustrates that the complex of interests involved in water infrastructure developed has increasingly blurred the dichotomies of public and private , and of domestic and international

affairs. Increasingly, infrastructure projects show that private companies take over functions that previously were performed by governments, while state agencies serve the commercial interests of companies across national borders. The explanation of such trends is complicated when, as in hydropower development, one has to engage with transboundary practices, as these bring in the dimension of regional governance.

2.1.2 Hydropower development and transboundary water governance

The management of natural resources is one of the traditional functions of the state, and it is here that the command and control approach has been prominent. As argued above, however, the market has increasingly become important to water governance. Governance is a complex and contested concept, but two early definitions provided by global organizations signify its influence in international development. While the World Bank (1992: 1) proposed a definition of public sector governance as "the manner in which power is exercised in the management of a country's economic and social resources for development", the United Nations Development Programme (UNDP 1997: 2-3) defined governance as "the exercise of economic, political and administrative authority to manage a country's affairs at all levels. It comprises the mechanisms, processes and institutions, through which citizens and groups articulate their interests, exercise their legal rights, meet their obligations and mediate their differences." While these definitions are relatively old, they are still widely used by influential global institutions. The World Bank emphasizes development as an objective of governance, whereas the UNDP's version focuses more on the scope, scale, and actors involved with governance beyond the state.

Compatible with the Bank's and UNDP's definitions of governance, the Global Water Partnership defined water governance as "the range of political, social, economic and administrative systems that are in place to develop and manage water resources, and the delivery of water services, at different levels of society" (Rogers and Hall 2003: 16). In a narrower sense, water governance is the complex of interactions among actors in decision-making processes on the development and management of water resources in order to serve their different or competitive interests.

Understood in this way, water governance appears to be much more a political rather than a technocratic issue (De Stefano et al 2014).

These definitions illustrate the basic dilemma of water governance, which combines a concern with the maximization of benefits from water use and with attention to management in order to control water usage in recognition of water scarcity. Both dimensions are not clearly separable but this study makes an analytical distinction between water governance and water management, in the sense that the former is more related with political processes of decision making at policy levels, while the latter is more focused on the technical implementation of those policies at operational levels.

As discussed in the last section, IWRM is a mainstream concept in water governance that advocates more involvement of the private sectors: this involves the use of technical tools such as cost-benefit analysis and information sharing; water pricing mechanisms; and the promotion of public participation, local engagement and international collaboration. Gat (2007) has argued that regional cooperation is preferred because the optimal and sustainable use of transboundary water needs a holistic approach for water management, which requires shared planning, scientific analysis, and operation by stakeholders who share the water system. Whereas watersheds or river basins would be the logical object of water governance, most watersheds are subjected to fragmented jurisdictions and governance of states. Many authors have argued that, therefore, integrated regional governance for the watershed should be created (Schlager and Blomquist 2008: 1 as cited in Huitema and Meijerink 2014: 5).

Nonetheless, the approach of IWRM encounters a traditional state-centric approach, the so-called 'hydrological mission', according to which the building of a modern state requires large-scale infrastructure development and centralized national-state based governance. The emphasis on more integrated social and ecological aspects in IWRM also emphasizes economic development pushed by the state (Jaspers and Gupta 2014; Gupta 2009). An important issue is, that while IWRM promotes a participatory and multi-stakeholder approach, the existing fragmented governance in the Mekong Basin requires more centralized and integrated management among states. Yet, such management is often a top-down process, which is very focused on technical best-

practice approaches, and neglects the political and cultural aspects of social relations (Hirsch 2012).

While many international organizations and governments promote the marketization of water, national policies on water governance are usually state-centric. Jaspers and Gupta (2014) argue that river basin organizations (RBOs) have evolved from local regulatory bodies to transboundary arrangements, such as in supranational agreements of the Water Directive Framework in the European Union and the United Nations Convention on the Law of Non-Navigational Uses of International Watercourses 1997. However, most of the RBOs are intergovernmental cooperation mechanisms that provide technical and decision-making support, while real decisions are usually made through diplomatic channels between governments. This characteristic of international cooperation mechanisms exposes the limitations to TWG in two ways, i.e., through scale mismatch and capacity mismatch.

According to Karkkainen (2005: 75-76) the two mismatches are deeply related to the state system. The scale mismatch relates to the state's political boundary that usually does not correspond with the natural boundary of resources such as watersheds or fresh water basins. Since sovereign states may share only part of a basin, the governance of waters may depend on collective action and therefore be weak or absent. By contrast, large states may find that just a part or a region shares the international basin, and for that reason the central government may have less interest in and concern for environmental problems that occur mainly at the local level and affect only part of the population.

Capacity mismatch is another fundamental problem. It implies that states lack the resources and knowledge to manage ecosystems located within or beyond their own boundaries. Following conventional regulatory approaches to governance, it is relatively easy to establish rules, but it may be more difficult to enforce them.

Huitema and Meijerink (2014: 1-3) have argued that, since governance of modern states is usually organized spatially at local, national, and international levels or functionally through bureaucratic departments, it is always difficult to achieve integrated water governance within such systems. There are a few exceptions, such as the water boards in the Netherlands that predated the modern state system that came into being between the eighteenth and the twentieth century. While the state has traditionally claimed a formal monopoly in water governance, and its role

expanded after the Second World War, this role seems to have been changing since the 1980s, with non-state actors, including private companies, civil society and international organizations, taking a more important place.

Although it is unquestionable that non-state actors increasingly play an important role in water governance at all levels, it is the change in power relations between state and non-state actors that actually matters. The rising importance of water marketization, which influences the mainstream approach to TWG, has not only challenged state control over resources and territory but has also impacted on the transformation of the state. As discussed earlier, there are reasons why some states may support the transformation in market-state relations – for instance, because of the influence of international donors, limitations experienced in domestic governance, or the changing context of economic liberalization and regional integration. The transformation in market-state relations may eventually change the traditional role of the state in development. The next section discusses the transformation, which involves an increasing role of the market in the delivery of public goods, while purposefully limiting the role of state actors to the regulation of development. This transformation leads to the rise of the so-called regulatory state, which seems to be an emerging model in developing countries, and particularly in the case of Laos that is central to this study.

2.2 Transforming the state for the market

2.2.1 The emerging regulatory state

In order to pursue its goals of water nationalism with a regionalist strategy built on the marketization of hydropower, the state needs to internalize regional governance precepts into domestic policies and regulations. This process of state (re)building requires a kind of governance that involves networks of public/private and domestic/international agencies that operate in transnational markets, while meanwhile safeguarding the domestic legitimacy of the state. This connects to the observation made by Netelenbos (2016: 256) that political legitimacy increasingly has to be achieved in a network society, where many actors participate in forms of transnational governance that cannot be understood only in terms of legal domination.

This research applies the concept of the regulatory state to explain the form of regionalism, driven by market forces and lacking supranational power, that is embraced by a state with limited governance capacity like Laos. The regulatory state model reflects how the state deliberately constitutes the market (Jayasuriya 2013: 187) with a rule-based, technocratic and legal approach to economic governance, which emphasizes institutional self-regulation (Philips 2006: 24). The model is linked to neoliberalism, as an ideology or policy of economic development in favour of creating as many conditions as possible for free markets by removing as many restrictions as possible on competition and the empowerment of market agents (Gamble 2001: 132). In a nutshell, it is a model of limited government that puts administrative and economic efficiency first and provides public services but does not produce them (Seidman and Gilmour 1986: 119 as cited in Levi-Faur 2011: 7).

Though the regulatory state conceptually follows the principle of 'less government, more efficiency' and signals the decline of Keynesian interventionism, of its practices do not imply that the state has handed over all responsibility for development. Market reform is embedded in regulatory institutions that impose market rules and norms on the private sector. Thus, the changing role of the state in the economy implies re-regulation rather than de-regulation. Moreover, the regulatory state framework is theoretically linked to the Neo-Weberian approach, which considers the state as a strong steering mechanism in society and not really as a burden to the market. Participation of the private sector is not automatically prioritized but selectively employed by the state, which steadily transforms and continues to regulate the economy and society as a partner or guarantor of economic and social development (Pollitt 2008: 14).

It should be noted that the concept of the regulatory state has different meanings at different moments and places. It was launched in the US in a study of federal governance,[5] and then applied in the EU as a

[5] In the US, the term was originally used in studies of administrative law and public administration before the Second World War for the system of decentralized agencies that were responsible to Congress and operated under specific legislation with clear mandate and power. However, the distinction between regulatory governance and service provision by federal agencies in the US became unclear because they decided increasingly to outsource administrative functions (Levi-Faur 2011: 5-6).

principle of regional–national governance relations. The European perspective of the regulatory state, dating back to the 1980s, is relevant to some aspects of regionalism in this study. Majone (1996) argued that, because the EU has a limited budget and taxation capacity compared to its member states, it has difficulties to implement non-regulatory policies such as subsidies and welfare delivery. Therefore, the EU has instead focused on its regulatory roles to respond to the demands of its stakeholders that national governments cannot meet. Private companies tend to support the EU's regulations to reduce the costs of inconsistent and varying national standards for their transnational business. Civil society may prefer regional level regulation when their demand for environmental protection is not met by national governments. Even EU member states may feel they can better serve their national interests in negotiations with other countries via regional regulation making.

To understand the transforming state in Asia it is useful to contrast the regulatory state to the developmental state model, which has been used to explain the rapid growth in East Asian economies in the 1980s and 1990s. Johnson (1982) made one of the earliest comparisons between the developmental state and the regulatory state in a study of Japanese industrial policy. In his view, Japan's state-guided capitalism prioritized development and employed the bureaucracy to reign in business activities. He made the following observation on Japan's 'economic miracle':

> The issue is not one of state intervention in the economy. All states intervene in their economies for various reasons…The United States is a good example of a state in which the regulatory orientation predominates, whereas Japan is a good example of a state in which the developmental orientation predominates. A regulatory, or market-rational, state concerns itself with the forms and procedures – the rules if you will – in economic competition but it does not concern itself with substantive matters (Johnson 1982: 17-19).

In a more recent observation, Jarvis (2014: 72) explained the difference between the regulatory and the developmental state in the following way:

> Unlike its predecessor, the regulatory state is a more circumspect one, focused on the efficient management of monetary policy, the

> stabilization of inflation and interest rates, balancing national fiscal accounts, and setting in place the parameters for market expansion through private sector capital formation and efficient market operation. The discourses of national politics reflect this change with political elites judged on the basis of their abilities to 'manage' the economy, create optimal investment conditions, attract investment capital, secure the blessings of rating agencies, and make markets work by sustaining private sector interest.

In Southeast Asia, the emphasis on the regulatory state is a reflection of the weak capacity of regional institutions for policy implementation, interests of private firms to reduce market barriers, demands from civil society for alternative political platforms, and efforts of member states to formulate regional policies and regulations in order to combine their individual interests. The rise of the regulatory state in Southeast Asia has taken place against the background of the market-oriented reforms introduced by the socialist states of the Mekong region (Laos, Cambodia and Vietnam) since the late 1980s and the relative decline of the developmental state model in other parts of the region (notably, Singapore, Malaysia and Thailand) after the Asian financial crisis of 1997, when these countries faced pressures for reform (Stubbs 2012: 95).

2.2.2 The regulatory state in developing countries

Although the concept of the regulatory state was rooted in the governance models of the US and the EU, the idea later trickled down to developing countries, which lacked the capacity to provide public welfare and implement socio-economic development policies. Some developing countries have been labelled as 'non-developmental states', and are characterised by dominant patron-client relations, high dependence on foreign aid and natural resource revenues, as well as undemocratic political systems that lacking checks and balances. The colonial legacies and relations with developed economies often contribute to the weak governance of newly independent states (Moore 2001). Some of the characteristics of the non-developmental state reflect the syndrome of what Evans (1995) has called the 'predatory state', where any form of Weberian rational-legal bureaucracy is absent and positive ties between the state and private actors are lacking. For Evans, while a developmental state intervenes in the market and promotes its private

sector with a view to long-term economic transformation, the predatory state tends to serve only the short-term self-interests of the elites.

Dubash and Morgan (2012: 267-275) have identified three driving forces for the transfer of the regulatory state to developing countries. Firstly, external pressures, especially from international financial institutions (IFIs), have pushed developing countries to adopt the model of regulatory agencies as public authorities, ideally independent from other arms of government, which regulate and supervise some specific sector on behalf of the state, especially for infrastructure development that usually involves private investment and state intervention. The establishment of regulatory agencies has often been part of the loan conditions imposed on developing countries as part of dominant neoliberal policies during the period of the Washington Consensus in the 1980s and 1990s (Williamson 1990). The conditions deliberately transplanted some norms and standards, such as the 'greening governance' model advocated by the World Bank for the transparent, accountable and independent regulation of environment-related sectors (Goldman 2005). Such mechanisms have spread out through networks of international consultants and technocrats who tried to push 'apolitical and technocratic' institutional reforms to facilitate privatization and liberalization in the recipient countries.

Secondly, some developing countries experienced a limited capacity to implement the demand for regulatory reform. There are two dimensions of this limited capacity: the so-called 'thin' and 'thick' issues (Dubash and Morgan 2012: 272-275). The thin issues include limited budget, technical and human resources, while the thick issues relate to the growing pressure on the state to manage multiple forms of engagement with diverse stakeholders in order to balance competing concerns of growth, efficiency, and redistribution. The evolution of the regulatory state can be seen in infrastructure development in sectors such as telecommunications, electricity and water. As a result, developing countries often find foreign capital and resources desirable to compensate for this shortage; the state tends to provide the regulatory framework to facilitate foreign involvement.

Thirdly, in settings of poor or even non-existent infrastructure, the regulatory state is tasked with redistribution through governance by independent agencies, which claiming their legitimacy on the basis of depoliticized expertise. The model is based on a separation between

independent, depoliticized regulatory agencies that implement policies based on technical knowledge – e.g., regulatory boards for public services and administrative courts – and executive bodies and government agencies that are responsible for political, redistributive policies and are held to account politically by oversight institutions such as parliaments.

After the discussion of the characteristics of the emerging regulatory state in the developing world, a critical question is whether state power is inevitably declining in view of the increasingly important role of the market. As argued by Jayasuriya (2013), regulatory reform seems to have significantly 'reshaped' but not essentially 'diminished' the power of state. He argued that:

> Under the impact of transnational markets and regimes, regulatory state leads to varied patterns of class formation. Such transnational regulation not only gives rise to new interests but also helps to protect existing patterns of interests and power within new configurations of regulation. (Jayasuriya 2013: 190)

The formation of the regulatory state signifies the transformation of the state in response to marketization in several ways. Firstly, in market-state relations, public and private affairs cannot be clearly separated because some state functions, such as the provision of public goods, are shared with or transferred to private actors. Secondly, in relation to TWG, when water systems and water markets operate transnationally, domestic and international governance become overlapping and it becomes difficult for any state to effectively regulate them within the national boundary. Thirdly, however, any state can still claim legitimacy on the basis of its roles in rule making and market regulation, theoretically in the public interest. A weak state with limited governance capacity may partially fulfil the state's developmental function with private involvement. Finally, the external influence of IFIs and foreign aid may promote the regulatory state approach in compliance with global and regional norms that stimulate globalization and regionalization.

The global spread of economic and governance reforms since the late 1980s, related to privatization, deregulation and liberalization, may not have led to the decrease of the role of the state as is often assumed. Braithwaite (2005) has argues that the neoliberal policy package may ideologically have promoted 'freer markets, smaller government' but may

practically have caused 'freer markets, more rules'. The argument then is that the state has become less central in the provision of public goods and services, but that it has kept control over the expanding market, especially beyond its national borders, through extensive regulation that has transformed the relations between public and private affairs and favoured transnational economic interests. Yet, one cannot assume that the regulatory state has effectively replaced other models of governance. As argued by Levi-Faur (2013), the transformation of the state in a regulatory direction has mainly privileged national and international capital; hence, the dichotomy between the regulatory and the developmental state is not very clear-cut.

While the regulatory state is an approach to governance pushed by global development institutions to further marketization, at the same time it seems to be a strategy for governments and state agencies to counter the declining role of the state. Attempts to push the regulatory state in developing countries creates a tension between the aim to transform the state and accommodate market building for achieving developmental goals, and the wish to maintain the legitimacy of the state as the institution in control of national development, for which it requires a particular kind of regional governance. This study argues that the TWG of hydropower represents a form of regionalism that is modelled by that tension. The enforcement of regionalization of the market by using the transformation of the state may facilitate the building of regional markets but at the same time may minimize the likelihood of power transfer to regional institutions that would lead to a loss of power of the national governments. These are the building blocks of a perspective to understand regionalism among developing countries.

2.3 Transforming the state towards regionalism

2.3.1 New regionalism and regionness

Discussions of regionalism outside Europe are often overshadowed by the experiences of the European Union. This is caused possibly by the fact that most classical theories of regionalism, such as functionalism (Mitrany 1946), neo-functionalism (Haas 1970), inter-governmentalism (Hoffman 1966; Moravcsik 1993) and international regimes (Haas 1980; Krasner 1983), tend to focus on the institutionalization of inter-state

relations and the transfer of power from the national to the international/regional level – aspects that are primarily derived from Western European experiences. The Eurocentric bias of analyses of regionalism leads to prejudice against the informality of regionalism in Asia, which is usually based on non-legally binding cooperation, loosely structured organization, consultation and non-intervention, although these are the very aspects that have significantly contributed to the survival of regional institutions such as ASEAN (Acharya 2001; Söderbaum 2012).

The end of the Cold War and the expansion of economic globalization have encouraged Asian regionalism (Beeson and Stubbs 2012). Because of the importance of these turning points, this research employs the notion of 'old and new regionalism' in order to focus on the continuity and change of forces driving regionalism and the regional political economy. As was introduced in the last chapter, the historical process of the Mekong Basin has turned the geographical area of river basin into an economic sub-region in Southeast Asia, where a combination of old regionalism, which was initiated in the 1950s, and new regionalism, which evolved since the mid-1980s, has influenced the nature of its regionalization.

Old regionalism took shape in the bi-polar world order of the Cold War that led to the establishment of many regional groupings for political-security-military reasons. The US hegemonic role in the 1950s determined the characteristics of the early wave of regionalism in Southeast Asia, which saw the creation of the Mekong Committee (MC) and the Southeast Asia Treaty Organization (SEATO). The MC was one of the attempts to contain communist expansion in Asia by promoting economic development in the LMB. The political motivation was obvious from the exclusion of communist China and isolated Burma (Nguyen 2006: 61). Hettne (1994) has argued that the objectives of the old type of regionalism were mainly related to trade and security. Such regionalism tended to be introverted and protectionist, based on exclusivity of membership, in the form of state-dominated intergovernmental organizations and usually imposed from the outside.

The new regionalism[6] is a global phenomenon, which is diverse in forms and degree of integration (Fawcett and Hurrell 1995). It is

[6] It should be noted that there is a distinction between new regionalism as a topic of international political economy (IPE) here, and the new wave of regional economic

different from the old wave because of the transformation in the global political economy since the 1980s. According to Hettne and Söderbaum (2002: 33), its major driving force primarily was the move from the bipolar system of the Cold War to an increasingly multipolar world, which led to a redistribution of power and a changing division of labour in the world economy. The new type of regionalism was also partly a result of the growing economic interdependence that was gradually undermining the nation-state system, as well as of the changing attitudes towards neoliberal economic and political development in developing countries, including socialist and post-socialist states.

The new regionalism has frequently resulted in deep economic integration with political elements of multilevel governance, occasionally combined with devolution within states, and a strong international legal framework and international cooperation across a variety of dimensions (Thakur and Van Langenhove 2008: 30). Unlike the old regionalism, the new wave has mostly emerged from regions themselves. Moreover, to some extent the new regionalism presupposes the growth of a regional civil society opting for regional solutions to local and national problems. It generates not only economic but also social and cultural networks, which are possibly developing faster than the formal political cooperation among states (Hettne 1994). The globalization of communication technologies and norms also seems to have driven the increasing integration of economic and social networks shaping new regionalism.

Since there are no natural or given regions, regions are socially constructed and therefore always politically contested. Thus, regionalism needs to be understood as a political project (Hurrell 1995; Payne and Gamble 1996; Hettne 2005). Regional integration may be understood as the creation of a territorial unit that links socio-economic and natural systems like as river basins by refocusing territorial scales through multilevel governance (Conca 2006). In such situations, however,

groupings as interpreted in neoliberal economic theory. The neoliberal interpretation perceives the new regionalism as a revival of trade promotion policies based on regional arrangements rather than global multilateralism. The latter, represented by the WTO, is seen as the best option for a wealthy world economy. New regionalism could either be a stepping-stone toward globalism or signify a revival of protectionism or interventionism that is considered undesirable to neoliberal advocates of globalization (Bhagwati 1998).

development is usually uneven among sectors. Glassman (2010: 40-41)has argued that the regional framework in the Mekong Basin has brought together a group of countries with unevenly and selectively developed infrastructural sectors rather than resulting in a coherent group tied together by the vicinity of all units to the Mekong River.

Studying the 'process' of existing regionalism through the lens of regional governance in a particular sector is potentially a proper way of understanding the contested nature of the socially constructed region. The new regionalism approach does not just view the existence of an increasingly interdependent group of states as a sign of regionalism, but pays attention to how the region is defined.

The emergence of a region implies that a relatively coherent territorial system emerges in a particular area and can be distinguished from other parts of the world. Hettne and Söderbaum (2002: 38) have attempted to capture this by introducing the concept of 'regionness', which is "the process whereby a geographical area is transformed from a passive object to an active subject, capable of articulating the transnational interests of the emerging region." Regionness is categorized on a continuum with five levels with a certain evolutionary logic (Hettne and Söderbaum 2002: 39-45:

1) *Regional space* - the geographical and ecological unit that is delimited by natural physical barriers and that forms the territorial basis for a functioning society. It needs increasing interaction among isolated societies to form a new social system.

2) *Regional complex* - the social system which implies trans-local relations of a social, political, cultural and/or economic nature between human groups. This system may form a security complex in which constituent units are dependent on each other. In the nation-state system, when a state opens up to external relations, economic and social interaction tends to increase. However, the system cannot evolve if the interaction is based only on the self-interest of actors that cannot rely on a more rule-based and organized structure to serve collective and long-term interests.

3) *Regional society* - the rule-based and organized cooperation in any field that can be defined by the membership of a regional organization. Without such organized cooperation, the idea of regionalism does not make much sense. This level of regionness gives rise to the participation of non-state actors such as TNCs, NGOs and social movements.

4) *Regional community* - the regional civil society takes shape when formal institutional frameworks promote social communication and convergence of values and informal organization throughout the region. The community usually has a shared culture and a collective identity, which creates mutual trust among actors and turns the region into an active subject with the capacity to tackle regional issues in the formal community of states and the transnational community of civil society.

5) *Regional state* - the region becomes an international actor on its own with a distinct identity, actor capability, legitimacy and decision making structure. Crucial areas of regional intervention are conflict resolution within and between states, the management of ecological systems and social welfare.

As all regions are constructed, social processes such as nation-building, political conflicts, economic downturns, ecological degradation, or globalization may cause the region to become more integrated or to disintegrate. Regionness in Southeast Asia probably is attaining the level of regional society, thanks to the existence of many intergovernmental agreements and several formal cooperation schemes for regional development. However, most of agreements and institutions are not legally binding and it is unclear how social communication has converged in the region, since states are still dominating decision making processes in international affairs. While most states have embraced the globalization of the financial, investment and trading systems pushed by 'the three sisters' – the IMF, the World Bank Group, and the World Trade Organization (WTO) – regionalism is probably seen as an alternative for states to counter the global forces that are threatening to weaken their roles and power.

Whereas the pressure from globalization seems to have led to a declining role of states, regionness in Southeast Asia has obtained distinct characteristics, which underlined the highly dominant role of states in regional governance arrangements. As noted by Hout (1996: 173), "regionalism is the opposite tendency to globalization, since it involves the joint effort of several governments to recapture their sovereignty over economic policy, which has been eroded substantially by the globalization of business, production and finance." Regionalism has become a strategy pursued by governments to deal with increasingly transnational issues and their interests at the regional level. In the context of Southeast Asia states are transnationally sharing their

developmental functions with the private sector but domestically expanding their regulatory power at the same time. Focusing on the Mekong Basin, this dissertation adopts this perspective in its search for the relationship between TWG in hydropower development and regionalism. The form of regional governance that has emerged in this context can be understood as regulatory regionalism.

2.3.2 Regulatory regionalism and the state transformation

Regulatory regionalism may be understood as a response against IR approaches that tend to overemphasize regional institutionalization and the transfer of power from states to supranational institutions. Those approaches tend to overlook the process of regionalization of development projects, where the role of the state has transformed from being a provider to being more of a regulator and system maintainer for expanding regionalization. Regulatory regionalism is not just about implementing economic reforms in favour of creating the best conditions for marketization, but also involves a transformation of the state under capitalism in line with increasing transnational interests and regulations (Jayasuriya 2015: 518-19).

According to Hameiri and Jayasuriya (2012: 179) this transformation affects three interrelated dimensions of state power, including 'shifts' in the *location* of actual governance structures and the space where state power is exercised; in the kinds of *actors* who exercise that power; and in *ideologies* employed to legitimize it. They argue that the governance lens helps us identify the relevance of the regional order for market building processes and state transformation (seen as changes in the way in which political power is produced, reproduced and distributed within the state) in individual countries. This transformation leads to an explanation of regionalism that focuses more on regional policies applied at the national level rather than on inter-state interactions in supranational institutions. They define this kind of governance as regulatory regionalism as:

> a process of internal transformation that creates the appearance of regional *frontiers* within the state's policy and governance apparatuses. Regional governance, from this perspective, is not an agglomeration of national territorial and political units at a higher regional level. It is a more fundamental regionalization of economic and security issues. Emerging forms of regional regulation rely more on the active participation of national

> agencies in the practices of regulation, than on formal international treaties or international organizations for their enforcement. (Hameiri and Jayasuriya 2012: 179)

Jayasuriya (2015) has identified some examples of regulatory regionalism developed in Asia-Pacific. On migration issues, the Australian government has initiated regional agreements to externalize its border and security control by founding detention centres for migrants within other island countries. On financial matters, Asian countries agreed to share information with the regional financial surveillance framework developed by the ADB and the IMF under the Chiang Mai Initiative, a liquidity fund created in 2000 after the Asian financial crisis. In the Mekong Basin, the ADB has pushed its plan for regional market building, through incorporation into national policies and regulations, via its GMS program. The Chinese government also set up a national coordination group for the GMS, which has brought together various national agencies to foster the internationalization of business in the hydropower industry through the activities of state corporations attached to local governments. According to Hameiri (2013: 323), this is an important process that transforms the developmental state into a form of regulatory state.

The transplantation of regional governance and policy making into domestic rules is crucial for the creation of a market-led regional economy, as well as for hydropower development in particular. This thesis argues that adopting regionalism for market building and expanding regional production systems, while minimizing power transfer to regional institutions, is a sound option for state actors that need to be in control of national development. This regional governance approach may provide an explanation of developments in the Mekong Basin where regulatory regionalism becomes a major strategy to realize and legitimize the marketization of transboundary hydropower.

The case study of hydropower development in Laos reflects these elements. Although it is the smallest country in the region, both in terms of population and size of the economy, its hydropower industry has made the country very important for the development of the regional water and energy sector. The ongoing extensive regulatory reforms in Laos coincided with the emergence of the market economy, which was highly dependent on foreign aid from the IFIs, most notably the World Bank and the ADB, and on investment from transnational private

companies, especially from neighbouring China, Vietnam and Thailand. The development of hydropower as Laos's backbone industry demonstrates the logic of regionalism and the changing pattern of the intra-regional political economy, especially in the case of transboundary projects on the Mekong mainstream.

2.4 Regulatory regionalism and transboundary water governance: an analytical framework

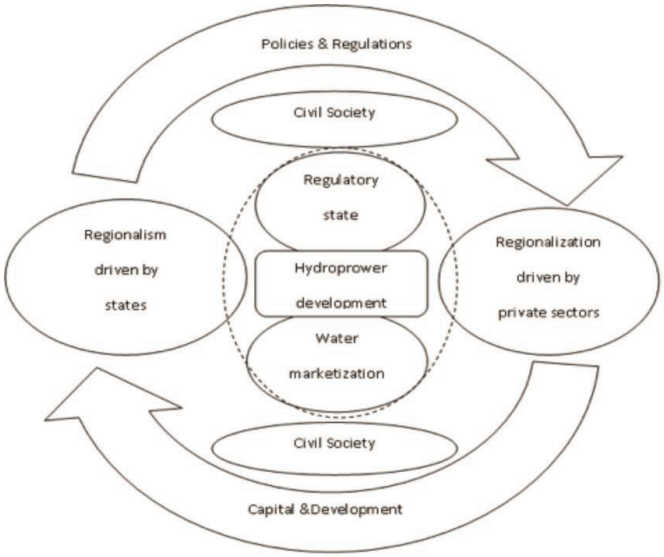
A significant assumption linking regulatory regionalism to hydropower development is that regionalism has the potential to overcome two major problems of TWG. These are: the distribution of water by the regional market mechanism, and the territorial control over water by regional governance institutions. In theory, regionalism promises to create a more integrative regulatory framework to facilitate regional market transactions. Alan and Mirumachi (2010) note that this process potentially reduces water tensions because countries may benefit from regional trade in water to reduce their reliance on domestic water supply.

This research argues, however, that the process shaping regionalism is not only based on the technocratic logic of efficient water management. Although the basic principle of market efficiency was an important factor in the emergence of the regulatory state both in developed and developing countries, some characteristics of the latter group – such as the lack of capital, external economic dependence, and limited governance capacity – have created a different dynamics behind the formation of the regulatory state, which deviates from its original purpose. Because regionalism potentially meets the developmental needs of some countries, especially the weaker and smaller ones, the model of the regulatory state offers more benefits to them than the developmental state model. With state activities mainly focused on the introduction of forms of regulation that attract and facilitate national and foreign investors, the ensuing results in the form of transnational trade and investment are expected to trickle down to their population.

In this case, state actors take advantage of the expansion of regionalization that encourages the growth of capital flows. The political project of regionalism, which supports marketization, enhances political legitimacy by contributing to stronger decision making and regulation in the case of development projects. So-called regulatory regionalism tends to

influence TWG in the Mekong Basin by technically strengthening regional governance for integrated water management; yet, it is dominated politically by state-led regionalism aimed at the marketization of water in the form of hydropower. The states and state-led regional institutions such as ASEAN and the GMS together create policies and regulations in order to facilitate and control the regionalization of economic transactions that are driven, as is the case in hydropower development, by the private sector This process is supposed to lead to an increased inflow of capital that creates economic growth and fulfils the development purposes of the state. Both regionalism and regionalization may affect the relationship between the state and civil society – such as NGOs and local community organizations – because they may create unclarity about the responsibility of public and private developers and about legal jurisdictions, particularly in relation to the transboundary impacts of the projects developed by transnational companies in foreign territories (see diagram 2.1).

Diagram 2.1: Analytical framework of regulatory regionalism



Regarding the level of governance, regulatory regionalism potentially takes shape at the international level when the forces of regionalization are stronger than those of regionalism. It means that the expansion of regional capital through transnational investment and trade develops faster than the institutionalization of regional governance among states, which prefer to maintain their regulatory power over development projects. Hence, at the domestic level, the regulatory state is shaped not only by the globalization of the market, pushed by global institutions, but also by regional capitalists and state actors who want to integrate their national economy, in this case by exploiting water as an economic good, into the emerging regional market.

The concept of regulatory regionalism is compatible with the framework of regionness that was discussed above. In this case, a regional space is constructed on the basis of the geographical features of a river basin. The usage of water, including for hydropower, creates a regional complex of transnational relations among users, developers, and regulators in the area. Intensifying regionalization may stimulate the organized cooperation among states in the form of a regional society, which is a tangible foundation of regionalism.

However, as discussed in section 2.3.1, regionness does not necessarily evolve hierarchically but is shaped by the relationship between regionalism and regionalization. A regional society does not necessarily require rule-based international or regional institutions, but may develop from shared principles of regional marketization that are transplanted onto the domestic governance arrangements of each of the states in the region. One may expect that, in this way, state actors will be able to control intensified regionalization through regulations that serve their specific interests and that may transform into hybrid forms of governance such as public-private partnerships.

Growing regionalization may transform a regional space into a regional complex in a particular sector such as hydropower. Increasing regionalism may obtain some features of a regional society, but this does not need to result in the establishment of a regional community because the latter would necessarily require a political project. The emergence of regulatory regionalism possibly replaces the need for such a political project because it may provide the state with the tools to influence other actors to participate in development projects, via its regulatory power, in the form of the making and the enforcement of rules.

Eventually, this transformation changes the power relations within a state, because regionalization makes national policy makers increasingly dependent on foreign capital. The creation of regional institutions may be seen as an attempt to install regional governance to strengthen the regionalized role of capital within the state apparatus, something which Jayasuriya (2015: 521) has called the 'internationalization' of the state by. This thesis argues that the dominant technocratic approach to TWG and market-driven regionalism in the Mekong Basin will likely result in a legitimation of state-centred institutional arrangements and decision-making processes with regard to transboundary hydropower development.

The following chapters will apply this framework in the analysis of hydropower development in the Mekong Basin and the role of the state in Laos. The third chapter highlights the changes in hydropower development as part of the global trend, and discusses the revival of the hydropower industry and the regionalization of the energy market through transnational investment and cross-border electricity trade in the Mekong Basin. The chapter explains why and how the state is an important factor in the marketization of hydropower, as well as how the changing power relations between states and non-state actors plays a role in the uneven development in the region.

The fourth chapter analyses regionalism in relation to hydropower development and its regional governance. It focuses on the new regionalism in the Mekong Basin and on the way this has been shaped by the state-centric nature of regional governance, rooted in the old regionalism of the Cold War era. The contradictions of TWG, which result from its combined focus on water development and water management, is discussed in order to show how the market has influenced the emerging 'regionness' in the Mekong Basin and has led to the rise of regulatory regionalism.

The case study of Laos and the Xayaburi hydropower project in chapter 5 illustrates how several actors have been pursuing their interests through regionalism. The chapter describes the context of hydropower development in Laos, as well the relations with Thailand, its biggest partner in the hydropower trade. This chapter analyses why and how Laos has adopted the model of the regulatory state, as well as its implications for state transformation and the tendencies to regionalism.

3 Transformation of water for energy: Hydropower development on the Mekong Mainstream

Introduction

Among different forms of water usage, hydropower is notably different from others. Although power generation usually affects water quantity and quality, the physical change involved is not as obvious or noticeable as in case of the diversion of water for irrigation or water supply. The transmission of hydroelectricity water is tradeable across borders without subtracting substantial volumes out of the natural system. As a portion of electricity is lost during long-distance transmission and cannot be stored in warehouses, the efficiency of hydroelectricity transport relies on the possibility of instant exchange in a wide and steady market with secured access and predictable prices as well as proximity of power sources and users. A regional market comes is relevant for matching differential energy demands and supply between neighbouring countries.

Some states have limited resources and capacities or lack the intention to invest in the development of dam infrastructure. As a consequence of this, private developers, especially transnational companies, have been the main investors in large hydropower projects, frequently sponsored by international financial institutions (IFIs) that promote the participation by private actors in development. Particularly in Southeast Asia, large dams and hydropower development have recently been high on the agenda at the regional level. In the Mekong region, although the marketization of the water sector is taking place relatively slower than elsewhere, we have recently witnessed growing transnational markets that provide greater opportunities for private firms concentrating on transportation, telecommunication and energy (Conca 2006: 227).

Private developers have become active in the hydropower sector because of three major reasons. First, while many developed countries built hydropower dams a long time ago, presently most projects

concentrate in developing countries with limited financial and technical capacities – this is a situation where transnational banks and companies see opportunities for investment and infrastructure construction. Second, the economies of scale and the monopolistic character of large dam projects lead to potentially high profit margins, making the projects attractive to private investment. Third, market-oriented reforms and economic liberalization promoted by IFIs and Western donor governments have encouraged the expansion of the market system and the private sector.

A unique characteristic of hydropower development is that demand and supply of water for energy production work mainly between neighbouring countries because trade in hydroelectricity usually operates on a cross-border or regional basis, because energy is not suitable for long-distance international trade as is the case for other goods. This chapter first explores the global trend of large dam and hydropower development in order to explain why this particular sector has been widely promoted and met much opposition, especially in developing countries. The second part presents the Mekong Basin as a region with fast-growing hydropower development. The case of the Upper Mekong dams in China is mentioned to understand their significant influence in the Lower Mekong Basin. Finally, the setting, perceptions and potential impacts of the Xayaburi Hydroelectric Power Project (HPP) are presented to demonstrate the complexity of hydropower development on the Lower Mekong mainstream.

3.1 Large dams and hydropower development

3.1.1 Global development of large hydropower dams

Many societies have a long history of water management with dams and reservoirs; however, it is not until the middle of the twentieth century that the development of large dams began after important breakthroughs in engineering and hydrologic technology. The World Commission on Dams (WCD 2000: 8) estimated that there were more than 45,000 large dams[7] in over 140 countries at the end of the last century. The number

[7] These are dams with a height of at least 15 m. from the foundation as well as dams with a height between 5 and 15 m. and a reservoir with a volume of more than 3 million m^3.

of dams had increased rapidly from the 1950s to the 1980s but fell since the 1990s. Still, the total number of large dams worldwide is increasing. Recently, the International Commission on Large Dams (ICOLD 2015) estimated that there are 58,402 dams classified as large dams globally. Around 20% of all large dams in the world are built for hydropower. Among them, around 5,727 dams are single-purpose hydropower dams. These are primarily designed for the generation of hydroelectricity, although they often serve other subordinate purposes, including flood and drought management, irrigation, navigation, and water supply.

