

Promoting and contesting hydropower development:
actors and narratives in the lower Mekong basin's
hydropolitical constellation

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Abstract

This thesis investigates hydropower development in the lower Mekong basin. Water resources development is promoted and contested by multiple actors at multiple scalar levels of analysis. In examining the hydropolitical constellation of the lower Mekong theoretical insights from political ecology are utilised, and dominant assumptions about transboundary rivers are considered. The hydropolitical constellation of the lower Mekong is comprised of a number of different actors with competing water resources development agendas, including: the Mekong River Commission, multilateral development banks, donors, the private sector, and civil society. The Mekong River Commission, as a transboundary river basin organisation, is a key arena for hydropower development debates as it is a space where a multitude of actors interact and confront each other.

This thesis argues that a dominant development narrative linking hydropower development and poverty reduction has endured since the 1950s. This narrative was the initial impetus for transboundary water cooperation between the four lower Mekong states. From the 1990s onwards the pace of hydropower development in the lower Mekong has increased and is being intensified by new actors. Changing regional dynamics and the presence of new actors has altered power relationships, but not dominant conceptions of the Mekong and hydropower.

This thesis argues that actors utilise narratives to legitimise their development interventions and silence the concerns of less powerful actors. Situating hydropower development at the national scale obscures actors, processes and impacts at other levels of analysis which are promoting and contesting hydropower development. Representing the Mekong and development in particular ways allows actors to maintain and extend their access to resources. However, this is continually challenged by less powerful actors. The evidence and representations of less powerful actors have been unable to displace those of powerful actors who have shifted the terrain to discussions of trade-offs.

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Glossary

Abbreviations

ADB	Asian Development Bank
AFD	Agence Française de Développement
AMRC	Australian Mekong Resource Centre
ASEAN	Association of Southeast Asian Nations
BDP	Basin Development Plan
BDP2	Basin Development Plan Programme Phase 2
BOOT	Build-Own-Operate-Transfer
CA	Concession Agreement
CEO	Chief Executive Officer
CNMC	Cambodia National Mekong Committee
CPRGS	Comprehensive Poverty Reduction and Growth Strategy
CWP	Coordinating Working Party on Fisheries Statistics
DANIDA	Danish International Development Assistance
DOE	Department of Electricity
ECAFE	Economic Commission for Asia and the Far East
EDF	Électricité de France
EDL	Electricite du Laos
EGAT	Electricity Generating Authority of Thailand
EIA	Environment Impact Assessment
GMS	Greater Mekong Subregion
GDP	Gross Domestic Product
GNI	Gross National Income
GNP	Gross National Product
GWP	Global Water Programme
IAG	International Advisory Group
IBP	Indicative Basin Plan
IBRD	International Bank for Reconstruction and Development
ICEM	International Centre for Environmental Management
IDA	International Development Association
IHA	International Hydropower Association
IMC	Interim Mekong Committee
IPE	International Political Economy
IPP	Independent Power Producer
IR	international relations
ISH	Initiative on Sustainable Hydropower
ITD	Italian-Thai Development
IUCN	International Union for the Conservation of Nature
IWMI	International Water Management Institute
IWRM	Integrated Water Resources Management
Lao PDR	Lao People's Democratic Republic
LNMC	Lao National Mekong committee
LMB	Lower Mekong Basin
MDG	Millennium Development Goals
MOU	Memorandum of Understanding
MPOWER	Mekong Program on Water, Environment, and Resilience
MRC	Mekong River Commission
MWRAS	Mekong Water Resources Assistance Strategy
MW	megawatt

NGO	non-governmental organisation
NGPES	National Growth and Poverty Eradication Strategy
NMC	National Mekong Committee
NMCS	National Mekong Committee Secretariat
NSDP	National Strategic Development Plan
NT2	Nam Theun 2
NTEC	Nam Theun Electricity Consortium
NTPC	Nam Theun Power Company
ODA	overseas development assistance
PDA	Project Development Agreement
PM	Prime Minister
PNPCA	Prior Notification, Prior Consultation and Agreement
PO	Participant Observation
POE	Panel of Environmental and Social Experts
PPA	Power Purchase Agreement
RCC	Rivers Coalition in Cambodia
SEA	Strategic Environmental Assessment
SIA	Strategic Impact Assessment
SIDA	Swedish International Development Agency
TA	Technical Assistance
TERRA	Towards Ecological Recovery and Regional Alliance
THPC	Theun Hinboun Power Company
TOR	Terms of Reference
TVA	Tennessee Valley Authority
UN	United Nations
UNDP	United Nations Development Program
US	United States
US\$	United States dollars
USACE	US Army Corps of Engineers
USAID	United States Agency for International Development
WCD	World Commission on Dams
WCED	World Commission on Environment and Development
WMPA	Watershed Management and Protection Authority
WREA	Water Resources and Environment Agency
WWF	World Wildlife Fund for Nature

Chapter One: Hydropolitics in the Lower Mekong

1. Introduction

Rivers have played a unique role in human history and development. Water management was integral to the development of early civilisations such as Mesopotamia, and to the development of modern nation states through the utilisation of water for agriculture, industry, and transport (Hassan 2003). From the 19th Century onwards water engineers and politicians became increasingly interested in the concept of river basin development including grand plans for irrigation and dams (Molle 2009). Water and development have become intrinsically linked in the discourse of engineers, planners, and politicians. As water use by society has increased to encompass domestic uses, agriculture, industry and power production, competing water demands have emerged at the same time as societies are becoming more inter-linked (Hassan 2003). As such, rivers have emerged as a field of interest in political science.

From the 1980s onwards, there has been increasing academic and practical interest in the world's transboundary rivers, and their conflict and cooperation potential due to their interconnected and interdependent nature has been widely debated (Wolf 1998; Sadoff and Grey 20002; Phillips *et al.* 2006). Institutions or cooperative river basin organisations have been suggested as a key mechanism to reduce the inter-state tensions that result from states sharing a watercourse and foster cooperation between riparian states (Lowi 1995). The Mekong River in Southeast Asia has a long-standing and resilient history of water cooperation between the four lower riparian states: Lao People's Democratic Republic (Lao PDR), Thailand, Cambodia and Vietnam (Wolf 1998). In 1995 these four states established the Mekong River Commission (MRC). As the pace of water resources development in the region has intensified the MRC has become the subject of an immense amount of attention from actors who want to critique, improve and empower it (Dore and Lazarus 2009). The reasons for this, and for the resurrection of plans to develop mainstream hydropower, lie both within and outside the sphere of lower Mekong water cooperation.

This thesis examines how multiple actors promote and contest hydropower development in the lower Mekong, and how both the Mekong and development are constituted in discourse. The dynamic interplay between actors, narratives and representations of development illustrates that hydropolitics in the lower Mekong is complex involving both place and non-place based actors, as well as global, regional,

national and sub-national discourses on water cooperation and development. This thesis challenges the state-centric focus of conventional IR approaches to hydropolitics, and utilises political ecology and insights from critical IR approaches to account for the complexity of development debates and hydropolitics in the lower Mekong.

2. The Mekong River

The Mekong River is shared by six states: China, Myanmar, Thailand, Lao PDR, Cambodia and Vietnam (see Map 1, p.3). It is 4904km long and one of the largest rivers in the world (MRC 2010a). It rises in the Tibetan Plateau and flows through Yunnan Province in Southwest China before forming the border between China, Myanmar, and Lao PDR; the river then forms the border between Thailand and Lao PDR for a considerable distance before flowing through Cambodia and dividing into the nine branches that form the Vietnamese Delta, and discharging into the South China Sea (Phillips *et al.* 2006; Cronin 2009). The Mekong basin is usually split into two parts, the upper Mekong (China and Myanmar) and the lower Mekong (Lao PDR, Thailand, Cambodia and Vietnam). This division is for both geopolitical, and hydrological and topographical reasons.

Around 60 million people live in the lower Mekong basin, with 80% living in rural areas and sustaining themselves with small-scale primary production (MRC 2010a; Phillips *et al.* 2006). The Mekong River supports one of the world's most productive and biologically diverse fisheries, which plays an integral role in livelihoods and food security (MRC 2010a). One of the key features of the Mekong River system is the Tonle Sap River in Cambodia which connects with the Mekong at Phnom Penh and reverses its flow depending on the season. During the flood season excess water from the Mekong floods into the Tonle Sap River and expands the size of the Tonle Sap Lake inundating a large floodplain; as the flood subsides water flows back into the Mekong River bringing with it a large quantity of migratory fish and providing part of the Mekong Delta with enough water to produce a third rice harvest (Cronin 2009; Sokhem and Sunada 2006). As well as important roles in fisheries and agriculture, the Mekong River system has a strong potential for hydropower dam development.



Map 1: The Mekong River Basin (Phillips *et al.* 2006: 93)

Since 1957, the four states of the lower Mekong have participated in cooperative water arrangements. This cooperation has three distinct phases: one, the Mekong Committee (1957-1975), which had a strong focus on regional development plans; two, the Interim Mekong Committee (1978-1991) during which Cambodia was absent due to internal instability; and three, the Mekong River Commission (1995- to present) which combines all four lower Mekong states and is officially orientated towards sustainable development of the lower Mekong (Varis *et al.* 2008a; Chi 1997; Radosevich and Olsen 1999; Browder 2000). Hydropower development plans have been associated with

Mekong water cooperation since 1957, and linked to regional development by the four lower Mekong states. The lower Mekong is simultaneously a space for regional water cooperation, important for local livelihoods, and a potential resource for development.

3. Hydropower development and water resources governance in the lower Mekong

Hydropower development in the lower Mekong since the end of the Cold War has attracted attention and criticism from civil society actors and researchers. Global civil society actors have challenged projects such as Nam Theun 2, whilst Thai civil society actors have campaigned against projects such as Pak Mun dam. Prior to 2006, the projects being proposed, planned and contested were located on tributaries (see Map 2, p.4)



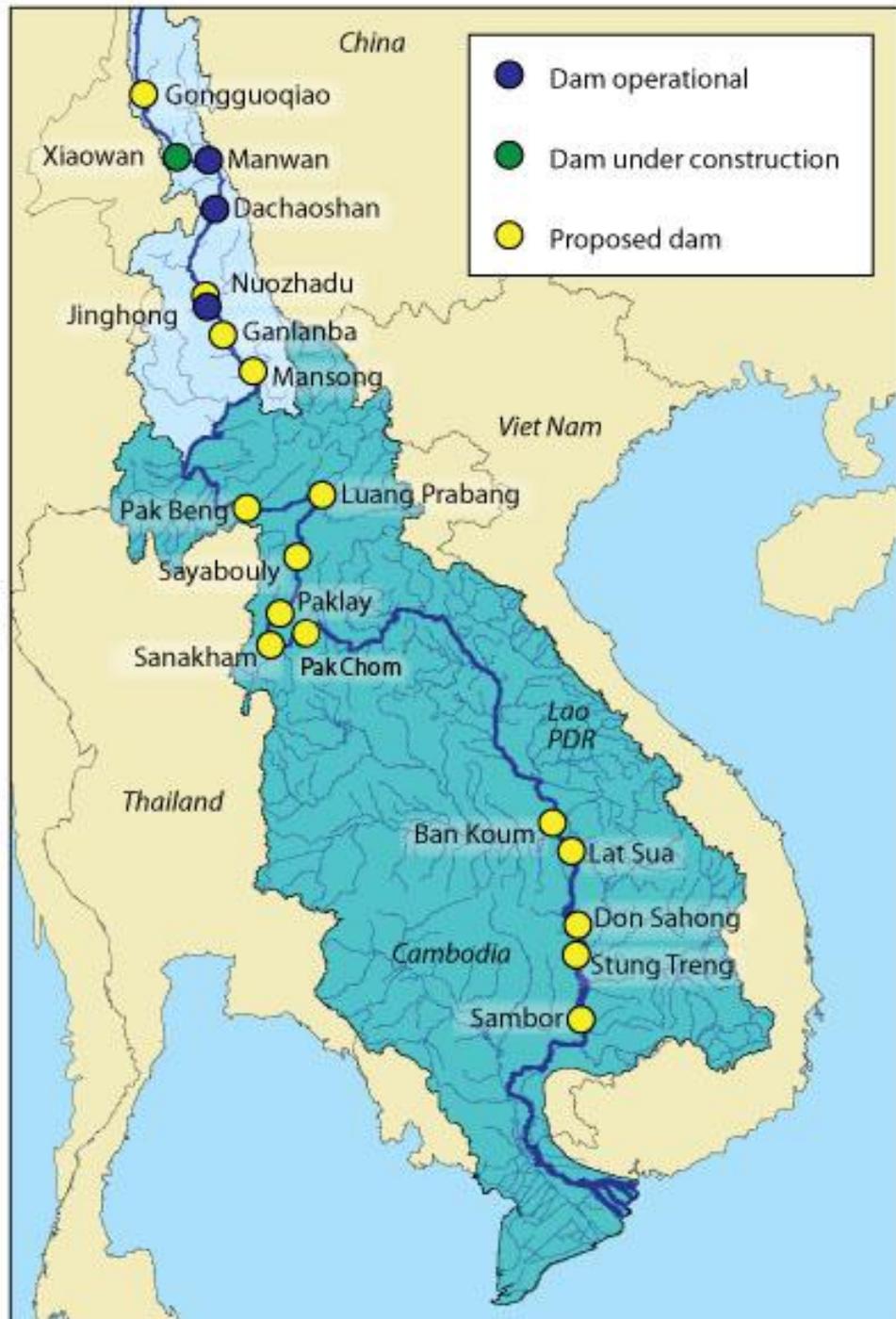
Map 2: The Mekong's main tributaries (http://en.wikipedia.org/wiki/Srepok_River)

The MRC was largely absent from debates over these projects, arguing that they were outside its purview (Backer 2007). Hydropower dams are controversial because

they alter various actors' relations to water, introduce new technologies that require experts and remove control of water use and access away from local communities (Trottier 2003a). Hydropower development is often a politically opaque process where local communities, and sometimes individual states, are concerned because it is dominated by international experts, consultants, engineering firms, and both public and private capital (Bakker 1999). Civil society actors, researchers and academics are concerned about the impacts of hydropower, as well as the distribution of costs and benefits (*e.g.* TERRA 2007; Baran and Ratner 2007).

Plans for hydropower development in the lower Mekong escalated in 2006 with the resurrection of plans to dam the mainstream of the lower Mekong River (see Map 3, p.6). Traditional donors to the region (such as Denmark), civil society actors and the development banks were surprised by the resurrection of these plans. Civil society actors expressed concern that these dams were being discussed again when earlier studies had demonstrated their potentially significant impacts on fisheries (MRC 2008a). In 2006, the Asian Development Bank (ADB) and the World Bank argued that mainstream hydropower development was unlikely given the size of the potential socio-environmental impacts (ADB and World Bank 2006).

Plans for mainstream dam projects intensified the debate about the role and relevance of the MRC amongst donors and civil society actors. The MRC has been characterised as largely absent, silent or underutilised by Member States in decision-making and debates about controversial water resources developments, including: Chinese plans to dam the upper Mekong; Vietnamese hydropower development of the Sesan (a Mekong tributary), which negatively impacted local communities in Cambodia; Thai plans for diverting water from the Lower Mekong, and a channel improvement programme for the upper reaches of the Mekong involving China, Myanmar, Lao PDR and Thailand (Dore and Lazarus 2009). Civil society actors have accused the MRC of "abdicating responsibility" by remaining silent regarding Member States' plans for mainstream hydropower (TERRA 2007). Donors to the MRC, including Australia and Germany, urged the MRC to play a strong role in hydropower and for Member States to utilise the MRC (Development Partners 2007). However, as the debate has continued the MRC has provided one of the few arenas in which civil society actors can contest powerful actors' plans to dam the mainstream. The MRC has also undertaken research into potential impacts, which has been widely disseminated (*e.g.* ICEM 2010).



Map 3: Proposed Hydropower Projects on the Mekong mainstream
 (<http://www.mrcmekong.org/ish/map.htm>)

Debates and plans about water resources developments in the lower Mekong have largely taken place outside the MRC arena. This disjuncture is mirrored in a large part of the academic literature where hydropower development projects in the lower Mekong are considered within the field of geography, and water governance at the international

and regional levels are considered from conventional IR approaches to hydropolitics. Geographers have largely considered individual projects, their scalar properties, and the various actors involved (*e.g.* Usher 1996). In contrast studies on the MRC have largely utilised conventional IR hydropolitics approaches, such as regime theory, to consider particular aspects of the regime (*e.g.* Affeltranger 2008).

Hydropower development in the lower Mekong has attracted increasing attention from researchers (largely within the field of geography) since the mid-1990s as plans for tributary, and later mainstream dams, have escalated (see Bakker 1999; Hirsch 2001; Usher 1996; Klopper 2008). This literature has focused on issues of scale, power, and various actors (*e.g.* private companies and the ADB) who operate over various scalar levels (see Hirsch 2001; Usher 1996). The politics of hydropower development in the lower Mekong has also been emphasised within this research. Klopper (2008) and Lebel *et al.* (2005) have highlighted the scalar strategies that actors utilise in order to both promote and contest hydropower development. For example, Thai state actors have rescaled their hydropower development strategies to the regional level and are funding and promoting hydropower development in Lao PDR in order to meet their predictions of rising energy demands and avoid domestic opposition to hydropower (Klopper 2008; Lebel *et al.* 2005). Research has also focused on interactions between different actors over various scalar levels. Usher (1996) links the Theun Hinboun hydropower project in Lao PDR, with Nordic private companies, Nordic donors to the region, and the local impacts of hydropower development.

The MRC, whilst mentioned in some of this literature, does not feature heavily in analyses. Researchers have placed current hydropower plans within their historical context noting the links between hydropower plans and Mekong water cooperation (see Bakker 1999; Usher 1996). However, it is argued that at the same time as the MRC is incorporating social and environmental concerns into its programmes, it is becoming marginalised (Bakker 1999). There is a strong focus on state actors, private companies, multilateral development banks, and civil society (see Klopper 2008; Lebel *et al.* 2005; Hirsch 2001). This literature illustrates that a wide range of non-state actors operating over various scalar levels are important aspects of water resources development. However, as hydropower development is being rescaled to the international level through plans for mainstream dams, it is important to consider water governance at this scale, as well as the overlapping interactions between actors operating over different scalar levels, and locate unfolding trends, such as increased involvement of the private sector, in their wider political contexts.