Table 3.1 Top ten countries with large dams in 2015
Source: International Commission on Large Dam (www.icoldcigb.org)

Country	Number
China	23,842
USA	9,265
India	5,102
Japan	3,108
Brazil	1,392
Korea (Rep. of)	1,306
Canada	1,170
South Africa	1,114
Spain	1,082
Turkey	972

It seems that the growing demand and promotion of renewable sources of energy provide a major justification for the expanding hydropower industry today. Increasing energy demand caused by the rapidly growing world population and increase of economic activities, the reduction of conventional fossil fuel sources – i.e. oil, coal and natural gas – as well as concerns about greenhouse gas emission have encouraged the exploitation of renewable energy sources including wind, solar, tide, wave, geothermal, biomass, and hydropower. Hydropower accounts for 16% of total electricity generated in the world and is the most common form of renewable energy, roughly accounting for 80% of all renewable sources (World Bank 2015). Hydropower development in the world may expand by 73% with the exploitation of all current potential capacity; only 19% of the total global potential had been developed by 2008 (IEA 2010). However, the relative share of hydropower in global electricity production may not rise rapidly –

estimates suggest it will increase from 16% in 2011 to 18% by 2040 – because global energy demand tends to increase at the same pace (Zarfl et al 2015: 166).

Even if hydropower may not substitute conventional energy sources such as oil, gas, coal and uranium at the global level, it is being promoted widely. Both developers in governments and private companies who support hydropower argue that it provides a source of economic development that is not only renewable but also relatively clean. Hydropower leads to significantly less carbon emission and no direct waste, especially compared with conventional fossil fuels. The costs of hydroelectricity are relatively low and hydropower can be applied for a variety of domestic and industrial uses. Hydropower is also a flexible source of electricity because it is possible to adjust the amount of water for power production to power demand. These rationales are praised in the community of developers such as the International Commission on Large Dam, founded in 1928 and comprising around 10,000 hydropower experts including engineers, hydrologists and geologists from government agencies, universities, consultancy firms and construction companies worldwide (ICOLD 2015).

The report by the WCD (2000: 15-16), however, concludes that while large dams, including hydropower ones, have made a significant contribution to human development, the costs to uphold them are too high in many cases. The impact of dams usually includes the physical transformation of rivers, which has so far led to modifications in 46% of world global primary watersheds. The degradation of watershed ecosystems leads to dangers for fish species, nutrient recycling, soil replenishment and flood control. The construction of dams has caused the displacement of 40 to 80 million people globally; many of them have lost access to natural resources, livelihoods and cultural heritage.

Because large dams always require huge investments and potentially create wider impacts, environmental problems cannot be understood in isolation from the political and economic contexts in which they emerge (Bryant and Bailey 1997). At least two trillion US dollars were invested in the construction of large dams over the 20th century and sometimes were the biggest investment ever in some developing countries (WCD 2000: 14). The majority of large dams was financed directly by the public sector and frequently were supported by foreign aid and loans provided by international development agencies such as World Bank Group (WB)

and Asian Development Bank (ADB). Multi-national banks, such as Mizuho (Japan), Fortis (Netherlands, integrated into ABN-AMRO in 2010), ING Group (Netherlands), ANZ (Australia), and Citigroup (USA) have also played an important role as lead financiers or co-financiers in large infrastructure projects worldwide, as well as in the Mekong region (van Gelder et al. 2010).

The widespread negative impact of some projects has stimulated protests from social movements against large dams since the 1980s and discouraged the sponsoring of large dams by international development institutions, especially the World Bank (Goldman 2005; Khagram 2004). Case studies in the WCD report (2000), such as the Tarbela Dam in Pakistan, the Tucurui Dam in Brazil, and the Pak Mun Dam in Thailand, highlight the power of anti-dam movements. After the peak investment in hydropower in the 1970s the World Bank's global share in financing and co-financing hydropower projects dropped from 4% to 1% in the 1990s and to 0.6% by 2003 (Shannon 2012). Nonetheless, the construction of dams and the investment in hydropower development has been increasing in developing countries, concurrent with the implementation of economic reforms and regional integration, which encourage more international investment, energy demand, and cross-border power trade.

3.1.2 Hydropower development in the developing world

It seems that the development of large dams, especially for hydropower, has been revitalized recently. Around two-thirds of all large dams in the world are concentrated in developing countries and emerging economies. The expansion of large dams has concentrated in South America, Africa and Asia, mainly in China and India. In Southeast Asia, declining support from the IFIs since the 1990s has not halted the expansion of hydropower development, as new developers within the region from China, Thailand, Malaysia and Vietnam, which have all enjoyed high economic growth since the 1980s or 1990s, have increased their activities in the hydropower industry (Middleton et al. 2009).

This trend is in contrast to the situation in Europe and North America where the construction of new dams has decreased. There are various reasons for this difference in trends. In Europe and North America, where most hydropower dams were built decades ago, costs of

maintenance have become too high, both in a financial and an environmental sense. In the US, where dams were developed rather early on, the rate of dam decommissioning outpaces that of dam construction because of safety and environmental considerations (McCully 2001).

Meanwhile the IFIs, especially the World Bank, have adjusted their policies in response to pressures from social movements against dams since the 1990s. The Bank has started to include multi-stakeholder approaches into its 'green policy' by including ministries, international organizations and NGOs into the policy networks on natural resources and environment. Several international agents were commissioned to develop new regulations, redesign state governance and redefine local production with global norms (Goldman 2005). Regarding the energy sector, the green policy encourages 'clean' and 'renewable' sources of energy, with hydropower being considered among other sources, such as wind, waves, tides, solar, biomass and geothermal energy.

World Bank financing of hydropower has been constantly increasing since 2003 and has been focused on Sub-Saharan Africa and South Asia, where basic infrastructure and investment are most scarce. The basic idea of the revival may be expressed in a comment by the Chief Technical Specialist on Hydropower at the World Bank, who argued that:

> The Bank had withdrawn from the hydropower sector for about 10 years from the mid-1990s before gradually revising its strategy since about 2003. Now however, the Bank has acknowledged that not to fully engage with hydropower would impact its ability to meet its objectives. The Bank has now pledged some one billion US dollars in funding for hydropower projects in the world's poorest countries. In addition, the agency aims to place hydro higher on the political agenda, including large-scale projects. Hydro of all scales is vital in affecting the impact of climate change; it also has the highest potential for clean energy development and is abundant in the poorest regions of the world where the needs are greatest. (Hydro World 2013)

This policy change has encouraged developers in other regions than Africa and South Asia, even with less support from the World Bank and other IFIs, because hydropower is regarded as a source of renewable energy, which is strongly promoted by the Bank (World Bank 2009). To implement its policy, the World Bank grounds its strategy in three steps;

first, direct support for basic infrastructure needs; second, invest in a secondary/higher level of infrastructure and seek out cooperation with more partners including middle income countries and regions; third, diversify financial support to include private sources in the form of public-private partnerships (Shannon 2012).

In other words, the reform tries to transplant a political doctrine, economic programs and regulatory practices, which considers nature as capital, commodity or eco-services (Bakker 2005, 2010). The term 'natural capital' is employed by the ADB to promote its policy on economic integration by focusing on the negative impacts of over-exploitation and making a case for market-driven ideas for natural resources development in the Mekong region:

> A natural-capital approach is the economic reflection of the value that natural assets and services contribute to human economies. It represents a fundamental shift away from traditional approaches to natural resource management and counters the widespread perception that natural resources are either valueless or unlimited merely because they are available for "free" (without market prices). Properly assessing and valuing natural capital (both stocks and ecosystem services) and capturing that value in a natural-capital accounting framework can provide decision makers with essential information about the trade-offs involved in development decisions (ADB 2015: ix).

Next to supporting hydropower projects financially, IFIs and donor governments often have promoted a greater involvement of private developers when implementing programs on governance reform in the public sector. They aimed to strengthen the role of the private sector in development, especially in large-scale projects such as those in the hydropower sector. As stated by a World Bank official, "[The Bank] can promote good practice as well as leverage private investment to mitigate commercial risks. Help our clients do the right projects, and do the projects right (Hydro World 2013)."

The advocates of hydropower usually include coalitions of state agencies, engineering companies and academics as well as financial institutions. The opponents typically are social and environmental NGOs, academics and local people who are affected by hydropower projects. However, more complex coalitions may come into being: for example, a government that promotes hydropower dams on its territory

may strongly oppose a project upstream in another country. Those actors form coalitions, domestically and internationally, in order to strengthen their position and influence the planning and implementation of development projects based on their viewpoints and cultures (Nusser 2003, Baghel and Nusser 2010).

Currently, governments and private developers often jointly implement hydropower projects via public-private partnerships as a so-called 'Independent Power Producer (IPP)', replacing mainly state-owned developers. The private party has the responsibility to raise the funding for the project, is often entitled to retain all revenues generated, and owns the facility during the concession period. To secure the revenue of the project, a purchaser or off-taker, usually a state-owned agency and a private power producer will conclude a Power Purchase Agreement (PPA) to guarantee the market and price of the product. Without such a PPA, the project may not be viable and attractive to foreign investors. Finally, the IPP will transfer the facility to the government at the end of the concession agreement (World Bank 2014b).

Practically, IFIs and other international donors have eagerly promoted this strategy to realize the marketization of water and other resources: as part of the approach, they propose lending agreements that require recipient countries to implement Public-Private Partnership (PPP) approach in national policies and development projects. The PPP is a typical term for collaboration between the state and non-state actors, which transforms public to private goods. It aims to reorient the state away from its major developmental functions to be more focused on regulatory ones as defined by the World Bank (2014a):

> PPPs combine the skills and resources of both the public and private sectors through sharing of risks and responsibilities. This enables governments to benefit from the expertise of the private sector, and allows them to focus instead on policy, planning and regulation by delegating day-to-day operations.

The approach assumes that the involvement of more stakeholders in public affairs, including private companies and civil society, would create more knowledgeable, efficient and democratic governance for development, as well as reconcile potential conflict between public and private interests (McDonald & Ruiters 2005). While the market approach

leads to greater involvement of private actors in hydropower development, and assumingly leads to better ways of providing energy, generating income, boosting industry and employment linking to poverty eradication, etc., this often overshadows that water has other functions, such as contributing to ecological balance, food security, and local livelihoods. (O'Rourke 2004: 226).

Focusing on the state as a developer of hydropower projects, the government traditionally plays a pivotal role in decision making in the name of the national interest that reflects its water nationalism. According to Hirsch and Jensen (2006) the national interest is used in transboundary water governance in two ways. First, it is used to identify the assumed benefits or costs brought upon a particular country rather than others. Second, references to the national interest are made to affirm the legitimacy and development gains at the national level over local or smaller groups in the country. However, the definition of the national interests always depends on who represents, evaluates, and prioritizes the diverse interests of actors into national public policy. Hence, the power of actors in a development project essentially depends on the political regime type and the socio-cultural status of groups in a particular society. For example, the World Bank withdrew its support to the Sardar Sarovar project on the Narmada River after international networks of social movements strongly opposed it in the highly democratic political system of India in 1993-94 (Khagram 2004).

In short, the global trend shows the increasing development and concentration of hydropower projects in developing countries, which is driven by their socio-economic growth and their attractiveness to international investors, as well as by their alignment with the global development policies supported by the IFIs. The promotion of private sector participation in hydropower development has significantly changed the role of state actors. Further, the critics of ineffective and inefficient state-led projects emphasize that the role of the state in large and complex infrastructure development should be reduced. This is also relevant in the context of the Mekong Basin where the Mekong mainstream, one of the few relatively untamed international rivers, has recently become a growth area for hydropower development.

3.2 The Mekong Basin and hydropower development

3.2.1 Hydropower in the Mekong Basin

Hydropower generation is one of the biggest potentials of the Mekong River and its tributaries. The estimated hydropower potential of the LMB is 30,000 Megawatts (MW) while that of the UMB is 28,930 MW (MRC 2010). With the ongoing economic growth in the countries of the region, power demands are expected to rise by around 7% per year over the next 20 years, yielding a substantial and potentially profitable energy market (Graecen and Plettu 2007). In the 1950s this great potential was recognized by the MC's initiative for large hydropower dams. During the 1960s and 1970s, the MC studied and proposed seven mainstream dams on the Lower Mekong. After the long regional turmoil during the Cold War had brought discussions about dam construction to a standstill, the mainstream projects were reconsidered in the 1990s. In 1994 the MRC released a study of twelve proposed mainstream dams on the Lower Mekong with heights ranging between 20 and 50 m. from the riverbed (ICEM 2010: 27).

Hydropower is attractive to developers in the Mekong countries that mostly have limited fossil fuel resources but abundant seasonal water flows. In the Mekong Basin during the monsoon or the wet season, rivers swell to over ten times the dry season flow. The natural setting is suitable for dam construction to capture and store water during the wet season for release during the dry season (WCD 2000: 11). This logic is applied to dams in the Mekong Basin which are mostly designed for various purposes, for instance irrigation, flood control and hydropower. All of them are or would be large dams. In 2011, the installed capacity – the total power output of turbines per dam – in the LMB was estimated at 29,684 MW. Around two-thirds of the capacity would be located in Laos, as shown in table 3.2.

Table 3.2 Installed capacity (in MW) of hydropower projects in the LMB
Source: *Planning Atlas of the LMB*, Basin Development Plan Programme, MRC 2011, p. 81

Country	Mekong mainstream	Tributaries				Total
	Planned	Existing	Under construction	Planned	Tributary total	
Laos	10,417	738	2,764	6,847	10,350	20,767
Thailand		745			745	745
Cambodia	4,280	1		1,309	1,310	5,590
Vietnam		1,204	1,016	363	2,583	2,583
Total	*14,697*	*2,688*	*3,780*	*8,519*	*14,987*	*29,684*

On the Lower Mekong mainstream, early versions of dams promoted by the MC included large storages of conventional dams. More recent plans include scaled-down versions, commonly referred to as 'run-of-river dams',[8] which depend on the seasonal flow of the river to generate power without storing more than a few days' flow. The MRC's 2011 plan was based on a more even flow of water from the Upper Mekong dams in China, with more regulated water available during the dry season and less during the wet season. The prospects for year-round power generation are better than those of an unregulated monsoonal flood regime (Hirsch, 2011).

Unlike the Upper Mekong, the Lower Mekong mainstream was not dammed until 2012 when the construction of the first project, the Xayaburi HPP, started in Laos. One major reason is that the situation in the upper part of the river differs very much from that in lower parts. The Upper Mekong is considered as a domestic river, the Lancang, by the government of China, and several hydropower projects have operated on the mainstream since the 1990s. The dynamic development on the Upper Mekong certainly has implications for the recently revived plans for downstream dams on the Lower Mekong.

3.2.2 China and dams on the Upper Mekong

Around 22,000 dams or half of all large dams in the world are in China (WCD, 2000: 9). China is by far the largest hydropower producer and

[8] These are hydropower dams with a small or no reservoir that generate electricity from a consistent annual water flow, which is either natural or regulated by a storage dam upstream (International Rivers 2016).

continues to lead global consumption of hydroelectricity, representing around 17 % of all domestic use (World Watch Institute 2012). Among large dams in China, the series of hydropower projects on the Lancang or the Upper Mekong in Yunnan Province is prominent. Comparing China with other countries in the Mekong Basin, Magee (2006) has noted that the annual hydropower generating capacity of the Lancang only within Yunnan is estimated to be more than 100 TWh, slightly more than the capacity of Laos, and between two and twenty times more than that of Cambodia, Myanmar, Thailand, and Vietnam.

Although the dams on the Upper Mekong have attracted less attention than the gigantic 'Three Gorges Dam' project on the Yangzi River, the projects have generated much criticism of the disorganized resettlement of residents near the dams and particularly the transboundary impacts on the Lower Mekong in neighbouring Southeast Asia. Although China claims that it on average shares only 16% of the water flow in the mainstream Mekong, in the dry season around 40% of the total flow comes from China and this has a significant effect on the volume of water in the Mekong downstream (Osborne, 2004: 2).

Dam building in Yunnan is supported by a policy, the so called 'Open up the West' campaign, officially launched in 1999. This campaign has aimed to utilize the resource-rich areas of western China to fuel the economic growth of eastern China, which in turn should provide rural electrification and lead to poverty alleviation in the poorer western regions. Moreover, Yunnan is framed as an electricity provider in the ADB's development framework of the Greater Mekong Subregion (GMS), which emphasizes the construction of a regional power grid (Magee 2006: 24-26).

Chinese Mekong hydropower development began in 1986 with the construction of the Manwan dam, which was a solution for the power shortage in Yunnan, and subsequently led to the construction of other cascade projects. Until 2012, four dams have been built on the Mekong upstream – Manwan, Dachaosan, Jinghong and Xiaowan – while another four are planned. These projects were developed by Chinese state-owned companies and most of the electricity was generated for domestic demand, but could potentially be exported to the neighbours in South and Southeast Asia (Deetes 2009). Nevertheless, these dams have created concerns and criticism from both academics and civil society within and

outside the region especially because of their transboundary impacts to the areas downstream. International Rivers (2009) notes:

> China's dam construction on the Upper Mekong has changed the Mekong River's natural flood-drought cycle and blocked the transport of sediment, affecting ecosystems and the livelihoods of millions living downstream, especially along the Thai-Lao border where communities have suffered declining fisheries and changing water levels that have seriously affected their livelihoods….this construction has proceeded without consultation with China's downstream neighbors and without an assessment of the dams' likely impacts on the river and its people.

Although this statement has been contested among scientists (see Rasanen et al 2012; Li et al 2011; Lu et al 2008), Chinese unilateral actions on the upstream Mekong are incontestable. Some NGOs and local villagers, especially in Thailand, believe that the upstream Chinese dams have caused unusual drought and flood in the Mekong. This sceptical feeling towards China is not new, witness the campaigns of Thai social movements against dams in China since the early 2000s.[9] Although China has shown a willingness to cooperate internationally by submitting data on the rainy season to the MRC since 2005 and continually accepting MRC members' visits of its dams, the Chinese government has insisted that the dam building is its sovereign right. In the case of the severe drought in 2010, the Chinese Foreign Ministry declared that China also suffered from the drought and insisted that the quantity of water flowing from the Lancang River into the Mekong was only 13.5% of the total flow (Mineta 2011: 8). Although China has appeared more cooperative in recent years than before, there has been no sign from Beijing that it would wish to join the membership of the MRC.

Nonetheless, economic ties clearly contribute to the expanding engagement between China and countries in the Lower Mekong. In 2010, China and ASEAN established the ASEAN-China Free Trade AreaChina currently is the biggest trade partner of ASEAN with a share of 15.2% of total intra-regional trade (ASEAN statistic 2016). Jalilian and Flower (2013: 17-18) have noted that China has been well integrated into the

[9] Personal interview with Jeerasak Inthayos, Rak Chiang Khong Group, Chiang Khong, 13 March 2013.

production network of Southeast Asia though trade relations. It mostly imports primary products from and exports manufactured goods to the Mekong countries. Chinese FDI concentrates in garment manufacturing and natural resource extraction such as mining and hydropower, especially in Laos and Cambodia where China has become the biggest investors.

China has recently played a more proactive role in Mekong regional governance by establishing the Lancang-Mekong Cooperation (LMC), an intergovernmental mechanism for multifunctional cooperation in the Mekong region. The LMC was initially proposed by Chinese Premier Li Keqiang in November 2014 at the China-ASEAN Summit in Myanmar, encouraged by Thailand's 2012 initiative for a closer cooperation mechanism among the Mekong countries. Besides cooperation on the development of economic infrastructure, technical exchange, capacity building and border economic zones and so on, the issue of water governance has also been added into the framework. A tangible plan is to establish a centre for water resources of the Lancang-Mekong Basin in China (MFA, PRC 2016).

The mentioned attempts to further collaboration may seem redundant in light of the existence of the MRC – yet, China has never had the intention to join the Commission. Although the MRC per se is not a party to the LMC at this stage, all members of the MRC participate in the framework. The government of Thailand supports the LMC initiative as it may play an important role in infrastructure development across the region. Moreover, Thailand has become frustrated with the MRC, since planned water diversion project for domestic use in the northeastern region has been impeded by the Mekong Agreement 1995 and the MRC for a long time. More than for other members, the LMC framework seems to be an option supportive to Chinese and Thai interests.

To conclude, developments in China have significantly contributed to the revival plan of the Lower Mekong dams in the late 2010s at least for four reasons. First, from a technical point of view, a more regulated flow from the Upper Mekong dams would contribute to more predictable and all year-round available water for hydropower production, thus making the projects on the Lower Mekong more feasible. Second, their domestic experience and capital have heightened the interest of Chinese state-enterprises to expand their investments in the hydropower industry in neighbouring countries. Third, the Lower Mekong countries depend on both the hydrological control of Chinese dams and investment from

Chinese companies. Fourth, the development of dams in the Upper Mekong would seem to encourage more hydropower development on the Lower Mekong, where the governments of Laos, Thailand, Cambodia and Vietnam may derive legitimacy from their claims that they are keeping changing water flows under control, providing increased economic growth and poverty reduction, and protecting their sovereign rights in the same way as the Chinese government did.

3.3 Hydropower development on the Lower Mekong

3.3.1 The revival of the Lower Mekong mainstream dams

Since the mid-2000s, the Lower Mekong countries – Laos, Thailand, Cambodia and Vietnam – have revived the plan for mainstream hydropower projects that would attract investment from Thai, Chinese, Vietnamese, and Malaysian companies (International Rivers 2013). Twelve mainstream dams on the Lower Mekong are proposed, two of them are planned to be located in Cambodia, and the rest would be in Laos and on the Lao-Thai border (ICEM 2010: 27). The Lower Mekong flowing through Laos and its border with Thailand is the longest part in the LMB. Moreover, around 50% of total flow in the Mekong originates from watercourses in this area. Table 3.3 identifies the proposed projects with their current status and developers.

Table 3.3: Proposed hydropower projects on the Lower Mekong mainstream

Adapted from: ICEM (2010), *MRC Strategic Environmental Assessment (SEA) of Hydropower on the Mekong Mainstream*. Hanoi: International Centre for Environmental Management.

No.	Project	Installed capacity (MW)	Status (2018)	Country	Developer
1	Xayaburi	1,285	Under construction - planned commission, 2019	Lao PDR	Ch. Karnchang (Thailand)
2	Don Sahong	240	Under construction	Lao PDR	Mega First (Malaysia)
3	Pak Beng	1,230	MRC consultation 2017	Lao PDR	Datang International Power Generation (China)

4	Pak Lay	1,320	MRC consultation 2018	Lao PDR	CEIEC and Sino-Hydro (China)
5	Luang Prabang	1,410	Planned	Lao PDR	PetroViet Nam Power Corporation (Viet Nam)
6	Sanakham	700	Planned	Lao PDR	Datang International Power Generation (China)
7	Lat Sua	686	Planned	Lao PDR	Charoen Energy and Water Asia Co Ltd. (Thailand)
8	Pak Chom	1,079	Planned	Lao PDR - Thailand	n/a
9	Ban Kuom	1,872	Planned	Lao PDR - Thailand	Italian Thai Asia Corp. Holdings (Thailand)
10	Strun Treng	980	Planned	Cambodia	Song Da Construction Co. (Viet Nam)
11	Sambor	2,600	Planned	Cambodia	China Southern Power Grid (China)
12	Thakeo (River diversion - not dam)	50	Planned	Lao PDR	CNR & EDL (France/Lao)

Four driving forces are significant for a proper understanding of this plan in the current context. First, as discussed in the previous section, Chinese projects on the Upper Mekong have urged the downstream countries to exploit their own resources because of two rationales. Technically, the Mekong flow may be more predictable and all year-round available for electricity generation because of the dams in China. Economically, this feature seems more convincing for international investors, including experienced developers from China.

Second, the urbanization and industrialization in the Lower Mekong countries has led to a higher demand for energy. Though the population growth rate has been declining, the total population of the four countries is expected to increase to 33 million by 2025, 30% of whom will be 15 years old or younger (PRB 2010: 8). Thailand and Vietnam are expected to account for 96% of total energy demand in the LMB by 2025 (ICEM 2010: 45; ASEAN Secretariat 2012a: 1). Laos and Cambodia hope that hydropower projects will lead to domestic poverty reduction as a result

of the export of electricity to and the attraction of more investment from their neighbours.

Third, although major IFIs, such as the World Bank and the ADB, have toned down their enthusiasm for large dams, they are still in favour of hydropower as a renewable source of energy, as this would respond to fears of climate change by decreasing uses of fossil fuels. And fourth, economic integration frameworks such as the Greater Mekong Subregion Economic Cooperation (GMS) promoted by the ADB and ASEAN have supported regional integrated plan for investment in electricity infrastructure and trans-border links to support the development of other sectors (see ICEM 2010; Lee and Scurrah 2009; Symon 2009).

The MRC's strategy for the 2011-2015 period praised the many advantages of hydropower as follows:

> Mekong Government policies promote the use of water resources to generate electricity, not only for national consumption but also for export to earn foreign exchange for funding the country's socio economic development objectives. It also catalyses the mutually beneficial expansion of cross-border power trade to support regional economic integration and the attainment of energy security goals (MRC 2011b: 13).

The MRC's plan also mentioned the importance of the completion of dams in China for making hydropower development on the Lower Mekong more viable as well. The plan also contained an endorsement of several global norms of development as promoted by the World Bank. These included renewable and clean energy as a response to climate change, economic efficiency, regulatory reform and participation of the private sector:

> Hydropower has recently attracted more support, since not only is it a renewable technology, but it also generally emits far less greenhouse gas than fossil fuel power plants. Furthermore, the increased fluctuations in gas and oil prices have made hydropower more economically competitive. This coupled with the predicted increase in dry season flows in the mainstream resulting from the dams on the Lancang-Mekong upstream and availability of private sector finance is driving a rapid regional expansion of hydropower. The introduction of national regulatory systems to encourage investment in strategic infrastructure for water and energy has also led a significant private sector response to propose new large hydropower

> schemes on both the tributaries and mainstream of the Mekong River. (MRC 2011b: 17)

Since 2010, the debate about dam projects has not focused exclusively on the Chinese dams in the UMB but also on expected projects in the LMB. After many dams had been built on the tributaries, the government of Laos (GoL) proposed the first project on the Mekong mainstream, named 'Xayaburi' after the province where it would be located. The project caused opposition from governments of downstream Cambodia and Vietnam as well as civil society, especially in Thailand, which is concerned with the project's transboundary impacts. The Xayaburi project is not only significant in that it would be the first dam on the Lower Mekong mainstream, but it was also the first project for which an international prior consultation process was implemented.

According to the Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin 1995, any development on the Mekong mainstream is prohibited without consultation with the riparian countries. The Procedures for Notification, Prior Consultation and Agreement (PNPCA), an extension of the 1995 agreement, state that member countries must notify the MRC's Joint Committee when they want to start any major infrastructure development – such as the construction of a hydropower dam on the mainstream Mekong or on tributary rivers – particularly if those projects could have significant impacts on people or the environment downstream (MRC 2011c).

This provision excludes upstream China which is not a MRC member and which has already built dams on the Upper Mekong. Moreover, domestic tributaries were not included in this agreement, although projects on those tributaries could also cause problems since they contribute significantly to the water volume in the lower basin mainstream.

Although the focus of this dissertation is on the political and governance aspects of hydropower development, ecological and socio-economic impacts are usually interwoven with and inseparable from the former issues. It is, however, quite difficult to obtain an authoritative assessment of the possible transboundary impacts of the mainstream dams on the Lower Mekong because of two main issues. First, there are no comprehensive studies available about the seasonal water crisis on the entire Mekong mainstream. According to Grumbine and Xu (2011: 178-79), the planning of mainstream hydropower projects in the Mekong Basin has proceeded with limited analyses and unreliable data because of

difficulties in data collection and lack of government capacity and transparency. According to one expert, this lack of knowledge is related both to the weakness of civil society, who are unable to monitor development, and to the inadequate capacity of governments to manage transboundary hydropower projects.[10] An NGO expert on the energy sector commented that the governments in the region should promote recognition of and learning about energy and natural resource management among their citizens beyond small the circle of scientific and engineering technicians.[11]

Second, because the only dams that are operational are located in the Upper Mekong in China, most studies on the ecological impacts focus on them (Rasanen et al 2012; Li et al 2011; Lu et al 2008). For instance, one study indicates that the downstream flow in the dry season has become much weaker since the construction of Manwan dam, but indicates that other factors such as increasing water consumption, land use and climate change could also have affected the water flow (Lu et al 2008). In the wet season, the dams may also cause excessive flooding when water is released quite suddenly after the dams have reached maximum holding capacity (Osborn 2004). Unnatural water flows are expected with higher levels in the dry season and lower levels in the wet season (Kummu and Varis 2007). International Rivers (2009) indicates that mainstream dams in China have changed the seasonal flood and drought cycle and block the transportation of sediments, which serve as natural fertilizers for agriculture, and affect fisheries. Such impacts seem to have an unavoidable effect on the livelihoods of millions of people who live downstream and depend on the Mekong ecosystems.

With regard to the Lower Mekong, the Strategic Environmental Assessment of Hydropower on the Mekong Mainstream (SEA) 2010 is one of the most frequently cited documents on the impacts of the mainstream dam. The report was prepared by International Centre for Environmental Management (ICEM) for the MRC Secretariat in order to implement the Mekong Agreement 1995. The SEA involved a variety of

[10] Personal interview with Apisom Intralawan, Institute of Natural Resources and Environmental Management, Mae Fah Luang University, Chiang Rai, 16 March 2013.

[11] Personal interview with Witoon Permphongsachareun, Mekong Ecology an Energy Network (MEE-NET), Bangkok, 9 April 2013.

stakeholders, including the MRC Secretariat, the national governments of the four member countries as well as civil society and the private sector. This report was published in the same year that the first Lower Mekong mainstream dam, the Xayaburi project, was proposed to the MRC.

The SEA's main findings show that the construction of Mekong mainstream dams would reduce fisheries, cause inundation of riverbank gardens, and lead to a loss of nutrients for floodplain agriculture, equivalent to 500 million US dollars a year, and turn 55% of the lower mainstream into reservoirs with slow-moving water. Despite the migratory nature of fishes in the Mekong, only three of the proposed eleven dams in the Lower Mekong incorporate fish ladders, and none of the designs are adequate for local species. Approximately 50-75% of total river sediments would be trapped behind the dams and would be prevented from moving downstream to support river productivity and floodplain farms. The SEA projected that roughly 2.1 million people would suffer direct and indirect losses to their livelihoods (ICEM 2010; Grumbine and Xu 2011).

As mentioned earlier, developers usually claim that run-of-river model of dams will not significantly divert or block the flow of water and sediment, and will cause much less negative environmental impacts than conventional dams. Nonetheless, International Rivers (2016) noted that run-of-river dams are often built in a series or cascade along a river so that upstream dams may regulate the flow in order to maximize potential and enable more efficient power generation further downstream. However, because power generation needs regular water regulation, hydropower dams potentially pose a risk to downstream water levels, especially during the dry season in the delta, and may lead to increasing salinization from sea water intrusion.

For these reasons, the impacts of the dams cannot be counted individually but need to be studied cumulatively – yet, this is often lacking in the decision-making process of governments and private developers that exclusively focus on their specific projects. The SEA recommended that the immensity of the risks was "beyond the current capacity of the members to address and all mainstream dam building in the Lower Mekong should be deferred for 10 years" (ICEM 2010: 19-20). Although many academics and activists refer to this renowned document in their

studies and campaigns, it has never been endorsed by the member states of the MRC.[12]

Presently the commission is preparing another study namely the Study on Sustainable Management and Development of the Mekong River, or the Council Study. It assesses the impacts resulting from different water resource uses, including mainstream dams, by employing various development scenarios. The study was commissioned by the ministerial meeting of the MRC Council in 2011 and was expected to be published in 2018. Vietnam, which is situated in the Mekong delta and probably is most vulnerable to ecological changes in the mainstream, has also conducted its own study, called the Delta study, issued in 2016. Vietnam's study claims that if there is no proper mitigation of potential impacts from planned and constructed mainstream dams, environmental resources and people in Vietnam and Cambodia would be severely affected (MRC 2016). The contested nature of the impact studies shows the weakness of regional water governance, which lacks capacity to provide trust and comprehensive knowledge to the member states and especially their people.

Beyond their social and environmental impacts, dam projects have often been questioned because of their political-economic aspects. Around two trillion US dollars were invested in the construction of large dams over the 20th century; sometimes these projects represent the biggest investment ever in some developing countries (WCD 2000: 14) The majority of large dams were financed directly by the public sector and frequently were realized with the help of foreign donors and international development agencies, as a consequence of which some countries accumulated serious debts. Bakker (1999: 211) commented that hydropower development is often not a very transparent process for the public because the projects require the collection and analysis of hydrological data, which take place within the technocratic space of international consultants, engineering firms, and capital providers.

[12] Group discussion with Thongthip Chandalasang, Viengsay Sophachan, and Luckdavone Valangoun, Lao National Mekong Committee Secretariat (LNMCS), Vientiane, 13 May 2014.

3.3.2 Xayaburi: the pioneer dam on the Lower Mekong

Controversies are not exclusive to Chinese dams anymore, but are also associated with the coming project on the Lower Mekong. The GoL proposed the first hydropower dam project on the Mekong mainstream in 2010. This caused a lot of protests, particularly from the downstream governments of Cambodia and Vietnam as well as from NGOs and civil society, especially in Thailand. Although, as discussed above, the MRC proposed that all projects on the mainstream should be delayed for at least ten years, the GoL, which is expected to receive up to 30% of the project's revenue, confirmed to push ahead with the Xayaburi dam project (Vaidyanathan 2011).

Most parts of the Mekong River in Laos and Thailand constitute the natural border between the two countries. Yet, the Xayaburi dam is built entirely on Lao territory, in the Xayaburi province, around 300 km. northwest from the Lao capital, Vientiane, and 1,931 km. upstream from the Mekong delta in Vietnam. By choosing this specific location, it seems that sensitive border issues between Laos and Thailand could be avoided and direct opposition by active Thai civil society could be neutralized.

Although the project is legally within the territorial sovereignty of Laos, the Xayaburi HPP is also very much a Thai project. The government of Thailand, through the state-owned Electricity Generating Authority of Thailand (EGAT), has agreed to purchase 95% of the dam's electricity production. The construction of the Xayaburi Dam is in the hands of Ch. Karnchang Public Company Limited (CK) from Thailand via its subsidiary, Chor Karnchang (Lao) (CHK) and has a value between 1.7 and 1.8 Billion US dollars (Bangkok Post 2012). Once the construction will be completed, the dam will generate 6,000 GWh of electricity per year for EGAT. The project was partly financed by an 80 Billion Thai Baht loan from the four main financial institutions in Thailand, including the Siam Commercial Bank, Kasikorn Bank, Bangkok Bank and state-owned Krung Thai Bank (Save the Mekong 2013). The Xayaburi Project is fundamentally driven by EGAT's need to purchase electricity in order to provide secure and affordable electricity for Thailand (EPPO 2013).

The operator, the Xayaburi Power Company Limited (XPCL), obtained the concession to construct the electricity generation project

from the GoL. CK, through its holding company, CK Power[13], holds the biggest share in XPCL (30%). Minor shareholders are Natee Synergy Company Limited (NSC), Electricity Generating Public Company Limited (EGCO), which is a subsidiary of EGAT, Bangkok Expressway PCL (BECL), and PT (Sole) Company. All companies are Thai except PT, which is from Laos. Electricité du Laos (EdL), on behalf of the Lao government, also holds 20% of shares transferred from CK since 2013 to comply with the Common Term Agreement and Concession Agreement (XPCL 2014: V).

Table 3.4 Roles of Developers in the Xayaburi HPP

Roles	*Actors*	*Relations with XPCL*
Grantor	GoL	Concession Agreement
Shareholders	CK, EdL, NSC, EGCO, BECL, PT	Shareholders' Agreements
Lenders	BBL, SCB, KBank, TISCO, KTB EXIM[14]	Credit Facilities Agreements
Contractor and supplier	CHK	Engineering, Procurement and Construction Contract
Engineering Consultants	Pöyry, CNR, AF Consult, TEAM Group, SEAN[15]	Engineering Service Agreements
Off-takers	EdL, EGAT	Power Purchase Agreements

The roles of those developers and their relations with XPCL are shown in table 3.4. While CHK, the subsidiary of CK in Laos, has carried out the construction, international consultants have engaged extensively in the development process, from the feasibility study to the engineering work. To respond to the concerns of downstream countries about negative impacts, two consulting companies – Pöyry and Compagnie Nationale du Rhône (CNR) – were hired by the GoL for reviewing the design and giving advice on the adjustment of the design, particularly the improvement of fish passages and the sediment flushing

[13] CK Power was founded in 2011 as a holding of CK. Next to holding shares in XPCL, CK Power possesses a majority share of 75% in the Nam Ngum 2 HPP.
[14] Lenders are all Thai banks comprising Bangkok Bank (BBL), Siam Commercial Bank (SCB), Kasikorn Thai Bank (KBank), TISCO Bank, Krung Thai Bank (KTB), and Export-Import Bank of Thailand (EXIM). The last two banks are state-owned.
[15] International consultants comprise Pöyry and AF Consult from Switzerland, Compagnie Nationale du Rhône (CNR) from France, TEAM and Southeast Asia Energy Limited (SEAN) from Thailand. SEAN works as the Owner-Engineer because it is a subsidiary of CK, the major shareholder.

system (Vientiane Times 2012). Finally, EdL and EGAT, the state monopolies for energy transmission in Laos and Thailand, will be off-takers purchasing 5% and 95% of hydroelectricity respectively.