The MRC has been considered from a number of conventional IR approaches to international hydropolitics. Conventional IR approaches focus on the conflict/cooperation problematic: transboundary rivers, due to their interconnected nature, contain both the potential for conflict and cooperation as development of water resources in one part of the basin will impact the other parts (Elhance 1999). Political scientists, such as Makim (2002), have argued that whilst none of the Mekong Committees plans were ever realised in the period 1957-1994, the value of lower Mekong water cooperation lies in its contribution to regional security as it provided a space for otherwise hostile riparian states to meet and discuss. Recent research on the lower Mekong and the current incarnation of Mekong water cooperation, the MRC, have largely utilised a state-centric focus and international relations approaches such as regime theory (Backer 2007; Makim 2002; Meninken 2007). A large amount of research has been produced focusing on different aspects of Mekong cooperation including: the negotiations for the 1995 Mekong Agreement (Browder 2000; Nakayama 1999); public participation (Chenoweth *et al.* 2002); links between water cooperation and security (Makim 2002); issues surrounding data management and exchange (Affeltranger 2008); and MRC effectiveness and Member State commitment (Backer 2007).

Case studies of the Mekong River have also been conducted within the context of larger debates about the conflict and cooperation potential of transboundary rivers and how water cooperation can mediate this conflict potential (Elhance 1999; Phillips *et al.* 2006). Within these case studies, hydropower development plans are dealt with briefly and related to the river's hydropower potential and Member States' growing electricity demand (*e.g.* Phillips *et al.* 2006). However, they do identify hydropower development as a threat to the basin's future integrity (Phillips *et al.* 2006).

This IR-influenced literature focuses on the international level and on cooperation between four unified states, therefore the potential impacts of hydropower development for local communities are not considered. Situating analysis at the international or regional scale masks the ways in which water resources development is experienced by actors at other scales, such as local communities. It also obfuscates how multiple state actors, such as different ministries, as well as private sector actors are driving hydropower development in the lower Mekong outside of the sphere of regional water cooperation.

4. Actors, narratives and scale: research question and approach

In order to explore the hydro-political constellation of the lower Mekong and current hydropower development debates it is necessary to integrate the concerns of hydropower development and water governance; understand the multiple scales over which actors operate; challenge conventional IR approaches' focus on unified states to reveal the various state actors proposing and contesting hydropower development and water governance; trace the regional discursive formation, which has shaped development thinking in the lower Mekong region; and, consider the discursive coalitions which form around hydropower. In doing so this thesis addresses the following question:

How can considerations of multiple actors and narratives be integrated into approaches to transboundary hydro-politics in order to understand and analyse the debates surrounding the MRC and hydropower development in the lower Mekong?

Hydropower development and water governance involves different actors. Utilising conventional IR approaches to hydro-politics cannot account for this as these approaches do not locate water governance in its wider social, economic, political and development contexts. The MRC has been labelled as absent or silent by civil society. Underpinning this is the assumption that water resources development decisions should involve the MRC and that the MRC operates in certain ways. Donors to the MRC have looked for ways to strengthen the institution, including building capacity and increasing stakeholder participation (*e.g.* MRC 2007a). However, these strategies will not necessarily work as they are based on analyses which detach the MRC from its wider contexts, treating it in isolation from other scalar levels and actor relationships in the basin.

Conventional approaches to hydro-politics are informed by the neo-neo consensus of neo-realism and neo-liberalism (Du Plessis 2000). These approaches largely focus on the conflict/cooperation potential of transboundary rivers (Furlong 2006). International river basin organisations and other cooperative forms are identified as key to mitigating the tensions inherent in transboundary river basins (*e.g.* Lowi 1995). Water cooperation has been conceptualised in terms of hegemonic stability theory (Lowi 1993), the role of institutions in mitigating the mistrust and compliance problem in inter-state relationships (Dinar 2000), and regime theory (Jagerskog 2001).

Work within this field is focused on problem-solving. Tools such as Integrated Water Resources Management (IWRM) and benefit sharing have been developed and are being disseminated via international organisations such as the Global Water Partnership, and donor-recipient state relationships (Sadoff and Grey 2002; Phillips *et al.* 2006; Varis *et al.* 2008a).

Conventional IR approaches to hydropolitics are incapable of capturing the complexity of water resources and governance debates in the lower Mekong as they focus on interactions between unified state actors at the inter-state level. Consequently, they cannot account for the intra-state and cross-state relationships located over various scalar levels, which are driving hydropower development in the lower Mekong basin and locating water resources decisions outside of national and regional water governance spheres. As mentioned above, Thai state actors have rescaled hydropower development to the regional scale and are developing hydropower projects in Lao PDR. One of the key Thai state actors involved in this is the Electricity Generating Authority of Thailand (EGAT), a state enterprise under the Ministry of Energy. EGAT is responsible for determining Thai electricity demand and devising plans to meet this demand. EGAT favours hydropower development in Lao PDR. A number of proposed hydropower projects in Lao PDR are premised on EGAT purchasing the electricity. This relationship between state actors outside of the water governance sphere is propelling hydropower development in Lao PDR. Two important dynamics emerge from consideration of these types of actor relationships: one, states are not unified actors, and two, a range of actors need to be considered when examining hydropower development and water governance debates.

A focus on undifferentiated states and their national interests cannot adequately explain international water conflict and cooperation (Selby 2005). The state is a multifaceted actor and it is imperative that analysis avoids the territorial trap, whereby states are reified as fixed units of sovereign space which contain society (Furlong 2006). As well as considering multiple state actors such as EGAT and the Lao and Thai Ministries of Energy, it is important to consider sub-state and non-state actors. Conventional approaches to hydropolitics sever the domestic and international spheres. However, these two scales are interrelated and impact each other in a number of ways. States are “immersed in a complex dynamic process whereby their institutions interact with non-state institutions both within and outside the national territory” (Trottier 2003a: 4). These interactions condition water resources outcomes at various scalar levels.

Actors' relationships overlap and condition each other in webs or networks of power relationships. By placing debates about water resources development and governance within their larger socio-political contexts, interactions between different actors operating over various scalar levels become visible. For example, Member State government actors, for example the Ministries of Planning or Energy, sign deals with private sector companies to investigate hydropower sites. These governments are members of the MRC, which entails certain commitments. However, they are also complex entities within which, differences concerning hydropower development and water resources management exist. Through the MRC, member governments receive funding and have relationships with different donors, such as Denmark. These donors have their own constituencies to which they have to justify their overseas development assistance and who are concerned about the renewed interest in hydropower. Hydropower development affects local communities who are championed by global and regional civil society because civil society is weak or lacking in some parts of the Mekong basin.

Hydropolitical analysis needs to be multi-scalar in two ways: one, it needs to consider the multiple actors who operate over various different scales and how relationships between these actors condition each other and outcomes; and two, it needs to consider actors' scalar strategies, such as the ways in which actors scale interventions or 'jump scale'. EGAT has scaled hydropower development at the inter-state level in response to wide-spread, high profile opposition against hydropower development in Thailand. Thai civil society actors have contested a number of domestic hydropower projects including Pak Mun. Civil society actors are 'jumping scale' in order to access debates about mainstream hydropower development. The majority of these civil society actors cannot access debates at the national level due to a lack of space for civil society. Instead, actors are scaling up their concerns to the regional level and accessing debates through the MRC. As such, the MRC acts as an arena in which conflicting development representations can be articulated and hydropower development can be contested by less powerful actors.

The resurrection of plans for mainstream dams and the arguments which underpin them, illustrates how a regional discursive formation has shaped development in the region, and framed the thinking of powerful actors. A regional discursive formation is comprised of "certain modes of thought, logics, themes, styles of expression, and typical metaphors...[which] run through the discursive history of a region, appearing in a variety of forms, disappearing occasionally, only to reappear with even greater

intensity in new guises” (Peet and Watts 1996: 16). Since the 1950s a development narrative linking poverty, hydropower development, and poverty reduction has dominated water resources development, framing actors’ thinking and development strategies. Current plans for mainstream hydropower are surprisingly similar to the mainstream hydropower plans produced and investigated by the Mekong Committee in the 1960s and 1970s. These new plans are also justified in similar terms by state officials interviewed for this thesis: mainstream hydropower will lead to poverty reduction. Analysis of this regional discursive formation and the ways in which it has shaped development interventions, framed the thinking of powerful actors, and conditioned what can be meaningfully said in development debates has to be integrated into examination of the lower Mekong’s hydropolitical constellation. Development debates and the ways in which they are framed are not the result of neutral, technical or scientific processes, but are political. The ways in which problems are identified and defined, the types of evidence that are gathered, and the ways in which solutions are produced and accepted by particular actors are all political processes.

The dominant regional discursive formation in the lower Mekong frames development at the national and regional scales, and as such depoliticises development. Hydropower development is represented by state actors as beneficial because it will reduce poverty, which is defined in terms of indicators such as Gross National Income. This is a state-level justification. Development is represented as a technological or scientific good: this masks its normative nature. It is necessary to trace the ways in which debates are framed and scaled in order to open up the category of development and reveal its contested nature. Hydropower development is presented by state actors as the obvious solution to the problem of poverty. However, there is nothing natural, fixed or pre-given about the ways in which both poverty and its solution (hydropower) have been defined and operationalised. There are a number of potential development options for the lower Mekong states, including eco-tourism and community-based development initiatives. Consequently, it is necessary to analyse how development debates are framed in such a way that hydropower becomes the dominant development option.