Compared to other commodities, the revenues from hydropower export are relatively stable because they usually are agreed in advance contracts and power purchase agreements; most financial risks from loans and operations would be borne by private developers. The Xayaburi HPP is expected to generate 135 million USD per year or 3,913 million USD for the whole concession period (29 years) for the GoL. This includes 1,897 million USD in royalties, 637 million USD in taxes, and 1,379 million USD in dividend for the 20% share held by EdL in XPCL (MEM 2012: A3).

In relation to the resettlement, the developer claims that 458 families have been directly affected by the construction of Xayaburi HPP (XPCL 2012). According to a retired Lao government official who has become an executive of PT Development[16], one of the shareholders of XPCL, the project would increase the average total income in resettled villages from 1.2 billion Lao Kips (approx. 109,000 Euros) to 2.7 billion Lao kips (approx. 246,000 Euros) per year. He described the social mission of the Xayaburi HPP:

> The resettlement program is based on three principles, including the provision of secured and permanent dwelling, constant improvements in the quality of life, and a sustainable environment. Whereas foreign trade between Thailand and Laos is sometimes impeded by political tensions, the border has never been closed for electricity.[17]

As observed during fieldwork in 2014, 48% of around three thousand people affected by the construction had been resettled or relocated and around 30% of the construction of civil works had been completed. At the time, half of the river was blocked for the construction and the flow was still passing through the other half until completion of the first part. In March 2014, the total workforce of the Xayaburi HPP at the site was 9,604. The workforce comprised 6,104 Laos (including most of the

[16] PT is the only Lao private company holding shares in XPCL. It mainly deals with the project's social affairs, especially in the resettlement.
[17] Personal interview with Soukhan Phongsawath, Director of Government Relations, PT Development, Vientiane, 13 May 2014

relocated villagers)[18]; 2,782 Thais and 1,018 nationals from other countries. Of these, 4,191 worked directly for CHK, while the rest was employed by several subcontractors. The project has been running well on schedule and is expected to be completed on time in 2019. The operation by XPCL will last for twenty-nine years until 2048 when the dam will be transferred to the GoL (XPCL 2014: 21).

Figure 3.1 the Xayaburi dam in 2014
Photo by Ome Chattranond

Apart from electricity generation, the developer claimed that the Xayaburi project will contribute to other purposes including navigation, fisheries and flood control. The dam will feature a navigation lock with a 120 meter long and 12 meter wide lock chamber to facilitate transportation vessels. It will also be equipped with a 10 meter long fish pass on the left side to allow the migration of fish and other aquatic animals through or around the dam. The additional emergency spillway gates are designed for the passing of seasonal overflowing water and flood prevention. The reservoir head level is kept largely constant and inflowing water is constantly released either through the turbines or the spillway, in order to not block the water and maintain natural mean daily

[18] During the field observations in 2014, the relocated villages were almost empty during the daytime. According to a village chief, most people were at work at the dam construction site.

flow all year round (XPCL: 2012). As noted by Cronin and Weatherby (2015: 4), "According to the Porgy representative (the main consultant for the project), parent company Ch. Karnchang has spent 200 million USD on fish research and passage redesign alone, more than any other major project globally."

Although Thai, Cambodian, Vietnamese and Lao governments agreed that on the necessity to conduct additional research on the impact to the Lower Mekong Basin, the proper study has never been delivered and the Xayaburi dam construction project still has no clarity on the real impacts. The Mekong related NGOs point out some governance problems related to the Xayaburi dam: in particular, the project lacks transparency as information from the reports on the Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA) has not been released.

To date, no transboundary or cumulative impact assessment has been published on the influence of the Xayaburi and other proposed projects beyond the immediate/local project area or on the potential damage to fisheries or livelihoods downstream (Cronin and Weatherby 2015). Moreover, construction of the project was approved before proper research on the impact on the whole basin was conducted. In relation to other Mekong dam projects a Vietnamese academic commented that:

> …the Xayaburi and other mainstream projects pose a serious threat to the Mekong Delta, the source of half of Vietnam's national rice production... All hydropower dams in China are operated by the Chinese government or Chinese private investors, meanwhile the construction of 12 hydropower dams proposed for the mainstream in the Lower Basin will be financed, built, and operated by companies from at least 5 different countries: Thailand (4 dams), China (3-4 dams), Vietnam (1-2 dams), Malaysia (1 dam), and France (2 dams). A common agreement among and between these owners and governments for the coordinated operation of these reservoirs remains a fantasy…(Those dams) directly benefit the investors and the countries owning the projects, while many of the most severe negative impacts will fall on the Mekong Delta (Dao Trong Tu, 2011).

The quotation aptly depicts the complexity of hydropower development in the Mekong Basin, which is highly regionalized in the sense that capital flows in this industry have been transnationally concentrated within the less-restricted regional market among private

firms and state agencies that promote hydropower development. The case of Xayaburi obviously represents the changing trend in hydropower development, challenging regional water governance in the Mekong Basin. In the past, most funding for river basin planning and dam construction came from multilateral development institutions, e.g., the ADB and the World Bank Group. Now these agencies, with their greater commitment to some level of environmental and social impact assessment, are being replaced by investments from private and state-owned banks that likely focus more on profits and may not adequately consider recommendations of the World Commission on Dams or other corporate social responsibility guidelines (Grumbine and Xu 2011; Hirsch and Jensen 2006).

Moreover, the projects on the Mekong mainstream are more sensitive to riparian states than dams on the tributary rivers. This is not only because of their larger transboundary impacts, but also because the mainstream dam development may become part of regional politics in several ways, including by creating border disputes along the river, enhancing dependence on foreign aid and investment, as well as heightening political tensions when impacts are experienced. Not only state actors work together in this process, but also private companies and civil society organizations play their respective roles as project developers and campaigners for the monitoring of the impact of dams. This elevates the issues to the regional/international level and eventually leads to more complex games within new arenas.

3.4 Conclusion

In the Mekong Basin, both global and regional forces have affected ongoing trends in the hydropower industry, especially in Laos. Firstly, the issue in the Mekong Basin is consistent with the global trends in hydropower industry. After the widespread negative impacts of some large dams stimulated social movements against the construction of large dams in the 1980s, international development institutions such as the World Bank Group and the ADB were discouraged to sponsor this kind of projects. Nonetheless, the number of dams and hydropower projects has still been increasing in developing countries. The growing demand for energy in developing countries, which have recently opened their markets and which experience higher growth rates than developed

economies, as well as the promotion of renewable sources of energy provide a major justification for the expansion of the hydropower industry.

Secondly, developments in China affect the hydropower industry in the Lower Mekong Basin in two ways. In an economic sense, the growth of Chinese consumption and production stimulates the demand for products from Mekong Basin countries. The growth of the Mekong countries also expands the market for exports from China. In a hydro-engineering sense, the hydropower projects in China, which are technically able to control available water flows all year round, have made proposed projects along the Lower Mekong, including the Xayaburi HPP, more feasible and attractive to developers.

Thirdly, because of the regional economic boom and the experiences with hydropower development, private or state-owned companies from the region itself have increasingly become major players in the Mekong hydropower projects. The policies of IFIs, such as the World Bank and the ADB, to keep a low profile in am development, but at the same time encouraging the transition to renewable energy and fighting climate change, provide a favourable ground for construction companies of hydropower projects as well as financial institutions from emerging economies in the region such as Thailand, Vietnam, and China. Whereas the IFIs and other international donors have pushed regulatory reforms related to such aspects as environmental standards and transparency of the hydropower industry, their influence seems to be limited in comparison to transnational companies that operate with fewer regulations on social and environmental safeguards.

Finally, the hydropower projects favour the formation of a regional market. The market provides a space for tradable water in the form of hydroelectricity, which is technically more efficient when implemented at a regional scale, unbounded by national borders. For instance, the power trade planned for the Xayaburi HPP is expected to generate relatively stable incomes for the host state of Laos because of the long-term concession and power purchase contracts; meanwhile it intensifies the exploitation of water resources to serve the market in other states. This development needs a facilitating structure that creates and sustains the transnational market, and it is here that regionalism seems to provide a sensible strategy.

Hydropower development is, therefore, far beyond the work of engineering and hydrological technology and is deeply involved with global and regional political economy. The increase in the construction of large dams in developing countries implies a need for transforming governance to regulate this complex industry, in accordance with international norms and practices induced by the global development agenda of the IFIs such as the World Bank and the ADB.

The high potential alone, nevertheless, is not enough to convince developers to invest in hydropower development. External promotion of the market system of renewable energy by international institutions, higher demand for energy from growing economies and increased foreign investment facilitated by economic liberalization have contributed to the revitalization of hydropower projects planned many decades ago. The discussion in this chapter explains how the market logic leads to the exploitation of water as natural capital – something which would not be possible if there is no market water in the form of hydroelectricity.

However, this process has happened in the context of fragmented water governance in the region. The changing role of the state, which collaborates with private developers in the hydropower industry, has facilitated marketization but does not adequately address the potential problems generated by the revitalization of the large-scale hydropower on the Mekong mainstream. This emphasizes the need for more integrated planning and cooperation among government agencies as well as private developers (MRC 2011b: 15).

Hydropower development provides both opportunities and threats for further regionalism. Potential impacts have urged some non-state actors, including social activists and affected local people, to oppose large-scale hydropower projects. Limited participation and access to information produce more distrust in hydropower development. The transboundary impacts create even more tensions among governments and between governments and their own people. On the one hand, this possibly impedes closer regional integration and water governance in the long term. On the other hand, common threats of transboundary impacts may generate more public awareness on hydropower development and demand for regionalism. To understand this tension, the following chapter will discuss existing frameworks of regionalism, especially in relation to hydropower development in the Mekong Basin.

4 Regionalization of The Mekong Hydropower Development

Introduction

Long before the creation of modern states during the period of colonization in the nineteenth century, French colonizers arranged expeditions along the Mekong in search of a route from Indochina – now Laos, Cambodia, and Vietnam – to China, and finally occupied the area. The British colonial authority in Burma, as well as the Chinese and Siamese (Thai) governments also had developed infrastructure (roads, rails and communication systems) as well as regulations to access and the routes, natural resources, and people and claim of their over them (Hill 1998; Samnieng 2012; Reungsri 2014). Nowadays, with the development of infrastructure and facilitation of the market system, the ADB (2014) claims that its projects in the region have revived the ancient regional market from the time when the Mekong and its basin were important water and hinterland trading routes between southern China and the communities of mainland Southeast Asia.

This description illustrates how the process of intensifying economic and social transactions concentrated in a specific geographical area, which actors tried to control for serving their interests. Declining support from major powers and the end of the Cold War have led to adjustment of the states in the basin by implementing reforms related to marketization and globalization (Stubbs 2012: 91-93). Currently, each state in the Mekong Basin commits to a development strategy of regionalism, enhancing international cooperation within the growing regional economy as well as providing natural resources for regional and global markets (Goh 2007). This is the result of an historical process in the region, ranging from US hegemony during the Cold War to regional reconciliation and the rise of China (Hirsch 2010).

This chapter presents the evolution of regionalism in Southeast Asia, particularly in relation to hydropower development in the Mekong Basin. Regarding regional governance, the focus is on three regional

institutions, including the Association of Southeast Asian Nations (ASEAN) as the major formal regional organization; the Greater Mekong Subregion Economic Cooperation (GMS) as the main economic integration framework for the entire basin; and the Mekong River Commission (MRC) as a regional body for transboundary water governance (TWG). Because these institutions are the most prominent frameworks for regional development in the Mekong Basin, relations among them represent major characteristics of regionalism.

The chapter starts with contextualizing regionalism in the Mekong region, using the concepts of old and new regionalism in order to explain continuities and change. The second section discusses the roles of major regionalist frameworks in the basin, the GMS and ASEAN, which emphasize the building of a regional market, especially in the energy sector. The third part focuses on the MRC, the sole TWG framework in the region, and details its structure, its process of governance and the implications of these for the hydropower sector. The particular case of the MRC's consultative process for the Xayaburi hydropower project is presented in the final part to illustrate the working of existing regional governance that is dealing with the expanding transboundary issues of hydropower development.

4.1 Mekong Regionalism

4.1.1 Old regionalism: the iron curtain

Although transboundary relations among people along the Mekong have existed for a long time, regionalization was intentionally created and institutionalized only a few decades ago as a result of the political projects of the states, so-called regionalism. While there had been a polarization in global politics between 'the East' and 'the West' right after the Second World War, Southeast Asia had also become divided, particularly in the area along the Mekong. Insurgencies and civil wars spread out in French Indochina (Laos, Cambodia and Vietnam), where nationalists and communists were competing in the struggle for independence. When the French were defeated by the communists in North Vietnam, the United States realized that communist movements would potentially expand throughout Southeast Asia if it would not act.

Next to political and military action, leading to the establishment of the Southeast Asia Treaty Organization (SEATO) in 1954 as a collective defence mechanism similar to the North Atlantic Treaty Organization (NATO) in Europe and North America, the start of development cooperation in the Mekong Basin was strategy for securing popular support and strengthening forces that were opposing the communists. At the time, all states in the Mekong Basin were fragile, having suffered from political conflicts during the 1940s and early 1950s. In China, the communists prevailed in the civil war with the nationalist fraction in 1949 and later crucially supported communist rebellions in Southeast Asia. Thailand had never been colonized but had encountered communist insurgencies both internally in the rural areas as well as from neighbouring countries. Burma, Laos, Cambodia and (North and South) Vietnam had just gained their independence. The US strategy was to promote regional development in the Mekong Basin, responding to the governments of the states that urgently needed reconstruction and development.

To utilize the economic potential of one of the world's biggest untamed rivers, the Committee for Coordination on the Lower Mekong Basin, simply known as *the Mekong Committee (MC)*, was founded in 1957 supported by the United Nations Economic Commission for Asia and the Far East (UN-ECAFE),[19] and receiving major sponsorship from the US. It was the first river basin development initiative and the largest single project funded by the UN. The early plan of the MC focused on the large-scale development of irrigation, navigation, and especially hydropower on the mainstream of the Mekong (MRC 2012).

From the 1960s through to the 1980s the Lower Mekong was compared to an iron curtain in the confrontation between the communist and the capitalist world. The MC was an attempt to prevent the spread of communist influence in the region by promoting economic development in the four Lower Mekong countries, i.e., Laos, Cambodia, South Vietnam and Thailand, which were the US allies, while excluding self-isolated Burma (now Myanmar) and communist China on the Upper Mekong (Nguyen 2006: 61). In 1967, Thailand and its allies – the Philippines, Indonesia, Malaysia and Singapore – founded a regional organization, the *Association of Southeast Asian Nations (ASEAN)*, which

[19] This is now the United Nations Economic and Social Commission for Asia and the Pacific (UN-ESCAP)

clearly was meant to be a counteraction to the threat of communist movements that eventually were victorious in Laos, Cambodia, and Vietnam in 1975. Throughout the 1980s, two groups of closed regionalism were formed in Southeast Asia: the socialist camp in Laos, Cambodia and Vietnam, and the capitalist camp of ASEAN.

However, political turmoil hindered both the ASEAN and the communist states in their pursuit of regionalization. In the communist group, while Laos and Vietnam were pro-Soviet, the Cambodian communist regime, Khmer Rouge, was an ally of China, which had been hostile to both Vietnam and the Soviet Union. Vietnam finally invaded Cambodia in 1978 and replaced the Khmer Rouge with a pro-Vietnamese regime. The ousted Khmer Rouge and other anti-Vietnam movements were supported by China, Thailand and other members of ASEAN. Although the founding document of ASEAN highlighted economic and social cooperation, the group had spent most of the time on political-security issues. While the Cold War had led to a closed regionalism of the two political pacts, it severely impeded regionalization across the Mekong Basin.

During the period of old regionalism from the 1960s to the 1980s, the countries in the Mekong region were heavily fragmented by civil wars or insurgences. It meant that the governments usually lacked the capacities or attention to develop their economies. Under these circumstances, the old regionalism in the Mekong Basin was characterized by a political-security led agenda, closed protectionism, and intervention by the great powers like the US, the Soviet Union, and China. The Cold War and the Cambodia issue had deferred the cooperation in the Mekong Basin for two decades. Between 1978 and 1995 the MC was suspended and the Interim Mekong Committee was formed without the participation of Cambodia. Unsurprisingly, as noted by Nakayama (2002: 277), there were no significant projects carried out; data collection and the implementation of studies became the major activities of the committee, while some small domestic projects were implemented mostly in Thailand.

4.1.2 New regionalism: turning the battlefield into a market place

The end of the Cold War in the late 1980s was a turning point for regionalism in the Mekong region. Regional cooperation recovered and

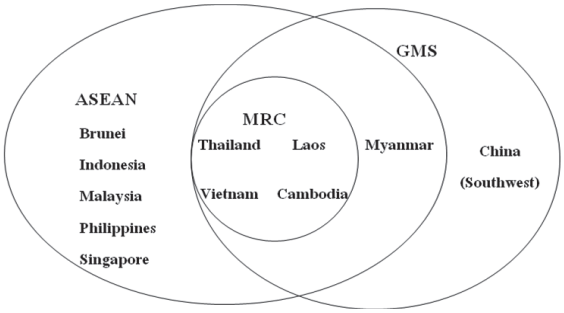
expanded, along with the reform in socialist states that faced economic catastrophe after the collapse of their major sponsor, the Soviet Union (Stubbs 2012). The transition had started even before the end of the Cold War. In 1986, Laos launched a reform of its economic policies in order to open up its market: this was the 'New Economic Mechanism'. Vietnam, in a similar vein, adopted its 'Doi Moi' ('Renovation') policy in the same year. Both cases primarily implied an embrace of the market system and the opening of the door to foreign trade and investment. In Cambodia, the tragic civil war ended in 1991 and the first democratic elections were held in 1993 with the support of the UN. A year later, the first bridge in history across the Lower Mekong was opened between Thailand and Laos. The MC, which was a UN-affiliated body, was transformed into the independent Mekong River Commission (MRC) in 1995. Together, these changes signified the rise of new regionalism with the collapse of ideological barriers and re-engagement in the fragmented region.

There also have been attempts by actors within the Mekong region to stimulate regionalism (see Osborn, 2000; Nguyen, 2006; Sisowath, 2006; Taweesit et al., 2008). After its period of booming economic growth in the 1980s, the Thai government launched its policy of 'Turning the Battlefield into the Market Place' initiated in 1988 to benefit from economic opportunities in the newly opened markets of neighbouring countries. The Quadrangle Economic Cooperation (QEC), backed by Thailand and China, was an early framework to increase trade and tourism based on cooperation in northern Thailand, south-western China, north-eastern Myanmar and north-western Laos. Meanwhile, the external influence on Mekong regionalism had not completely faded out but moved towards more economic issues. The Greater Mekong Subregion Economic Cooperation (GMS), promoted by the ADB, commenced in 1992 and covered all six countries in the Mekong Basin. Moreover, Japan's Forum of Comprehensive Development in Indochina (FCDI) was created in 1993 and underlined the importance of Japan as a major trade partner in the region.

The skyrocketing economic growth of ASEAN in the 1990s allowed the members to pursue their interests for mutual development based on the comparative advantage of subregions. Such sub-regions were called 'growth areas' – one of them is the ASEAN-Mekong Basin Development Cooperation (AMBDC) announced in 1996. AMBDC was

regarded as the first formal cooperation scheme that tied the Mekong countries to all ASEAN members except Thailand. The significance of AMBDC lay in the development of a railway route across Southeast Asia from Singapore to China, as well as the construction and renovation of damaged routes in Cambodia, Laos, Vietnam, Myanmar and Thailand. The Asian financial crisis of 1997 delayed those projects, which were backed financially mainly by Singapore and Malaysia (Chongkittavorn, 2004: 25).

Figure 4.1 Major Regional cooperation frameworks in the Mekong Basin



The most important move in the reconciliation between ASEAN and non-member countries in the Mekong Basin was that Vietnam decided to join ASEAN in 1995, with Laos and Myanmar following in 1997, and Cambodia in 1999. Accession of the new members to ASEAN indicated that the old contestations had ended. In addition, it signified that these countries had a strong intention to pursue cooperation (Narine, 2002). Major drivers of regional integration included investments, assistance from the more prosperous ASEAN members and the intention to build up the regional bargaining power in the international arena, as well as draw in investments and assistance from organizations and countries dealing with ASEAN (Mya Than 2006: 129-130).

As noted by Hettne and Söderbaum (2002), new regionalism was part of the structural transformation of world politics in four ways: the move away from the bi-polar system of the Cold War to a multi-polar world, the decline the role of the US as a world hegemon, the erosion of the

Westphalian state system with the expansion of interdependence and globalization, and the changing attitude in developing and post socialist countries towards neoliberal economic development and political systems. These conditions are relevant in the case of Mekong regionalism. As earlier presented, the end of the Cold War changed the political landscape in the Mekong region, with all states embracing the liberal market economy, though not the liberal political system. However, the puzzle in this case is how regionalism as a political project has led to the process of regionalization. The next section focuses on the GMS as an example of the approach to enhance cooperation within the framework of regionalism. This approach provides more insight into the dynamics of regionalization, and sheds light on the degree of regionness in the Mekong Basin – as the emergence of a region in the making.

4.2 GMS and ASEAN: Building of the regional market

4.2.1 The Greater Mekong Subregion (GMS)

Though it is named after the Mekong, the GMS is essentially a different idea for the river basin. The name 'greater' implies that it is not only aimed at spatial development for the whole basin but goes far beyond that geographical area. According to the ADB (2012), the GMS is an economic area bound together by the Mekong River, covering 2.6 million km^2 and a combined population of around 326 million people from six countries across the whole Mekong basin: China (Yunnan Province and Guangxi Zhuang Autonomous Region), Myanmar, Laos, Thailand, Cambodia and Vietnam. Initiated in 1992, the GMS is the first and the only regional cooperation scheme covering the entire Mekong Basin, comprising both the Upper Mekong (China and Myanmar) and the Lower Mekong (Laos, Thailand, Cambodia, and Vietnam).[20] The GMS has been a milestone marking the end of the Cold War in Southeast Asia and the transformation of the Mekong from an iron curtain to a market place.

The GMS rationale for economic cooperation among bordering countries has long been recognized as a stepping stone to creating larger markets for national producers and consumers and to establishing

[20] In March 2016 China initiated the 'Lancang-Mekong Cooperation (LMC)'. It is the second formal regional forum of the entire Mekong development.

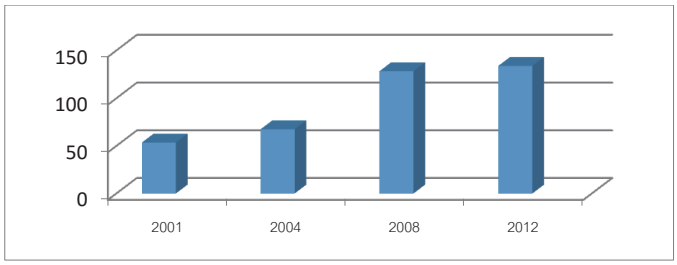
economies of scale by reducing barriers to trade, capital and labour through the development of regional infrastructure networks and the management of spill-over of costs and benefits across borders. The ADB (2010: 1) claims that regional cooperation is particularly relevant for land-locked areas – i.e., Laos and southern regions of China – by enabling them to get access to international markets.

The GMS is a loosely structured framework based on intergovernmental cooperation in various forums, from the heads of governments' summit and ministerial meetings down to operational levels. Unlike ASEAN, the GMS does not have a regulatory body or charter, but rather has a ten-year strategy as its main cooperation framework. The ADB is technically the GMS's secretariat, and mainly provides technical assistance to development projects funded by both the ADB itself and other international donors.

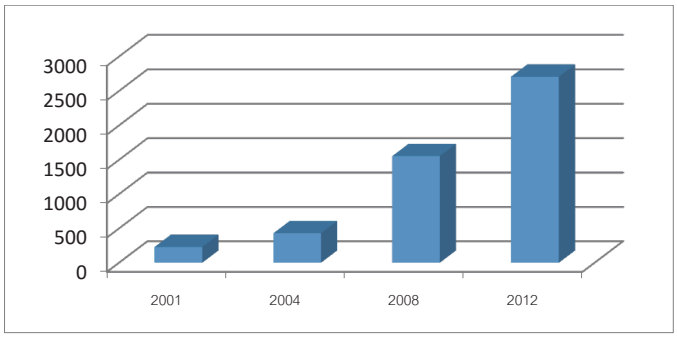
The mandate of the GMS includes the implementation of sub-regional projects in transport, energy, telecommunications, environment, human resource development, tourism, trade, private sector investment, and agriculture. Priority infrastructure projects are targeted on economic corridors such as the East-West Economic Corridor that is meant to extend eventually from the Andaman Sea in Myanmar via Thailand and Laos to central Vietnam, bridging the Indian Ocean and the Pacific coast (ADB 2010). It is an attempt to create a larger and linked market in order to stimulate trade and investment, from both intra- and extra-regional capital owners.

This vision of the GMS is attractive to governments and investors in ASEAN and China, who see opportunities for expanding markets. It aims to merge the economy of the Mekong countries in ASEAN with southwest China, which is complementary to the Chinese central government's policy for the development of the Western region (Badenoch 2002: 7). Intra-GMS trade almost doubled from 4% in 2000 to 7.4% in 2013 (ADB 2013: 17). Foreign Direct Investment (FDI) flows to the GMS have increased more than two times between 2000 and 2012 and intra-GMS FDI has grown even faster, at around ten times during the same period. Graph 4.1 shows the growth of extra-regional FDI inflows, from e.g., Japan, EU and the US. Graph 4.2 underlines that FDI generated within the group is growing much faster, though it concerns smaller amounts.

Graph 4.1: Total FDI inflow: extra-regional to GMS (billion USD)
Source: ADB (2015) Greater Mekong Subregion Statistic on Growth, Connectivity and Sustainable Development. p.18.



Graph 4.2: Total FDI inflow: intra-GMS (million USD)
Source: ADB (2015) Greater Mekong Subregion Statistic on Growth, Connectivity and Sustainable Development. p.18.



The expansion of capital flows has produced a dramatic change in energy demand. According to the ADB (2012c: 2), peak energy demand in the Mekong region is predicted to triple from about 83 GW[21] in 2010 to more than 227 GW in 2025. The biggest share comes from Thailand, which accounts for around 29% of the whole region followed by Vietnam and southern China (Guangxi and Yunnan). By 2030 the three countries would account for about 96% of peak power demand, while Cambodia, Myanmar and Laos may account for only 4%. Nonetheless,

[21] Giga watts.

the latter three countries possess great reserves of natural resources for electricity production, especially in natural gas and hydropower, which potentially will generate income from exportation to the neighbouring countries. The relationship between Thailand and Laos is the best example. The former is the biggest importer of electricity while the latter is the smallest country in terms of population and power demand but the biggest exporter in the region, as shown in table 4.1.

Table 4.1: Intra-GMS Power Trade in 2010 (GWh*)
Source: ADB (2012) GMS Power Trade and Interconnection: Two Decades of Cooperation. p,12.

Country	Export	Import	Net Import/Export
Cambodia	-	1,546	- 1,546
Laos	6,944	1,265	5,688
Myanmar	1,720	-	1,720
Thailand**	1,427	6,938	- 5,511
Vietnam	1,318	5,599	- 4,281
China***	5,659	1,720	3,939

* Gigawatt-hour
** Excluding Thailand's import from Malaysia
*** Guangxi Zhuang Autonomous Region and Yunnan Province, excluding power trade from/to other parts of China

The GMS Regional Indicative Master Plan on Power Interconnection provides a framework for GMS power connection projects to be implemented during the 2004–2020 period. Its long-term goal is to create a competitive and efficient subregional power trade market (ADB 2005) as well as to promote private sector investment in a model of independent power producers (IPP), facilitated by the Inter-governmental Agreement on Regional Power Trade in the GMS (ADB 2012c). Cross-border transmission lines are developing and potentially support an integrated power system. Laos, for instance, has been exporting hydroelectric power generated from its Mekong's tributaries to Thailand since 1998. It is the biggest exporter in the region and plans to expand supplies to Vietnam and Cambodia.

The total power grid is still a distant vision. In order to move from one-way cross-border supply to a region-wide power system, the governments will have to pool sovereignty to regulate and institutionalize a common liberalized and competitive power market. The Road Map for GMS Expanded Energy Cooperation (ADB 2012: 1) states that:

> …Regional cooperation is an effective way to ensure cost-effective energy supply with focus on cross-border electricity trading, and the interconnection of transmission networks to connect strong energy demand growth centres with rich indigenous energy resource centres….the integration is also an effective way to mitigate climate change by enhancing efficiency on the entire regional energy system and exploiting resources in an optimal manner with least environmental impacts.

The rationale for the integrative power market are stated in this road map, focusing on four major strategic objectives: (1) enhance access to energy for all sectors, particularly the poor; (2) develop and utilize more efficient, indigenous, low carbon and renewable resources while reducing imported fossil fuels; (3) improve energy supply security through cross-border power trade; and (4) promote public-private partnership and private sector participation, particularly from SMEs, for energy development (ADB 2012b: 2).

However, the GMS Energy Cooperation Work Plan (2009-2015) has defined renewable energy sources as biofuel/biomass, solar, wind and micro-hydro[22] (ADB 2012b: 5), not large hydropower dams. The extra-regional actors have instead focused more on other developments; e.g., the World Bank on micro-hydro and the US on petroleum. The decline in support from extra-regional capital to the hydropower business has been compensated by intra-regional investment, usually with participation by governments and transnational firms mainly from China and Thailand.[23]

Although the GMS is not a formal-legal regional development framework, its large capacity both in terms of financial and technical assistance has substantial influence towards building developmental regionalism, involving non-state actors such as transnational companies that are seeking opportunities in a larger regional market. In order to expand the market in the Mekong Basin, the GMS has been promoting, e.g., the building of cross-border transport infrastructures and the establishment of economic corridors. The ADB's GMS strategy framework (2011: 10) clearly states its roles in regionalism as follows

[22] small hydropower project with capacity of 5 to100 kW generated by natural water flow for using in remote areas away from the grid (IRENA 2012: 11)

[23] Personal interview with Witoon Permphongsachareun, Mekong Ecology and Energy Network (MEE-NET), Bangkok, 9 April 2013.

> GMS Program is firmly rooted in a broad evolving structure of Asian regionalism that already includes 54 regional institutions. These institutions fall into four broad categories: (i) overarching, with the purpose of convening summits that provide normative and declaratory frameworks that legitimize and support regional cooperation and integration; (ii) functional, with a specialized technical agenda on a focused topic; (iii) facilitating, through the provision of advisory, administrative, technical, and financial support to a given area; and (iv) security.

Seen from this perspective, ASEAN, would seem to fit in categories (i) and (iv), which relate to the provision of regional norms and security, and revolve around political will. The GMS plays a more technocratic role in categories(ii) and (iii), which are more technical and resource-driven. More specifically, functional organizations such as the MRC may contribute across all categories but at a smaller scale and based on more limited capacity. Although it does not have a solid, well-structured governance structure, the GMS can still influence regionalism, driving regionalization in order to boost development, through its capacity in hard-infrastructure development while avoiding sensitive political issues such as state sovereignty over transboundary watercourses.

4.2.2 Association of Southeast Asian Nations (ASEAN)

Since the enlargement of ASEAN to the Mekong Basin in the 1990s, the disparity in socio-economic development between the former members and the newcomers has been one of the biggest challenges (ASEAN Secretariat, 2005a). In 2003, the ASEAN leaders signed the Declaration of ASEAN Concord II or Bali Concord II, agreeing to establish the ASEAN Community in 2020 (this was later changed to 2015), consisting of three pillars:

1) ASEAN Political Security Community (APSC)
2) ASEAN Economic Community (AEC)
3) ASEAN Socio-Cultural Community (ASCC)

Of the three pillars, the one related to economic integration is the most prominent. The database of ASEAN legal instruments[24] provided by

[24] Legal documents include agreements, protocols, conventions etc., which have been accepted by member states through signing, acceptance or ratification. Statements and declarations expressing aspirations and political will are excluded.

ASEAN legal services (ASEAN Secretariat 2015) shows that there are 59 agreements under AEC, compared with 14 for APSC and only 8 for ASCC. The distribution across the three pillars seems to reflect a preference for a regionalism of the free market, which separates 'the market' from 'the state', and implies regional governance with limited supranational authority. Since its establishment in 1967, ASEAN governance has been characterized by the "ASEAN Way", which implies cooperation among states based on consensus decision making, informality, non-confrontation and non-intervention in other states affairs (Acharya 2001).[25]

The foundation of AEC is rooted in schemes that were established since the 1990s, including the ASEAN Free Trade Area (AFTA), the ASEAN Framework Agreement on Services (AFAS), and the ASEAN Investment Area (AIA). The AEC is a further step to establish a single market in Southeast Asia by allowing the free circulation of goods, services and investments. In the case of people, even though citizens of ASEAN generally can travel throughout the region for tourism and visit other countries without a visa, only some skilled labourers are allowed to work in other member states. Policy makers fear that the wide economic development gap among countries may cause excessive transborder migration beyond control of the member states (Hew, 2005: 55).

Comparatively speaking, the ASEAN framework is more institutionalized but is less concrete than that of the GMS, which focuses more on economic infrastructure, and the MRC, which plays a specific role in water-related development. There is a division of labour related to Mekong development, according to which the MRC is responsible for transboundary water management while the ADB sponsors energy planning and development of smaller projects on the Mekong's tributaries as well as studies for the impacts of hydropower development on the mainstream. Usually, the ADB just makes sure that national government comply with its standards in development projects, e.g., concerning safeguards on resettlement, environment and indigenous groups.[26]

[25] Some observers have criticized the focus on market-led regionalism in ASEAN because it has resulted in a lack of attention to domestic politics, in particular the absence of democracy (Juego 2015).

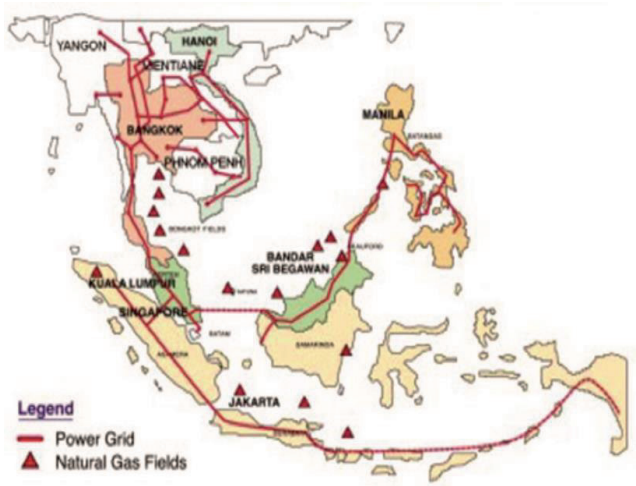
[26] Personal interview with Barend Frielink, Deputy Country Director, ADB – Lao PDR, Vientiane, 27 March 2014.

As part of its ambitions for regional market building, ASEAN has set out to establish an integrated energy system, called the ASEAN Power Grid (APG), a policy framework with modalities for power interconnection and trade, as well as enhanced energy infrastructure facilities in ASEAN with the commissioning of power interconnection projects (ASEAN Secretariat 2007). The ASEAN Work Plan of Action on Energy Cooperation (APAEC 2010–2015) mentions that is wishes to enhance energy security, and contribute to accessibility and sustainability of the ASEAN region with due consideration to health, safety and environment, through accelerating regional development including by the establishment of the APG and a Trans-ASEAN gas pipeline (ASEAN Secretariat 2012c: 11).

The APG is a flagship program adopted in 1997 under the ASEAN Vision 2020, aiming to ensure regional energy security while promoting the efficient utilization and sharing of resources. The intention is to link up the power lines in the 10 ASEAN countries by 2020. Its strategy encourages the establishment of interconnections among fifteen identified projects, first on cross-border bilateral terms, then gradually expanded to a sub-regional level and, finally, to a totally integrated Southeast Asian power grid system. Currently, three APG projects are under construction, all of them involving Laos as a central point of connection with Thailand, Cambodia and Vietnam (ASEAN Secretariat 2012c: 12-13).

According to the ASEAN Master Plan, member states should basically rely on a so-called 'three pronged strategy' consisting of physical, institutional and people connectivity. Energy and transport are the main elements in the physical connectivity, while trade, investment and service liberalization and facilitation are highlighted in the institutional aspect of connectivity (ASEAN Secretariat 2011). Even if offering less significant potential than natural gas, hydropower is seen to play an important role as an alternative and renewable source of energy (ASEAN Secretariat 2010). Based on these logics, developers are able to legitimize the growth of hydropower industry, something that also responds to the desire of global institution like the World Bank to promote renewable energy

Map 4.1: The ASEAN Power Grid
source: www.aseanenergy.org



ASEAN Power Grid. (Photo credit: Aseanenergy.org)

4.2.3 Regional governance of the energy market

It is clear that both the GMS and ASEAN have promoted the idea of establishing an integrated power system through cross-border trade and investment in various sources of energy, notably natural gas and hydropower. It seems that the regional power market is attractive to public and private businesses alike. A survey done in 2010 showed that more than 3,000 opinion economic leaders in Asia prioritize energy and related infrastructures as the most compelling sector for regional integration (Capannelli 2011: 8).

Efforts to create forms of regional governance of energy are loosely structured, though institutionalized in accordance with the formal regional structures of ASEAN and the GMS. Regional governance of the electricity sector in the Mekong Basin has focused more on the facilitation of regional power interconnection than on regulation of energy-related activities. This is related to the domestic governance of states in the region. So far there have been independent regulatory

agencies for power services only in China and partially in Thailand (ADB 2013). This is probably because most of the Mekong countries, except China and Thailand, established or rebuilt their infrastructure after the long period of civil wars and recurring regime changes. So, the provision of services and the promotion of investment in electricity infrastructure seem to be the top priority.