Situating development at the national scale also depoliticises the impacts of hydropower development. At this scale of analysis the potential impacts of hydropower development, which are largely located at the local community level, are situated in such a way that they are an acceptable trade-off for the benefits that hydropower will bring at the national level (*i.e.* increased amounts of electric power which can be exported or used in industry, and increased government revenues, which can be used for

poverty reduction programmes). Within this, development is the task of the government and developing the state, its resources, and people lies within its capabilities and purview. 'The people' are represented as an undifferentiated mass, apolitical, lacking agency, and waiting to be developed by the government. This representation obscures at the regional and international scales of debate and decision-making the ways in which local communities utilise the lower Mekong, have developed communal property regimes, and depend on the Mekong's water and fisheries resources for livelihoods. Local community actors possess agency and are active users and developers of their local water resources. Consequently, as a first step in ascribing agency to local, non-state actors, approaches to international hydropolitics need to open up the category of development and consider the ways in which it is framed, the impacts particular types of interventions will have for local communities, and the spaces for non-state actors to contest development interventions.

Development is not a neutral category: it is highly contested and political. The ways in which powerful actors represent development at particular scalar levels of analysis legitimises and justifies particular types of development interventions. How particular development representations and narratives come to dominate is an important aspect of hydropolitical analysis. Development discourse is never complete or closed: it is open and contested (Doty 1996). Less powerful actors in the lower Mekong contest and challenge the dominant development narrative. They also offer alternative development representations, and highlight the potential impacts of hydropower development. Less powerful actors, during the period of this study, largely utilised the MRC as a way to contest dominant representations and hydropower development plans. However, the terms of debate were framed by more powerful actors, who to a certain extent acted to co-opt the terrain of less powerful actors as a way to constrain opposition.

Focusing simply on the international scale, unified state actors, and conceptualising development debates and interventions as neutral or technical, cannot capture the complexity of water resources development and governance in the lower Mekong. For example, a common argument about the relevance of the MRC runs thus: Member State commitment is weak because national interests dominate transboundary water interests (Backer 2007; Hirsch and Jensen 2006). Whilst this argument may be valid at the international scale, understanding the reasons for this involves exploring the intra-state and inter-state contexts and the interactions between them as well as a range of sub-state, non-state, and state actors. If this type of analysis is not undertaken then research findings are not embedded in the wider socio-political contexts, which themselves

highly influence and condition water resources and governance outcomes at the regional and inter-state levels. This gives the impression that the international and regional scales are somehow detached from other scalar levels of analysis.

In order to integrate multiple actors and narratives into approaches to transboundary hydropolitics and explore the debates around hydropower development and the MRC this thesis will utilise political ecology as well as insights from critical IR approaches. Political ecology is an approach that operates from the assumption that environmental change can be the outcome of interactions between human power relationships and the environment (Bryant and Bailey 1997). Scale, actors, power relationships, and environmental narratives are all important elements of political ecology analyses (Watts and Peet 2004). Political ecology has been applied to a wide range of environmental issues, including fisheries resources in Thailand and hydropower dam development (Tan-Mullins 2007; Baghel and Nusser 2010).

Within political ecology, representations of nature and how discursive formations shape policy and practice are extremely important (Watts and Peet 2004). Sneddon and Fox (2006) argue that how representations are framed and become institutionalised is an important ‘blind spot’ in conventional approaches to hydropolitics. The application of political ecology to the case of hydropolitics in the lower Mekong tackles this ‘blind-spot’ by tracing the origin and history of a particular representation of the lower Mekong, and the development narrative it underpins, as well as the ways in which it is fundamentally linked to the promotion of hydropower development. Emerging in the 1950s at the convergence of interests between the United States (US), the newly formed United Nations (UN) Economic Commission for Asia and the Far East (ECAFE), planners, and water resources management paradigms of the time, the Mekong was represented as being unutilised. This representation underpinned a development narrative which argued: the people of the Mekong are poor; the Mekong has a huge hydropower potential; therefore harnessing the river for hydropower will lead to development. This narrative became institutionalised through the work of the Mekong Committee and the experts and planners it employed.

The dominant development narrative of the lower Mekong is resilient and continues to underpin and condition the work of state actors in the lower Mekong and other actors, such as the development banks, who are promoting hydropower development. However, the MRC operates at the intersections of the discourses of a wide range of actors, including western donors and the global water community who emphasise paradigms such as IWRM, and civil society actors who emphasise the harmful impacts of

hydropower. Examining the MRC and the arena it offers for different actors to debate development interventions allows other narratives and representation of development to become visible.

Examining development discourse, the ways in which it is framed and constitutes particular types of interventions, is a highly important area of hydropolitical analysis. Both the work of political ecologists, who have traced the genealogy of particular environmental and developmental narratives, and the work of post-structural IR theorists who have demonstrated how particular representations justify and enable particular types of interventions, as well as technologising and depoliticising issues such as famine, are highly relevant in this context (*e.g.* Bassett and Zueli 2003; Swift 1996; Doty 1996; Edkins 2008). Discourse and discursive practices, such as representation, narratives and framing are considered in both political ecology and critical IR theories, and the use of these different approaches complement each.

Power-knowledge relations and asymmetric power relations are extremely important elements in transboundary hydropolitics. Development discourse is produced under unequal conditions of power and power is also exercised through discourse (Escobar 1995). Post-structural conceptions of power, both in political ecology and in critical IR theories, allow discourse to be analysed to open up categories and reveal alternative representations and narratives. They also reveal the ways in which power is exercised over populations and nature, for example, how statistical measurements categorise people in ways which allow intervention. By tracing the genealogy of development narratives, political ecologists assert that questions such as ‘who has the power to decide for society’ and ‘who decides the conditions for truth’ open up avenues for challenging hegemonic narratives and transforming unequal power relations (Stott and Sullivan 2000). Political ecology as critique seeks to expose flaws in dominant approaches to the environment and denaturalise “certain social and environmental conditions, showing them to be the contingent outcomes of power, and not inevitable” (Robbins 2004: 12). This is extremely important in the study of the lower Mekong’s hydropolitical constellation where dominant representations and narratives are presented as natural, neutral and technical, thereby depoliticising the impacts and outcomes of development.

5. Methodology

Hydropower development debates in the lower Mekong involve a large number of actors, asymmetric power relations, representations and narratives. At the official decision-making levels, both nationally and regionally, a narrative linking poverty, development and hydropower dominates and circulates. This narrative is based on representations of the lower Mekong as unutilised and its populations as needing development. Less powerful actors contest these representations and promote alternative ones. MRC meetings are a key arena in which contending narratives and actors confront each other. Less powerful actors also conduct their own scientific research, form coalitions and convene their own meetings.

The ways in which development is written, narrated and spoken constructs the world as unruly, requiring management and intervention: this establishes expertise, silences alternative voices, and underpins and reproduces asymmetric power relations (Bassett and Zueli 2003). Development discourse has a stylised and repetitive form in terms of its content, imagery and symbolism, and regional discursive formations run through the history of regions (Bassett and Zueli 2003; Peet and Watts 1996). This thesis is interested in examining the dominant discursive formation in order to illuminate its practical effects, such as legitimising certain actors and interventions.

Certain narratives circulate within the corridors of power and have practical effects (Bassett and Zueli 2003). Alternative narratives, championed by less powerful actors are not taken seriously because they do not conform to the discursive frameworks and simplifying narratives of more powerful actors, and because they lack institutional authority (Bassett and Zueli 2003; Swift 1996). However, discourse is not closed, but open: its exterior limits are constituted by other discourses that are themselves open, inherently unstable, and in the process of being articulated (Doty 1996). Consequently, there is always tension between competing discourses, narratives and representations, and the possibility for change.

Hajer (1995) argues that when examining discourse it is important not only to analyse what is said but also to consider the institutional context in which it is said, as this “co-determines what can be said meaningfully” (2). Policy and decision-making are not cases of finding solutions to pre-defined problems, but involve re-defining social phenomena in ways that solutions can be found for them (Hajer 1995). Different actors define and frame problems and solution differently. Discourse coalitions form around

specific story-lines, but whilst actors may share a storyline, they interpret its meaning differently and tell different stories (Hajer 1995).

In the hydropower development debate in the lower Mekong two loose discourse coalitions can be identified: one, which comprises various state officials, private sector companies and the development banks, and tells stories about how hydropower will lead to poverty reduction; and two, which comprises local, regional and global NGOs, local community representatives, and researchers, who tell stories about hydropower's destructive effects on local water users. In order to analyse water resources development and governance debates in the lower Mekong, the wide range of relevant actors and these two loose discourse coalitions and their storylines, four methods of data collection were used: semi-structured interviews, participant observation, site visits and document analysis.

Semi-structured interviews were conducted with 30 participants. Research participants fall into the following sub-categories: state officials, MRC representatives, donor representatives, development bank representatives, hydropower industry representatives, civil society representatives and fisheries experts. The use of key actor interviews does not imply that elites' opinions are effective and uncontested. This thesis is interested in the multiple actors operating over various scalar levels who promote and contest hydropower development; the regional discursive formation which has shaped the history of development in the region; the dominant narrative of hydropower development in the lower Mekong, which has framed policy-makers thinking and justified certain types of development interventions; and the alternative narrative which challenges it and is advanced by a loose coalition of less powerful actors. Key actor interviews are an appropriate method for collecting data on the ways in which different actors represent development, tell different stories about it, and frame the problem and solution. The variety of views expressed and the nature of the hydropower development debate in the lower Mekong challenges the idea that elite views are effective, and illustrates instead their highly contested nature. Elites increasingly have to justify their plans and engage with the concerns of less powerful actors in order to advance their hydropower agendas. State officials, planners, and private sector companies are engaging with alternative representations, narratives and the actors who promote them, and are adopting strategies such as representing less powerful actors in particular ways. This was revealed in a number of the interviews conducted where NGOs were labelled as "bad" or "anti-development".