As part of the pillar of AEC, the ASEAN Ministers of Energy Meeting (AMEM) and the Senior Official Meeting on Energy are the main platforms for regional energy policy. The ASEAN Centre for Energy is a technical support body to facilitate and coordinate the two arms of energy cooperation in Southeast Asia. First, the ASEAN Gas Consultative Council and the ASEAN Council on Petroleum, which include national companies agencies in the gas and oil industries, are major consultative forums for the Trans-ASEAN Gas Pipeline project (TAGP), which is mainly implemented by the maritime countries of Southeast Asia(Malaysia, Singapore, Indonesia, the Philippines and Brunei). Second, policy and research activities of the ASEAN Power Grid, which concentrates on mainland Southeast Asia, are supervised by the Meeting of Heads of ASEAN Power Utilities/Authorities (HAPUA), comprising national electricity agencies and state enterprises such as the Electricity Generating Authority of Thailand (EGAT) and Electricité du Laos (EdL). The goal of HAPUA was to realize the APG by removing the barriers to cross-border mobility, such as legal questions, technical standards and financial institutions by 2015 (Suyardi 2015).

The institutional setting of the GMS is similar in nature, though it is less formal. The sub-regional Electric Power Forum (EPF) was created in 1995 as a regular platform for this cooperation. Half of the members include representatives from government energy policy and planning agencies and the other half are representatives of power utilities. The Experts Group on Power Connection and Trade was founded in 1998 to prepare the regional master plan. The Intergovernmental agreement (IGA) on regional power trade in the GMS was signed in 2002 and provides the legal framework for the project; it established the Regional Power Trade Coordination Committee (RPTCC) to oversee and coordinate the implementation (ADB 2012c: 6-7). The establishment of a Regional Power Coordination Centre (RPCC) for regulating cross-border power trade has also been on the agenda since 2011, but has not been

finalized yet because of different views among member states on the appropriate host country for the centre.[27]

Because of differences in transmission infrastructures and regulatory frameworks among countries, the implementing strategy for the regional power market is arranged into four phases (ADB 2012c: 39). The first step is the current period in which the regional transmission network has not yet been put in place. This implies that power trade is executed on the basis of bi-lateral power purchase agreements between government agencies or takes the form of electricity sales by independent power producers in one country to national power utilities in other countries. Practically, electricity transmission in the Mekong countries is exclusively operated by national power utilities or state enterprises such as EdL and EGAT.[28] Hence, states agencies continue to be the sole buyers of cross-border power trade in cooperation with private producers.

The cross-border transmission and regulatory arrangement can be a further step in regional power trade. As noted by Aalto (2014: 95), the second step is possible when the bi-lateral infrastructure and regulatory frameworks are in place and limited surplus capacity is tradable to the third country. In the third phase, cross-border transmission should be developed and third (private) parties other than national power utilities are allowed to trade. Finally a regional electricity market should be established. The market is supposed to provide a competitive space for traders, either public or private, across borders in the region. The energy market in the Mekong Basin currently is in between the first and the second steps.

Although the regional plan and policy are evidently grounded, all countries have different systems and the governments concentrate on their bi-lateral projects even though they are not cost-efficient compared to regional/multilateral arrangements. In order to achieve full integration huge investment are required to harmonize business regulations, technical standards and physical systems that affect the interconnection of national power grids. As commented by an EGAT officer, although the frameworks of ASEAN and GMS have not made many commitments and have not yet produced tangible results for transboundary power linkage, the regional platforms have provided

[27] Personal interview with Thongphet Douangngeune, Deputy Managing Director of Electricité du Laos (EdL), Vientiane, 24 June 2013.
[28] Ibid.

opportunities for formal and regular multilateral negotiations and legitimize their bilateral transboundary projects.[29]

In brief, the hydropower industry has concentrated in Laos that is located at the centre of the region and is surrounded by all other Mekong countries. This is one of the most important factors for the expansion of the hydropower industry in Laos – this is not only based on its national policy, but also on the recognition by neighbouring governments and foreign companies of the opportunities offered by of this regional ambition. Opening access to natural resources and realizing a free flow of economic factors to the market, especially in the energy sector, is a clear objective of the GMS, while ASEAN has tried to institutionalize regional policies such as on the ASEAN Power Grid in order to support a common market within the AEC. Those projects link to the other side of the same coin, the issue of regional water governance led by the MRC. Both ASEAN and the GMS do not have a clear mandate on this issue, as this falls within the remit of the MRC. This is another sign of Mekong regionalism.

4.3 The Mekong River Commission (MRC) and hydropower development

4.3.1 The MRC: governance and riparianization

The regionalization of natural resource development has been more pronounced during the new wave of regionalism after the Cold War. An explanation may be found in the following three elements. Firstly, though economic and social development was mentioned in the policies of old regionalism such as SEATO, the Mekong Committee and ASEAN before the end of the Cold War, it was overshadowed by security issues. Subsequently, the more peaceful and stable political context since the late 1980s has paved the way for regionalism beyond the political-security sphere. Secondly, there are fewer political barriers than in the past between early capitalist countries in the region such as Thailand, which has greater demand for natural resources, and newly marketized economies such as Cambodia, Vietnam and Laos, which have an underexploited reservoir of

[29]Personal interview with Paruhas Vongthaned, Director of Energy Economic Division, Electricity Generating Authority of Thailand (EGAT), Bangkok, 3 April 2013.

resources. Finally, the economic development of the newcomers has concentrated in extraction of natural resources so as to integrate their economies into regional and global markets.

Transboundary water governance (TWG) of the Mekong Basin is based on the 'Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin' signed on 5th April 1995 in Chiang Rai, Thailand. The agreement replaced former legal documents related to Mekong governance, including the Statute of the Committee for Coordination of Investigations of the Lower Mekong Basin from 1957, the Joint Declaration of Principles for Utilization of the Waters of the Lower Mekong Basin from 1975, and the Declaration Concerning the Interim Committee for the Coordination of Investigations of the Lower Mekong Basin from 1978. The agreement endorsed the establishment of Mekong River Commission (MRC), an independent structure replacing the former UN-affiliated Mekong Committee. The MRC Secretariat (MRCS) was set up to implement the agreement with technical and day-to-day administration as well as coordination among the member governments of Cambodia, Laos, Thailand, and Vietnam.

Governance of the MRC is based on a structure of intergovernmental cooperation comprising:

(1) The Council of Ministers: the ministerial meeting that meets annually to take policy and strategic decisions;

(2) The Joint Committee (JC) of senior government officials, who are permanent secretary or director-general in a relevant ministry, e.g. the Ministry of Environment and Natural Resources: this committee meets as a board several times per year to make operational decisions and to oversee the international secretariat;

(3) Four National Mekong Committees (NMCs) that liaise between the respective national government and the MRCS as well as coordinate national policies and actions among national departments regarding the Mekong water resources;

(4) The Secretariat (MRCS), headed by a Chief Executive Officer (CEO), which runs the administration, performs technical studies and is responsible of capacity development of the system.

In 2014, around 150 staff worked in two MRC Secretariat offices, one in Vientiane, Laos and another in Phnom Penh, Cambodia. The offices are staffed by riparian national officers, i.e., Cambodian, Lao, Thai and Vietnamese citizens, as well as international employees and technical

consultants. Vientiane may be seen as the capital of hydropower development in the Lower Mekong Basin. Not only because it is the capital of Laos where most dams in the region are located, but also because the hydropower section of MRCS is there.

As indicated before, the MRC is the basin organization only for the Lower Mekong Basin (LMB) since the governments of China and Myanmar in the Upper Mekong Basin (UMB) have never been joined the Commission, although they are currently dialogue partners. The MRC has engaged them since 1996, but their accession is not foreseen yet. Cooperation takes two main forms: information sharing and joint capacity building for water-related activities such as navigation, hydropower, and environmental protection. China signed an MoU with the MRC in 2002 to provide daily water flow and rainfall data in Yunnan province (southern China) during the wet season in order to support the MRC's flood management downstream. As discussed in the former chapter, China also launched the 'Lancang Mekong Cooperation' (LMC) in March 2016 as a competing intergovernmental framework for economic and water-related development that includes all of the MRC's members. The host claims that the LMC is supplementary to China-ASEAN relations as well as a model for South-South cooperation (China Daily 2016). At this early stage, it is unclear whether the LMC will be supportive or competitive to the MRC.

Another consultative but influential forum for MRC policies is the group of development partners comprising international donors, both governments and international organizations. While the MRC has been funded for a minor part by its member states, the major contribution comes from financial and technical assistance provided by donors. In 2012, the MRC received 23.35 million USD in contributions from its development partners[30] and 1.8 million USD from the riparian states (MRC 2013: 5). The current partners include Australia, Belgium, Denmark, Finland, France, Germany, Japan, Luxemburg, New Zealand, Sweden, Switzerland, the Netherlands, the US, as well as the European Union (EU) and the World Bank Group. Some international organizations work closely with the MRC in co-funded projects or studies and have obtained observer status at the MRC's meetings. They are the ADB, ASEAN, the International Union for Conservation of

[30] Top 5 contributors to the MRC budget in 2012 are Finland, Belgium, Australia, Switzerland and Sweden.

Nature (IUCN), the United Nations Development Programme (UNDP), the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), and the World Wide Fund for Nature (WWF).

The rapid economic growth in the region has brought about an increase of tensions and led to competition for water resources, in addition to the occurrence of noticeable seasonal draught and flooding crises in the Mekong Basin. These issues have raised public expectations regarding the MRC. The Basin Development Plan (BDP) described the MRC's mandate in article 2 of the Mekong Agreement 1995 as follows:

> To promote, support, cooperate and coordinate in the development of the full potential of sustainable benefits to all riparian States and the prevention of wasteful use of Mekong River Basin waters, with emphasis and preference on joint and/or basin-wide development projects and basin programmes through the formulation of *a basin development plan*, that would be used to identify, categorise and prioritise the projects and programmes to seek assistance for and to implement at the basin level.

The BDP is one of the most concrete products delivered by the MRC so far. The BDP 1 (2001-2005) and the BDP 2 (2006-2010) were not integrated plans for all member states but were essentially based on accumulated information given in national plans and the Mekong sub-areas reports. The BDP 3 (2011-2015) has provided basin strategies and water management scenarios to its members. The important dilemma of the BDP is how to balance the twin roles of the MRC in 'water management' and 'water development'. The management side seems to be more the raison d'être of the MRC while the development side is engaged more with other regional frameworks, including the GMS and ASEAN.[31]

Nonetheless, a challenge to the MRC was that the BDP 1 and 2 were not closely linked to other regional development frameworks, such as GMS and ASEAN. According to an MRC officer, the BDP 3 tries to integrate more into the regional context but yet more interaction is needed. This is also the case for multi-stakeholder engagement, which is often limited. Frequently MRC forums are held for water specialists, but there are usually just a few participants from other related sectors, e.g.

[31] Personal interview with Anoulak Kitthitkoun, Programme Coordinator, Basin Development Programme – Mekong River Commission, Vientiane, 7 April 2014.

energy, agriculture, law and so on. Public participation seems to be one of the top strategic goals of the BDP, but it has been still far from being realized. The MRCS has a limited role in organizing public participation because it is within the remit of member governments to choose the information they wish to publish, define who are the stakeholders and select the participants in MRC related activities.[32]

A dilemma of MRC governance, therefore, is its promotion of a basin-wide approach for water governance, emphasizing the international paradigm of integrated water resources management (IWRM) on the one hand, and its reliance on national/state-centric governance on the other hand. As indicated above, this reflects a contradiction between the management side of the MRC, which is aimed at minimizing transboundary impacts and unsustainable uses of water at the regional level, and its development side, which seeks to maximize economic benefits of water, something that is highly prioritized by the member states. This tendency has emerged even more clearly in the recent development of the MRCS. In 2015, the MRC kicked-off the so-called 'riparianization' of the secretariat, which implies that many implementation functions such as fisheries, navigation and irrigation are transferred to riparian governments (Cambodia, Laos, Thailand, and Vietnam) and are coordinated by regional working groups under the MRC framework.

According to an officer of the MRC, there are at least four reasons for this riparianization. Firstly, there is less support from international donors, which tend to give more priority to other regions such as sub-Sahara Africa. Secondly, their fast growing economic development has made the Mekong countries more affluent, and thus able to support their own cooperation schemes. Thirdly, the long experience with cooperation has generated more competence among staff and know-how among national agencies of member states. Fourthly, riparianization is a strategy for achieving more efficient governance with a smaller organization and more focused mandates. The decentralization of project implementation makes the MRCS smaller both in term of manpower and functions. The MRCS concentrates more on its core functions such as coordination and

[32] Personal interview with Privan Limpanboon, Basin Development Programme – Mekong River Commission, Vientiane, 4 April 2014.

technical support.[33] However, all these conditions seem to significantly reduce the role of the MRCS.

The core functions of the MRCS identified by the Strategic Plan 2011-2015 (MRC 2011c: 21) include: (1) secretariat administration; (2) river basin management (data acquisition and exchange; modelling and assessment; planning support; forecasting, warning and emergency response; implementing MRC procedures; promoting dialogue and communication; reporting and dissemination); (3) capacity building and tools development; and (4) consulting and advisory services. The biggest project expenditure, or around 20% of the budget, relates to the Information and Knowledge Management Programme (MRC 2013: 11), which is well expressed in the MRC's core competence of technical support.

The role of development partners significantly contributes to these core functions. International paradigms in water governance such as IWRM and sustainable development at the regional level have been promoted by the MRCS for many years but its regulatory roles have been very limited. This may be explained by the fact that the agency has depended on international assistance from non-members much more than its own member states, who tend to focus on their national development. For instance, foreign donors like the EU members really pushed environmental concerns in regional cooperation (Dosch 2010: 21). The tension between international donors and member states is noted in the World Bank and ADB's joint paper (2006: 19):

> …Some development partners retain reservations with respect to the MRC involvement in project development and want it rather to strengthen its regulatory and conservation roles. The countries on the other hand increasingly call for the MRC to assist in the facilitation of sustainable development.

This debate seems to weigh more on the latter when the riparianization is going to take place. In practice, the number of international officers (from non-MRC countries) will be reduced significantly and many will be replaced by riparian nationals. This

[33] Personal interview with Voradeth Phonekeo, Initiative for Sustainable Hydropower – Mekong River Commission, Vientiane, 17 March 2014.

includes the new CEO, a position for which only riparian national applicants are eligible in the announcement (field observation 2014).[34] Riparianization seems to reflect a tendency of regionalism instead of internationalism, which means that governments in the region try to control policies and governance of the MRC and reduce international donors' influence. Similar to the current hydropower investment, where private funds and developers from within the region become much more important players than outsiders, TWG in the Mekong Basin seems to become more regionalized in order to facilitate exploitation and trade of water resources on a regional basis.

4.3.2 The MRC: regulatory role and hydropower mission

As noted in the previous section, Mekong regionalism has moved from being an expression of the competition of political ideologies during the period of old regionalism to cooperation aimed at conflict resolution in water use, as represented by the Mekong Agreement 1995. Öjendal (2000: 182-85) has provided some interesting observations on the position of member states in the 1990s. Thailand, a country in the mid-stream of the Mekong and the fastest growing economy in the region, preferred to have fewer restrictions on water use, making possible inter-basin diversion for domestic use, coupled with a new model of governance, and inclusion of upstream China and Burma (now Myanmar) among the members. By contrast, downstream countries Cambodia and Vietnam proposed more protective TWG since they were the most vulnerable to ecological changes. Laos has a relatively more complicated position. More flexible rules would benefit Laos, as the country possesses one-third of the total flow in the Lower Mekong and has a large hydropower potential. However, the government of Laos (GoL) was politically closer to Vietnam and Cambodia and tended to be afraid of Thai domination of the basin.

The 1995 agreement seems to have been a compromise between those positions. Unlike the 1957 statute that considered the Mekong as a common resource and required consensus for any decision on development, the 1995 agreement contains principles of international customary law in water governance but provides a broader and loose

[34] Until 2015, all CEOs since the establishment of the MRC were westerners. The first riparian CEO from Vietnam takes the office in 2016.

regulatory framework. Five principles for water governance are mentioned in the preamble of the Mekong agreement including sovereign equality and territorial integrity, equitable and reasonable utilization, respect for rights and legitimate interests, good faith and transparency (MRC 2011a).

It seems like these principles essentially imply a model of international relations focusing on protection of member states' power over their land and water more than on enhancing efficient water use for common interests in the region. The agreement is operationalized in five procedures of the MRC, which are the general rules for water governance, . They comprise the Procedures for Water Use Monitoring (PWUM), the Procedures for Water Quality (PWQ), the Procedures for the Maintenance of Flows on the Mainstream (PMFM), the Procedures for Data and Information Exchange and Sharing (PDIES), and the Procedures for Notification, Prior Consultation and Agreement (PNPCA). The final set of procedures, summarized in table 4.2, will be discussed more in depth as they are relevant to this study

Table 4.2: Rules for Water Utilization and Inter-basin Diversion
According to the Mekong Agreement 1996, Article 26

Scope	Use	Notification	prior consultation	Specific agreement
Tributary				
Wet season	intra-basin use inter-basin diversion	∫ ∫		
Dry season	intra-basin use inter-basin diversion	∫ ∫		
Mainstream				
Wet season	intra-basin use inter-basin diversion	∫	 ∫	
Dry season	intra-basin use inter-basin diversion		∫	 ∫

The PNPCA, adopted by the MRC in 2003, directly engages with how decision making on water use should take place among riparian countries. This procedure is primarily based on Article 5 of the 1995 Mekong agreement in which the Member Countries agree "to utilize the waters of the Mekong River system in a reasonable and equitable manner in their respective territories". The Rules for Water Utilization and Inter-basin

Diversion provided in Article 26 provide for a different treatment of the Mekong mainstream and its tributaries. Mere notification to the joint committee of the MRC is enough for any development on the tributaries, which are generally domestic rivers, but a prior consultation process and agreement are required in the case of the mainstream, which is considered an international watercourse.

The ASEAN Report on Water Resource Management (ASEAN Secretariat, 2005b: 2-3) stated that the water situation in the Mekong basin is complex because the agreement contains no specific provision for water sharing based on the general principle on international water law known as 'reasonable and equitable utilization', and it does not include any formal sanctions. The net result of this water sharing approach is that riparian states are faced with uncertain expectations regarding the water volume, a situation that is occasionally more sensitive when water crises occur.

It should also be noted that the mentioned provision excludes upstream China which is not an MRC member and has planned to have at least 8 large hydropower dams on the Mekong/Lancang River mainstream, which is expected to contribute 24% of China's hydropower potential by the end of 2020 (Tana 2008: 108-109). Moreover, tributary rivers are not included in the agreement, and conflict potential remains, since the MRC members neglected the importance of these tributaries as they are actually a significant factor in providing the water volume on the mainstream.

Two hydropower projects on the Mekong mainstream have resulted in applications under the PNPCA so far. The Xayaburi dam underwent a prior-consultation process in 2010–2011, which was concluded with an ambiguous agreement. The second one is Don Sahong dam, for which member states requested prior consultation after it was notified in 2015 (MRC 2016). Both projects were proposed by and are located in Laos. In 2016, the GoL has allowed the two projects, developed by Thai and Malaysian companies, to be implemented.

The expanding development of hydropower projects significantly has challenged the MRC. The late 2000s saw a hydropower revival in the Lower Mekong Basin, as well as a reorganization of the MRCS. In 2008, the Initiative for Sustainable Hydropower (ISH) was created as a cross-cutting hydropower-related policy and planning unit involving related MRC programmes, i.e. fisheries, agriculture and irrigation, environment,

navigation, flood management and basin planning. The ISH is a unit within the Planning Division of the MRCS and replaced the former Hydropower Programme in order to integrate work related to hydropower development beyond the engineering and energy sectors. According to a MRCS officer, the name change is significant because hydropower often has a negative connotation for the general public.[35] The ISH assists member countries in relating decisions on hydropower development to basin-wide integrated water resources management (IWRM) perspectives and supports regional consultations on mainstream hydropower development proposals through the MRC's PNPCA process, as demonstrated for the first time in the case of the Xayaburi project.

Initially, the main functions of ISH focused on engineering and dam safety. Beyond engineering, the ISH currently focuses more on governance-related work, including the preparation of policy papers, engaging stakeholders, and contracting strategic environmental assessment (SEA) and impact assessment tools for hydropower development at the regional/basin level. The ISH has updated the database of new hydropower projects originally launched by MRCS since 2009 and has employed this data in scenario assessments of current and future hydropower projects. Studies for individual projects are conducted by their international developers/consultants and are expected to be consistent with the ISH guidelines.[36] In 2014, the ISH unit had ten staff members, comprising six Laotians (including the chief), two Cambodians and two Australians.[37] After most policies, studies and technical tools had been put in place, there were only two staff members left in 2016 (field observation).

The MRCS basically has not obtained any regulatory power from the riparian governments, as is obvious in the work of the ISH. Studies and technical assessment tools for hydropower development are well developed; however, their implementation is totally dependent upon the decision of member states which hold the exclusive power to endorse MRC documents. The MRC's lack of regulatory power can be witnessed

[35] Personal interview with Voradeth Phonekeo, Initiative for Sustainable Hydropower – Mekong River Commission, Vientiane, 17 March 2014.
[36] Personal interview with Sophearin Chea, International Cooperation and Communication Section – Mekong River Commission, Vientiane, 18 March 2014
[37]Perhaps because Thailand has less interest in hydropower development domestically

from the PNPCA procedures as applied in the case of the Xayaburi project. According to an MRCS officer[38], there was no compulsory or unified "format" for public consultation process of the Xayaburi project because nothing was written about that in the Mekong Agreement 1995. Therefore, member states may apply the agreement according to their own interpretation and may design domestic processes differently.

Most likely, hydropower development is more complicated in its politics than in its engineering. For an ISH technical advisor, the tools created by the MRCS are international standards, some of them even more progressive, but national bureaucrats may see them as barriers to national development.[39] The sensitivity of the MRC's work may be observed in other practices, e.g., the requirement in human resource management that all positions in MRCS, starting from the level of Programme Coordinator, need to be approved by the four riparian governments in order to prevent any dispute between members.[40] As an intergovernmental organization, the MRCS is highly aware that it needs to avoid any intervention in the domestic affairs of the member states.[41]

4.3.3 MRC and the case of Xayaburi HPP

Unlike dams on domestic tributary rivers, the international dimension of the Mekong mainstream dams has made the process of hydropower development more complicated. The Mekong Agreement 1995 is the only formal-legal rule on basin development. The Xayaburi HPP was the first case submitted to the PNPCA process, as prescribed by the provision of intra-basin use on the mainstream of the Mekong River in Chapter III, article 5.B of the Mekong Agreement 1995. As indicated earlier, the prior notification of the project and consultation with all members of the MRC (Laos, Thailand, Cambodia, and Vietnam) are required.

The project host, the GoL in this case, had to submit the project to the MRC joint committee. The consultation process took six months and

[38] Personal interview with Sophearin Chea, ICCS-MRC, 18 March 2014
[39] Personal interview with Simon Krohn, ISH-MRCS, Vientiane, 23 March 2014
[40] Personal interview with Voradeth Phonekeo, ISH-MRCS, Vientiane, 17 March 2014.
[41] During the visiting research at the MRCS, the researcher was clearly asked to do any contact with Lao government personally, never officially through the MRCS as it is sensitive for its protocol with the member governments.

was concluded with a recommendation from member states without voting or approval and technical advices from the MRC Secretariat. Because the Xayaburi project does not involve any inter-basin diversion on the mainstream in the dry season, a specific agreement between member states, as meant in the Guideline on the implementation of PNPCA (MRC 2011), was not required.

The GoL claimed that the consultation process of the Mekong River Commission (MRC) was completed in April 2011 and that the project complied with all MRC's rules (MEM 2012: B-4). This technically meant that the project was accepted by all countries. However, Cambodian and Vietnamese governments as well as some NGOs were still sceptical and demanded more research on the project. As explained by International Rivers (2012):

> The Xayaburi's current environmental impact assessment only examines impacts 10 kilometers downstream from the dam site. More, Pöyry Company from Finland[42], the engineering consultant for the project, also claims that it can rely on unproven technologies to mitigate any harm the dam might cause. In brief, the full extent of the dam's impacts remains unknown…

The lack of the MRC's regulatory power is visible in the PNPCA of the Xayaburi HPP. An ICCS officer at the MRCS noted that there was no compulsory or unified format for the public consultation process of the Xayaburi project, as he Mekong Agreement 1995 did not contain any provision about it.[43] This implies that member states may apply the Agreement according to their own interpretation and may design domestic process differently.

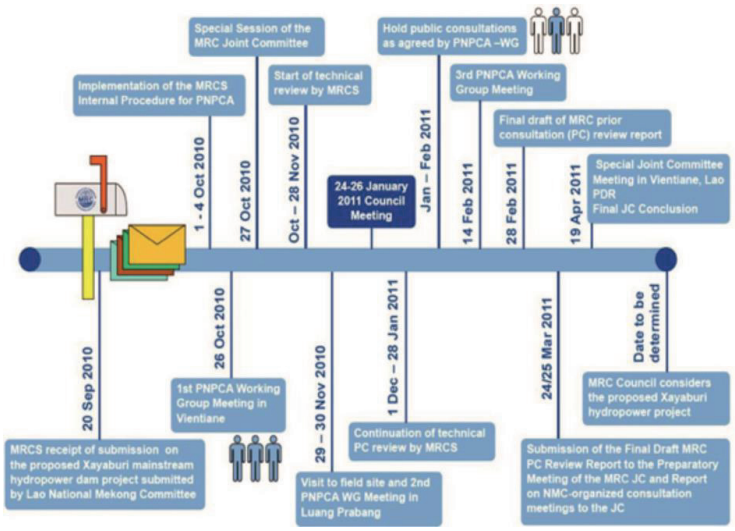
The MRC's PNPCA, which has been used for the first time in the Xayaburi case, provides evidence of state-centric governance and fragmented TWG. There were two consultations in Cambodia and Vietnam, while three were held in Thailand. During the process, as shown in diagram 4.1, the MRCS provided some financial and personal support. Interestingly, while Thai NGOs are the most active campaigners against the project, the Thai authorities employed the term

[42] It is noted here that Finland is no.1 budget contributor to the MRC.

[43] Personal interview with Sophearin Chea, International Cooperation and Communication Section – Mekong River Commission, Vientiane, 18 March 2014.

'public hearing' instead of 'public consultation', which may signal that public involvement has a less formal role in the project, which was in fact developed by Thai companies and supported by Thai government.

Diagram 4.1: the Xayaburi HPP's prior-consultation process
Source: Mekong River Commission, http://ns1.mrcmekong.org/PNPCA/PNPCA-technicalprocess.htm



In December 2011, the MRC's four members declared to postpone the Xayaburi project and indicated they needed further research on the sustainable development and management of the Mekong River including impact from mainstream hydropower development projects. In a special meeting during the ASEAN Summit, they also agreed to approach the government of Japan and other international development partners for support to do a further study (MRC 2011). For the GoL, those decisions were only optional and not legally binding.

However, when the governments of Cambodia and Vietnam were still questioning the potential impacts from the dam after the PNPCA process had been completed in 2012-2013, the GoL strongly protected its sovereignty by continuing the project and responded by requesting

the company to adjust the dam's design time after time.[44] The developer also claims that the 'run-of-river' design of the Xayaburi dam tends to have less impact on upstream water levels and the downstream flow, as it would require minimal alterations to the river and riverside habitat (XPCL: 2012).

The government gave the green light for the construction of the dam in November 2012 and invited Cambodian and Vietnamese representatives to the ground-breaking ceremony of the Xayaburi Dam (Herbertson 2013: 23). This seems to have implied symbolic approval by the neighbouring governments, although the Thai government still kept a low profile. Nevertheless, this positive claim may be challenged, since the GMS, ASEAN and the MRC can be viewed as exclusive clubs of state actors that allow minimal participation by their people. Regionalization here seems to be increasingly driven by the states in collaboration with the private sector.

4.4 Conclusion

The ongoing hydropower development in the Mekong Basin represents a combination of market-driven and state-centric approaches to Mekong regionalism. The market logic plays a pivotal role in driving the transformation of water for energy purposes, while transforming the state to facilitate the making of regional market. The case of hydropower development on the Lower Mekong mainstream reveals the contradiction in the relationship between regionalism and transboundary water governance (TWG).

First, while deep marketization seems leading the process of new regionalism in the Mekong Basin, its water nationalism has been shaped by state-led developmentalism originating from the Mekong development plan rooted in the old regionalism of the Cold War. Second, the mandate of TWG in the Mekong Basin includes both water development and water management, which are often contradictory, even for different actors within the same state. It is the states, therefore, that try to control the TWG in order to support their interests through

[44] Personal interview with Daowong Pornkaew, Director of Energy Policy and Planning Department, Ministry of Energy and Mines, Vientiane, 25 June 2013.

centralizing TWG at the national level instead of pooling their power to international/regional levels of governance.

This study proposes that the Mekong development is in a transition from the 'old' to a 'new' regionalism. It is a mixture of a market building process with a structure of states believing in the centralized control of their natural resources. While regionalism is a formal inter-state and rule-based integration project, regionalization is more informal, market-led and based more on non-state actors, while the state plays a less important and often complementary role (Chen 2005: 32).

This chapter discussed the lack of formal regional governance in the form of supranational authority. The GMS is just a cooperation framework run by sectoral government agencies with support from the ADB. ASEAN is much more organized but is strongly committed to non-intervention and consensus in decision-making: the so-called ASEAN Way (Acharya 2004). The MRC is a consultative forum and technical supporter rather than an independent regulator. Political sensitivity to the violation of sovereignty, as a scare of old regionalism since the Cold War, has weakened development of formal regional governance. All of the current regimes in Laos, Cambodia and Vietnam have been established just in 1975 and introduced the market economy only in the late 1980s.

Ironically, the name of ASEAN itself contains the term 'association', instead of 'organization' because of its preference for informality of integration. This governance style differs from the western style, which welcomes more debates, a majority orientation and a legal approach to decision making (Acharya, 2004: 64). The informality is considered necessary, however, for solving problem related to differences in thinking and interests. The form of cooperation may also boost the trust among members, whereas official agreements, such as treaty, might reflect a lack of trust (Locknie, 2004: 38). The historical context of chronic conflicts and hostility, which was discussed in the early part of this chapter, brings along a high degree of distrust in particular forms of governance.

Regional governance in the energy sector is influenced by those factors but it also displays empirical expressions of 'regionness', comprising regionalism in development policies and regionalization of the sector through regional projects such as the regional power grid. These projects directly serve the interests of the state and the market at

the same time. The market provides a space for tradable hydroelectricity, yet, as demonstrated by the case of transboundary hydropower, it is regulated by the state's dominance of the TWG structure of the MRC. Despite the fact that the MRC promotes integrated water resources management, other parts of the Mekong Agreement 1995 clearly aim to use water development for economic purposes.

The recent riparianization of the MRC Secretariat essentially reflects attempts by the member states to retain their power vis-à-vis a regional body that is sometimes contradicting their development goals. The form of regionalism in the Mekong Basin is based on national control of states over regional governance. It seems that regionalism here can be interpreted as a means to protect state autonomy from growing market influences (Hout 1999: 27), embraced by states itself. While the state pursues marketization as a strategy for economic growth and development, it is struggling to maintain control over decision making and regulatory processes. Private sector actors technically have little direct power, but often can informally influence the process of governance

The above-mentioned issues reveal the vulnerability of regionalization with fragmented regionalism. This means that the market-led development facilitated by the state, built on an alliance of governments, state-enterprises and private companies, is oriented to official national development goals and is not open to all societal groups. Regionalism seems to serve the national interests as far as it reflects the state's priorities.

Eventually, the implications of regionalism may vary for different sectors and actors. In 2016, Laos held the rotating chairmanship of ASEAN, just after the group symbolically kicked off the ASEAN Community on 31 December 2015. A statement by a Lao leader noted on this remarkable step of Southeast Asian regionalism that:

> ASEAN's successes during the past nearly five decades have been remarkable. We are now living in a region of peace, stability and prosperity. From tomorrow onwards, ASEAN will officially form a single market and production base with a total population of 622 million people with combined GDP of almost USD 2.6 trillion, ranking as the 7th largest world economy….ASEAN has also become a unique example of ten diverse nations who have come together under the ASEAN Community. In this

> light, the Lao PDR is proud to be part of this Community of ASEAN (Ministry of Foreign Affairs, Lao PDR 2016).

The statement leads to two conclusions about Mekong regionalism. On the one hand, after half a century of regional turmoil, the establishment of a common market and well-developed production base is a high priority in this emerging region. The logic of the market seems to prevail in regional governance and water is considered as an economic resource or natural capital by state and non-state developers. On the other hand, Southeast Asia is a region that attempts to accommodate the diverse interests of all member states, democratic or authoritarian, rich or poor, and big or small. Part of the reason why member states are committed to regional frameworks is that they have never had any supranational pretension. Yet, regionalism has come to the rescue of weak states with limited capacities in development and governance. To explore this issue, the next chapter will present a case study of Laos. It will explain why and how regionalism has been transplanted at the national level through vibrant hydropower development in the country.

5 Transformation of the State: Laos and the Governance of Hydropower Development

Introduction

It is common for countries to display monuments, dams and buildings as the symbols of successful modernization and nation-state building. However, in Laos, dams have become much more than just a symbol. A hydropower dam is depicted in the national emblem of Lao People's Democratic Republic, in conformity with the Constitution (2003 article 90). Dams are displayed on bank notes, in public advertisements, and are shown even in music videos of the national anthem. Electricité du Laos (EdL) seems to be one of the most important state agencies. Its headquarters is located in one of the tallest and most modern buildings in Vientiane, and is frequently visited by foreign officials, businessmen, consultants, and other professionals in the power sector. [45] The Department of Energy Business, which is the main agency for the promotion of power trade and investment in cooperation with the private sector, uses the term 'poweringprogress.org' as its website's domain name, signifying how the country expects to benefit from its hydropower potential.

Hydropower has become a source of national pride in Laos as expressed in a message from Minister of Energy and Mines on the fiftieth anniversary of the EdL:

> Based on the potential strength and competitive advantages we have in our country for development. The Party[46] always considers electricity industry as top priority. To realize this, the Party has determined and formulated the long-term strategy. The government has defined suitable policies for promoting, supporting and facilitating the domestic as well as foreign

[45] Observation during fieldwork.
[46] Lao People's Revolutionary Party (the communist party).

investment. EdL has been assigned as the main executing agency to execute and coordinate in all of these investments (EdL 2011: 13-14).

This message makes it easy to guess how a leader in the government of Laos (GoL) views hydropower development, which is one of the growth industries and major sources of income in Laos. This chapter discusses the hydropower potential of Laos and the governance framework of the hydropower industry. The country's relations with Thailand, the biggest and oldest partner in the hydropower industry of Laos, as well as the case of Xayaburi project demonstrate the structure and process of governance in hydropower development particularly at the national level. Through the case study, this chapter mainly argues that states in the Mekong do not simply embrace regionalism by transferring power to regional institutions, but take advantage of regionalism as a strategy to keep states relevant as developmental actors by collectively creating and enforcing the regulations that favour their interests.

Figure 5.1 Bank notes of Lao PDR, displaying hydropower dams
Photo by: Ome Chattranond

5.1 Laos and hydropower development

5.1.1 The hydropower hope

Lao PDR, popularly known as Laos[47], is a relatively small country in Southeast Asia with an area of 236,800 sq. km. and an estimated population of 6.8 million in 2014, ranked 8th out of 10 countries in ASEAN, just above micro-states like Singapore and Brunei (CIA 2015a). It is a lower middle-income country with a GDP of 11.68 billion USD in 2014, ranked 132 among 188 countries in the world, but the smallest economy in ASEAN. Its GDP per capita was 4,987 USD in 2014 (IMF 2015). In terms of human development, the UNDP (2014) has categorized Laos as having medium human development, globally ranked 139 out of 187 countries. These figures depict the relatively poor position of Laos in the world and the region. The figures are used as well as to legitimize the national development agenda as the top priority of the state to overcome its least developed country (LDC) status as defined by the United Nations.

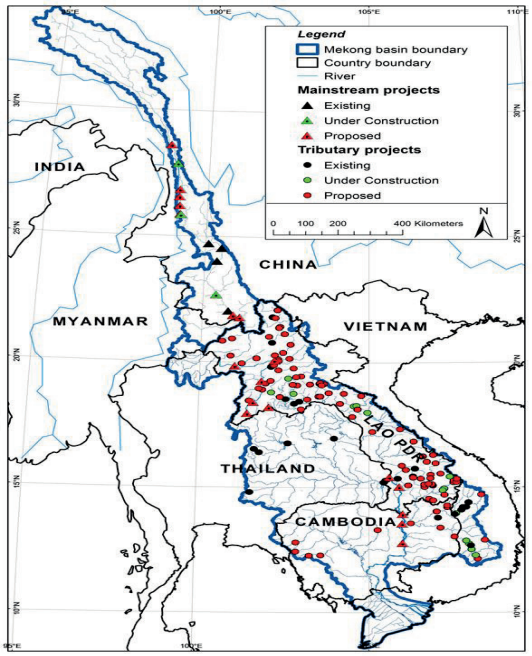
Laos is the only land-locked country in Southeast Asia and comprises 70% massive mountainous areas and plenty of watercourses. The country has the highest mean annual rainfall in the Lower Mekong Basin (LMB) with an excess of 2,500 mm. in areas of high elevation (MRC 2011e: 51). The basin covers around 80% of the total area of Laos, through which the Mekong mainstream flows for 1,835 kilometres, next to 140 tributaries that originate 35% of total water flowing into the Mekong mainstream (EdL 2011: 20). These characteristics have created both advantages and disadvantages at the same time. While the landscape brings very high costs for infrastructure development and international trade, abundant water flows through steep valleys provide a high potential for hydropower development.