Interviews with state officials, donor representatives, and development representatives revealed the commonalities of problem and solution framing, which elites in the lower Mekong share and offered insights into the dominant development narrative in the region. These interviews also provided richer, more nuanced insights into hydropower plans, the justifications for particular interventions, and official/governmental thinking about development. Interviews with elites such as state officials and discussions with private sector representatives also revealed some of the ways in which more powerful actors characterise and represent less powerful actors.

The development narrative of the lower Mekong which dominates at the official level is being contested by a wide range of civil society actors. By considering alternative representations and the loose coalition of less powerful actors who are contesting hydropower development this thesis exposes the highly political nature of the debate and sheds light on the agency of less powerful actors. Interviews with civil society representatives revealed some of the stories less powerful actors tell about development and the ways in which these differ from the dominant representations and narratives of more powerful actors. When combined with participation observation at a large number of civil society meetings in the region (discussed below) they provided insights into how civil society actors frame their arguments differently depending on the forum and on their goals and orientations. Taken together the range of key actor interviews revealed the complexity of development in the lower Mekong and the role of representations and narratives in reducing this complexity for different actors.

Narratives frame the politics of development for less powerful actors. This includes local communities in the lower Mekong. A full consideration of local community actors throughout the basin was beyond the scope of this study. Interviews with civil society representatives, participation in civil society meetings and analyse of research conducted by civil society actors allowed analysis of alternative representations of the lower Mekong and the predicted impacts of hydropower on local communities. However, as one civil society representative asked at a regional consultation: “where are the local communities? I am part of an NGO. I cannot speak for local communities” (Observation notes, MRC Meeting 09/08). The interviews conducted for this thesis cannot provide reliable information on the opinions, conceptions, narratives and knowledges of local communities. There is likely to be a great heterogeneity in local communities’ opinions, representatives, and narratives about the Mekong River itself and hydropower development. Whilst the civil society representatives interviewed for this thesis provided alternative representations and narratives these cannot be taken as

synonymous with local communities' views (these issues are discussed further in Chapter Eight).

Interviews for this thesis were limited to participants who had a working knowledge of English. Participants were selected based on position, knowledge of the issues involved, and their membership of the two loose discourse coalitions. In the majority of cases this coincided with the participants having a working knowledge of English for a number of reasons: English has been the working language of lower Mekong water cooperation since 1957 and a large number of the same state officials have been involved throughout its various guises and therefore provide organisational memory; government employees operating at the national level in the lower Mekong have to possess basic English skills; and, regional, national and provincial NGOs have English speaking representatives as a number of NGOs, such as Cambodia's Fisheries Action Coalition Team, were founded with help from international NGOs.

Interviewing only English participants had some methodological and analytical consequences. It restricted the type of civil society organisations and experts that could be included in the research to those who are confident in using English and are visible at the national, regional and intergovernmental levels. It also restricted the participation of state officials to those operating at the national level as those in the provinces did not necessarily speak English. There was also a concern about misunderstandings as interviews were conducted in participants' second language and therefore there is always the possibility that meaning could be misconstrued. Immersion in the MRC's working environment helped to overcome this as I became familiar with the ways in which participants used English and the meanings they attached to particular phrases. In order to ensure accuracy in understanding and analysis, interviews were combined with participant observation, an internship at the MRC and document analysis as well as site visits to some of the locations frequently discussed in interviews.

Participant observation was conducted at a range of meetings and consultations in the lower Mekong region between September 2007 and September 2008. This allowed observation of the ways in which competing discourses confront each other, and the incomplete and open-ended nature of discourse. I participated and observed meetings between civil society and the MRC, civil society and state officials, the MRC and donor states, and civil society meetings which included a wide range of environmental and water resources NGOs, academics, researchers, and activists. Participant observation revealed the ways in which different discourses confront each other, and how actors tailor their stories and narratives depending on the context. For example, NGO

representatives were more critical of hydropower plans in meetings with other civil society organisations than they were in meetings with state officials.

Participant observation also revealed how powerful actors framed the debates at meetings, such as the September 2008 MRC Hydropower Consultation, in terms of trade-offs. In order to meaningfully say anything less powerful actors had to engage with this framing. Less powerful actors who refused to recast their arguments were either ignored at these meetings, or were not invited to participate as they were seen by powerful actors as “too critical”, or “anti-development”. Participant observation at these meetings illustrated how discourses confront each other and powerful discourses attempt to co-opt weaker ones in particular settings, as such the data collected cannot be extrapolated as representative of all discourses about development in the lower Mekong.

Participant observation was limited to meetings which took place in English, and therefore potentially useful meetings such as ones organised by and for Thai civil society actors were not attended. Reports from these meetings were critical of hydropower plans and state actors, and called for an end to hydropower projects. These meetings and their participants are part of the loose discourse coalition which contests the dominant narrative of hydropower development in the lower Mekong. As such, they are part of a discourse coalition which shares the same storyline. This storyline, that hydropower development will have negative consequences for local communities, and should therefore either be curtailed or halted, was evidenced in English-language meetings and amongst the various civil society actors who attended them. This thesis is concerned with the ways in which narratives frame thinking, justify/contest particular types of development interventions, and are the outcome of/underpin power relations; and, destabilising understandings of development debates as technical to expose the highly political and contested nature of development. Participant observation of English-language meetings between state officials, MRC representatives and civil society allowed data on these concerns to be collected. Due to the transboundary nature of the lower Mekong and the wide range of actors involved, a large proportion of meetings, aside from local or provincial ones, are conducted in English as a matter of routine as it is the common denominator language.

Access to meetings with a range of actors was facilitated by my position as a MRC intern between September 2007 and July 2008. During this time I undertook research duties for the International Cooperation and Communication Section, and the Basin Development Plan Programme. As well as facilitating access to meetings which were otherwise closed to ‘outsiders’, this internship allowed rapport to be developed with a

wide range of interview participants, introductions to actors outside of the MRC sphere, and insightful relaxed discussions with numerous people. The dual status of MRC intern and PhD researcher was open and acknowledged at all times.

Interviews and participant observation data were analysed for representations, narratives, stories about development, instances of problem and solution framing, and relationships with other actors in the lower Mekong's hydropower debate. The key strategy for analysing data was thematic coding of notes taken during the interviews. A large number of themes were identified including, but not limited to: development visions, justifications for hydropower development, poverty reduction, the damaging role of civil society, the emergence of the private sector, state actors are powerful, state actors are weak, hydropower is destructive for local communities, more and better research/science is needed, donors are trying to stop Mekong states from developing hydropower, the MRC is toothless, the MRC plays a valuable role, the role of the development banks is changing, and the development banks are necessary in order to ensure 'good' development projects. The incidences of these themes overlapped, for example in the following statement from a NGO representative a number of themes can be identified:

“there should be sustainable use of natural resources, equitable use of resources, encompasses everything really, development shouldn't be, we are not anti-development, but development shouldn't be at the cost of some for the benefit of others...In the Mekong the obvious issue is the payoff between services river provides for poor communities against the industrial benefits- hydropower and irrigation- which generally benefit urban areas. Not just a question of who benefits and who wins and loses, but who shoulders the proportion of the risk” (Interview, 04/08b).

This statement contains a vision of development, a reply to the charge by some state officials that NGOs are anti-development, an evaluation of how the hydropower debate has been framed in terms of costs and benefits, and the idea of trade-offs. The ways in which actors assembled different themes depended on the stories they told about development and illustrated how different discourses overlap and constitute each other.

Interviewees appear anonymously in this thesis due to the politically sensitive nature of the topic, and the concerns of some interviewees about how participation in previous academic research had been easily identified. One interviewee stated that they had been able to identify every person who had participated in a previous PhD candidate's research because they were referenced by job title. In order to try and avoid this identification, interviewees appear in this thesis according to their categorisation and the

month and year when the interview occurred. Interview categories are as follows: state official, donor representative, development bank representative, civil society representative, fisheries experts, hydropower industry representatives, and MRC representative. For example, an interview conducted with a state official in June 2008 appears as: State official, interview, 06/08. Participant observation data is referred to throughout by type and the month and year in which it was gathered. For example, participant observation data collected at a MRC meeting in June 2008 is referenced as: observation notes, MRC meeting, 06/08.

As this thesis is interested in analysing development narratives and interventions document analysis was highly useful and effective as a method of data collection. Documentary material includes, amongst others: MRC documents about hydropower, fisheries, the Mekong's environment and hydrology, and procedures, rules and working arrangements; donor strategies; Member State government's national development strategies; and information produced by civil society actors, researchers, and scientists on livelihoods, the impacts of hydropower, and fisheries. Access to a number of historical documents, such as Mekong Committee basin plans, scoping studies for various hydropower projects, and legal documents, was facilitated by my position as a MRC intern as it enabled full-use of and access to the MRC library and programme archives.

In order to contextualise and visualise some of the projects and key areas of debate (*e.g.* the nature of resettlement programmes and the importance of fisheries), site visits were conducted to the Nam Theun 2 hydropower project in Southern Lao PDR, the Nam Ngum hydropower project in Lao PDR, the Tonle Sap Great Lake in Cambodia, and Dong Thap Province in the Vietnamese Delta (see Map 2, p.4). The site visit to Nam Theun 2 was facilitated by a Thai engineer who worked on the project and this afforded access to a number of Nam Theun Power Company staff who were willing to engage in discussions about both the project and the wider lower Mekong context. The material obtained from site visits supplemented data collected from the other three sources and provided a deeper understanding of the issues involved.

This research was conducted in a changing and evolving setting. During the period of the research, new dams were proposed, new agreements were signed between developers and Member States' governments, the MRC increased its engagement in hydropower, and actors introduced new initiatives, such as the United States' Lower Mekong Initiative. New developments and information were incorporated into the thesis during the writing process. As the situation is still unfolding further changes are

expected. However, new information and developments confirm that an approach which considers multiple actors, various scalar levels and development discourse is a highly relevant one for analysing the lower Mekong's hydropolitical constellation.

6. Outline of the thesis

The data collected during the fieldwork period shaped the outline of this thesis in a number of important ways. It allowed the tracing of the regional discursive formation which has shaped state actors' development strategies in the lower Mekong since the 1950s, and this material forms the basis of Chapter Three. A wide range of actors, relationships and actor types were identified as important in hydropower development and water governance debates, which have not necessarily be considered by previous research into the lower Mekong's hydropolitical constellation (see Chapter Four). Three key areas of contestation were distilled from the vast amounts of data collected: one, the debate over the role and relevance of the MRC, the wide range of actors involved, and how it is conditioned by actor relationships located outside the water governance sphere (see Chapter Five); two, civil society actors contest the development bank's framing and representation of the Nam Theun 2 hydropower project as a 'good' or 'model' hydropower project (see Chapter Six); and three, the ways in which powerful actors frame the hydropower debate at the national and inter-state scales in terms of trade-offs, and how civil society actors, prominent scientific research and other actors are contesting this, with fisheries impacts being the key area of contestation (see Chapter Seven).

Chapter Two examines conventional IR approaches to transboundary rivers which focus on conflict and cooperation at the inter-state level and challenges their state-centric focus. In order to account for the complexity of the lower Mekong's hydropolitical constellation it is necessary to analyse development discourse, narratives, discourse coalitions, a wide range of actor types and the overlapping asymmetric power relationships in which they are located, and various scalar levels of analysis and actors' scalar strategies. Combining political ecology with insights from critical IR approaches allows these dynamics and elements to be conceptualised and explored, as well as the links between them to become visible.

Chapter Three traces the dominant regional discursive formation from its origins in the 1950s to the current water resources development and governance debates. This regional discursive formation, which links hydropower development, regional

development and poverty reduction, has appeared in a number of guises through the different phases of regional water cooperation and at times has appeared to disappear. A number of regional changes have also impacted the different phases of water cooperation, including: the end of the Cold War and the resumption of peace in Cambodia, new regional cooperative schemes such as the ADB's Greater Mekong Subregion Programme, and the increased involvement of China in the lower Mekong. Despite these changing regional dynamics the dominant development narrative has continued to shape development thinking and strategies at the governmental level. Regional changes have also opened up a number of new avenues that allow powerful actors to propose and plan hydropower development.

Chapter Four considers a number of changing dynamics in actor types and power relationships since the early 1990s which are conditioning water development and governance debates and outcomes in the lower Mekong's hydropolitical constellation. These power relationships are multi-scalar. Member State-donor state relationships are changing due to both reorientations in donor states overseas development assistance strategies, and increased Member State access to funds for hydropower development. The involvement of private sector actors in lower Mekong hydropower development has increased. The type of private sector actors involved has changed from predominantly Western companies and financiers facilitated by the development banks, to Asian companies and financiers. Spaces for civil society participation have increased and civil society actors are rescaling their opposition to hydropower projects to the regional and inter-state levels.

Chapter Five traces the interconnections between discourses and actors over different scalar levels and how they condition outcomes at the transboundary water cooperation level. It argues that the debates about the MRC's relevance and role in hydropower can only be adequately captured if placed within a larger context where interactions between different actors are considered. This includes actors who largely fall outside the MRC sphere, such as state energy actors, but whose relationship with other state agencies, such as water agencies, conditions how water cooperation is enacted at the MRC level.

Chapter Six explores how actors construct problems and solutions in ways which privilege their interventions or extend their access to natural resources. New private sector actors are threatening the position of the development banks. The ADB and World Bank are promoting Nam Theun 2 as a 'model' hydropower project as a strategy to legitimise and maintain their role in hydropower development in the lower Mekong.

This 'model' has three key elements: public participation, social and environmental programmes, and revenues utilised for poverty reduction. Civil society actors have contested all three of these elements. This illustrates how representations are never complete and closed, but are always open and contested. Despite the development banks writing the history of Nam Theun 2 in particular ways, this process is not complete and it is still unclear whether the project will become a 'model' for hydropower development.

Chapter Seven explores how, in the face of civil society challenges to the dominant narrative of hydropower development, powerful actors have shifted the terms of the debate. The material in this chapter is drawn from three moments in the hydropower debate at the MRC level, which involved multiple actor types and competing representations and narratives of development. These moments are: one, the Independent Fisheries Expert Group in September 2008; two, the Regional Multi-Stakeholder Consultation on the MRC Hydropower Programme in September 2008; and three, the MRC Strategic Environmental Assessment, which was published in 2010. This chapter illustrates how the interpretive grid of trade-offs came to dominate discussions at the regional level. The discussion of trade-offs portrays the negative impacts of hydropower development as an acceptable or inevitable cost in light of the benefits to be accrued from hydropower. This depoliticises the distribution of costs and benefits to different actors and the political nature of water resources development.

Chapter Eight concludes the thesis by drawing insights into the complexity of water politics in the lower Mekong and the ways in which hydropower is contested and promoted by multiple actors over multiple scalar levels.

Chapter Two: Water, actors, power relations, scale and narrative in the Mekong's hydropolitical constellation

1. Introduction

In order to analyse debates about the MRC and hydropower development in the lower Mekong it is necessary to integrate narratives and multiple actors into approaches to hydropolitics. Political ecology, with its focuses on the political nature of environmental change, environmental narratives, scale and the importance of both place and non-place based actors is an approach, which allows the complexity of hydropolitics in the lower Mekong to be analysed and conceptualised. Transboundary hydropolitics are constituted in discourse, whilst hydropower development is being propelled by a dominant regional discursive formation linking it to poverty reduction. As such, insights from critical IR approaches, which have focused on discursive practices including representation, discursive formations and depoliticisation are combined with the political ecology approach.

Transboundary rivers have largely been analysed through conventional IR approaches to hydropolitics. These approaches are unable to account for debates about hydropower development and the MRC as they focus on monolithic states and interactions at the transboundary scale. Transboundary hydropolitics are conditioned by relationships between multiple actors, both inside and outside of the sphere of transboundary water governance, located over various scalar levels. Hydropolitical constellations are embedded in wider socio-political contexts, which condition outcomes at the transboundary level. These important dynamics are not visible if conventional IR approaches are applied.

Development discourse, narratives and apparatus represent objects of development (states, rivers *etc.*) in particular ways, which justify particular types of intervention. They also depoliticise development, obscuring the political effects of development interventions, including unintended consequences such as expanding state power. However, discourse is not closed, but open and alternative representations and narratives do exist. Analysing hydropolitical constellations through development discourse, narratives and representation reveals the inherently political nature of water resources development and governance debates.

2. Transboundary rivers: conflict and cooperation

Transboundary rivers are shared by two or more states: currently 263 shared river basins house 40% of the world's population and nearly 60% of global freshwater flow (Giordano and Wolf 2003). The end of the Cold War led to an increased interest in transboundary rivers (Du Plessis 2000). Environmental resources, including water, became conceptualised in terms of security as traditional understandings of security were expanded to include non-military aspects (Du Plessis 2000). Transboundary rivers have security implications because water resources utilisation or development by one state may lead to dispute with the other riparian states (Dinar 2000). Water resources management is firmly on the international community's global policy agenda because of increased awareness of water scarcity (both in terms of quantity and quality) due to factors such as population growth and increased per capita use (Phillips *et al.* 2006; Uitto and Duda 2002). Water scarcity and water stress have also become associated with security concerns (Phillips *et al.* 2006).

Elhance (1999) links a number of the arguments expressed above: water scarcity is increasing at a time when water demand is growing in the arid and semi-arid regions of the world; most of the remaining water sources that can be developed to meet this growing need are in river basins shared by two or more sovereign states; consequently, there is potential for conflict or cooperation. The conflict/cooperation potential of transboundary rivers is the starting assumption for a large body of academic work. The study of conflict and cooperation between states over transboundary rivers has been termed hydro-politics (Elhance 1999). The debate over transboundary rivers, which commenced at the end of the Cold War, includes a range of positions between these two opposing poles: one which argues that water leads to conflict and war (*e.g.* Starr 1991), and its opposite, water leads to cooperation (*e.g.* Wolf 1998; Jagerskog 2002).