Laos has the obvious vision to use hydropower, from both the Mekong mainstream and its tributaries, as a prime driving force of its national development. The hydropower industry is a backbone sector of the economy of Laos, with an estimated total potential of 26,500 MW, including 18,000 MW technically exploitable, but excluding the potential

[47] This dissertation generally employs the name 'Laos' and 'Lao PDR' interchangeably but strictly uses 'Lao PDR' when it refers to the political regime after the revolution in 1975.

on the Mekong mainstream. Only 15% of that potential has been realized so far but the government of Laos (GoL) has signed MOUs or conducted studies on a total of more than 70 hydropower projects, 24 of which are either operational or under construction (MEM 2017). However, the estimate was drawn from some studies conducted three decades ago and represents just the upper limit, so changing technical information and higher standards of evaluation on socio-environmental impacts associated with hydropower development would affect the real potential at the present time (Pholsena and Phonekeo 2004). Map 5.1 shows that apparently most of the hydropower projects in the Mekong Basin, both on the mainstream and the tributaries, are located or expected to be in Laos.

Map 5.1 Hydropower projects in the Mekong Basin
Source: Mekong Flow, http://mekongriver.info/hydropower



The economy of Laos has relied heavily on the export of natural resources. Next to hydropower, the mining of gold, copper, tin, and gypsum are important activities. However, the majority of the labour force is still employed in agriculture, which accounts for around 25% of GDP but 73% of employment (CIA 2015a). The Asian Development Bank (ADB 2014: 220-223) has described Laos as one of the fastest growing economies in Asia with an economic growth of more than 7% for nine consecutive years. This significant economic growth has helped to halve the national poverty rate from 46% in 1992 to 23% in 2013. Specifically, the industrial sector grew by 8.5%, with significant contributions resulting from foreign direct investment (FDI) in hydropower projects, most of which exported electricity to Thailand. In this respect, the ADB has highlighted the economic prospect of Laos as follows:

> Investment in power projects will generate much of the growth over the forecast period. More than 20 power projects are under construction, including the $3.5 billion Xayaburi hydropower plant, scheduled for commissioning in 2019 with capacity to generate 1.3 gigawatts. Power generation will get a boost when the large Hongsa lignite power plant, able to generate 1.9 gigawatts, comes on stream later this year and is fully operational in 2016. Total electricity production is projected to rise by 6% in 2015, accelerating significantly in 2016 when six new plants come online (ADB 2014: 221).

The GoL aims to graduate voluntarily from the Least Developed Country (LDC) status by 2020. Although there are some worries about a substantial decline in preferential trade treatment and foreign aid – this is because 25% of the total budget in the government's 2011-2015 development plan is funded by donors and international development agencies – the hydropower industry could significantly contribute to mitigating possible negative impacts. The UN Resident Coordinator and Resident Representative of the UN Development Programme (UNDP) in Laos has commented:

> We are confident that, given the build-up of foreign direct investment in the country over the years, particularly in hydropower energy, the revenues generated in this investment will more than make up for any phasing out of development assistance (IRIN 2012).

For the mentioned reasons, hydropower has become an important element of the national strategy for poverty reduction. It is envisaged to provide the infrastructure for the development of other sectors and transform Laos into the 'Battery of Asia', as an exporter of hydroelectricity to energy-thirsty neighbours, including Thailand, Vietnam, Cambodia and China.[48] The expansion of hydroelectricity and transmission lines can help meet the twin objectives of supplying electricity for domestic use and generating substantial income from power export to its neighbours, which contributed 9.97% of total exports in 2009 (Ministry of Planning and Investment, Lao PDR 2011). The hydropower export has exceeded that of timber and textiles, which used to be major exports of Laos since 2001 (ADB 2004 as cited in Pholsena and Banomyong 2006: 87), but the history of hydropower development in the country began much earlier than that.

5.1.2 Realizing hydropower development in Laos

The Lao economy in general may lag far behind that of its neighbours such as Thailand and Vietnam but its hydropower industry has been flourishing for a long time. Actually, Laos has been developing its hydropower industry since the 1960s with substantial technical support from the Mekong Committee and the US, as discussed in the third chapter, but chronic political conflicts and insurgencies critically halted that development until the 1980s. However, Doran and Christensen (2014: 69) note that Laos has been one of the most experienced countries in export-oriented hydropower development, when compared to other Asian countries. These authors have noted that the hydropower industry in Laos developed relatively early and have distinguished four phases in its history.

The first phase was characterized by state ownership for domestic supply, financed by international financial institutions (IFIs) such as the World Bank as well as bilateral grants and loans in the 1970s and until 1998. All of the dams built in this period were developed by the state and state-owned. The government started to open up the hydropower sector

[48] Personal interview with Daowong Pornkaew, Director of Energy Policy and Planning Department, Ministry of Energy and Mines, Vientiane, 25 June 2013.

to foreign investment in 1988 after the launch of Laos' economic reform program in 1986.

Second, a transitional phase took place in the 1990s through the early 2000s with more private and less state ownership, export of electricity with financing from both IFIs and commercial lenders alongside political risk guarantees (PRG) from IFIs. During this phase the investments by private companies, so called 'independent power producers', has started to become important.

Third, since the late 2000s, the role of IFIs and need for PRG have decreased, while the role of commercial lenders in electricity export has been increasing. The first project (Nam Ngum 2) was entirely financed by Thai lenders with no involvement of IFIs, next to smaller dams for domestic supply sponsored by Chinese banks.

Presently, Laos seems to be at the forefront of the export oriented hydropower industry, while most Asian countries have just reached first or second phase of development. The following table shows that there were only four hydropower projects in Laos before its economic reforms in 1986. The number has increased almost eight times over the subsequent three decades.

Table 5.1: Existing hydropower dams in Lao PDR by 2015
Adapted from: EdL (2015) Power Development Plan of Lao PDR 2015-2025

No.	Project	Commissioned	Installed capacity (MW)	Developer
1	Selabum	1970	5	EdL
2	Nam Dong	1970	1	EdL
3	Nam Ngum 1	1971	155	EdL
4	Nam San	1978	0.11	EdL
5	Xeset 1	1991	45	EdL
6	Nam Ko	1996	1.5	EDL
7	Theun-Hinboun	1998	220	IPP
8	Houay Ho	1999	152	IPP
9	Nam Sad	1999	0.25	EdL
10	Nam Leuk	2000	60	EdL
11	Nam Mong	2000	0.8	EdL
12	Houy Sae	2000	0.8	EdL
13	Nam Ngay	2001	1.2	EdL
14	Nam Mang 3	2005	40	EdL
15	Xeset 2	2009	76	EdL
16	Nam Theun 2	2009	1,088	IPPe
17	Nam Lik 1-2	2010	100	IPPd
18	Nam Nhon	2011	3	IPPd

19	Nam Phao	2011	1.7	IPPd
20	Nam Tha 3	2011	1.25	IPPd
21	Nam Song (Extension)	2012	6	EDL
22	Nam Ngum 2	2012	615	IPPe
23	Nam Ngum 5	2012	120	IPPd
24	Theun Hinboun (Extension)	2013	220	IPPe
25	Nam Gnoung 8	2013	60	IPPd
26	Nam Long	2013	5.5	IPPd
27	Tad Salen	2013	3.2	IPPd
28	Xenamnoy	2013	14.8	IPPd
29	Nam Sana	2014	14	EdL
30	Xekaman 3	2014	250	IPPe
31	Sugar	2015	105	IPPd

EDL: 75 – 100% owned by EDL (state-enterprise)
IPP (Independent Power Producer): more than 50% owned by private companies
IPP*e*: Export oriented project
IPP*d*: Domestic use project

The first three dams mentioned in table 5.1 were built during the former regime (Kingdom of Laos) before the communist revolution in 1975. Nam Ngum 1, in particular, was developed for export of electricity to Thailand, at a time when the Lao and Thai governments had been close allies and received much support from the US. Nam Ngum 1 was the first cross-border power trade arrangement in Southeast Asia and it is still active today.

The political tensions and economic stagnation at the dawn of the new regime impeded any hydropower development in the 1980s but economic reforms since 1986 have provided opportunities for more foreign investment and aid from IFIs and capitalist countries. Except Nam Ngum 1, all large dams with more than 100 MW of installed capacity have been developed under the IPP model. Since the 2000s, the IPP projects have also been identified as export oriented (IPPe) or for domestic use (IPPd). This pattern obviously shows the vibrant private participation in hydropower sector.

An example of the IPP model is Theun-Hinboun, the first IPP project in Laos, which was built with financial support from the ADB and several foreign commercial banks. Theun-Hinboun Power Company is owned by three companies, with 60% of the shares held by EdL-Gen (a commercial subsidiary of the EdL state enterprise), and 20% each by GMS Lao (a subsidiary of GMS Power Company from Thailand) and

Nordic Hydropower Company from Norway. 95% of the generated energy has been exported to Thailand and 5% was for domestic use. When commissioned in 1998, the ADB called this project a 'winner' because there was little criticism of the environmental impacts. However, International Rivers, an international NGO, claims that more than 30,000 people in at least 66 downstream villages have lost fresh water supplies, fisheries, rice fields and vegetables gardens (International Rivers 2014).

Nam Theun 2 is another showcase of the IPP model, which was realized decades after the last World Bank-financed dam in Laos. The project is famous because of two aspects. First, it was the largest foreign investment (around 1.5 billion USD invested by French, Thai and US investors) and the biggest dam in Laos before the construction of the Xayaburi HPP. Second, the dam has been praised by its major sponsors, the World Bank and the ADB, as the first mega project which exceeded international standards including in social and environmental issues. The Nam Theun 2 project and underscored the IFIs' influence on the Lao government to institutionally reform its hydropower sector to comply with international standards (Doran and Christensen 2014: 69).

To maximize the market and benefit from the hydropower potential of Laos, regionalist frameworks as GMS and the ASEAN regional grid, offer more chances for hydropower export and connectivity in remote areas as well as better opportunities to attract foreign investment. Because of the recent economic crisis, Thailand, the major importer of Lao's electricity, has imported less power from Laos than expected. The regional framework could support Laos' policy aimed at achieving more flexibility and finding alternative markets, including China and Vietnam, as it is aspires to 'change Laos from land-locked into a land-linked country'. Moreover, as shown in the MRC consultation process on the Xayaburi dam, regional forums can somehow balance the interests of their members. As confirmed by Lao officials, when neighbouring governments in Cambodia and Vietnam hotly debated the potential impacts from the dam, the GoL strongly protected its sovereign rights but positively responded by adjusting of its dam's design time after time.[49]

[49] Personal interview with Daowong Pornkaew, Director of Energy Policy and Planning Department, Ministry of Energy and Mines, Vientiane, 25 June 2013; and

To realize its hydropower plans, the role of private actors in hydropower development is vital for the GoL because public resources are limited and there may be insufficient public funding available for new infrastructure and the maintenance of existing infrastructure. Moreover, Laos' domestic market is too small to attract foreign investors for domestic infrastructure construction. However, Foran et al (2010: 10) indicate that Laos is becoming more attractive for investment because its hydropower does not serve only domestic demand, but is oriented to the regional market, including Thailand, Vietnam, and possibly Cambodia.

It is logical for Laos to export its surplus hydroelectricity to Thailand and to a lesser extent Vietnam, as well as avoid importing fossil fuels. Total foreign direct investment for the twelve mainstream hydropower projects, ten of which are planned in Laos, will be roughly 25 billion USD. With the concession agreements, power export will bring in around 2.6 billion USD per year to Laos, for at least 25 years (SEA, 2009). These could be crucial financial resources for poverty eradication and the national strategy for socio-economic development. Nevertheless, Gajasei (2011) has argues that even without the construction of mainstream dams, Laos would still have sufficient hydropower potential on the Mekong tributaries to continue healthy export earnings and encourage investment in the medium term. Although Thailand and Vietnam welcome trans-boundary electricity supply from Laos, mainstream schemes will have a minor impact, of less than 1.5%, on their domestic electricity prices and only limited effects on the energy supply strategies.

At this point, hydropower clearly has become a high hope for the national development of Laos and its ambition to become the Battery of Asia. The high potential of hydropower, its low domestic demand, and its strategic location surrounded by countries with higher energy demand make Laos particularly attractive to international investors especially from neighbouring countries who wish to take advantage from regional proximity and the facilitating regulations for cross-border power trade. The IFIs and donors also support Laos to put market-facilitating policies in place, especially in opening the hydropower sector for private developers.

Komonchanh Phet-Asa, Director of Business Department, EdL, Vientiane, 25 June 2013.

It sounds difficult, hence, to imagine any significant change in the vision apart from being the Battery of Asia. It is absolutely not only because the GoL has limited choices and posted a high ambition in hydropower but there are complementary interests among its neighbouring countries, which are thirsty for energy and eager to expand overseas investment to sustain their economic growth. One of those countries is Thailand, once a hostile neighbour during the Cold War but currently the biggest electricity importer from just the other side of the Mekong.

5.2 Laos and Thailand: the hydropower ties

5.2.1 Love-hate neighbours

Similar to many neighbouring countries in the world, Laos and Thailand do not share only their long border of 1,754 km., mostly along the Mekong River, but also close cultural and historical ties. Although their official languages are different both in speaking and writing, Lao and Thai are basically intelligible to both Thais and Laotians, especially the local people in the Mekong Basin in Laos and northeastern Thailand. It is because the ethnic majority in both countries is a branch of 'Tai', which constitute a broad ethnic group dispersed over mainland Southeast Asia, southern China and north-eastern India and concentrated in modern Laos and Thailand (Pholsena and Banomyong 2006: 60). Due to cultural proximity and the limited availability of domestic media and manufactures, Thai media and products are very popular in Laos.

Thailand, formerly known as Siam, has played a significant role in the history of Laos. In the nineteenth century, there was no unified state of Laos, but several Laotian kingdoms mostly ruled as vassal states of Siam. French colonialists had unified those kingdoms and founded the modern state of Laos as a protectorate in French Indo-China, along with Cambodia and Vietnam, in 1893. The French empire and Siamese government had demarcated their border along the Mekong, unnaturally dividing the Lao people who had traditionally lived along the both sides of the river (Ivarsson 2008).

The Cold War immediately effected Indo-China after the Second World War and the end of the French rule in 1953. Then the

government of Kingdom of Thailand, firmly allied with the US and South Vietnam, supported the royalist government in the Kingdom of Laos where there were enduring conflicts among the royalist, the neutralist, and the communist fractions. The communist movement, named 'Pathet Lao' was supported by North Vietnam, the Soviet Union and China; hence, the struggle was considered an extension of the Vietnam War. In 1975, communist regimes took over power in Cambodia, Vietnam and Laos. Then the Kingdom of Laos was replaced by the Lao People's Democratic Republic (Lao PDR), the socialist state led by the Lao People's Revolutionary Party (LPRP) as the only legal political party in the country (see Stuart-Fox 1997; 2003). Lao-Thai relations had deteriorated; and the Mekong River was ironically labelled the 'iron curtain' of Southeast Asia.

The relations did not revive until Laos reformed its economy in 1986 by introducing the 'New Economic Mechanism', following the Soviet Union's Perestroika, leading to an opening of its market to international trade and investment, claiming a return to capitalism as an intermediary step to socialist development. This step was matched with the Thai policy of reconciliation with its hostile neighbours, initiated in 1988. On this basis, since the 1990s, Laos and Thailand have continuously expanded their economic ties in various sectors, both bilaterally and multilaterally through regional cooperation frameworks such as the Quadrangle Economic Cooperation of 1992, the Greater Mekong Subregion Economic Cooperation (GMS) of 1992 and the accession of Laos to ASEAN in 1997. Laos' economic growth closely relates to Thai prosperity. The country's land-locked location makes international trade and investment in Laos much more dependent on its neighbours than on distant countries, e.g. the US or Japan, which have expanded their activities in other Southeast Asian nations. So far, Thailand has been the biggest trade partner of Laos both in imports and exports, followed by China and Vietnam respectively. In 2013, Thailand was responsible for 56% of Laos' total imports and 33% of the country's total exports (CIA 2015).

Laos' ASEAN membership really signified the end of the Cold War, as ASEAN was originally a regional organization of by anti-communist states in Southeast Asia. After the first Friendship Bridge was opened in 1994, four bridges were constructed across the Mekong between Thailand and Laos so far, and three more are planned. The bridges

symbolize the end of the Mekong as the iron curtain between the two countries and the transmission of the market economy to Laos.

5.2.2 Thailand and hydropower development in Laos

Compared with its neighbours, Thailand has been relatively more peaceful and has developed its market economy more consistently. After the Second World War, the country experienced neither colonial struggle nor large scale civil wars and economically benefited from large amounts of foreign assistance as a strategic ally of the US in the Cold War, especially since 1961 when the first National Economic and Social Development Plan was launched. In the power sector, the Electricity Generating Authority of Thailand (EGAT) was founded in 1969 as a restructured state enterprise with a mission to seek, produce and provide new sources of electricity from natural resources to meet the national demand for energy that has grown rapidly since the 1960s (EGAT 2013).[50]

Keeping access to cheap electricity for Thai consumers and industries, with 3-7% growth in demand over the past three decades, has been one of the most important elements on the agenda for every government in Thailand (Jarvis 2010). Hence, the import of power from foreign sources became one of options. For the national energy policy of Thailand, the current official Power Development Plan (PDP) 2010, Third Revision (2012-2030) was endorsed by the Cabinet on 19 June 2012. Thailand has experienced an increasing demand for electricity but a decreasing potential for electricity production because it has few feasible sources and is faced with strong opposition to hydropower dam construction by civil society. The over-exploitation of natural resources and degradation of the environment in Thailand have led to growing resistance of local

[50] Since 1989, the Thai government has supported private actors to participate in this sector on the basis of conditionalities attached to structural adjustment loans from the IMF and the World Bank. EGAT has changed from being the sole power generating agency anymore into the biggest purchaser of electricity from private companies, which sell their electricity either to EGAT power networks or directly to public communities (EPPO 2013). The government also pushed the partial privatization of EGAT by establishing the Electricity Generating Public Company Limited (EGCO) to substitute some operations. However, EGAT has remained influential through its share-holding and former staff that came on the boards of some IPPs (Wisuttisak 2012).

communities with support from NGOs as well as increasing demand for regulations to protect environment. This movement has pushed the power-generating industry to search for new alternatives that are cheap, stable and more viable (Pholsena and Banomyong 2006: 87).

Although Thailand's Power Development Plan (PDP) 2012-2030 proposed to purchase foreign power to a maximum of 15% of total generating capacity, electricity from Laos mainly supplies the eastern part of Thailand and substitutes for the risk of domestic power generation in the western part of the country that depends on natural gas acquired from sources in Myanmar (EPPO 2012: 7). Moreover, the import also serves to diversify sources of electricity in Thailand away from its dependence natural gas, which is one of the most important agendas in Thai energy policy.[51]

According to EGAT (2013: 96), Laos is Thailand's number one origin of imported electricity and almost its entire source is hydropower. The bulk of hydroelectricity is generated by dams not too far from the Lao-Thai border, mostly demarcated by the Mekong. EGAT currently purchases electricity from six projects with a total capacity of 2,404.6 MW. Supplies of 3,316 MW are being purchased from Laos during the 2014–2019 period, including from the Hongsa-Lignite project (operating from 2015/16), the Xe Pian-Xe Nam Noy HPP (from 2019), Nam Ngiep 1 (from 2019), and the Xayaburi HPP (from 2019).

Power trade between the two countries is also outstanding at the regional level. Laos is the biggest exporter of electricity in Southeast Asia, counting around 13 billion kWh[52] in 2014, thus making the country fourteenth in the world (CIA 2015a). Thailand, meanwhile, is the biggest electricity importer in the region with amounts of 12 billion kWh in the same year, something which makes the country rank twentieth globally (CIA 2015b).

So far, however, Laos has been still a net importer of electricity from its neighbour because of the late development of the power grid and poor transmission in remote areas. EdL (2011: 109-110) indicated that Laos imported 998.98 million kWh and exported 341.29 million kWh in 2010, mostly from and to Thailand. These figures may change soon as many hydropower projects in Laos are nearing completion and are ready

[51] Personal interview with Samerjai Suksumek, Deputy Director-General, Energy Policy and Planning Office, Ministry of Energy, Bangkok, 11 April 2013.
[52] Kilowatts per hour.

to operate.[53] The complementary policies of Thailand and Laos have paved the way for the transnational power trade and further investment in the hydropower.[54]

Nonetheless, critics from NGOs such as International Rivers conclude that Thailand does not need to purchase electricity from the controversial Xayaburi dam to meet its domestic demands (Bangkok Post, 2012). Activists claim that ordinary Thai people are not aware that the energy demand in Thailand is frequently over-estimated by the state authorities as compared to real usage. Greacen and Greacen (2012) comment that the generation capacity of the dam is also expected to be lower than the estimation and that, together with the unrealistic demand forecast, the Xayaburi dam will become a liability for the Thai government rather than a future asset.

Moreover, the heavy reliance on its exports to Thailand – in the range of 80 to 90% of all exported hydroelectricity – makes the hydropower industry in Laos sensitive to external influences. Given the continuous growth of the Thai economy in the 1990s, Laos had a secured market for its products. Nevertheless, the Asian financial crisis, which started in Thailand in 1997, demonstrated already that Laos may be too dependent on a single buyer, something which significantly decreases the bargaining power of the seller in pricing negotiation (Pholsena and Banomyong 2006: 87).

For Thailand and Laos, the multilateral regional power trade and interconnection plans are also complementary to their regional integration policies. Although most of the current power trade is based on bilateral cooperation, the GMS and ASEAN have provided opportunities for an integrated system through a regional power grid, aiming for the most efficient use of energy and investments for narrowing regional the economic gap. EGAT, as a state enterprise of the government of Thailand, has a clear vision of the regional power hub for the transborder trade of electricity, linking to ASEAN Power Grid (APG) scheme. While the APG is still at an early stage of development, EGAT

[53] Personal interview with Paruhas Vongthaned, Director of Energy Economic Division, Electricity Generating Authority of Thailand (EGAT), Bangkok, 3 April 2013.
[54] There are four MoUs on cross-border power trade between Laos and Thailand since the 1990s after the end of Cold War and Laos has opened its door to the international market. From 1,500 MW in 1993, the latest MoU signed in 2007 targeting 7,000 MW by 2020, including the generation from the coming Xayaburi dam, the first project on the Mekong mainstream.

has cooperated bilaterally with Laos since the 1970s. Although an EGAT officer commented that ASEAN and the GMS have not shown much commitment and that tangible results of cross-border power linkage are limited so far, the regional platforms have provided constant multilateral negotiations that legitimize the transboundary project.[55]

Although the ADB and ASEAN have pushed the regional power grid as one of their regional agendas, each country in the region still has a different transmission system. Compared with multilateral regional cooperation, the power trade on a bilateral basis has been so far more effective. Because of their long-standing cooperation in the energy sector, Laos and Thailand currently share some standards in their transmission systems. Nevertheless, regional power grid and cross-border power trade could benefit Laos more. Its geographically central location, surrounded by Thailand, China, Vietnam and Cambodia could lead to diversification of its market for hydroelectricity. For this to be realized, support is needed both in the hard infrastructure of an integrated transmission-line system and the soft infrastructure of integrated regulations and governance for cross-border power trade. The Lao-Thai experience could serve as a model at the regional level in the long run.[56]

In brief, two factors have mainly driven the relations between Thailand and Laos regarding hydropower development. Firstly, geographical proximity provides an opportunity. Secondly, the disparity between the two countries leads to a division of labour in the regional market where hydropower-rich Laos becomes a power source for energy-thirsty Thailand. Moreover, since Thailand is the biggest trade partner of Laos, the hydropower investments and energy exports significantly relieve the existing trade deficit. Thai investment is similar to the relocation of industries from Japan and other NICs to Southeast Asia in the 1980-90s, which were driven by the availability of natural resources and low-cost labour (Dixon 1999: 30). In the case of Thailand, its hydropower potential is almost depleted and new development would likely bring very high costs as a result of the strong resistance by Thai civil society.

[55] Personal interview with Paruhas Vongthaned, Director of Energy Economic Division, Electricity Generating Authority of Thailand (EGAT), Bangkok, 3 April 2013.
[56] Ibid.

5.3 Regulatory governance and hydropower development in Laos

5.3.1 Laos and market reform

As indicated above, it was not until 1986 that capitalism was revived in Laos. Actually, the market economy was not well established in the country even before the communist revolution because it had experienced chronic political conflicts since its independence from France in 1953. Like for its close political ally, Vietnam, the early years after the revolution were tough, with economic catastrophes deriving from the massive costs of post-war reconstruction, the failure of collectivization, the brain-drain of skilled labourers, as well as external sanctions and containment by hostile capitalist countries.

Eventually the communist party and the GoL decided to change the strategy and transform the socialist economy. The regime officially admitted this direction in the seventh resolution of the Supreme People's Assembly in 1979 and prepared for the reform policy that was issued in 1986 as the 'New Economic Mechanism'. The collectivization and some restrictions on private property and production were abolished, while foreign trade and investment were promoted (Pholsena and Banomyong 2006: 81). Sombounkhan (2012: 4) indicated that the party accepted the reform as it could not rely only on the revolutionary achievement but needed to increase employment and development through the industrialization, modernization, and regional integration. Thipmountaly (2012: 26-27) legitimizes this turning point as follows:

> According to socialism, international integration and competition is the right direction to solve economic contraction. On the other hand, even though Laos has a strong potential to improve our country's competitiveness, it is still lacking basic development needs and international economic integration. It also has a small market for industrialization, an old-fashioned infrastructure, and low quality of labor. The centrally planned economy has still not suitably expanded as a core leader while a mixed economy has slowly expanded, and the private economy has still not expanded to reach its potential in order to support Laos' centrally planned economy.

In 1989, the GoL concluded an agreement with the World Bank and IMF for enhancing market reform. Key structural reforms included

changes to the country's public expenditure policy and management, its financial infrastructure, trade, and private sector development. After two decades, the World Bank (2012: 17) evaluated Laos' reform process as follows:

> ...the government (of Lao PDR) continues to make solid progress in efforts to have a more predictable and rules-based legal framework for trade and private sector development. However, continued gaps in implementation between the de jure regulatory framework and de facto practices pose an increasing risk that the private sector will see less than anticipated benefits from improved laws, regulations and procedures.

The IFIs and other donors have strongly supported the hydropower development in three common ways, i.e. by formulating policies, building human capacity and financing projects. The World Bank is a good example of this approach. In 2013, the Bank' International Finance Corporation (IFC) announced its plans to work with the GoL in developing draft laws for governing hydropower development. It supported EdL-Gen, a private subsidiary of EdL, to improve the company's management on environmental and social issues. The IFC also recruited international consultants and specialists to support social engagement and stakeholder communication for hydropower and forestry sectors in Laos. The Ministry of Energy and Mines wanted to have consultants to conduct a detailed review of the power market structure, and the institutional framework that governs and reforms the power sector (Hydro world 2015). Some official development assistance (ODA) also contributed to the Data Collection Study on Energy Sector (funded by JICA, Japan) and Energy, and Environment Partnership-Data Training and Scenarios for Sustainable Energy Planning in Lao PDR (funded by INES, Finland).

Although the IFIs, the UN agencies and bilateral governmental donors have long played a role in pushing forward hydropower development, current dams are being developed and financed much more by the private sector, primarily from countries within the region. New financiers are based in developing countries, including state-owned institutions such as the China Export-Import Bank, the China Development Bank, the Thailand Export-Import Bank and Thai commercial banks such as the Siam Commercial Bank, the Bank of Ayudhya, the Kasikorn Thai Bank, the Bangkok Bank, the Siam

Commercial Bank, the Thai Military Bank, and the Thanachart Bank. Few of these banks have the technical capacity to serve as lead arrangers of finance for large hydropower projects (Foran et al. 2010: 10). In the case of the World Bank, its strictness partly reflects greater knowledge about the impacts of large dams, and partly the related political controversies of the 1980s. This process is reflected in the regulatory framework of hydropower governance in Laos, which has applied international standards, guided by the IFIs and international consultants, and was designed to promote the domestic interests of several government agencies, especially in securing national development as a legitimizing element of the raison d'être of the state.

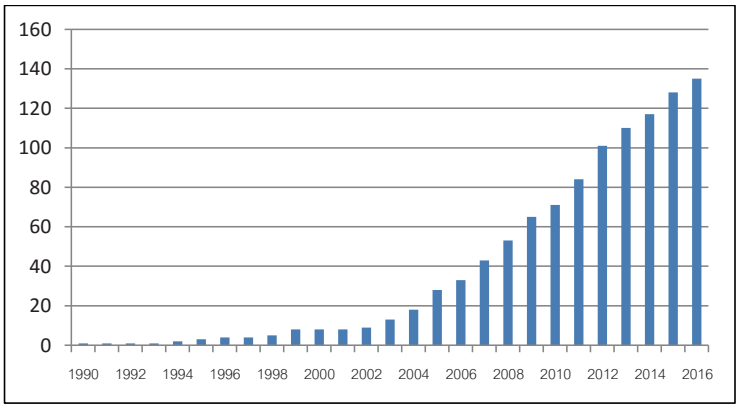
5.3.2 The emerging regulatory state

The economic reforms were clearly reflected in the increase of the number of laws and regulations in Laos. The lack of a constitution and formal written laws after the revolution in 1975, when the constitution of the former regime was abolished, until 1989 seriously discouraged international development agencies and foreign investors to engage with Lao economy (Macalister and Zasloff 1994). The country had mainly functioned with Prime Minister's Decree no.53 launched in 1976 as a basis for state orders, while only four basic laws – i.e., Criminal Law, Criminal Procedure Law, Law on People's Prosecutor, and Law on People's Court – were adopted by the Supreme People's Assembly (now the National Assembly) in 1989. The country's first constitution was adopted on 15 August 1991, signifying Laos' re-establishment of the rule of law and re-engagement with the international community (Legal Research Group for Criminal Proceedings 2015: 1).

After three decades of reform, the GoL has created or amended various laws to integrate the country with the regional and global economy as well as to respond to social issues resulting from rapid economic growth. The number of laws has significantly increased since the 2000s (see graph 5.1), after Laos had acceded to ASEAN (1997), normalized trade relations with the US (2005), and gained full membership of the WTO (2013). The total number of laws adopted by the National Assembly has risen from eight in 2000 to 135 in 2016. Only in the period from 2012 to 2016, 51 more laws were adopted (GoL 2016). Although the LPRP (communist party) and the government strongly

support the economic reforms, they firmly maintain political power though the model of the 'market economy regulated by the state in the direction of socialism', which is legally confirmed in the constitution.

Graph 5.1 Total numbers of laws adopted by the National Assembly of the Lao PDR, 1990-2016
source: applied from Government of Lao PDR (2016) *Legal documents*. http://www.laogov.gov.la/legaldoc/pages/document.aspx



In accordance with the reforms, the constitution was amended in 2003 by the Decree of the President on the Promulgation of the Amended Constitution of the Lao PDR, which included several new articles clearly reflecting national development towards the market system, especially in the part on the Socio-Economic regime (Chapter 2):

> *Article 13.* The national economy of the Lao PDR relies on a stable multi-sectoral economy which is encouraged (by the government) to expand manufacturing capacity, broaden production, businesses and services, transform the natural economy into a trading and manufacturing economy, and modernize; [while] combining with regional and global economies to stabilize and develop the national economy continuously and to improve the material and spiritual living conditions of the multi-ethnic people.
>
> All types of enterprises are equal before the laws and operate according to the principle of *the market economy*, competing and cooperating with each other to expand production and business while *regulated by the State in the direction of socialism*.

> *Article 15.* The State promotes foreign investment in the Lao People's Democratic Republic, [and] creates favorable conditions for the injection of capital, for the use of technology and for introducing modern types of management into production, businesses and services.
>
> The lawful assets and capital of investors in the Lao People's Democratic Republic shall not be confiscated, seized or nationalized by the State.

This study argues that Laos has transformed into the direction of a regulatory state, though it has embraced the goals of a socialist state. The regulatory state tends to downsize its interventions in welfare provision and support a leading role of the private sector. The state may pursue its regulatory approach either because it believes in the market system, or lacks the capacities to provide public goods by itself. The latter factor seems to be a main reason for the emergence of the regulatory state in Laos. At the policy level, the national policy frameworks of Laos currently rely on the Seventh National Socio-Economic Development Plan (2011-2015) and the National Growth and Poverty Eradication Strategy, which emphasize the importance of hydropower development and the participation of the private sector. The Ministry of Planning and Investment (2011: 61) indicated in the national development plan that:

> The government has made efforts to ensure the business and political environment is conducive for promoting the domestic private sector and attracting investment from overseas. This has been carried out through improvements in regulations, laws and enterprise establishment processes. Business enterprises are partially administered by the government, but the enterprises are fully self -managed in terms of finance, planning and marketing. This is to reduce excessive government intervention in the market.

The government also issued the National Policy on the Environmental and Social Sustainability of the Hydropower Sector (NPESSHS) in 2005. It aims to adapt and apply the principles developed under the Nam Theun 2 hydropower project, acclaimed as a showcase by the World Bank, to the whole hydropower sector. The Power Development Plan 2015-2020 is designed to achieve the policy targets of the NPESSHS. In light of this, the GoL has signed an MOU with the government of Thailand for the provision of 7,000 MW of electricity to Thailand by 2020. Another MOU was signed with Vietnam for the supply of 5,000 MW by the same year (EdL 2015).

The Electricity Law was concluded in 1997 and later revised in 2010 and 2012. The original law of 1997 identified different types of investment in Article 10 ("Investment in Operations Relating to Electricity"), including (1) The State invests by itself; (2) The State invests with other domestic or foreign parties; and (3) Domestic cooperative or private investment. In the amended electricity law (2012, Article 26), different models were mentioned, including (1) Build, Operate and Transfer (BOT); (2) Build and Transfer (BT); (3) Build-Own-Operate (BOO); and (4) state enterprise operation. These models are commonly based on the principle of 'project finance' and are generally applied for large, complex and expensive projects in which loans are secured by the assets and revenues from an individual project under control of its project developer/company (BIS 2005).

The BOT is the most popular model in Laos. This model implies that when a developer obtains a concession from the government, it forms an independent company to manage the project. The company is governed by the majority of private shareholders (usually the developer itself hold the largest part) while the government, via its state enterprises, holds a minority share. The project company builds and operates the project during the concession period, which usually lasts between twenty and thirty years. After that, the project is transferred to and owned by the government.

The main idea behind the revision of the electricity law is the expansion of nation-wide electrification through the national grid and the encouragement of investment in power generation by the public-private partnership in order to address the risks of inadequate, unpredictable revenue and high reliance on foreign aid. It has been boosted by the Law on the Promotion of Foreign Investment of Lao PDR (2004), which contains investment incentives for foreign companies, especially in hydropower projects that are usually developed in the remote mountainous areas with no or less infrastructure.

While there have been several efforts to promote international and private participation in economic activities, the state agencies still firmly control the governance process. For electricity services, unlike in Thailand where generation and distribution of electricity are separated between the national producer, EGAT, and two other state

enterprises,[57] the EdL has monopolized the functions. It owns and operates the main generation, transmission and distribution assets in Laos, and manages electricity imports to its grids and electricity exports from its generating stations.

Established in 1961, the EdL was under the auspices of the Ministry of Public Works and operated a few small electricity businesses in major towns. After the revolution, it became a state agency under the Ministry of Industry and later the Ministry of Energy and Mines. It was only in 1997 when the EdL was corporatized; yet, it remains state-owned and answers to a board appointed by the government. In 2010 the GoL also founded EdL-Generation Public Company (EdL-Gen), which operates seven of fourteen hydropower plants in Laos and joined the newly opened stock market in 2011 (EdL 2011: 105). This trend well reflects the market-oriented policy of hydropower in the socialist state.

The EdL is the sole buyer in the national grid and it manages the use of IPP-generated electricity in the grid as well as cross-border exports. IPP production will be an increasingly important source of power generation because more commitments from new projects are planned. The EdL's General Manager is a member of the Coordinating Committee for the Development of Electric Power (CDEP), responsible for negotiations with foreign power purchasers on tariffs for export-oriented IPP projects. Generally, the EdL operates smaller hydropower projects that serve domestic demand, while larger dams are developed and run by IPPs, including all export-oriented projects. An executive of the EdL expressed that its major roles are transformed from hydropower development to more of a monitoring and coordinating agent for the protection of domestic interests. To apply this principle, the GoL hold its shares in IPP investments via EdL or LHSE, a special state holding enterprise, such as in the Nam Theun 2 project.[58]

The Ministry of Energy and Mines (MEM) oversees the EdL. The ministry is the central agency responsible for electricity supply and power sector development. Three departments of MEM practically focus on the hydropower industry. First, the Department of Energy Policy and

[57] The Provincial Electricity Authority (PEA) and Metropolitan Electricity Authority (MEA), which are distributers in provincial and capital city areas

[58] Personal interview with Komonchanh Phet-Asa, Director of Business Department, EdL, Vientiane, 25 June 2013.

Planning (DEPP) develops national energy policy and plans for energy generation, transmission and distribution, and rural electrification, renewable energy and energy exports. Second, the Department of Energy Business (DEB) is mainly responsible for the promotion of private investment in the energy sector; it monitors project implementation in accordance with the policies. DEB oversees the process of project development ranging from feasibility studies, project development agreements, concession agreements, and memorandums of understanding to power purchase agreements with support from DEPP. Third, the Department of Energy Management (DEM) is in charge of drafting energy-related laws, regulations, guidelines and safety standards, providing technical consultants and monitoring government agencies, state enterprises and private developers to ensure that they comply with the regulations. The three departments are the result of the recent reorganization of the former Department of Electricity and the Department of Energy Promotion and Development under MEM in 2011.

Nonetheless, there is no independent regulatory agency for the electricity sector in Laos, which means that regulating and regulated entities are often overlapping such as in the case of EdL, and the expected countervailing role of the regulator seems ambiguous. MEM becomes the key agency responsible for the sector's policy and governance, supported by technical information from the EdL. DEPP is also responsible for the promotion of environmental and social safeguards, including public participation and information disclosure.

Other than MEM, the Ministry of Planning and Investment is indirectly involved in the hydropower sector, through the provision of regulations for foreign investment that cover hydropower investment from foreign companies. The Lao Holding State Enterprise (LHSE) was established in 2005 to facilitate investments in the energy sector by managing the state's holdings in IPP hydropower projects, which are financed by foreign and private investors, as well as in non-hydro projects such as regarding transmission development.

As hydropower development has affected other uses of water and has environmental effects, the Water and Water Resources Law (1996) and the Environmental Protection Law (1999) require water users to comply with water resource management regulations, including the requirements to implement environmental and social impact assessments and to obtain

approval for small-scale hydropower reservoirs. These laws are in the process of rapid improvement because the governance of the water and environment sector has been entirely reorganized recently.

The Ministry of Natural Resources and Environment (MONRE) was established only in 2011 by merging the Water Resource and Environment Administration (under the Prime Minister Office) with departments of the National Land Management Authority and other related agencies such as the Geology Department and the Forest Conservation Department and Divisions within the Ministry of Agriculture and Forestry. The new ministry and its Department of Water Resources are in charge of revising the Law on Water and Water Resources with support from the World Bank-funded Mekong Integrated Water Resources Management Project (M-IWRM) and the IFC-funded Environmental and Social Standards in the Hydropower Sector of Lao PDR Program (MONRE 2013).[59]

For development projects on the Mekong mainstream and its tributaries, a special agency is dealing with its environmental aspects, separated from Department of Water Resources, which concentrates on domestic water regulations. This agency is the Lao National Mekong Commission Secretariat (LNMCS), the national coordinator of the Mekong River Commission and the main office dealing with transboundary water management in Laos. It should be noted that this Lao agency seems to be more important and higher in organizational status than its Thai counterpart as it is an independent department within MONRE. The Thai National Mekong Commission Secretariat (TNMCS) is only a division under Department of Water Resources within the MONRE in Thailand. This probably reflects the importance that Laos attaches to its Mekong water resources.

The LNMCS has two main functions. First, it is in charge of all policy planning and regulation related to the management of the Mekong and its tributaries in accordance with the MRC. Although general regulations on water resources are the responsibility of the Department of Water Resources, it needs to coordinate with LNMCS to achieve integration with the Mekong Agreement. In 2014, the Law on Water Resources of Lao PDR (1996) was being modified. The law had been improved in the

[59] During the field observation in 2013, I noted that the reorganization created much confusion among officials, due to the relocation of offices, communication and the administrative process.

past with support of the ADB but it had not been approved by the National Assembly.[60] Second, the LNMCS is the coordinator between the MRC and the GoL as well as among national agencies regarding issues of the Mekong Basin. It also has a working group in charge of coordination with the GMS and ASEAN, although LNMCS focuses on water resources rather than economic development. The chairperson of LNMC is the Minister of MONRE and the vice chairperson is the Vice Minister of MEM who is in charge of hydropower development. This simply reflects again how significant the hydropower sector is for the state.[61]

Large hydropower projects in Laos mostly apply quite a similar model. The GoL holds a minority share in most projects and works through corporatized entities such as LHSE and the EdL in case of Xayaburi HPP. DEB serves to promote and monitor IPP investments on behalf of the GoL and ensure that they comply with the general regulation on hydropower development, related laws of Laos and the Mekong Agreement.[62] The Xayaburi project, for instance, will be supervised by a steering committee set up among public agencies from related ministries such as MONRE (by LNMCS), the Ministry of Planning, the Ministry of Finance, while DEB performs the secretariat.[63]

In the case of the Xayaburi HPP, the development process consisted of five stages. The hydropower investment process typically begins with developers bidding with the host government for exclusive rights to investigate potential sites, involving a feasibility study. For the Xayaburi HPP this stage began in 2007. With the consideration of the GoL through EdL, the Ministry of Energy and Mines, the Ministry of Planning and the Ministry of Finance, the developers then proceeded to

[60] Group discussion with Thongthip Chandalasang, Viengsay Sophachan, and Luckdavone Valangoun, Lao National Mekong Committee Secretariat (LNMCS), Vientiane, 13 May 2014

[61] Ibid.

[62] Personal interview with Chanthaboun Soukaloun, Deputy Director General, Department of Energy Business, Ministry of Energy and Mines, Vientiane, 23 March 2014

[63] Personal interview with Aksorn Khamsawad, Head of Contract Division, Department of Energy Business, Ministry of Energy and Mines, Vientiane, 21 March 2014

generate more refined knowledge of the impacts, costs, and returns, after which a project development agreement was concluded.[64]

Second, after the project agreement had been negotiated, the GoL nominated the project and its developer, the Xayaburi Power Company Limited (XPCL), to the buyers, in this case EGAT on behalf of the government of Thailand. On the Thai side, the purchasing power proposal was prepared by EGAT and the Ministry of Energy before it was submitted to the Sub-Committee on Electric Power Cooperation between Thailand and Neighbouring Countries (S-ECTN) that created the working group to negotiate with the GoL and the developer. After this negotiation, a draft tariff MoU was approved by S-ECTN, the Board of EGAT, the National Energy Policy Council (NEPC) and the cabinet, while the legal text was verified by the Office of the Attorney General. The same process was completed for the power purchasing agreement (PPA) between EGAT on behalf of Thai government and EdL on behalf of the GoL for pricing negotiation.

Third, when the PPA between the two countries had been approved, a concession agreement was concluded between the GoL and the developer, XPCL. With the PPA, the developer can claim potential benefits from the project and raise more funds for its investments from financial institutions, for instance commercial and state-owned banks in Thailand.

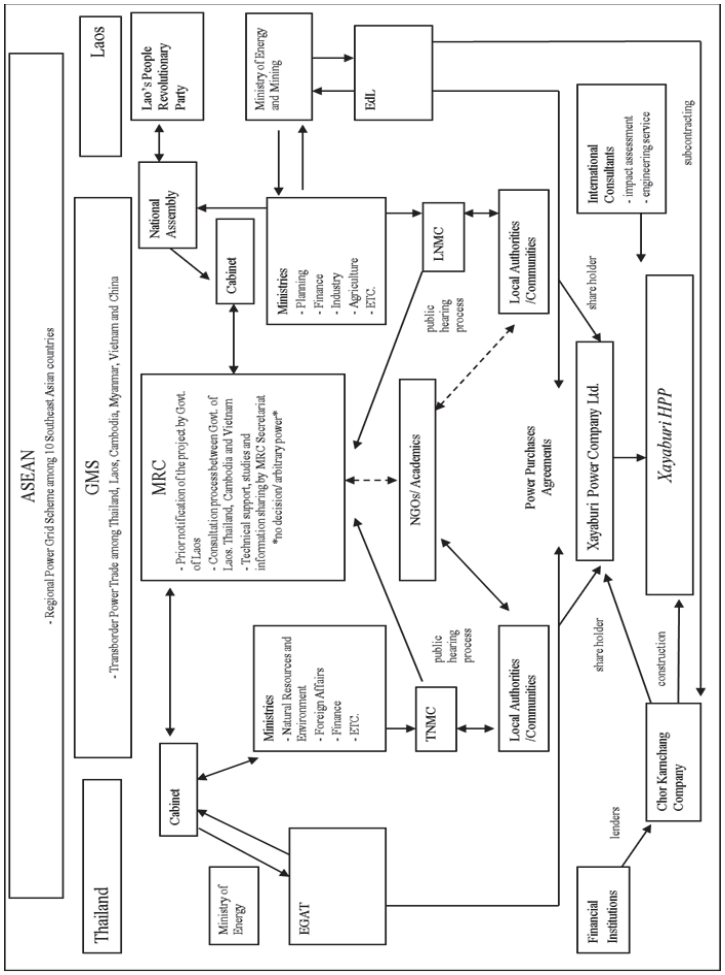
Fourth, because the construction of any mainstream dam is subject to the provisions of the Mekong Agreement 1995, the project needed to be submitted to the Prior Consultation process in the MRC, including the arrangement of public hearings in all four countries (see chapter 4).

Fifth, after the MRC process had finished, the National Assembly of Laos approved the project and the construction was started officially. Nevertheless, this stage is disputed outside Laos since Cambodia,

[64] Foran et al (2010: 21) comment that this stage is significant to commitment for further development as: "A developer has typically invested 1-2 million US dollars to complete the feasibility study stage for a large project. Just at the stage of public consultations, the wider public is beginning to participate, and may raise fundamental questions….such questions at that stage are not welcome to the developer, resulting in frustrations for all parties and as the amount of resources invested increases, willingness to withdraw declines."

Vietnam and NGOs in Thailand disagreed with the Lao interpretation of the Mekong Agreement and the MRC process. The governance complex of these steps is summarized in diagram 5.1.

Diagram 5.1 Governance structure of the Xayaburi HPP



5.3.3 From the regional plan to local challenges

The transformation of relations does not happen only in regional and national governance, but also at the local level, as this is increasingly integrated into the transnational market. Promoters of hydropower development and regionalism usually promise prosperity for the states and their people. Nonetheless, implementation of that vision is always a challenge, especially at the local level where development impacts are felt directly. Because of the mountainous environment and difficult road conditions, it takes around nine hours to reach Xayaburi by bus from Vientiane, although the distance is not more than three hundred kilometres. However, on the border between Vientiane Province and Xayaburi Province[65] the road has been all paved on the Xayaburi side by the Thai company for the transport of people and construction materials from the Thai border to Xayaburi town and the dam. According to local people, infrastructure has been much improved and many Thais have come to Xayaburi, which was once a remote and sleepy town, after the dam construction had begun (field observation 2014).

Figure 5.2 The Mekong crossing point between Vientiane Province and Xayaburi Province in Laos[66]
Photo by Ome Chattranond, May 2014

[65] This part of the Mekong locates entirely in Lao territory, not the border with Thailand. Vientiane Province is not a part of Vientiane Capital but its greater region.
[66] The bridge is being built by a Chinese company, partly with grants from the government of the Netherlands.

Because the run-of-river design of Xayaburi HPP needs no large reservoir, the developer claims that there will be fewer flooded areas and less resettlement compared to large dams in general. Of fifteen villages, with approximately three-thousand inhabitants, only one has been totally resettled. Most of the inhabitants have just moved ('relocated') from lower to higher areas. The terms *Yok Yai* (resettled) and *Yah Yai* (relocated) are differentiated in Lao regulations: affected villagers who completely lose their dwellings and lands are entitled to different levels of compensation in the case of resettlement and relocation.[67]

For instance, in Ta Lan, the biggest and nearest village to the dam, not all households, but only those in flood-prone areas had been moved just a few hundred meters away. On a population of 500, only 58 out of 103 families, including a community temple, were relocated in 2013. Most of the villagers used to be rice and corn farmers but are now hired as labourers at the dam construction, similar to the situation in most of the other villages. The resettlement program has provided vocational training focused on activities such as live stocking and commercial skills, supported by local departments of the government.

Figure 5.3 Relocated Ta Lan village on the new road to Xayaburi Dam
Photo by: Ome Chattranond, May 2014

[67] Agreement of the Chairman of Resettlement Management Committee of Xayaburi HPP on Policy, Compensation and Rehabilitation 2012, based on Decree on Compensation and Resettlement of People affected by Development Projects of Lao PDR, September 2006.

The Resettlement Management Unit (RMU) of the Xayaburi HPP is the coordinating office that represents the GoL at the local level. It works closely with PT Development, a Lao private company and a minor shareholder of XPCL, which is generally operating all social affairs of the project. The role of local governments is mainly focused on resettlement activities. After the concession agreement was signed between the GoL and the developer, two RMUs were set up in two affected provinces: six villages in Xayaburi and nine villages in Luang Prabang Province on the other side of the river. In addition, officials representing the energy departments of the two provinces have a small coordinating office at the XPCL office near the construction site. Besides hydropower development, public-private collaboration seems to be also a model linking national and local development.

The RMU work is led by a local branch of the Ministry of Planning[68] while its committees are composed of local line agencies at provincial and district/town levels, e.g. for energy, environment, agriculture, culture and tourism as well as mass organizations including the Lao Women's Union, the Youth Union, and the Lao Front for National Construction (socialist solidarity affiliation). All activities have been run within the framework of the Decree on Compensation and Resettlement of People affected by Development Projects of Lao PDR 2006 and the specific Agreement of the Chairman of Resettlement Management Committee of Xayaburi HPP on Policy, Compensation and Rehabilitation 2012.

According to an official at the RMU, the resettled villagers need much knowledge and many skills to adapt to their new lives, especially when changing from a self-reliant lifestyle to a life under the market system.[69] Moreover, communities have not been moved in their entirety in some villages, so there were disparities within communities. Many villagers want to relocate and get similar benefits as their relatives or neighbours. Nonetheless, because of limited budget and land availability, the government may not be able to honour all requests. While Laos is the least densely populated country in Southeast Asia, it is also the hilliest with a relatively limited surface of arable land. The limits of available

[68] But the secretariat at national level of Xayaburi HPP is performed by the Ministry of Energy and Mines.

[69] Personal interview with Phouvang Kongsap, Deputy Chief of Resettlement Management Unit of Xayaburi HPP, Xayaburi,14 May 2014.

land pushed the program to merge some villages from three to one.[70] Because the country's poverty alleviation strategy attempts to move people closer to urban areas where there is better infrastructure and more employment (MRC 2011e:15), the relocation may be a by-product of this policy by gathering the scattered rural population into more urbanized areas and integrating them into the market economy.

Hydropower development also seems to embed the market economy into local livelihood. Relocated villagers are compensated with new houses, electricity, food and money allowances, land and plants as well as new public buildings, e.g., schools and temples.[71] However, their livelihood has been changed significantly. In a village, many self-reliant fishermen are trained to be farmers in rubber plantations. They also plant a small amount of rice for household consumption since rubber trees are still small and some space is available.[72] This will be impossible when the rubber trees grow up and their lives will become more dependent on the market.

In the absence of active social movement dealing with the impacts from hydropower development in Laos, most of the movements are based in Thailand. For example, Chinag Khong, a border town on the Mekong River bank in Northern Thailand, hosts a well-known local NGO named 'Rak Chiang Khong', which deals with development issues on the Mekong. This NGO has contributed to educating people and campaigned against large dams on the Mekong in China since 2002.[73] The anti-dam campaigns have attracted attention from Thai and international media during the seasonal water crises in the Mekong Basin, especially in 2010.

However, the international cooperation between Thai and Lao local authorities across the Mekong has been limited because of the centralization of foreign affairs at the national governments. Local authorities in Thailand such as in Chiang Khong do not have much impact on the ongoing dam projects on the Mekong. According to local informants, it is because all decisions involving the Mekong River are usually made in Bangkok and Vientiane. Therefore, the local

[70] Personal interview with Vilaysak Thor, PT Development, Xayaburi, 15 May 2014.
[71] Field observation, 2014.
[72] Personal interview with Lang Inthavong, Na Tor Yai village, Xayaburi, 15 May 2014
[73] Personal interview with Jeerasak Inthayos, Rak Chiang Khong Group, Chiang Khong, 13 March 2013

governments are more concerned with local issues at hand, e.g., land grabbing, migration and tourism.[74]

Local public participation in decision-making processes on hydropower seems to be limited both in Laos and Thailand. According to some Thai NGOs[75], in the case of the Xayaburi dam the Thai government claims that the project is under Lao sovereignty; hence, the Thai authorities have no legitimacy to interfere. An International Rivers coordinator in Thailand has commented that information on the project was publicly released only in 2011 while its feasibility study had started in 2007. For civil society, time was too short to get familiarized with the project's costs and benefits. In 2011 three public consultation forums were held in Thailand in accordance with Thai law and the Mekong Agreement 1995. According to a coordinator of International Rivers in Thailand, the forums did not sufficiently consult the public as she notes:

> Around two-hundred questions were asked by participants but just a few of them were answered by the organizer. In each forum, there were a few officers from the Thai National Mekong Committee (TNMC) and the MRC giving some information to people but there was no one from the company. It looks like the government agencies want to keep themselves in a safe-zone and let it be the affairs beyond their responsibility. It seems now the government has collaborated mainly with the companies.[76]

In order to cope with the complexities of hydropower development, a Thai political ecologist argues that the activists should learn more about the regional context of transboundary development but rather concentrated on struggles at the domestic level as intervening into foreign affairs would be too problematic.[77] Some local NGOs propose that a realistic option for counter-balancing the development of large

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[74] Personal interview with Chalerm Tawiya, Mayor of Vieng Chiang Khong Municipality, Chiang Khong, 14 March 2013; and Orathai Hongprayoon, Mayor of Vieng Municipality, Chiang Khong, 14 March 2013.

[75] Personal interview with Teeraphong Phomhan, Director of Living River Siam, Chiang Mai, 27 March 2013; and Witoon Permphongsachareun, Mekong Ecology and Energy Network (MEE-NET), Bangkok, 9 April 2013.

[76] Personal interview with Pianporn Deetes, International Rivers Thailand, Bangkok, 20 April 2014.

[77] Personal interview with Chinarong Setthacheu, Mahasarakahm University, Mahasarakham, 5 February 2014.

dams probably is "countering first our own government and companies which are promoters of the dams in our neighbouring countries."[78]

Social movements challenge the centralized governance of the state, though to a limited degree. International and local NGOs support the creation of the Thai People's Network for the Mekong and the Save the Mekong Coalition to be a centre for the movement. They have sent letters to the MRC's Development Partners and the Prime Ministers of the member states, asking for a sustainable approach to the Mekong mainstream dams.[79] In November 2012, during the 9th Asia-Europe Summit in Vientiane, the movement gathered in boats on the Mekong River in Nong Khai, a Thai border town opposite to the capital of Laos, to protest against the Xayaburi dam. The protest was organized by the Network of Thai People in Eight Mekong Provinces and the Network of Community Organization Councils in Seven Northeastern Provinces (Herbertson 2013). These campaigns significantly pressured the Thai government to disclose its policy. Officials in TNMC and EGAT agree that they have to prepare more and better information for the public hearing forums which usually are fierce debates.[80]

Some NGOs have commented that environmental laws in Thailand are relatively progressive compared to those in neighbouring countries. Nonetheless, the story seems much different when Thai developers can transfer their capital to hydropower projects in neighbouring countries where the functioning of social movements is strictly limited. In 2012 the network of Thai local communities along the Mekong initiated a lawsuit to an Administrative Court against Thai authorities who deal with Xayaburi dam investment because they arguably did not comply with the Thai constitution and the MRC agreement by failing to properly notify the public about the project and conduct an adequate environmental impact assessment. The court finally refused the case for the reason that these people did not really have an interest in the project because it is

[78] Group discussion with Jeerasak Inthayos, Nopparat Lamul and Malee Pattanaprasitporn, Rak Chiang Khong Group, Chiang Khong, 19 December 2013.
[79] Personal interview with Teeraphong Phomhan, Director of Living River Siam, Chiang Mai, 27 March 2013.
[80] Personal interview with Nirat Phuriphanpinyo, National Mekong Committee Secretariat, Department of Water Resources, Bangkok, 21 February 2013; and Paruhas Vongthaned, Director of Energy Economic Division, Electricity Generating Authority of Thailand (EGAT), Bangkok, 3 April 2013.

developed outside Thailand.[81] However, on 24 June 2014, after the villagers appealed to the Supreme Administrative Court, the court agreed with their argument and accepted the case (Nijhuis 2014).

Although it was just an initial step, EnLaw (2014) has highlighted some elements of the court's decision. Firstly, according to a Thai law – the Rule of the Office of the Prime Minister on Public Consultation by Public Hearings 1996, Article 7 – for any development of 'the government project' that may cause adverse impacts to the environment, culture, occupation, safety, way of life of individual, community or society, and serious arguments among interested parties, the concerned agencies may organize public hearings. The court applied a broader definition that includes purchasing agreements between Thai government agencies and companies that lead the development of a private project, instead of a narrow definition that delimits government projects merely to those developed directly by the government or are related to concessions and subcontracting to private companies. Therefore, the Xayaburi HPP was defined as a government project and the requirement for open information access, public hearings and a consultation process had to be honoured. This was the first time that a Thai court seriously referred to an international agreement – in this case, the Mekong Agreement 1995 – particularly on the public consultation process binding to domestic practices. Finally, the potential transboundary impacts from the project were mentioned as a reason why the court accepted the case. For civil society, it was the first time that Thai authorities officially recognized that the Xayaburi project would seriously affect local livelihood.

The account in this section shows that the complexity of transnational investments has made the public responsibility over the project unclear. Although the project is primarily financed by Thai capital to serve a demand in Thailand, the Thai government can claim that the project is taking place under Lao sovereignty. In this way, transnational developers may possibly capture transboundary water resources in situations of fragmented regional governance with even fewer restrictions than in the case of domestic development.

[81] Personal interview with Jeerasak Inthayos, Rak Chiang Khong Group, Chiang Khong, 13 March 2013.

5.4 Conclusion

Although it is the smallest country in the Mekong Basin in terms of its population and economy, the hydropower issue makes Laos weightier in the regional forum as a major supplier of hydroelectricity. Meanwhile, national economic reforms since 1986 have led to the establishment of a market economy and currently promote public-private partnership as a popular model of large-scale hydropower development in Laos. New laws and regulations are being introduced with support from the IFIs and international donors, pushing various global agendas but essentially contributing to the country's marketization. Complementary policies of Thailand, the major destination of hydropower export and the origin of developers in the hydropower industry, have significantly motivated Laos' ambition to become the Battery of Asia.

Despite the high, but decreasing, dependence on international donors, the GoL has selectively applied the policies supported by foreign assistance. Hydropower development on the Mekong mainstream, illustrated by the case of Xayaburi HPP, by nature is neither a domestic nor a bi-lateral project between Laos and Thailand, but a bundle of activities involving public-private partnerships and regionalization pushed by ASEAN and the GMS. The project is an important step toward the realization of a regional power grid and transborder power trade and will likely be a showcase for subsequent hydropower projects on the Lower Mekong mainstream.

The Xayaburi project is an illustration of the process of state transformation, including power shifts in location, actors, and ideology of governance (Hameiri and Jayasuriya 2012: 179). The *location* shift took place when decision-making on a (geographically speaking) domestic project was organized across national borders by a complex of bi-lateral relations involving a power trade agreement, multi-lateral relations in the MRC, and public-private relations in the project development process of the Xayaburi HPP. Multilevel (and multinational) governance has actually not been implemented through hierarchical-formal regional institutions but in a complex of, rather, informal regional governance.

Different *actors* exercise power in the location shift of governance beyond the state agencies. The IFIs such as the World Bank and the ADB have supported Laos in this transformative process through their multilateral financial and technical assistance, promoting public-private

partnership. New developers such as construction companies and financiers from China and Thailand usually supported by their governments though public policy instruments such as national power development plans and cross-border power trade agreements, have importantly contributed to the growth of transnational hydropower development.

Being the Battery of Asia by blocking a transboundary watercourse may complicate the relations between Laos and its neighbouring states as well as between public and private actors, both at domestic and international levels. Although the MRC promotes integrated water resources management with multi-stakeholder participation, the region's governments still play a decisive role in decision-making. They seem to prefer public-private partnerships with transnational private developers because these supposedly provide solutions in view of the lack of capital and state capacity that are needed in pursuing national development goals.

Non-state actors are often marginalized in decision-making processes but expanding transboundary developments have urged them to reconsider their struggles. While the development of civil society in Laos is limited, public awareness has been raised by an active civil society in Thailand both at local and international level. However, the changing power relations between the state and the private sector under the influence of emerging public-private partnerships and transnational investments critically challenge civil society because of unclear public responsibilities and the relocation of conflicts in water resources to other countries. The controversial lawsuit on the Xayaburi HPP involving social movements and state agencies in Thailand has become a good example of this.

The shifts in the locations and actors of governance are ultimately outcomes of the shift in *ideology*. Traditionally the state tries to claim its sovereignty over water usage while intervening in the market by providing public goods and regulations. The emphasis on water nationalism, which is reflected in state policies and propaganda, was heightened when Laos opened its door to the global and regional economy in the late 1980s. The hydraulic mission gave rise to centralized national-based governance and large-scale hydropower development, for which it received much investment from international funds and developers. For a state that cannot control its international watercourses

effectively and provide sufficient public welfare on its own, the regional market becomes a sound option. That state saw the opportunity to transform from being a development provider to a market facilitator, by using its power in regulatory governance. This demonstrates that. Although neoliberal reforms enhance the participation of private actors in the economic system, state actors can still legitimize their function in the provision of development through public-private collaboration in a model of the regulatory state.

Meanwhile, international development agencies and donor agencies have constantly promoted global ideologies such as sustainable development through the integrated water resources management approach in the MRC. Multilevel governance, theoretically enhanced by regionalism, is the favoured mode of governance for this approach of TWG. Nonetheless, the emerging regulatory regionalism, which bypasses the regulatory power of supranational institutions, practically impedes multilevel governance. This is the case because regulatory regionalism implies that decision-making power is exercised by national governments that implement 'regional' policies with 'national' regulations to facilitate hydropower development through the rising involvement of 'regional' capital from the neighbouring countries of Laos.

6 Conclusion: Towards Regulatory Regionalism in the Mekong Basin

Introduction

After the construction of the Xayaburi Dam officially started in 2012, the government of Laos (GoL) has proposed three other hydropower projects on the Mekong mainstream to the MRC.[82] The Xayaburi project has become the pioneer model for other dams to follow. Although they are smaller in size, all of the ongoing mainstream dams in Laos share fairly similar characteristics with the Xayaburi, including that they are built for export-oriented production, receive the majority of their investment from foreign private funds, and are co-developed by the GoL and foreign companies from neighbouring countries. Even though these projects are based on bi-lateral international cooperation, they are planned to contribute to the regionalization of energy trade and the building of a regional market. Apart from current plans, in total, twelve dams are planned on the Lower Mekong.

This study has attempted to understand the transboundary water governance (TWG) of hydropower development in relation to regionalism in Southeast Asia, particularly in the Mekong Basin. In the former three chapters, the dissertation has discussed the dynamic context of hydropower development from the global level to the Lower Mekong Basin (LMB); the formation of regionalism and regionalization within relevant frameworks of the Greater Mekong Subregion Economic Cooperation (GMS), the Association of Southeast Asian Nations (ASEAN), and the Mekong River Commission (MRC) in connection

[82] Don Sahong project (260 MW) in southern Laos was proposed in October 2013 and developed by a Malaysian company. Pak Beng project (912 MW) and Pak Lay project (770 MW) were proposed in November 2016 and June 2018 respectively. They are in northern Laos and developed by Chinese companies.

with the hydropower issue; and the resulting governance dynamics and state transformation in the case of Laos.

The major argument formulated in previous chapters is that regionalism in the Mekong Basin is driven essentially by the transformation of the state, while the idea of regionalism has been incorporated into national governance through pro-market and regulatory policies without establishing strong centralized supranational institutions. It is a kind of regionalism that states do not simply embrace by transferring their power to regional institutions; rather, they employ it as a strategy to keep themselves relevant and able to achieve developmental goals through adopting a model of regional governance that favours, or at least does not challenge, the interests of the state. The outcome of development would be uneven for actors, as those closer to the interests of the state, including private firms as subcontractors to the state in development, may benefit more than others.

This concluding chapter functions as a synthesis of the argument on TWG and the political economy of regionalism, which links the logic of water marketization to the building of regulatory regionalism. It starts with answering the research questions, framed as four propositions regarding the politicized marketization of revived hydropower development on the Lower Mekong mainstream, the emerging and uneven development of the regulatory state and regulatory regionalism, and the transformation of the state. The second part follows up with implications of the findings and lessons learned in terms of theoretical and policy perspectives. Finally, the third section proposes a potential research agenda crystallised from the major findings of this study.

6.1 Responses to the Research Questions

To answer the research questions on the relationship between regionalism and the TWG in hydropower development, this research project has applied the analytical framework built on the concepts discussed in chapter 2, including TWG and water marketization, the regulatory state, and new regionalism. Applying international political economic and governance lenses, the logics of water, market and state are interconnected in an explanation of regional governance embedded in so-called regulatory regionalism.

6.1.1 Politicized TWG of hydropower development

Chapters 3 and 4 have highlighted how hydropower development on the Lower Mekong mainstream reflects the changing landscape of global and regional political economy. Changes in hydropower development have triggered a revival of the hydropower industry and stimulated the regionalization of energy markets through transnational investment and cross-border trade in electricity. Water is being exploited in response to patterns of demand and supply across national boundaries that have been generated by economic growth and capital accumulation, but the exploitation of water also serves the logic of states in their struggle to control territorial resources and take advantage of the emerging regional market.

Regional politics has affected the uncertain fate of hydropower development in the LMB. Although the Mekong Committee (MC) had studied and proposed large dams on the Lower Mekong mainstream since the 1960s, none of them were implemented until 2012, when the Xayaburi HPP became the first main dam project. The plans for this dam seem to have created more public awareness about hydropower development in the region. The construction has started in 2012 and the dam is planned to be operational by 2019, mainly serving for electricity export to Thailand.

The revitalization of hydropower reflects the emergence of a regional energy market, matching the demand for and the supply of energy, as well the increase of economic ties with expanded capital flows within the region. The specific geographical location of Laos surrounded by the growing economies of China, Thailand, Vietnam, and Cambodia, makes Laos an emerging strategic point for regional power trade. The Upper Mekong dams built in China technically make the proposed projects downstream in the Lower Mekong, including the Xayaburi dam, more technically feasible and attractive to developers because they lead to a more stable water flow all year round.

The IFIs and other international donors have also pushed for regulatory reforms, related to environmental standards and transparency of the hydropower industry, especially through the MRC. However, their influence seems to be limited in comparison with the increasing role of transnational companies in the region, which have gradually become major players in Mekong hydropower projects through both private or

public-private partnership investment. These developers have been facilitated by economic integration frameworks, i.e. ASEAN and the GMS, which were promoted by the ADB and have been aiming to stimulate regional development in electricity infrastructure and trans-border power links to support other development sectors.

The politics of legitimacy plays an important role. The state in Laos has tried to create instrumental legitimacy – based on the perceived effectiveness of service delivery by the state – by stimulating economic and infrastructure development, coupled with regionalization aimed at attracting foreign investment and expanding hydroelectricity exports. Meanwhile, the state has tried to enhance its substantive legitimacy – or the perceived right of the state to exercise social control – by emphasizing the potential of regionalism to contribute to values such as regional stability, prosperity, and cooperation. Although Laos depends on Thailand for much of its hydropower investment and exports, the project's infrastructure is seen by the national government as a contribution to its hydraulic mission and water nationalism.

The ongoing process of regionalism has served state building in the Mekong region. Unlike in the case of the EU, where most states have a long history and a relatively robust governance framework, modernization and marketization have arrived relatively late in most of the Mekong states. The latter are highly influenced by external forces: global institutions, foreign aid agencies and transnational companies. With limited governance capacity and poor or non-existing infrastructure, public-private partnerships such as in hydropower projects seem to accelerate the centralization or recentralization of state control over natural resources, which are often located in remote areas and are generally subject to little intervention by the state.

The state and its legislative and judicial bodies, regulatory agencies, and enterprises, traditionally try to control water resources by providing public or private rights of access. In the case of international watercourses, states tend to claim their sovereign rights or territorial integrity over water usage, which often leads to international tensions. Meanwhile they intervene in the market through regulation and the provision of public goods. Regulation includes the creation, facilitation and monitoring of markets, conflict resolution, and sometimes (in)direct intervention in the market in the form of public-private partnerships. In this case, the international market is formed to match demand and

supply with pricing and institutionalization of hydropower across national borders as well as to provide states with resources and income through trade and investment.

While globalization has been conducive to the rise and expansion of the regulatory state, regionalization has shaped its implementation with distinct characteristics. As discussed in chapter 4, the regional governance of hydropower, and the energy sector more broadly, in the Mekong Basin has encouraged regionalization through several projects, including the construction of a regional power grid and transmission lines, and led to efforts to push integrative regulations for cross-border power trade. The market provides a space for tradable water in the form of hydroelectricity, which is technically more efficient when implemented at the regional scale, unbound by national borders. This requires a facilitating structure that creates and sustains the transnational market, and regionalism seems to have provided a sensible strategy.

6.1.2 Emerging regulatory regionalism and regionness

The case of hydropower development on the Lower Mekong mainstream reveals the contradictions between regionalism and TWG. While marketization and integrated water management at the regional scale have become core elements of the leading paradigm of regionalism in the Mekong Basin, TWG has been shaped by a state-centric approach influenced by the old form of regionalism rooted in the Cold War. The states still try to control TWG in order to serve their interests, and attempt to dominate TWG at the national level instead of transferring their power to regional institutions.

Therefore, the Mekong regionalism is a mixture of 'old' and 'new' regionalism, where a market building process takes place within a structure of states that attempt to maintain control over their natural resources. The main objective of Mekong regionalism is to facilitate the commodification of nature in order to enlarge the market and provide economic opportunities to states and the private sectors, which collaborate closely in many development projects though public-private partnerships. Laos is a clear example of how a relatively weak state can use regionalism to overcome the limits of its small market and lack of capital to exploit its large potential in hydropower.

The form of regionalism as applied in the Mekong Basin has not produced a cohesive region where regional governance mechanisms provide effective responses to regional problems. However, the region has evolved in such a way that a certain degree of regionness has resulted. The evolution of regionness has not been even across periods and sectors, as is evident from the development of regional water and energy sectors in the Mekong basin. The analysis in previous chapters has emphasized that regional water governance has evolved much slower than the regional energy industry.

Nevertheless, it may be an exaggeration to depict regulatory regionalism as the triumph of the neoliberal campaign for maximizing the market while minimizing the state. Both state and market may be enlarged and strengthened because of the regulatory reforms. Regulatory regionalism can be seen as an attempt to strengthen governance in light of the increasing roles in development played by private companies and civil society, where previously the state used to be the prime mover (Braithwaite, 2005: 35). This transformation inevitably generates changing structures and consolidation not only within individual states but also among states in the region, producing a form of 'regionness' in the Mekong Basin.

Table 6.1 Regionalism, regionalization, and the degree of regionness

	Weak regionalism	Strong regionalism
Low regionalization	Regional space	Regional society
High regionalization	Regional complex	Regional community

The degree of regionness correlates with the degree of regionalism in terms of the commitment of states to manage their problems at the regional level with regional institutions, and regionalization in terms of the intensifying processes of social transactions and capital accumulation among state and non-state actors. Table 6.1 explains their relations (see Hettne and Söderbaum 2002). A regional space is the expression of weak regionalism and low regionalization, while higher regionalization in social and economic interactions, such as the shared use of water resources, potentially develops the space into a regional complex. When rule-based

regional governance is established in the form of stronger regionalism in order to keep regionalization in check, the result is a regional society. The formation of a regional community or ultimately a regional state, which is a cohesive unit of integrated states, is rare but conceptually possible when both the degree of regionalism and the regionalization are intense.

The findings of this research project imply that there are three instances of 'regionness' in the Mekong Basin. Firstly, *a regional space*, delimited by the territorial boundaries of the Mekong Basin, has been transformed into a growth area dominated by economic regionalization under the influence of regionalist frameworks, such as ASEAN, the GMS and the MRC. The region is characterized by increasing interdependence among transnational actors, involved in the exploitation of resources that do not conform to the boundaries of territorial sovereignty, thus producing *a regional complex* of economic and social interactions. The increase of international investments on dams within the region is a good example of the coming into being of a regional complex in the Lower Mekong Basin.

Although international trade and investment relations with countries such as the US and Japan are still important to the region, in some areas trade and investment have become decidedly focused on the region, as shown by the case of Laos and the hydropower sector. Regionalization could spill over from hydropower to other sectors, because of the increasing construction of infrastructure and the pressure to deregulate regional investment flows. It is unlikely that this regional complex will develop into *a regional society* because there is no rule-based pattern of relations governed by regional governance arrangements. The current situation is one of uneven regionness, where sectoral integration in some areas is combined with lower degrees of rule-based governance in others.

Secondly, particularly in the water sector, MRC-led TWG forms some degree of a regional society, because it has led to the increasing use and management of shared resources, guided by some regional rules and organizations. However, this society has very limited capacity because it is dominated by state-centric governance. For example, while international donors are influential in policies traditionally prevalent in the MRC, the committee's riparianization has implied a change of structure. Since its establishment, the MRC has depended much more on

assistance from donors from outside the region – the so-called development partners – than on the contributions from riparian states.

The recent riparianization has reorganized TWG by relocating most of the implementation from the regional body to national agencies, downsizing the international secretariat, and placing higher financial burdens on the member states. This process reveals the contradiction between weak regionalism and strong regionalization. In other words, when the logic of the state dominates the market and the water sector, the degree of regionness is weakened and it becomes difficult to move beyond the level of the regional society.

Thirdly, although regionness in the Mekong Basin is not rooted in strong supra-national governance, it is linked to the accumulation of capital – funding, technologies, man-power, and natural resources – concentrating on and operating within a regional space. At least in theory, regionalization potentially creates a more diversified economy and integrated market, which may overcome the limit of states' boundaries in using and distributing resources. It potentially reduces tensions over water allocation among states and societies, as other public goods or benefits are produced in exchange. Nonetheless, the interests of actors with higher demand of electricity – e.g. industrial sectors and urban societies – will easily prevail over those of local people, who are dependent on water for food production to support their livelihoods.