Transboundary rivers have been considered by scholars from a wide range of disciplines, including law (*e.g.* Chi 1997), geography (*e.g.* Giordano and Wolf 2003), and international relations (*e.g.* Lowi 1993). However, despite a range of scholars from outside international relations, IR theorising is implicit in a large proportion of the work on transboundary rivers (Du Plessis 2000; Furlong 2006). The focus on states, conflict, cooperation, hegemony, conditions that induce cooperation, institutions, sovereignty, interdependence, and geographic position illustrates the impact of IR theorising (Furlong 2006; Du Plessis 2000; Dinar and Dinar 2003). Du Plessis (2000) argues that mainstream theorising about water is "predominately embedded in and representative of

mainstream theorising of a positivist, explanatory and problem-solving nature” and is consistent with neo-realism and neo-liberal institutional approaches (11-12). The following paragraphs outline some of the dominant assumptions and arguments in the debate about conflict and cooperation over transboundary waters.

The state is considered the central actor in transboundary hydropolitics. Elhance (1999) has justified privileging the state over other actors because states whatever “their specific nature and constituents...are ultimately responsible for engaging in conflict or cooperation with other riparian states, and for entering into negotiations and agreements for the control and sharing of transboundary water resources”; states are also the primary actor with which other actors (non-governmental organisations, international organisations *etc.*) interact (14). Dinar (2000) argues that states are conceptualised within neo-realism and neo-liberal institutionalism as sovereign, unitary actors who act rationally to advance their security, survival, and interests in an anarchic and uncertain world. Consequently, as states seek to secure their survival and operate under the principle of self-help, transboundary waters are a potential source of conflict. Elhance (1999) argues that states are inherently inclined to unilaterally exploit water resources which flow through their territory. This unilateral exploitation can cause conflict because it constrains the ability of other riparian states to realise their national goals and objectives (Phillips *et al.* 2006). The focus here is on states as the key actor. This state-centric focus has limitations, as will be discussed in the following section.

State sovereignty poses a number of challenges for states sharing a transboundary river basin. Elhance (1999) argues that sovereignty has been interpreted as bestowing inalienable rights of ownership and utilisation of water resources in a state’s territory. This position is problematic because water is not still: it flows through, beneath and between states’ territory, and upstream uses of water resources will impact downstream riparian states. International law positions on state sovereignty and water resources have evolved over the course of the twentieth century. Initially extreme positions were asserted: absolute territorial sovereignty, also known as the Harmon Doctrine, argued that states could do virtually what they wanted with water resources in their territory, whilst at the other end of the spectrum, the principle of absolute territorial integrity argued that upstream states should do nothing to interfere with the natural flow into the downstream states (McCaffrey 1996). Neither principle is recognised as part of contemporary international water law (Salman 2007). Contemporary positions advocate principles of limited territorial sovereignty whereby each riparian state has a right to use transboundary waters but is under a corresponding duty to ensure that their use does not

harm other riparian states (Salman 2007). Related to this is the duty not to cause significant harm to other riparian states, and the right of each riparian state to reasonable and equitable use (Salman 2007). Attempts to codify an international convention covering the non-navigational uses of international watercourses resulted in the UN General Assembly adopting the Convention on the Law of Non-Navigational Uses of International Watercourses in 1997. One of the conventions most controversial provisions is the obligation not to do significant harm, and it has yet to be ratified by a sufficient number of states (McCaffrey 1998).

Within conventional IR approaches to hydropolitics, geography and power asymmetries are two important variables which determine whether water leads to conflict or cooperation. Geography and hydrology do not respect state boundaries and confer different advantages on different states (Elhance 1999). Geography also “determines the nature and degree of dependence of each riparian state over the shared waters” (Dinar 2000: 379). Different states also have different power capabilities. Brute military capabilities and the ability of one state to impose its will on other states are important in determining whether water leads to conflict or cooperation (Dinar and Dinar 2003). The interplay between dependency on the resource, geography and power contribute to the conflict or cooperation potential of transboundary rivers. For example, the Nile is shared by ten states, of which Egypt is the regional hegemon in terms of economic and military power, but it is also the most dependent on the Nile and the most downstream riparian (Swain 1997). Egypt has declared that the only issue which could take it to war again is access to water (Starr 1991). However, it has also displayed an interest in cooperating in certain areas such as technology, trade and water data (Dinar 2000). Geography, in these analyses, is portrayed as playing an important role in determining conflict and cooperation potentialities.

Arguments that water leads to cooperation have risen in prominence. Wolf (1998) argues that water conflict is rare and that cooperation ranging from treaties to institutions is more common. Between 1918 and 1994, according to available data there have only been seven armed incidences of water: in contrast 145 treaties were signed in the twentieth century concerning non-navigational water use (Wolf 1998). Alam (2002) utilises the concept of water rationality, defined as “any action taken by a state to secure its water supply in the long-term, both in quantity and quality”, to argue that states are more likely to maintain relations with each other that are conducive to ensuring long-term access to shared water resources (347). Arguments linking water and cooperation have drawn on a number of IR assumptions.

Water cooperation has been conceptualised in three ways: one, the result of hegemonic preference, two, the importance of institutions, and three, regime theory. Hegemonic stability theory argues that states cooperate when it serves the interests of the dominant power who takes the lead in creating cooperative arrangements which enhance the stability of the system (Dinar 2000). Lowi (1993) argues that cooperation is only possible if the hegemon accepts it or has been induced to do so by an external power. In this case cooperative arrangements are the reflection of underlying power asymmetries. A focus on hegemons as determining cooperation has been criticised. Furlong (2006) argues that it ignores the potential for shared resources and/or unique historical circumstances to affect relationships or outcomes. Actor behaviour changes in a given context, and this suggests that transboundary water cooperation is more complex than hegemonic stability theory implies (Menniken 2007). In terms of the Mekong, Thailand and Vietnam can be identified as the two most powerful states. Their preferences have helped to shape the current incarnation of the Mekong water regime, the MRC (Nakayama 1999). As will be shown in the following chapter, Vietnam's preferences concerning mainstream dams have changed over time. This is significant as water practitioners interviewed for this thesis assumed that mainstream dams would never be realised due to Vietnamese opposition. Vietnam's changing preferences in this area are conditioned by a number of factors including Mekong water cooperation and predictions of energy demand (see Chapter Three).

Neo-liberal institutionalists argue that cooperation emerges when the compliance problem and mistrust between states is mitigated by the assistance of institutions (Dinar 2000). Institutions generate information, lower transaction costs, increase transparency, and reduce uncertainty (Dinar 2000). As such they help to overcome mistrust between states and stabilise assumptions about other states' behaviour and intentions. As opposed to neo-realist assumptions which argue that cooperation is inhibited by states' concern with relative gains and mistrust of each other, neo-liberal institutionalists argue that states are concerned with absolute power, and the main obstacle to cooperation is cheating. Institutions help to overcome this problem, as well as contribute to building trust and a culture to solve problems without reverting to actions based on narrow self-interest (Dinar 2000; Henwood and Funke 2002). Interdependence and scarcity can provide incentives for cooperation. Interdependence is a condition whereby the actions or decisions of an actor impact on another actor: it can be symmetrical (where both sets of actors are affected equally) or asymmetric (where actors are affected differently) (Dunne 1997). As interdependence

“affects politics and the behaviour of states, new forms of rules, procedures and institutions for various activities have been created in order to manage and control transnational relations” (Jagerskog 2002). Interdependence in transboundary rivers provides a rationale and a need for cooperation (Henwood and Funke 2002; Elhance 1999).

Wolf (1998) argues that once “cooperative water regimes are established through treaty, they turn out to be tremendously resilient...even between otherwise hostile riparians and even as conflict is waged over other issues” (260). The Mekong water cooperation is an example of resilience as it has endured despite regional instability and has provided a forum for the lower basin riparian states to interact (Makim 2002). Commentators, such as Browder (2000), have focused on ways in which water cooperation can be strengthened and have considered the role that donors and outside experts can play in this. Arguments about interdependence have been extended by neo-functionalists. Neo-functionalists argue that cooperation in low politics (e.g. water) can ‘spill over’ into areas of high politics (Phillips *et al.* 2006). The history of the Mekong water cooperation is considered in the next chapter against the backdrop of development plans for the Mekong.

Regime theory has been applied to a number of transboundary river basins, including the Jordan (Jagerskog 2002) and the Mekong (Makim 2002; Backer 2007). Krasner (1983) defines a regime as “sets of implicit or explicit principles, norms, rules, and decision-making procedures around which actors’ expectations converge in a given area of international relations” (2). Regimes can be viewed as a means to facilitate international agreements and adherence to them, however, they are more than agreements, they are social institutions “in which the behaviour of its actors constitute the regime” (Jagerskog 2001: 2-3). Regimes are also not static entities, they change over time: changes in rules and procedures produce changes in the regime, but changes in principles and norms change the regime itself and either result in a new regime or the disappearance of the regime (Krasner 1983). Furlong (2006) argues that despite the shift from a concern with conflict to that of cooperation, IR theorising has remained, largely in the sub-field of international organisations drawing on regime theory to examine basin organisations, how they develop and how they are maintained and strengthened over time. Mekong water cooperation since 1957 illustrates the importance of norms on state behaviour and the development of collective understandings and expectations. The lower Mekong states perceive themselves as willing to cooperate. State officials interviewed for this thesis argued that: “the Mekong Spirit is our spirit of cooperation, it

means we must respect, must concern ourselves with each other even when it is difficult” (State official, interview, 05/08b).