6.1.3 Regulatory regionalism and the state transformation

The findings of this study indicate that arguments about the withering away of the state are not valid. State actors in the Mekong Basin seem to be able to adjust themselves to new political economy contexts by adopting strategies of regionalism. Nevertheless, at the same time, it is impossible for them to monopolize the space of the state since domestic and foreign private sector interests, decisions, and rules impact on the state's regulations because of the adoption of forms of regulatory regionalism. The transformation of states does not only change the location where power is produced and exercised within a state but also creates a situation of uneven regionness.

We can observe the transformation in three interrelated dimensions of state power (Hameiri and Jayasuriya 2012: 179). First, the transformation includes shifts in the location of actual governance

structures and spaces where state power is exercised, in this case across national borders to the transnational space of the Mekong Basin; in the kinds of actors who exercise that power, in this case moving from the dichotomy of public and private, or national and international to developers and non-developers; and third, in the ideology employed to legitimize the transformation, which in this case a tension between state sovereignty and the ideal approach of regional/multi-level governance. This study argues that these shifts express a combination of struggles between two types of governance, i.e., statism and regulatory regionalism (table 6.2).

Table 6.2 Three shifts in the state power

types of governance	Location	Actor	Ideology
Statism	National boundaries	State vs non-state/ National vs international actors	State sovereignty
Regulatory regionalism	Transnational/ ecological boundaries	Public-private developers vs non-developers	Regional/ multilevel governance

This thesis has interpreted regionalism not merely as a process of regional integration, where states transfer part of their power to regional institutions for their common interests, and which would ultimately make states less dominant in international affairs. The transformation of the state into what has been called a 'regulatory state' is part of the process of market building. Especially in the case of developing states like Laos, regionalism has become a strategy aimed at enhancing the role of the state both in terms of economic development and governance capacity, as the state is collaborating closely with private, and in the case of hydropower development in Laos, also transnational actors. Such transnational actors advocate regulatory reform in the country in order to obtain predictable and effective governance structures that support open markets, which facilitate capital flows throughout the region.

Regional frameworks, such as the MRC, appear unable to provide a counterweight to the forces of regionalization. While the commission has mandates related to both economic development promotion and environmental protection for sustainable development, the unclear text

in the Mekong agreement 1995 and the loose structure of the commission make its protection mandate legally weak. For instance, there appeared to be no compulsory or unified format for public consultation processes applicable to the Xayaburi project, as nothing had been included on this in the Mekong Agreement of 1995. Consequently, it was left to the member states to apply the Agreement on the basis of their own interpretation and design domestic process according to their own preferences.

The former chapters have shown that real decision-making power is in the hands of national ministries; in the interplay between ministries the energy sector usually overshadows the water sector because of three reasons. First, the energy sector is important for governmental priorities of income generation to sustain economic growth and poverty reduction. In the case of Laos, for example, the GoL has formulated its vision to be the 'Battery of Asia' and to graduate from LDC status by 2020. Second, private companies in the energy industry are eager to support hydropower projects and provide other infrastructure, such as roads, bridges, electricity transmission lines, etc., mainly to facilitate the construction of dams, but also to provide basic services that the poor state is not capable of delivering adequately. Third, water simply seems to be an abundant resource in tropical Southeast Asia, and arguments regarding the risks of alternative water use can easily be discarded.

Although disparities in economic and political development across countries in the LMB have an impact on countries' position vis-à-vis formal regional institutions, regional governance in the water and energy sectors is influenced heavily by transnational sectoral networks of public and private agencies. The governance arrangements, as well as the ensuing regionalization, in each sector depend on the priorities set by the regional framework and national governments, and are facilitated by regulations regarding private domestic and foreign investment promotion. This process, however, makes the dichotomy between the regulatory state and the developmental state unclear, as developmental goals are essentially the primary motivation for the formation of the regulatory state.

This research project has emphasized that the state uses regulations in order to control water resources and facilitate the process of marketization. The states in the Mekong Basin are confronted with private sector-driven transboundary hydropower development projects

and respond with political projects of regionalism. Meanwhile, regionalization creates economic growth and interdependence in foreign investment, energy trade, employment, infrastructure etc., which contribute to the developmental objectives of states in the region. Yet, regionalism, imposing regulations to regional governance, and regionalization all operate at different speeds. In the case of the water and energy sectors, economic development requires increasing regulation of the emerging national and regional markets. Because of regional interconnectedness, the development of projects on transboundary watercourses may escalate domestic issues to the regional level and put more pressure on both state and non-state actors. Among those non-state actors, private developers and civil society groups undertake activities that result in the regionalization of social transactions or demand a higher degree of regionalism.

6.1.4 Regulatory regionalism and uneven development

The making of regulatory regionalism tends to create stronger market-state collaboration but also leads to uneven development, affecting different actors differently depending on their relations to the state and the market. Regionalism in the Mekong Basin seems driven by two competing perspectives regarding hydropower development. The first perspective focuses on the maximization of benefits from water resources through investment and trade in hydroelectricity. The second perspective emphasizes the need for minimization of transboundary impacts from that development.

Although this study has not focused directly on the environmental and social impacts deriving from hydropower development, it is important to keep in mind how such activities generate uneven benefits and threats for different actors and that different scales of governance are expected. Hydropower development transforms 'water into capital' and 'a natural system of river basins into a market place'. The growth of trade and investment through regionalization highly depends on uneven development in the region, which comprises countries with highly different costs of labour, land and other resources.

The changing context of the Mekong Basin, which has been much more stable after the end of the Cold War, constantly pushes regional capital accumulation by transnational investment from richer and energy-

thirsty countries such as China and Thailand to capital-poor but resource-rich countries such as Cambodia and Laos. Facilitating regulations created by regionalist frameworks that are established by states do not only accelerate this capital expansion but create uneven development outcomes across scales and related actors.

Whereas the government of Laos positions itself in the uneven regional order as a main producer of hydropower or even the 'Battery of Asia', the complementary approaches of ASEAN and the GMS for the promotion of marketization and export-oriented strategies strongly support this ambition. Nevertheless, these positive claims may be challenged by the view that the GMS, ASEAN and the MRC have been exclusive clubs of state actors, and do not provide much access to citizens in decision making processes. For instance, criticisms of the GMS usually focus on its prominent market-oriented position, which tends to generate over-exploitation of natural resources, negative environmental impacts and uneven development among social classes (Glassman 2010). The transboundary trade of hydroelectricity, as a kind of 'virtual water', unavoidably affects 'real water' regulated by hydropower dams, including changes to water flows influencing sediments and fisheries. Roth and Warner (2008) note that the development of virtual water as in agricultural policies closely relates to the political economy of resource allocation that always benefits some and harms others. Besides national governance that decides on water allocation, regionalism also influences the process in this case.

Based on the discussion in chapter 5, this research has identified four important problems in the process of hydropower development. First, there is an insufficiently strong regulatory framework to address the very dynamics of development: as an example of this, we may note that the concession agreement and power purchase agreement of the Xayaburi HPP were signed before the regulation on resettlement was concluded in 2012. Second, although compensation and new infrastructure such as schools, roads, and electricity are provided for resettled villagers, it is unclear how knowledge and skills of local people would be developed to help them adjust to their new livelihood, which is significantly changing from self-reliant production towards the market system. Third, public participation in the decision making process of the Xayaburi HPP was organized, but it seems to have been insufficient. Centralization has made decisions involving the international river and transboundary issues

into an exclusive affair of the national governments in Bangkok and Vientiane. Fourth, the changing role of the state as the market facilitator, especially at the transnational level, may produce a democratic deficit of the state to its citizen. For instance, when the network of Thai local communities along the Mekong initiated a lawsuit to the Thai Administrative Court against the authorities that were dealing with the Xayaburi dam investment, the court initially refused to handle the case because the network was not really party to the project, as this was developed outside Thailand.

Regulatory regionalism tends to contribute to the expansion of capitalism, causing uneven geographical development. The making of space as a result of regionalization creates unevenness among geographical areas because, as Harvey (1996: 295) has noted, "different places always compete with one another to attract investment. In the process they tend to amplify unevenness, allowing capital to play one local or regional or national class configuration off against others."

Table 6.3 Opportunities and threats of regulatory regionalism

	Society	Market	State
Opportunities	- Public awareness - Transnational networks	- Transnational market - More competitive market	- Effective and efficient state - Interdependence and security community
Threats	- Transboundary impacts - Marginalization	- Monopolistic market - Non-diversified market	- Dependence - Regulatory/elite capture

As summarized in table 6.3, regulatory regionalism has caused uneven opportunities and threats for society, the market, and the state. For society, large-scale hydropower projects potentially have transboundary impacts, and these are regulated only loosely by existing regional governance mechanisms, which tend to marginalize local people in the decision-making process. Nonetheless, increasing public awareness and pressure to form transnational networks are potential effects of the escalating water crisis, which is caused by intensive development affecting people across national borders.

Next, regionalism facilitates the building of markets, which are larger transnational and competitive spaces for private actors in the region. In the hydropower sector, however, the monopolistic nature of big and

transnational funds and firms, as well as the great dependence on the extractive hydropower industry, possibly obstruct economic diversification in the long term. Finally, the transformation of the state in the making of a regional market may encourage growing interdependence and create a favourable context for the evolution into a regional security community, which is an area where increasing economic and social transaction and institutionalized relations may produce the resolution of social problems without significant uses of physical violence (Deutsch et al 1957). At the same time, it would produce risks of too high dependence on the private sector and foreign markets. Such dependence may create an opportunity for regulatory capture by elites who try to influence regulations in ways that represent their interests more than those of their societies.

6.2 The implication of the research

This thesis agrees with the argument that the current process of market building in Asia has gone further than creating a free market and a facilitating state, and that it has holistically transformed the relations among the market, the state, and society (Carroll 2012). Especially the transformation of state affairs, which are increasingly privatized and transnationalized in this case, has made the state's responsibility and legitimacy unclear to its citizens. The market building process has encouraged the establishment of a competitive society, where people need to be adaptive to the emerging marketized economy. The impacts of this would be positive if effective governance, accountable to the citizens of the state, were established. In contrast, accelerated market building in a situation of weak governance capacity tends to harm more marginalized groups of people. Such a situation would be challenging to the political legitimacy of the state in the long run.

Studies of TWG, which generally focus on water conflict and cooperation, are not convincing if they do not pay sufficient attention to the political economy of that particular region beyond water related issues. While water is certainly central to TWG, in reality the usage of water is connected to other sectors such as trade in food and energy, which are prioritized differently by different actors. Although this study does not aim to provide specific solutions for problems of TWG in

hydropower or regionalism per se, the transformation of the state in relation to regional marketization may have some policy implications.

This study has argued that regionalism significantly engages with some major problems of TWG, in particular those of scale and capacity mismatches. According to Karkkainen (2005), the two mismatches influence water governance in relation to the existing system of states. The scale mismatch refers to the incongruence between the political boundaries among states and the natural boundaries of water resources such as river basins. The mismatch may be complicated by states' lack of resources and knowledge to manage the ecosystem beyond or even within their own boundaries.

In relation to this study, the above-mentioned conclusion implies that the regionalization of water use, which is even encouraged by regional organizations, would theoretically enhance state capacity for TWG because the mismatch could be dealt with by a form of regional governance. However, the IPE analysis of this study shows that the limited governance capacity of states in the region has pushed them to adopt more inward-looking approaches to TWG as the prevalent form of weak regional governance. This form of TWG, which is subject to intra-regional power politics and dependent on support from outsiders such as international donors and IFIs, is not sufficient to manage valued water resources. Individually, each sovereign state is too small to manage common, basin-wide issues. Yet, at the same time, some states may not be sufficiently interested in TWG, because the international basin covers only a (small) portion of their territory. In both cases, national governments tend to have less interest in regional governance and pay more attention to problems that occur mainly at local or national levels.

Table 6.4 Scale and capacity mismatches of the TWG

	Supranational level of TWG	Subnational level of TWG
Strong capacity in TWG	Regionalism	Decentralization/ localization
Weak capacity in TWG	Fragmented/ Nationalization	Fragmented

Table 6.4 presents a typology of TWG, using two criteria: state capacity in TWG and its scale or the level at which TWG would be required (i.e., beyond the territory of the state or within the territory). This implies that a group of states with strong governance capacity,

faced with the need for high-level TWG, may set up regional frameworks, in order to pool their capacities to form stronger regional governance supported by a diversification of economic relations. If TWG is required at a low level, states may decentralize TWG to the local level, and collaboration may take place among some smaller parts of their territories. By contrast, TWG in a group of states with weak governance capacity tends to be fragmented, no matter whether water governance is required at lower or higher levels.

Back to the basis of this study, water serves to meet basic needs for society, security for the state, and natural capital for the market. Tensions potentially occur when water is insufficient or misallocated over different users or areas at either the domestic or the international level. Under perfect conditions, regionalism would promote marketization by making water tradable and transmissible in the form of hydroelectricity, as virtual water, in a de-bounded regional market. Because of the mismatches that were addressed in this section, the establishment of suitable regional governance frameworks will depend on the degree to which problems concerning the governance capacity of riparian states are addressed.

Presented in the findings, the IWRM approach to water management is highly contested, because states may hold stronger economic motivations for water development. In the case of the Mekong basin, MRC member states restrict the committee's mandate so as to provide more opportunity for the market and, at the same time, facilitate national development policies of the states. For the MRC to retain its relevance in TWG, it needs to serve more stakeholders, especially civil society and local groups, by educating them about water resources and promoting their rights to water in national regulations. Knowledge management has traditionally been a significant strength of the MRC. The commission should emphasize information and benefit sharing of TWG in order to contribute to the potential solution of conflicts among stakeholders in water related sectors, next to working on impact mitigation and compensation. More specifically, Laos would benefit from the establishment of a river basin organization or commission at sub-national level in order to generate skills and experiences for national agencies, which could thereby be assisted to develop more integrative approaches at regional/international level as well.

In addition, the increasingly transnational nature of accumulation in the region makes Laos' economy more vulnerable to external forces.

Liberalization and deregulation of the economy, with the purpose of attracting FDI for export-oriented production, is possibly harmful to domestic infant and import-substituting industries.[83] Laos seemingly does not have the big market and diversified economy that would enable it to absorb external shocks and cushion it against increasing external risks. The benefits of hydropower development in Laos will depend on the country's ability to use it for economic diversification and ultimately welfare distribution across society. Until now, the hydropower sector has relied heavily on the demand of energy from neighbouring countries, i.e., Thailand, Vietnam, and China, which pursue the same export-oriented strategy for economic growth as Laos and are therefore vulnerable to the global market as well.

Next to the attention to states and formal organizations dealing with TWG, the focus should be on citizens who are impacted by large-scale hydropower development. Transnational networks of civil society seem to be on the rise in parallel to regionalization of the market for hydropower, but they obviously do not have an easy task in the Mekong countries. Groups that are vulnerable to the transboundary impacts of hydropower dams (such as resettled villagers, local fishermen and farmers living along the river banks), are supported by local and transnational civil society organizations, but these are increasingly facing difficulties with monitoring and contesting projects that are supported by their states and developed by foreign capital.

The pressure from growing regionalization, however, may push civil society to form transnational coalitions of affected people and activists, who may try to use domestic and international mechanisms, such as courts and independent agencies, to impose stronger regulations on state agencies and companies. Empowering society with scientific knowledge and policy options may be as important as linking social movements in

[83] The case of China provides a good lesson. Hart-Landsberg (2013: 86-88) notes that China has used export-oriented and FDI-attraction strategies, which have succeeded in transforming China into one of the fastest growing economies in the world. However, even though China has a huge domestic market, the country has been losing its planning and regulatory capacities because of its dependence upon global production networks and markets, largely in the US. The outward-oriented Chinese economy may have benefited relatively small groups of people, but has also affected negatively the unskilled laborers, who form the majority of the population.

different societies to share experiences and operate across national boundaries.

6.3 Potential research agendas

Regarding the rise of regulatory regionalism presented in this study, the analysis of the relationship between regionalism and TWG has revealed that increasing regionalization does not always mean stronger regional governance. More research is certainly needed in order to understand and improve the regional governance of hydropower development in the Mekong Basin. This research proposes three points that should have more attention, including water nationalism in its relationship with the politics of legitimacy, regulatory capture that possibly originates from regulatory regionalism, and the energy politics of the hydropower sector. Knowledge of all three issues may contribute to a better understanding of TWG, especially in terms of international water conflict and cooperation.

As shown in the findings, hydropower has both symbolic and materialistic significances in Laos. Regionalism in the Mekong Basin seemingly contributes to water nationalism in Laos. Nonetheless, according to Menga 2016, the issue of water nationalism has received little attention in the study of water politics so far. Whereas economic diversification and the establishment of common political institutions of regionalism could theoretically contribute to achieving trade-offs in water-related issues, water nationalism has complicated TWG in the Mekong Basin with less-compromising positions of the riparian states in sharing of the international river.

Although the state may support regionalism and try to attract international trade and investment through regionalization, they employ that strategy to avoid bilateral domination and globalization at the same time. Comparative case studies in other countries would be useful to explain this linkage of domestic and international water politics, particularly in the post-conflict states, in which utilization of natural resources is crucial for the legitimacy of newly established political regimes. These ideas may be applicable to other developing countries that are landlocked, pursue reforms, and have a small domestic yet bigger neighbouring market for a particular resource or sector that relies on regional markets and geographical proximity beyond water, such as

contract farming and health care services in border areas. It is interesting whether and how other models of state governance, besides the regulatory state, could exist in such context.

Even though the regulatory state in principle aims to facilitate marketization, this kind of state may possibly be harmful to the market in cases where there is a relatively weak governance framework. The main risk is that some influential actors in a particular sector collaborate with state agencies to manipulate regulations to their benefit. This scenario amounts to 'regulatory capture', a process through which some actors, who are particularly influential in the regulatory process and vis-à-vis the regulatory agencies that are supposed to regulate them, may have undue influence on the nature of regulation (see Stigler 1971; Dal Bo 2006).

Certain circumstances may transform the state from being a protector of public interests into a facilitator of special (private or transnational) interests, especially in cases where the political system shows a democratic deficit (Bruszt 2012). Such capture possibly happens when the state creates and controls regulations for some actors, e.g., private companies sub-contracted to provide public goods on behalf of the state. Those actors are potentially influential because they have a significant stake in the specific nature of regulation, possess technical expertise, are well-organized, and often have close relations with people in regulatory agencies due to their long collaboration. In contrast, the general public is less influential in bargaining, because they generally have diffuse interests, are not well organized, have limited technical knowledge, and are subject to restricted participation in a non-democratic context. Capture may harm a society by favouring private over public interests and bringing about a market order that deviates significantly from the original idea of the pro-market regulatory state.

The study of energy politics, after an early boom at the time of the oil price shocks in the 1970s, seems to be underdeveloped, particularly beyond topics of energy security, geo-politics, and institutional cooperation. In Asia, the politics of energy resources has received little attention, and has largely been neglected in studies on regionalism (Carroll and Sovacool 2010). According to Hughes and Lipscy (2013: 457-58), energy politics needs more attention in at least two ways: the changing roles of developing countries and the changing structure of energy demand and supply.

First, the rapid growth of populations, industrialization, and urbanization has led to a rising global demand for energy from developing countries. Development of those countries, and particularly China, has great impact on the energy sector because of their big markets and emerging opportunities for innovation. Second, there are changes in energy demand and in the energy sources to meet that demand. The focus on sustainability and the introduction of measures to mitigate climate change have led to more demand for renewable energy sources, such as biomass, solar, wind and hydropower. Although conventional fossil fuels, such as oil, coal, and natural gas remain the primary sources of energy, in some places alternative energy sources, such as hydropower in Laos, have become the primary ones. In order to combine water with energy politics, for example, Magee (2006) has proposed the concept of 'powershed', linking the hydro-politics of energy to 'watershed' in China. This notion was later applied by Middleton and Allouche (2016) to the case of the Mekong Basin, and their research illustrates how we could define 'regionalism' on the basis of relations between nature and society in different ways from sector to sector. It remains interesting for researchers to explore how the construction of regions is determined by a complex of development projects that creates interconnections among transnational resources, capital, and territories.

Bibliography

Aalto, P. (2014) 'Energy Market Integration and Regional Institutions in East Asia', *Energy Policy* 74(2914): 91-100.

Acharya, A. (2001) *Constructing a security community in Southeast Asia: ASEAN and the problem of regional order*. London: Routledge.

_____ (2004) 'What Is a Community', in A. Acharya (ed.) *Towards Realizing an ASEAN Community: a Brief Report on the ASEAN Community Roundtable*, pp.27-35. Singapore: Institute of Southeast Asian Studies.

Acharya, A., and Stubbs, R. (2006). 'Theorizing Southeast Asian Relations: An Introduction'. *The pacific Review* 19(2): 125-134.

Allan, J.A. (2000) *The Middle East Water Question: Hydropolitics and the Global Economy*. London: I.B.Tauris.

Allan, J.A., and Mirumachi, N. (2010) 'Why negotiate?' Asymmetric endownments, asymetric power and the invisible nexus of water, trade and power that brings apparent water security' in Earle, A., A. Jägerskog, and J. Öjendal (eds) *Transboundary Water Management: Principles and Practice*. pp. 13-26. London: Earthscan.

Allouche, J. (2005) *Water nationalism: An explanation of the past and present conflicts in Central Asia, the Middle East and the Indian Subcontinent?*. PhD thesis. Institut Universitaire de Hautes Etudes Internationales, Geneva, Switzerland.

Aman, A.C. Jr. (1998) 'The Globalizing State: A Future-Oriented Perspective on the Public/Private Distinction, Federalism and Democracy', *Vanderbilt Journal of Law*. (31): 791-816. 14(1): 42-60.

Andrade, A.D. (2009) 'Interpretive research aiming at theory building: adopting and adapting the case study design' *The Qualitative Report* Alden, C., S. Morphet, and M.A. Vieira (2010) *The South in World Politics*. Palgrave Macmillan.

ASEAN Secretariat (2005a) *State of Water Resources Management in ASEAN*, Jakarta: ASEAN Secretariat.

_____(2005b) *ASEAN: Narrowing the Development Gap*, Jakarta: ASEAN Secretariat.

_____(2010) *ASEAN Plan of Action for Energy Cooperation 2010-2015*. ASEAN Secretariat.

_____(2011) *Master Plan on ASEAN Connectivity*. Jakarta: ASEAN Secretariat.
_____(2012a) *Memorandum of Understanding on the Power Grid 2007*. Accessed June 2012 <http://www.aseansec.org/20918.htm>.
_____ (2012b) *ASEAN Community in Figures*.Jarkata: ASEAN Secretariat.
_____(2012c) *ASEAN Work Plan of Action on Energy Cooperation (APAEC 2010 – 2015)*. Jarkata: ASEAN Secretariat.
_____ (2015) 'ASEAN Legal Instruments'. Accessed 10 December 2015 <http://agreement.asean.org/>.
_____(2016) 'External Trade Statistics'. Accessed 12 August 2017 < http://asean.org/?static_post=external-trade-statistics-3>.
Asian Development Bank (ADB) (2005) *Proposed Technical Assistance: Greater Mekong Subregion Power Trade Coordination and Development*. Manila: ADB.
_____ (2011) *The Greater Mekong Subregion Economic Cooperation Program Strategic Framework 2012-22*. Manila: ADB.
_____ (2010) *The Greater Mekong Subregion Economic Cooperation Program Strategic Framework 2012-22: Background Paper*. Manila: ADB.
_____ (2012a) 'GMS: the Overview'. Accessed 30 April 2012 <http://www.adb.org/countries/gms/overview>.
_____ (2012b) 'Roadmap for Expanded Energy Cooperation in the Greater Mekong Subregion (GMS)'. Accessed 20 December 2012 <http://www.adb.org/sites/default/files/SEFspecial-annex7.pdf>.
_____ (2012c) *GMS Power Trade and Interconnection: Two Decades of Cooperation*. Manila: ADB.
_____ (2013a) *Assessment of the Greater Mekong Subregion energy sector development: Progress, prospects, and regional investment priorities*. Mandaluyong City, Philippines:
_____ (2013b) *Lao People's Democratic Republic: Energy Sector Assessment, Strategy and Road Map (2013 Update)*. Mandaluyong City, Philippines: ADB.
_____ (2013c) 'Summary Discussion on 13th Meeting of the Regional Power Trade Coordination Committee

(RPTCC-13)'. Yangon, Myanmar 27 November 2012. Accessed 12 January 2013 <http://www.adb.org/sites/default/files/pub/2012/gms-rptcc13-summary-discussions.pdf>.

_____ (2014a) 'Ancient Trade Route Delivers Opportunities for the Greater Mekong Subregion'. Accessed Accessed 11 March 2016 <http://www.adb.org/results/ancient-trade-route-delivers-new-opportunities-greater-mekong-subregion.>

_____ (2014b) *Asian Development Outlook 2015: Financing Asia Future Growth*. Mandaluyong City, Philippines: ADB.

_____ (2015a) 'Greater Mekong Subregion Statistic on Growth, Connectivity and Sustainable Development'. GMS 20th ministerial conference in NyaPyi Taw, Myanmar, 10 September 2015. Accessed 11 March 2016 <http://www.adb.org/sites/default/files/institutional-document/173379/gms-statistics.pdf.>

_____(2015b) Investing in Natural Capital for a Sustainable Future of the Mekong Subregion. Manila: ADB.

Badenoch, N. (2002) *Transboundary Environmental Governance: Principles and Practice in Mainland Southeast Asia*, World Resource Institute.

Baghel, R. and Nüsser, M. (2010) 'Discussing large dams in Asia after the World Commission on Dams: Is a political ecology approach the way forward?' *Water Alternatives* 3(2): 231-248.

Bhagwati, J. (1998) 'Export promoting trade strategy: issues and evidences', World Bank Research Observer 3(1): 25-57.

Bakker, K. (1999) 'The politics of hydropower: developing the Mekong', *Political Geography* 18: 209–232.

_____ (2005) 'Neoliberalising Nature? Market Environmentalism in Water Supply in England and Wales', *Annals of the Association of American Geographers*, 95(3): 542-65.

_____(2010) 'The Limits of Neoliberal Natures: Debating Green Neoliberalism', *Progress in Human Geography* 34(6) 715-35.

Ballabh, V. (2008) 'Governance of Water' in V. Ballabh (ed.) *Governance of Water: Institutional Alternatives and Political Economy*. pp.1-17. New Delhi: Sage Publications.

Bangkok Post (2012) 'PM must stop Xayaburi dam', Accessed 24 July 2012<http://www.bangkokpost.com/opinion/opinion/303550/pm-must-stop-xayaburi-dam>.

Bell, S. (2002) *Economic Governance and Institutional Dynamics*. Oxford University Press: Melbourne, Australia.

Betsill, Michele M., Kathryn Hochstetler, and DimitrisStevis (eds), (2006) *International Environmental Politics*, New York: Palgrave Macmillan.

Bevir, M. (2009) *Key concepts in governance*. London: SAGE

Biermann, F. (2006) 'Global Governance and the Environment,' in Betsill,M., Hochstetler, K., andStevis, D.(eds)*International Environmental Politics*. pp. 239-247.New York: Palgrave Macmillan,

Birnie, P., and Boyle, A. (2002) *Sharing Transboundary Resources: International Law and Optimal Resource Use*. Cambridge: Cambridge University Press.

BIS (2005) *International Convergence of Capital Measurement and Capital Standards: A Revised Framework*. Basel Committee on Banking Supervision. Basel: Bank for International Settlements.

Braithwaite, J. (2005) *Neoliberlaism or Regulatory Capitalism*. RegNet Occasional Paper No 5. Australian National University.

_____(2006) 'Responsive Regulation and Developing Economies.'*World Development* 34: 884-898.

Bruszt, L.(2012) 'The State of the Market. The Market Reform Debate and Postcommunist Diversity', in D. Chalmers and S. Mainwaring (eds*), Institutions and Democracy: Essays in Honor of Alfred Stepan*, pp.111-136. Notre Dame: University of Notre Dame Press.

Büscher, B. and Arsel, M. (2012) 'Introduction: Neoliberal Conservation, Uneven Geographical Development and the Dynamics of Contemporary Capitalism' *Tijdschrift voor economische en sociale geografie*, 103: 129–135.

Büscher, B. and Fletcher, R.(2014) 'Accumulation by Conservation' *New Political Economy* 20(2): 273-298.

Capannelli, G. (2011) *Institutions for Economic and Financial Integration in Asia: Trends and Prospects*. Asian Development Bank Institute working paper series no. 308.

Carroll, T. (2012) 'Introduction: Neo-liberal development policy in Asia beyond the Post Washington Consensus', *Journal of Contemporary Asia*, 40(3): 350-58.

Carroll, T. and Jarvis, D.S.L. (2013) 'Market building in Asia: standards setting, policy diffusion, and globalization of market norms', *Journal of Asian Public Policy*, 6(2): 117-28.

Cascao, A.E., and Zeitoun M. 'Power, hegemony and critical hydropolitics' in Earle, A., A. Jägerskog, and J. Öjendal (eds) (2010) *Transboundary Water Management: Principles and Practice*. pp.27-42 London: Earthscan.

Castro, J.E. (2007) 'Water governance in the twentieth-first century.' *Ambiente y Sociedad* 10(2) July-December 2007.

Central Intelligence Agency (CIA) (2015a) *Laos: The World Factbook*. Central Intelligence Agency of the United States. Accessed 14 Mars 2015 <https://www.cia.gov/library/PUBLICATIONS/the-worldfactbook/geos/la.html>.

_____ (2015b) *Thailand: The World Factbook*. Central Intelligence Agency of the United States. Accessed 14 Mars 2015 <https://www.cia.gov/library/publications/the-world-factbook/geos/th.html>.

Chen, X. (2005) *As Border Bends: Tramsnational Spaces on the Pacific Rim*. Lanham, MD.: Rawman and Littlefield.

China Daily (2016) *Leaders of Lancang-Mekong convene*. 23 March 2016 Accessed 29 May 2016 <http://www.chinadaily.com.cn/world/2016-03/23/content_24045613_2.htm>

China Dialogue (2011) *A new era for Tibet's rivers*. 17 January 2011 Accessed 15 December 2011 <https://www.chinadialogue.net/article/4055-A-new-era-for-Tibet-s-river>.

Chongkittavorn, K. (2004) 'the GMS Cooperation within the ASEAN Context', in Siddque S., and Kuma S. (eds) *The 2nd ASEAN Reader*. Singapore: Institute of Southeast Asian Studies.

Christiansen, T., Jorgensen, K.E., and Wiener, A. (2001) (eds) *The Social Construction of Europe*. London: SAGE.

Clarke, R., and King, J. (2004)*The Water Atlas*. New York: The New Press.

Conca, K. (2006) *Governing Water: Contentious Transnational Politics and Global*

Cronin, R. and Weatherby, C. (2015) *Letters from the Mekong: site visit to Laos's first two mainstream hydropower projects*. Stimson. January 2015.
Dal Bo, E. (2006) 'Regulatory capture: a review', *Oxford Review of Economic Policy* 22(2): 203-225.
Dao Trong Tu (2011) *A Vietnamese Perspective on Proposed Mainstream Mekong Dams*. Stimson Center, December 08, 2011 <http://www.stimson.org/summaries/a-vietnamese-perspective-on-proposed-mainstream-mekong-dams>.
Deetes, P. (2009) *Chinese Mekong Upstream Dams and Transboundary Impacts*. Living River Siam. Accessed July 2011<http://www.livingriversiam.org/mk/mek_a40.pdf [12>(in Thai).
Dent, C. (2008) 'The Asian Development Bank and Developmental Regionalism in East Asia', *Third World Quarterly* 29(4): 767-86.
De Stefano, L., M. Svendsen, M. Giordano, B.S. Steel, B. Brown, and A.T. Wolf (2014) 'Water governance benchmarking: concepts and approach framework as applied to Middle East and North Africa countries' *Water Policy*, 16: 1121-1139.
Deutsch, Karl W., et al. (1957) *Political Community and the North Atlantic Area: International Organization in the Light of Historical Experience*. Princeton: Princeton University Press.
Dixon, C. (1999) 'Regional integration in Southeast Asia' in in J. Grugel, and W. Hout (eds) *Regionalism across the North-South Divide: State Strategies and Globalization*, pp.115-133. London: Routledge.
Doran, D.D., and Christensen, M. (2014) "Cross-border Hydro Project in Asia: Legal Issues, Hurdles and Solutions." *Hydropower and Dams,* vol. 21 issue 2: 66-72.
Dore, J. (2003) 'The governance of increasing Mekong regionalism', in M. Koasa-ard and J. Dore (eds) *Social Challenges for the Mekong Region*. Bangkok: Chiang Mai University.
_____ (2007). 'Multi Stakeholder Platforms: Unfulfilled Potential', in Louis Lebel, John Dore, Rajesh Daniel, and Yang SaingKoma (eds) *Democratizing Water Governance in the Mekong Region*, pp.197-198. Chiang Mai: Mekong Press.
_____ (2010) *Balancing Trade Growth and Environmental Protection in ASEAN: Environmental Issues in trade and Investment Policy Deliberations in the Mekong subregion*. Series on Trade and

Environment in ASEAN-Policy report 2. Manitoba: International Institute for Sustainable Development.

Dore, J., L. Lebel, and F. Molle (2012) 'A framework for analysising transboundary water governance complexes, illustrated in the Mekong Region', *Journal of Hydrology*, 466-467 (2012): 23-36

Dore, J., Y. Xiaogang, and K. Yuk-shing Li (2007) 'China's energy reforms and hydropower expansion in Yunnan', in L., Lebel, J. Dore, R.Daniel, and Y.S. Koma (eds) *Democratizing Water Governance in the Mekong Region*, pp. 55-92. Chiang Mai: Unit for Social and Environmental Research and Mekong Press.

Dubash N. K.(2004) 'Water, Market and Embedded Institutions in Western India', in Peet, R. and Watts, M. (eds) *Liberation Ecologies: Environment, Development, Social Movement*, pp.224-247. 2nd edition. London: Routledge.

Dubash, N. K., and B. Morgan (2012) 'Understanding the rise of the regulatory state of the South', *Regulation and Governance* 6(3): 261-81.

Earle, A., A. Jägerskog, and J. Öjendal (eds) (2010) *Transboundary Water Management: Principles and Practice*. London: Earthscan.

EdL (Electricité du Laos) (2011) *50 Years of Electricité du Laos 1961-2011*. Vientiane: Electricité du Laos.

_____ (2015) Power Development Plan of Lao PDR 2015-2025. Vientiane: Electricité du Laos.

Edgar, C.R. (2005) 'The traditional state function doctrine: a comparative institutional perspective', *NYU Journal of Law and Liberty* 1(2): 857-897.

Electricity Generating Authority of Thailand (EGAT) (2010) Summary of Thailand Power Development Plan, 2010–2030. Bangkok: EGAT.

_____(2013) *Annual Report 2013*. Nonthaburi: EGAT.

Energy Policy and Planning Office (EPPO) (2012) *Thailand Power Development Plan 2012 – 2030 (3rd revision)*. Ministry of Energy, Thailand.

_____ (2013) *Journal of Energy Policy* (in Thai). October - December 2012. Ministry of Energy, Thailand.

_____ (2014) 'Independent Power Producer' Energy Policy and Planning Office, Ministry of Energy, Thailand.Accessed 28 May 2014 <http://www.eppo.go.th/power/pw-ElecPriv-T-03.html>.

Energy Regulatory Commission (2014) 'Energy Regulatory Commission of Thailand' Accessed 30 May 2014 <http://www.erc.or.th/ERCWeb2/>.

Evans, P. (1995) *Embedded Autonomy: State and Industrial Transformation*. Princeton: Princeton University Press.

Fawcett, I., and A. Hurrell (1995) *Regionalism in World Politics: Regional Organization and International Order*. Oxford: Oxford University Press.

Finger, M., L. Tamiotti, and J. Allouche (eds) (2006) *The Multi-governance of Water: Four Case Studies*. Albany: State University of New York Press.

Foran, T., Wong, T. and Kelly, S. (2010) *Mekong hydropower development: a review of governance and sustainability challenges*. M-POWER Research Network and Ministry for Foreign Affairs of Finland.

Frost, E. (2008) *Asia' New Regionalism*. Boulder: Lynne Rienner Publishers.

Gajaseni, J. (2011) *Enhancing Social Impact Assessment for Hydropower Development Planning in the LMB: Lao PDR*, February 2011.

Gamble P. (2011) "Neo liberalism" *Capital and Class*. 74: 127-134.

Gat, J.R. (2007) 'Holistic Regional Approach to Water Management' in H. Shuval, and H. Dweik (eds) *Water Resources in the Middle East: Israel-Palestinian Water Issues from Conflict to Cooperation*, pp. 349-354. Berlin, Heidelberg, New York: Springer.

George, A.L. and A. Banette (2005) 'Case study and theory development in the Social Sciences'. London: MIT Press, pp.1-36.

Giordano, M., and T. Shar (2014) 'Non integrated water resources management' in P. Martinez-Santos, M.M. Aldaya, and R. Llmas (eds) *Integrated Water Resources Management in the 21st Century: Revisiting the Paradigm*. Leiden: Taylor and Francis.

Glassman, J. (2010) *Bounding the Mekong: the Asian Development Bank, China, and Thailand*. University of Hawai'i Press.

Goldman, M. (2004) 'Eco-governmentality and other transnational practices of a green World Bank' in R. Peet, and M. Watts (eds)

Liberation Ecologies: Environment, Development, and Social Movement, pp. 153-176. 2nd edition. London: Routledge.

_____ (2005) *Imperial Nature: The World Bank and Struggles for Social Justice in the Age of Globalization*. New Haven: Yale University Press.

Government of Lao PDR (GoL) (2016) *Legal documents.* Accessed 15 December 2016. <http://www.laogov.gov.la/legaldoc/pages/document.aspx>.

Graecen, C. and A. Plettu (2007) 'Electricity sector planning and hydropower in the Mekong Region', in L., Lebel, J. Dore, R.Daniel, and Y.S. Koma (eds) *Democratizing Water Governance in the Mekong Region*, pp. 93-125. Chiang Mai: Unit for Social and Environmental Research and Mekong Press.

Greacen, C. S. and C. Greacen, (2012) *Proposed Power Development Plan (PPDP) and a Framework for Improving Accountability and Performance of Power Sector Planning*. Bangkok, April 2012.

Grumbine, R.E., and J. Xu (2011) 'Mekong Hydropower Development',*Science* 332, 8 April 2011: 178-79.

Gupta, J. (2009) ' Driving forces in global freshwater governance', in *D. Huitema, and S. Meijerink (eds) Water Policy Entrepreneurs: A Research Companion to Water Transitions around the Globe*. pp. 37-57. Cheltenham, UK: Edward Elgar.

Guy Peters, B. (2011) 'Governance as Political Theory,' in Levi-Faur,D. (ed) *Oxford Handbook of Governance*. pp. 19-32. Oxford University Press.

Haacke, J. (2009) *ASEAN's Diplomatic and Security Culture: Origin, Development and Prospects*. RoutledgeCurzon.

Haas, E. B. (1970) 'The Study of Regional Integration: Reflections of the Joy and Anguish of Pretheorizing,'*International organization*, 24(4): 607-646.

_____(1975)*The Obsolescence of Regional Integration Theory*, Berkeley, Institute of International Studies, University of California.

_____ (1980) 'Why Collaborate?: Issue Linkage and International Regime,'*World Politics*, 32(3): 357-705, April.

Hameiri S.(2013) 'Theorising Regions through Changes in Statehood: Rethinking the Theory and Method of Comparative Regionalism,' *Review of International Studies*, 39 (2): 313 - 335.

Hameiri S., and K. Jayasuriya (2011) 'Regulatory regionalism and the dynamics of territorial politics: the case of Asia-Pacific Region', *Political Studies* 59: 20-37.

_____ (2012) 'Regulatory regionalism in Asia', in Beeson, M. and Stubbs, R. (eds) *Routledge Handbook of Asian Regionalism*, pp. 177-185. London: Routledge.

Hammami, M., J.F. Ruhashyankiko, and E.B. Yehoue (2006) *Determinants of Public-Private Partnership in Infrastructure*. International Monetary Fund Working Paper 06/99, at 15.

Habermas, J. (2001) *The Post national Constellation: Political Essays*. Cambridge, MA: MIT Press.

Hardins, G. (1968) 'The Tragedy of the Commons', *Science* 162 (3859): 1243–1248.

Harris, D. (2008) 'Uneven Development.' in Steven N. D., and Lawrence E. B. (eds) *The New Palgrave Dictionary of Economics*. Second edition. Palgrave Macmillan.

Hart-Landsberg, M. (2013) *Capitalist Globalization*. New York: Monthly Review Press.

Harvey, D. (1996) *Justice, Nature and the Geography of Difference*. Oxford: Basil Blackwell.

_____ (2010) *The Enigma of Capital and the Crises of Capitalism*. London: Profile Books.

Held, D., and A. McGrew (eds) (2000)*Global Transformation Reader: An Introduction to Globalization Debates*. Malden, Mass: Polity Press.

Herbertson, K. (2013) *Xayaburi Dam: How Laos Violated the 1995 Mekong Agreement*. International Rivers.

Hettne, B. (1994) 'The New Regionalism: Implications for Development and Peace', in Bjorn Hettne and AndrasInotai. *The New Regionalism: Implications for Global Development and International Security*, pp. 1-49. Helsinki: United Nations University World Institute for Development Economics Research.

_____ (2005) 'Beyond New Regionalism', *New Political Economy* 10(4): 543-71.

Hettne, B. and F. Söderbaum (2002) 'Theorising the Rise of Regionness', in S. Breslin, C.W. Hughes, N. Phillips, B. Rosamond (eds) *New Regionalism in the Global Political Economy*, pp. 33-47. London: Routledge.

_____ (2006) 'Regional Cooperation: A Tool for Addressing Regional and Global Challenges', in *International Task Force on Global Public Goods, Achieving Global Public Goods*, pp. 179-244. Stockholm: Foreign Ministry.

Hew, D. (2005) 'Southeast Asian Economies Towards Recovery and Deeper Integration', *Southeast Asian Affairs 2005*. Singapore: Institute of Southeast Asian Studies.

Hill, A.M. (1998) *Merchants and Migrants: Ethnicity and Trade among Yunnanes Chinese in Southeast Asia*. New Haven: Yale University Southeast Asia Studies.

Hirsch, P. (2009) "Issues of scale in governing water a common good: the Mekong River Basin" in Ghosh, D., Goodall, H., and Donald, S.H. (eds.) *Water, Sovereignty and Borders in Asia and Oceania*, pp. 125-133. Oxon: Routledge.

_____ (2010) 'The Changing Political Dynamics of Dam Building on the Mekong', *Water Alternatives*, 3:2, 312-23.

_____ (2012) 'IWRM as a Participatory Governance Framework for the Mekong River Basin?' in J. Ojendal, S. Hansson, and S. Hellberg (eds) *Politics and Development in a Transboundary Watershed : The Case of the Lower Mekong Basin*, 155-170. Springer.

Hirsch, P., and K.M. Jensen (2006) *National Interests and Transboundary Water Governance in the Mekong*. Sydney: Australian Mekong Resource Centre at The University of Sydney in collaboration with Danish International Development Assistance.

Hochstetler, K. (2012) 'Civil Society and the Regulatory State of the South' *Regulation and Governance*, 6: 362-370.

Hoffmann, S. (1966) 'Obstinate or obsolete?The Fate of the Nation State and the case of Western Europe'.*Daedalus,* 95(3).Tradition and Change (summer 1966): 862-915.

Horii, N. (2011) 'Energy Bottlenecks and Cooperation' in Fujita, M. Kuroiwa, I., and Kumagai, S. (eds.) *The Economics of East Asian Integration: A Comprehensive Introduction to Regional Issues*, pp. 450-78. Cheltenham, UK: Edward Elgar.

Hout, W. (1999) 'International relations and the new regionalism' in J. Grugel, and W. Hout (eds) *Regionalism across the North-South Divide: State Strategies and Globalization*, pp.14-28. London: Routledge.

Hughes, L. and P.Y. Lipscy (2013) 'The Politics of Energy' *The Annual Review of Political Science* 16: 449-69.

Huitema, D. and S. Meijerink (2014) 'The politics of river basin organisations: institutional design choices, coalitions and consequences' in Huitema, D. and S. Meijerink (eds) *The Politics of River Basin Organisations: Coalitions, Instituional Design Choices and Consequences*. pp. 1-37. Cheltenham, UK: Edward Elgar. *Institution Building*. The MIT Press.

Hydro World (2013) *World Bank Announces Renewed Support for Large Hydropower*. Accessed 10 May 2015<http://www.hydroworld.com/articles/2013/05/world-bank-announces-renewed-support-for-large-hydropower.html>.

_____(2015) *Laos hydropower program seeks power options*. Accessed 31 January 2015 <http://www.hydroworld.com/articles/2015/01/laos-hydropower-program-seeks-power-sector-reform-options.html>.

Initiatives for ASEAN Integration Unit (IAI) (2005) *Initiative for ASEAN Integration (IAI): Work Plan for CLMV Countries*. Progress report, Jakarta: ASEAN Secretariat.

Integrated Regional Information Networks (IRIN) (2012) *Laos: Aiming to leave least developed country list*. IRIN, Vientiane, Accessed 17 May 2012.<http://www.irinnews.org/report/95470/laos-aiming-to-leave-least-developed-country-list>.

International Centre for Environmental Management (ICEM) (2010), *MRC Strategic Environmental Assessment (SEA) of Hydropower on the Mekong Mainstream*. Hanoi: ICEM.

International Monetary Fund (IMF) (2015) *World Economic Outlook Database, April 2015*. IMF, Accessed 30 May 2015 <https://www.imf.org/external/pubs/ft/weo/2015/01/weodata/index.aspx>.

International Commission on Large Dam (ICOLD) (2015)*World Register of Dams*. Accessed 10 December 2015 <http://www.icoldcigb.org/GB/World_register/general_synthesis.asp>

International Energy Agency (IEA) (2010) *Hydropower Essential*. IEA Accessed 5 December 2014 <http://www.iea.org/publications/freepublications/publication/Hydropower_Essentials.pdf>.

International Renewable Energy Agency (IREA) (2012) *Renewable Energy Technologies: Cost Analysis Series 'Hydropower'*. IRENA working paper.

International Rivers (2009) *Mekong Mainstream Dams: Threatening Southeast Asia's Food Security,* Berkeley, CA: International Rivers.

_____ (2012) *Xayaburi Dam*. Accessed 12 January 2013, <http://www.internationalrivers.org/campaigns/xayaburi-dam>.

_____ (2013) *The Lower Mekong Dams: A Transboundary Water Crisis*. Factsheet on the Mekong mainstream dams, 28 March 2013. Accessed 15 April 2013 <http://www.internationalrivers.org/resources/the-lower-mekong-dams-factsheet-text-7908>.

_____(2014a) *Spreadsheet of Major Dams in China*. Accessed 5 December 2014 <https://www.internationalrivers.org/resources/spreadsheet-of-major-dams-in-china 7743>.

_____ (2014b) *Failure to Restore: An Assessment of the Impacts of the Theun-Hinboun Hydropower Dam Projects on Downstream Communities in Laos*. Accessed 8 May 2014. <http://www.internationalrivers.org/campaigns/theun-hinboun-dam-and-expansion-project>.

_____ (2016) Swindling Run-of River Hydro. Accessed 5 March 2016 <http://www.internationalrivers.org/files/attached-files/run_of_river_fact_sheet.pdf>.

Ivarsson, S. (2008) *Creating Laos: the Making of Lao Space between Indochina and Siam, 1860-1945*. Copenhagen: NIAS Press.

Iyer, R.R. (2008) 'Water Governance, Politics, Policy', in V. Ballabh (ed.) *Governance of Water: Institutional Alternatives and Political Economy*. pp.18-35. New Delhi: Sage Publications.

Jacob, J.W.(2002) 'the Mekong River Commission: Transboundary Water Resources Planning and Regional Security', *Geographical Journal*, 168:4, pp. 354-364.

Jalilian, H. and C.B.R. Flower (2013) 'Assessing China's Impact on Poverty Reduction in the Greater Mekong Subregion: An Introduction', in H. Jalilian (ed) *Assessing China's Impact on Poverty Reduction in the Greater Mekong Subregion*. pp. 3-31. Singapore: Institute of Southeast Asian Studies.

Jensen, K.M., and R.B. Lange (2013) *Transboundary Water Governance in a Shifting Development Context, New Development Finance, Development Spaces and Commitment to Cooperation: a Comparative Study of the Mekong and the Zambezi River Basins*. Danish Institute for International Studies (DIIS) Report 20.

Jarvis, D.S.L. (2010) 'Institutional Processes and Regulatory Risk: A Case Study of Thai Energy Sector.' *Regulation and Governance*, 4: 175-202.

_____ (2014) 'Regulatory States in the South: Can they Exist and Do We Want them? The case of the Indonesian Power Sector' in Carroll, T. and D.S.L. Jarvis (eds) *The Politics of Marketising Asia*. pp.71-100. Palgrave Macmillan.

Jaspers, F., and J. Gupta (2014) 'Global water governance and river basin organisations', in D. Huitema, and S. Meijerink (eds), *The Politics of Rier Basin Organisations: Coalitions, Instituional Design Choices and Consequences*. pp. 38-66. Cheltenham, UK: Edward Elgar.

Jayasuriya, K. (2013) 'Regulatory State with Dirigiste Characteristics: Variegated Pathways of Regulatory Governance', in Dubash N., and Morgan, B. (eds), *The Rise of the Regulatory State of the South*: *Infrastructure and Development in Emerging Economies*. pp. 185-197. Oxford University Press.

_____ (2015) 'Regulatory Regionalism, Political Projects and State Transformation in the Asia-Pacific', *Asian Politics and Policy* 7(4) 517-529.

Johnson, C. (1982) *MITI and the Japanese Miracle: the Growth of Industry Policy*. Stanford: Stanford University Press.

Jones, D.M. and Smith, M.L.R. (2009) *ASEAN and East Asian International Relations: Regional Delusion*. Edward Elgar.

Juego, B. (2015) The Political Economy of the ASEAN Regionalisation Process. Heinrich Boll Stiftung, Accessed 12 March 2016 <https://www.boell.de/en/2015/10/28/political-economy-asean-regionalisation-process>.

Karkkainen, C.B. (2005) 'Transboundary ecosystem governance: beyond sovereignty?' in Bruch,C.,Jansky,L. Nakayama, M. and Salewicz,K.A. (eds)*PublicParticipation on the Governance of International FreshwaterResources*.pp. 73-87, United Nations University Press. New York.

Kats, D. (2011) 'Hydro-Political Hyperbole: Examining Incentives for Overemphasizing the Risks of Water Wars' *Global Environmental Politics* 1(11): 12-35.

Kehl, J. R. (2011) 'Hydropolitical Complexes an Asymmetrical Power: Conflict, Cooperation, and Governance of International River Systems', *American Sociological Association* (17) (1): 218-235.

Keohane, R. O. (2001) 'Governance in Partially Globalized World' Presidential Address, American Political Science Association 2000, *American political Science Review*, March 2001: 1-13.

Khagram, S. (2004) *Dams and Development: Transnational Struggles for Water and Power*. Ithaca: Cornell University Press.

Kiely, R. (2012) 'Spatial Hierarchy and/or Contemporary Geopolitics: What Can and Can't Uneven and Combined Development Explain?' *Cambridge Review of International Affairs*. 25.2, 2012: 231-248.

Klingensmith, D. (2007) *One Valley and a Thousand: Dams, Nationalism and Development*. New Delhi: Oxford University Press.

Kooiman, J., M. Bavinck, R. Cheunpagdee, R. Mahon, and R. Pullin (2008) 'Inter active governance and governability: an introduction', Journal of Transdiciplinary Environmental Studies. 7(1): 1-11.

Krasner, S. D. (ed) (1983) *International Regimes.*Ithaca: Cornell University Press.

Kummu, M., and O. Varis (2007) 'Sediment-Related Impacts due to Upstream Reservoir Trapping, the Lower Mekong River'. *Geomorphology*, 85(3-4): 275-293.

Legal Research Group for Criminal Proceedings (2015) *Handbook for Criminal Proceedings in Lao PDR*. Vientiane: Human Resource Development Project in Judicial Affairs (In Lao).

Levi-Faur, D. (2011) *The Odyssey of the regulatory state: episode one the rescue of the welfare state*. Jerusalem Papers in Regulation and Governance, no. 39.

_____ (2013) 'The Regulatory State and the Developmental State: Towards Polymorphic Comparative Capitalism' in Dubash N., and Morgan, B. (eds), *The Rise of the Regulatory State of the South*: *Infrastructure and Development in Emerging Economies*. pp. 236-245. Oxford University Press.

Li, Z., He D., and Feng Y. (2011) 'Regional Hydropolitics of the Transboundary Impacts of the Lancang Cascade Dams', *Water Inter National* 36(3): 328-39.

Locknie, H. (2004) 'The ASEAN Community: Institutional Implications', in A. Acharya (ed)*Towards Realizing an ASEAN Community: A Brief Report on the ASEAN Community Roundtable*.Singapore : Institute of Southeast Asian Studies.

Lu, X., J. Wang, and C. Grundy-Warr (2008) 'Are the Chinese Dams to Be Blamed for the Lower Water Level in the Lower Mekong' in M. Kummu, M. Keskinen, and O. Varis(eds) *Modern Myths of the Mekong*, pp. 39-51. Water and Development Publications, Helsinki University of Technology.

MacAlister, B., and J. Zasloff (1994) 'Relations with Thailand' in Savada, A.M. (ed) *Laos: a country study*. Library of Congress Federal Research Division.

Magee, D. (2006) 'Powershed Politics: Yunnan Hydropower under Great Western Development',*The China Quarterly* (185): 23-41.

Majone, G. (1996)*Regulating Europe*. London: Routledge.

_____(1997) 'From the Positive to the Regulatory State: Causes and Consequences of Change in the Mode of Governance',*Journal of Public Policy* 17(2): 139-167.

Matichon (2015), 24 May. Accessed 25 May 2015 <http://www.matichon.co.th/news_detail.php?newsid=1432457245>.

McCully, P. (2001) *Silenced Rivers: The Ecology and Politics of Large Dams*. London:Zed Books.

McDonald, D.A. and G. Ruiters (2005) *The Age of Commodity: Water Privatization in Southern Africa*. London: Earthscan.

Mekong River Commission (MRC) (2010) *ASEAN, MRC to Boost Cooperation on Mekong Issues,* Media Release, Mekong River Commission Secretariat, 4 April 2010.

_____ (2011a) *About the Mekong*. MRC Secretariat. Accessed 30 July 2011 <http://www.mrcmekong.org/ about_mekong.htm>.

_____ (2011b) *Basin Development Plan Programme: Planning Atlas of the Mekong Basin*. Vientiane: MRC Secretariat.

_____ (2011c) 'Procedure for Notification, Prior Consultation and Agreement (PNPCA)' in *1995 Mekong*

Agreement and Procedural Rules. Vientiane: Mekong River commission.

_____ (2011d) *Strategic Plan 2011-2015*. Vientiane: MRC Secretariat.

_____ (2011e) *1995 Mekong Agreement and Procedural Rules*. Vientiane: MRC Secretariat.

_____ (2012a) *About the MRC*. MRC Secretariat. Accessed 10 May 2012 <http://www.mrcmekong.org/about-the-mrc>.

_____ (2013) *Audited Financial Statement as at/and for the year ended 31 December 2012*. Vientiane: MRC Secretariat.

_____ (2016a) 'Procedures for Notification, Prior Consultation and Agreement (PNPCA)',Vientiane MRC Secretariat. Accessed 11 March 2016 <http://portal.mrcmekong.org/pnpca-description>.

_____ (2016b) *MRC to Review Vietnam's Mekong Delta Study on Hydropower Development*. MRC Secretariat. Accessed 30 March 2016. <http://www.mrcmekong.org/news-and-events/news/mrc-to-review-viet-nams-mekong-delta-study-on-hydropower-development/>.

Merme, V., R. Ahlers, and J. Gupta (2014) 'Private equity, public affairs: hydropower financing in the Mekong Basin', Global Environmental Change 24(2014): 20-29.

Middleton C., and J. Allouche (2016) 'Watershed or Powershed? Critical Hydropolitics, China and the Lancang-Mekong Cooperation Framework', *The International Spectator* 51(3): 100-117.

Middleton, C., J. Garcia, and T. Foran (2009) 'Old and New Hydropower Players in the Mekong Region: Agendas and Strategies.' in F. Molle, T. Foran, and M. Käkönen, (eds) *Contested Waterscapes in the Mekong Region: Hydropower, Livelihoods and Governance*, pp. 23-54. London: Earthscan.

Ministry of Energy and Mines (MEM) (2012) *Development Plan of Xayaburi HPP*. MEM, Lao PDR.

_____ (2017) *Hydropower in Lao PDR*. Department of Energy Business, MEM, Lao PDR. Accessed 10

August 2017 <http://www.poweringprogress.org/new/2-uncategorised/3-hydropower-in-lao-pdr>.

Ministry of Foreign Affairs, Lao PDR(2016) Remarks by Mr.ThonglounSisolith, Deputy Prime Minister and Minister of Foreign Affairs at the Ceremony to Celebrate the Establishment of the ASEAN Community.30 December 2015, Landmark Hotel, Vientiane, Lao PDR.Accessed 11 March 2016 <http://www.asean2016.gov.la/>.

Ministry of Foreign Affairs of People's Republic of China (MFA, PRC)(2016) *Sanya Declaration of the First Lancang-Mekong Cooperation (LMC) Leaders' Meeting*. Accessed 15 December 2016 http://www.fmprc.gov.cn/mfa_eng/zxxx_662805/t1350039.shtml.>.

Ministry of Natural Resources and Environment (MONRE) (2013) MPNRE, Lao PDR. Accessed 31 May 2013 <http://www.monre.gov.la/home/>.

Ministry of Planning and Investment (2011).*The Seventh Five Years National Socio-Economic Development Plan 2011-2015*. Vientiane: Ministry of Planning and Investment, Lao PDR.

Mineta, S. (2011) *Impact from China on the Water Resource in Greater Mekong Sub-region*. Paper submitted to International Seminar on 20 Years of Greater Mekong Sub region (GMS), Chiangmai, Thailand, December 2011.

Minogue, M. and Carino, L. (eds) *Regulatory Governance in Developing Countries*, pp. 17-38. Cheltenham: Edward Elgar.

Miranda, L., M. Hordijk, and R.K.T. Molina (2011) *Water Governance Key Approaches: An Analytical Framework*. Literature Review No. 4, Chance2Sustain. University of Amsterdam.

Mitrany, D. (1946)*A Working Peace System: An Argument for Functional Development of International Organization*. 4th ed,London: National Peace Council.

_____(1966) *A Working Peace System*.Chicago: Quadrangle Books.

Molle, F., T. Foran, and P. Floch (2009) 'Introduction: Changing Waterscapes in the Mekong Region – Historical Background and Context', in Molle, F., T. Foran, and M. Käkönen (eds) *Contested Waterscapes in the Mekong Region: Hydropower, Livelihoods and Governance*, pp. 1-20. London: Earthscan.

Molle, F., and P. Floch (2008) 'Mega projects and social and environmental changes: the case of the Thai 'water grid', *AMBIO* 37 (3): 199-204.

Molle, F. (2007) 'Irrigation and Water Policies: Trends and Challenges', in Louis Lebel, John Dore, Rajesh Daniel, and Yang SaingKoma (eds) *Democratizing Water Governance in the Mekong Region*, pp. 9-36. Chiang Mai: Mekong Press.

Moore, M. (2001)Political Underdevelopment: What causes badgovernance', *Public Management Review*, 3:3, 385-418.

Moran, M. (2003)*The British Regulatory State: High Modernism and Hyper Innovation*. Oxford: oxford University Press.

_____ (2011) 'Publication Review: The Oxford Handbook of Regulation.' *Public Law* 4, 859-862.

Moravcsik, A. (1993) 'Preferences and power in the European community: a liberal intergovernamentalist approach', *Journal of Common Market Studies* 31: 473-524.

Morgan, B. (2011) *Water on Tap: Rights and Regulation in the Transnational Governance of Urban Water Service*. Cambridge: Cambridge University Press.

Moss, T. and Newig, J. (2010) 'Multi-Level Water Governance and Problems of Scale: Setting the Stage for a Broader Debate', *Environmental Management* 46: 1-6.

Mya Than (2006) 'Intra-Regional and Cross-border Economic Cooperation', in M. S. I. Diokno, and V.C. Nguyen (eds), *The Mekong Arranged and Rearranged*, Chiang Mai: Mekong Press.

Nakayama, M. (2002) 'International Collaboration on Water Systems in Asia and the Pacific: A Case in Transition', *International Review for Environmental Studies*, 3(2): 274–282.

Narine, S. (2002) *Explaining ASEAN: Regionalism in Southeast Asia*, Boulder, USA: Lynne Rienner.

Nguyen, P. B. (2006) 'Geopolitics and Development Cooperation in the Mekong Region', inM. S. I. Diokno, and V.C. Nguyen (eds), *The Mekong Arranged and Rearranged*, Chiang Mai: Mekong Press.

Nusser, M. (2003) 'Political Ecology of Large Dams: A Critical Review', *Petermanns GeographischeMitteilungen* 147 (1): 20-27.

Nye, J. (1987) *Peace in Parts: Integration and Conflict in Regional Organization*. Little, Brown & Co.

O'Rourke, D. (2004) "Transition Environments: Ecological and social challenges to post-socialist industrial development", In Peet, R. and Watts, M. (eds) *Liberation Ecologies: Environment, Development, Social Movement*, pp.224-247. 2nd edition. London: Routledge.

Öjendal, J. (2000) 'Regional Hydropolitics in Mainland Southeast Asia', in B. Hettne, A. Inotai, and O. Sunkel (eds) *The New Regionalism and the Future of Security and Development*, pp.176-209. London: MacMillan.

Osborne, M. (2000) The *Mekong: Turbulent past, uncertain future*. St. Leonards, N.S.W., Australia: Allen &Unwin.

_____(2004) *River at Risk: The Mekong and The Water Politics of China and Southeast Asia*. New South Wales: Lowy Institute for International Policy.

Pholsena, S. and Phonekeo, D. (2004) *Lao Hydropower Potential and Policy in the GMS Context*. A paper presented in United Nations symposium on hydropower and sustainable development, Beijing 27-29 October.

Pholsena, V. and Banomyong, R. (2006) *Laos: From Buffer State to Crossroads?*. Chiang Mai: Mekong Press.

Philips, N. (2006) 'States and Modes of Regulation in the Global Political Economy' in Minogue, M. and Carino, L. (eds) *Regulatory Governance in Developing Countries*, pp. 17-38. Cheltenham: Edward Elgar.

Piattoni, S. (2009) 'Multi-level Governance: a Historical and Conceptual Analysis', *European Integration*. 31 (2): 163–180.

Pieterse, J.N. (2010) *Development Theory: Deconstruction/ Reconstruction*. SAGE.

Plummer, M.G. and Yu, C.S. (eds) (2009) *Realizing the ASEAN Economic Community: A Comprehensive Assessment*. Singapore: Institute of Southeast Asian Studies.

Polanyi, K. (1965) *The Great Transformation: The Political and Economic Origins of Our Time*. sixth edition. Beacon Press.

Pollitt, C. (2008) 'An Overview of the Papers and Propositions of the First Trans-European Dialogue (TED1)', *The NISPAcee Journal of Public Administration and Policy*. 1(2), Winter 2008/2009: 9-16.

Population Reference Bureau (PRB) (2010) '2010 World Population Data Sheet'. Accessed 30 May 2012 <http://www.prb.org/pdf10/10wpds_eng.pdf>

Puchala, D. J. (1994) 'the Integration Theorists and the Study of International Relations,'in Phil Williams et al. (eds)*Classic Reading of International Relations*. Belmont, California: Wadsworth.

Räsänen, T.A., J.Koponen, H. Lauri., and Matti K. (2012) 'Downstream Hydrological Impacts of Hydropower Development in the Upper Mekong Basin', *Water Resources Manage* 26: 3495–3513.

Reungsri, W. (2014) *Caravans and Long-Distance Traders: the Rise of the Modern State in Northern Thailand and the hinterland of Peninsular Southeast Asia*. (in Thai) Chiang Mai: Centre for ASEAN Studies, Chiang Mai University.

Rittberger, V., and Mayer, P.(eds) (1993)*Regime Theory and International Relations*, New York: Oxford University Press.

Rogers, P. and Hall, A.W. (2003) *Effective Water Governance*. Stockholm: TEC Background Papers No. 7, Global Water Partnership.

Roth and Warner (2008) 'Virtual Water: Virtuous Impacts: the Unsteady State of Virtual Water' *Agriculture and Human Values* 25 (2) 257-270.

Salman, M.A.S. and Bradlow, D.D. (2006) *Regulatory Framework for Water Resources Management: A Comparative Study*.Washington DC: The World Bank.

Samnieng, C. (2012) 'Relations in the Mekong Basin along the Trading Routes' (in Thai) Chiang Mai: Institute of Public Policies Studies. Accessed 15 March 2016 <http://www.siamintelligence.com/trade-relation-on-mekong-sub-region/>.

Save the Mekong. (2013) *Chor Karnchang Expected to Sign the Contract Early Next Year*. Accessed January 26 2013 <http://www.savethemekong.org/news_detail.php?nid=180&langss=th>.

Scudder, T. (2005) The Future of Large Dams: Dealing with Social, Environmental, Institutional and Political Costs. London: Earthscan.

Sekiguchi S., and N. Makito (2000) *Road to ASEAN 10*. Singapore: Institute of Southeast Asian Studies.

Shannon, D. (2012) 'Continued Growth Projected for Dams and Hydropower Markets', *Hydro Review* 31(3). Accessed 10 December 2015

<http://www.hydroworld.com/articles/hr/print/volume-31/issue-3/article/continued- growth-projected-for-dams-and-hydropower-markets.html>.

Shi, X., and F. Kimura (2014) 'The status and prospects of energy market integration in East Asia', in Y. Wu, F. Kimura, and X. Shi (eds.) *Energy Market Integration in East Asia: Deepening Understanding and Moving Forward*, pp. 9-24. Abingdon, UK: Routledge.

Sisowath, D.C. (2006) 'Region within Region: the Mekong and ASEAN', in S. D.I. Maria, and V. C. Nguyen (eds) *The Mekong Arranged and Rearranged*, pp.121-40. Chiang Mai: Mekong Press

Sneddon, C., and C. Fox (2006) Rethinking Transboundary Waters: A critical Hydropolitics of the Mekong basin. *Political Geography* 25:181-202.

Söderbaum, F. (2012) 'Theories of Regionalism' in Beeson, M. and Stubbs, R. (eds) *Routledge Handbook of Asian Regionalism*. pp. 11-21. London: Routledge.

Sokhem, P., K. Sunada, and S. Oishi (2007) 'Managing Transboundary Rivers: The Case of the Mekong River Basin', *Water International* 32: 503-523.

Sombounkhan, C. (2012) 'Control of Power in Lao People's Revolutionary Party (LPRP): Facts and Strategic Objectives' *Social Sciences: Research Journal of Lao Academy of Social Sciences* 14:1-7.

Sretthachau, C. (2000) *Political Ecology of Large Dam Scheme in Thailand: A case Study of Kaeng Sua Ten Dam Project* (in Thai). Master theisis in man and environmental management. Chiang Mai University, Thailand.

Stigler, G. (1971). 'The theory of economic regulation', *Bell Journal of Economics* 2(1): 3-21.

Stuart-Fox, M. (1997) *A History of Laos*. Cambridge: Cambridge University Press.

_____ (2003) *A short history of China and Southeast Asia: Tribute, Trade and Influence*. St.Leonards, NSW: Allen &Unwin.

Stubbs, R. (2012) 'The Developmental State and Asian Regionalism' in Beeson, M. and Stubbs, R. (eds) *Routledge Handbook of Asian Regionalism*. pp. 90-99. London: Routledge.

Suhardiman, D., Silva S., and Jeremy C.S. (2011) *Policy Review and Institutional Analysis of the Hydropower Sector in Lao PDR, Cambodia*

and Vietnam. IWMI, ICEM and CGIAR Challenge Program on Water and Food.

Suryadi, B. (2015) 'Development of ASEAN Energy Sector' ASEAN Centre for Energy. Accessed 14 July 2015 <http://www.aseanenergy.org/blog/development-of-asean-energy-sector>.

Symon, A. (2009) 'Southeast Asia's Quest for Energy Security: Cooperation and Tensions', *Regional Outlook: Southeast Asia 2009-2010*, Singapore: Institute of Southeast Asian Studies

Tana, T.S. (2008) 'A Rational Approach to International River Management in Different Jurisdictional Contexts of the Greater Mekong Subregion: Water Development versus Biodiversity Conservation', in SuchadaTaweesit, Peter Vail, and RosaliaSciortino (eds), *Transborder Issues in the Greater Mekong Sub-region*, pp.108-109. Mekong Sub-region Social Research Center, UbonRatchathani University.

Thakur, R. and Van Langenhove, L. (2008) 'Global Governance and Regional Governance', in Andrew Cooper, Christopher Hughes, and Philippe De Lombaerde (eds) *Regionalisation and Global Governance: The Tameing of Globalisation*, pp.17-42. London: Routledge.

The Economist (2010) "The Ups and Down of Dams: Small projects often give better returns." Special report 20 May 2010.Accessed 15 September 2013 <http://www.economist.com/node/16136280>.
the South',*Regulation and Governance*6(3): 261-81.

_____ (2012) 'The Mekong: Lies, dams and statistics', *The Economist,* Accessed 26 July 2012 <http://www.economist.com/blogs/banyan/2012/07/mekong-river>.

Thipmountaly, K. (2012) 'Globalization and its Current Impacts on the Socio-economics of Laos' *Social Sciences: Research Journal of Lao Academy of Social Sciences* 14: 21-28.

Trebilcock, M.J., and Prado M.M. (2014) *Advanced Introduction to Law and Developmen*t. Cheltenham UK: Edward Elgar.

Troung, T.D., and K. Knio (2016) *The South China Sea and Asian Regionalism: A Critical Realist Perspective*. Peace and Security Studies 24, Springer.

Tun Myint (2012) *Governing International Rivers: Polycentric Politics in the Mekong and the Rhine.*Northampton, MA: Edward Elgar Publishing.

Turton, A.R., and A. Earle (2005) 'Post-apartheid institutional development in selected Southern African international river basin', in C. Gopalakrishnan, C. Tortajada, and A.K. Biswas (eds) *Water Resources Management : Structure, Evolution, and Performance of Water Institutions*, pp.154-168. Hildenberg: Springer.

United Nations Development Programme (UNDP) (1997) *Governance for Sustainable Human Development*. New York: UNDP.

_____ (2006). *Human Development Report*. Oxford: Oxford University Press.

_____ (2014) *Human Development Report 2014*. New York: UNDP.

Vaidyanathan, G. (2011) 'Dam Controversy: Remaking the Mekong', *Nature* (478): 305-307.

Van Gelder, J.W., Denie, S., and Law, H. (2010) *Financial Institution Involved in the Lower Mekong Dam Projects*. A research paper prepared for WWF Greater Mekong Programme. Draft 1 August 2010. Amsterdam: Profundo Economic Research.

Vientiane Times (2012) 'Laos unveils strategy on Xayaburi Dam', 26 July 2012.

_____ (2014) 'Laos pushes for energy integration', 23 September 2014. Accessed 26 September 2014 <http://www.vientianetimes.org.la/subnew/Previous_223/index.html>.

Wachtel, H.M. (2007) 'Water Conflicts and International Water Markets' in H. Shuval, and H. Dweik (eds) *Water Resources in the Middle East: Israel-Palestinian Water Issues from Conflict to Cooperation*, pp. 147-153. Berlin, Heidelberg, New York: Springer.

Ward, V. (1998) 'Sovereignty and Ecosystem management', in Karen Litfin (ed) *The Greening of Sovereignty in World Politics*, pp. 79-108. Massachusetts: the MIT Press.

Weigand, F. (2015) *Investigating the Role of Legitimacy in the Political Order of Conflict-torn Spaces*. SiT (Security in Transition) 4/15.

Williamson, J. (1990) *The Progress of Policy Reform in Latin America.* Washington: Institute of International Economics.

Wimmer, A. and Schiller N.G. (2003) 'Methodological Nationalism, the Social Sciences, and the Study of Migration: An Essay in Historical Epistemology', *International Migration Review* 37(3): 576-610.

Wisuttisak, P. (2012) Regulation and competition issues in Thai electricity sector. *Energy Policy*, 44: 185-198.

Witt, M.A., and Redding G. (2014) 'China: Authoritarian Capitalism' in Witt, M.A., and Redding, G. (eds.). *The Oxford Handbook of Asian Business Systems*, pp.11-32.Oxford: Oxford University Press.

Wolf, A.T. (1998) 'Conflict and cooperation along international waterways', *Water Policy* 1(2): 51-65.

_____(1999) 'The Trans boundary Fresh Water Dispute Database Project', *Water International* 24(2): 160-163.

Wood, D. M., and Yesilada, B.A. (1996)*The Emerging European Union*. Longman.

World Bank (1992) *Governance and development*. Washington, DC : The World Bank Group.

_____(2009) Directions in Hydropower. Washington, DC : The World Bank Group.

_____ (2011) World Development Indicators database. The World Bank, 1 July 2011.

_____ (2013) *Lao People's Democratic Republic - Ninth Poverty Reduction Support Operation Project*. World Bank, August 27, 2013.

_____(2014a) What are Public Private partnerships?.Accessed December 2014. http://ppp.worldbank.org/public-private-partnership/overview/what-are-public-private-partnerships

_____(2014b) BOT - PPP in Infrastructure Resource Center.World Bank.Accessed December 2014.http://ppp.worldbank.org//public-private-partnership/agreements/concessions-bots-dbos

_____(2015a) *A Water Secure World for All - Water for Development: Responding to the Challenges*. Washington, DC : The World Bank.

_____(2015b) *Database World Development Indicators "electricity production (kWh)"*. Accessed October 2015 <http://wdi.worldbank.org/table/3.7>.

World Bank and Asian Development Bank (ADB) (2006) *Future Direction for Water Resources in the Mekong River Basin*, *Mekong Water Resources Assistance Strategy (MWRAS)*. WB/ADB Joint Working Paper.

World Commission on Dams (WCD) (2000) *Dams and Development: A New Framework for Decision Making*. London: Earthscan.

World Watch Institute (2012) *Use and Capacity of Global Hydropower Increases.*Accessed 30 August 2012 <http://www.worldwatch.org/node/9527>.

Xayaburi Power Company Limited (XPCL) (2012) *Xayaburi Hydroelectric Power Project*. Vientiane: XPCL.

_____ (2014) *Monthly Progress Report No.41*. XPCL, March 2014.

Yu, W.J. (2011) 'China and East Asian Regionalism', *European Law Journal* 17(5), September, 611–629.

Zarfl, C., A.E., L. Berlekamp, L. J. Tydeks, and K. Tockner (2015) 'A global boom in hydropower dam construction', *Aquatic Science* 77: 161-170.

Zeitoun, M., and Mirumachi, N. (2008) 'Transboundary water interaction I: Reconsidering conflict and cooperation', *International Environmental Agreement: Politics, Law and Economic* 8: 297-316.

Zeitoun, M., and Warner, J. (2006) 'Hydro-hegemony: a framework for analysis of transboundary water conflicts', *Water Polocy* 8: 435-460.

Curriculum Vitae

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