A focus on how to induce cooperation illustrates the problem-solving nature of a large proportion of the literature. Problems include power and geographic asymmetries. Haftendorn (2000) argues that water conflicts are asymmetric situations. Therefore, in order to reach agreeable solutions they need to be linked to other issues or factors which balance out or modify the situation into a more cooperative, symmetrical one, which allows for the possibility of trade-offs between economic, environmental, political and social benefits (Haftendorn 2000). Sadoff and Grey (2002) have identified four types of benefits that can be derived from water cooperation: ecological (benefits to the river), economic (*e.g.* hydropower and flood management), political (*e.g.* reducing costs because of the river, *i.e.* costs of tense relations), and catalytic (benefits beyond the river, *e.g.* regional integration and cooperation in other areas). Identifying benefits, and sharing these as opposed to the water itself, could induce cooperation between states (Sadoff and Grey 2002). Discussions of trade-offs and benefits in the lower Mekong’s hydropower debate are detailed in Chapter Seven.

2.1. Questioning a state-centric focus and its application in the Mekong

The Mekong River is a transboundary river, which has been widely examined from conventional IR approaches and presented as an example of resilient water cooperation (*e.g.* Backer 2007; Wolf 1998). However, there are some limitations to these state-centric approaches. Privileging the state as the primary unit of analysis obscures the multitude of actors involved in water resources development and management and the scalar levels over which they operate and over which impacts are located. Although there are limitations, it is important to consider the role of the state and also the ways in which transboundary rivers are conceptualised. The assumptions outlined above have helped to structure the ways in which state actors in the Mekong conceptualise transboundary water cooperation and the possible outcomes of water resources development.

A focus on states as the privileged unit of analysis means that some research can fall into what Agnew (1994) has termed the territorial trap. The territorial trap involves three linked assumptions: state units have been reified as fixed territorial units of space under state control; the severing of domestic and foreign politics; and the state as prior to and a container of society (Agnew 1994). The argument of the territorial trap was

developed through consideration of the central tenet of the field of international relations theory which Agnew (1994) identifies as a synthesis between neo-realism and elements of liberalism. Furlong (2006) argues that a large portion of the IR water discourse falls into the territorial trap, and that deferring to IR theory can illuminate some issues, but risks obfuscating many more. IR assumptions situate the state as the controller of water resources within its territory. However, as this thesis will explore water resources development can act as a tool for actors to extend their control over natural resources. Uitto and Wolf (2002) argue that “too often, analysts tend to view nation-states as political monoliths, ignoring the critical relationship between internal dynamics and international relations” (291). A focus on monolithic states also obscures the ways in which other actors and processes challenge or support the state at multiple scales (Sneddon and Fox 2006). Bryant and Bailey (1997) argue that “state actions are conditioned by the relationship of the state to other actors both inside and outside...[and] the state itself is often subject to powerful fissiparous tendencies as a result of bureaucratic conflict” (45). In order to examine the water resources debates in the lower Mekong, it is necessary to consider actors other than states, and also the actors (such as state agencies and bureaucracies) which constitute the state.

Approaches focused on states are not necessarily capable of capturing the complexity of water politics and resources development at multiple scales or examining the multiple actors involved. Sneddon and Fox (2006) have called for a critical hydropolitics which goes beyond the focus on the capacity of sovereign states to cooperate over shared resources to consider issues such as: how understandings of river basins are transformed within transboundary institutional arrangements; the manner in which multiple actors in transboundary basins construct geographic scale; and how control over water is represented and exercised within governance and management institutions. The state-centric focus of hydropolitics has led to conceptual blind spots including: how and why development agents have discursively engineered transboundary basins into spatially fixed entities; and the complex interaction among different scales of conflict within basins’ socioecological dynamics (Sneddon and Fox 2006: 183). These blind spots could be rectified by a critical hydropolitics (Sneddon and Fox 2006). Sneddon and Fox (2006) argue that cooperation may not be the end-in-itself for Third World riparian governments who create transboundary water institutions: instead cooperation may be sought as the basis for proceeding with water resources development encompassed by basins. Chapter Three of this thesis explores how the

Mekong has been represented as an object for development at the basin level, and how this was the initial impetus for cooperation between the lower Mekong states.

However, it is still important to consider the state as an actor, especially in the exploration of the Mekong's hydropower debate. Large dams contain a number of symbolic aspects, including progress and modernity, which are "closely connected to these very arbitrary territorial entities of nation states", and the role of the state in the construction of dams needs to be considered critically (Baghel and Nusser 2010: 234). Water resources management is also commonly viewed as being located at the state level. Decision-making at the national level is often justified on the grounds that centralised coordination, command and control is needed to ensure supply and fair allocation (Lebel *et al.* 2005). In light of this, it is then argued that state agencies can undertake planning and decision-making in the national interest or public good (Lebel *et al.* 2005). However, water resources development and management in the Mekong reveal that this is not the case: it is not as simple as a contest between monolithic state interests and unified community interests; different state agencies and different actors have different interests and may pursue different agendas (Lebel *et al.* 2005). Consequently, it is important to consider a range of different actors, whilst examining the ways in which debates about water resources development are represented as being located at the state level and thus obscure actors and impacts at other scalar levels of analysis.

It is important to retain an understanding of conventional IR approaches to hydropolitics. State officials and decision-makers interviewed for this thesis conceptualised transboundary hydropolitics in terms of their potential for conflict: "now water conflict is coming, now we are planning mainstream hydropower, there will be problems because there will be impacts on the downstream countries" (State official, interview, 05/08a). These arguments utilise unacknowledged conventional IR hydropolitical assumptions. This illustrates how water politics practitioners "select those theories about the world that best suit and justify their agendas" (Warner and Zeitoun 2008: 803). It also illustrates the persuasiveness of conventional IR hydropolitical assumptions and how they shape powerful actors framings of transboundary hydropolitics. This demonstrates how "[t]heory is always *for* someone and *for* some purpose" (Cox 1981: 128). However, a focus on conflict and cooperation over transboundary water resources at the state level cannot adequately analyse key questions such as: which actors are involved in water resources development; where are decisions about water resources located and which actors are involved; what strategies

do actors use to extend or maintain their control; and which actors benefit from or are disadvantaged by water development plans.

2.2 New approaches, critical IR and political ecology

Hydro-hegemony is an emerging framework which draws on critical IR theories to open up new avenues for exploring hydropolitics by focusing on power asymmetries, hegemonic strategies, and the varying intensities of conflict (Warner and Zeitoun 2008). The hydro-hegemony framework challenges conventional IR approaches as it argues that conflict and cooperation can co-exist: the existence of a water cooperation treaty can institutionalise power asymmetries and does not necessarily signify the absence of conflict (Warner and Zeitoun 2008). As such it also challenges the assumption that hegemony is beneficial as it results in cooperation. The hydro-hegemony framework defines hegemony as legitimate or authorised leadership in situations where the most powerful competitor of formerly equal parties maintains its control through a mixture of soft and hard power (Warner 2008; Warner and Zeitoun 2008). Power has three dimensions: the ability to mobilise capabilities, control the rules of the game and power over ideas (Zeitoun and Warner 2006). Hydro-hegemony seek to define the ‘rules of the game’ set the agenda and have their values adopted and internalised by non-hegemony (Zeitoun and Warner 2006). Hydro-hegemony can tend towards the negative (domination), or positive (all riparians benefits). Assessing levels of hydro-hegemony involves examining power position, potential to exploit the resource, and riparian position, with power being the prime determinant (Zeitoun and Warner 2006). Riparians seek to maximise their objectives with the resource and employ a range of tactics including: coercive compliance producing mechanisms (*e.g.* military threats), utilitarian mechanisms (incentives), normative mechanisms (*e.g.* treaties), and hegemonic mechanisms (securitisation, knowledge construction, and sanctioned discourse) (Zeitoun and Warner 2006).

The hydro-hegemony framework is a welcome addition to IR approaches to hydropolitics as it opens up the categories of conflict, cooperation, and hegemony to illustrate the various tactics and strategies which actors use. It also opens up space for considering discourse. Zeitoun and Warner (2006) argue that “the benefits of enjoying a position of hydro-hegemony extend to determining the political discursive processes in each of the basins” (453). This also resonates at the global level: due to their greater power, more decision-making positions in international organisations are populated by

individuals from those states (Zeitoun and Warner 2006). Hegemonic discourses at the global level, such as IWRM, are transmitted by donors and international actors, and impact on how basin water relations are institutionalised and operationalised (Zeitoun and Warner 2006; Warner 2008).

However, the framework for hydro-hegemony has a number of limitations. It has to date largely focused on the international level and privileged the state as the unit of analysis. Proponents have recognised that this can be limiting as it can obscure important dynamics occurring between non-state actors, across international boundaries or at the sub-national scale (Warner and Zeitoun 2008). Warner (2008) has posited a multi-layered approach as a means of overcoming this limitation and exploring hegemony at the global, regional, basin, and state-society relations levels as “interactions at various levels impinge on each other” (272). This multi-layered approach highlights the role of global capital, global water governance, the role of discourse and controlling how the world is represented as a hegemonic strategy, and how the state seeks to maintain hegemony within its own territory, as well as reward the formations which support it (Warner 2008). This is a welcome extension, but whilst it illuminates some of the ways in which actors interact at various levels, it cannot necessarily capture the ways in which actors ‘jump scale’ or re-scale their water resources strategies in order to further their development agendas. A more nuanced understanding of scale as found in political ecology and other critical geography approaches is highly useful in this context.

Despite opening space for the consideration of discourse, the hydro-hegemony framework emphasises material aspects, arguing that material power undergirds the hegemon’s ability to represent the world in particular ways: ideology alone cannot sustain control (Warner and Zeitoun 2008; Warner 2008). As such, the framework for hydro-hegemony portrays discourse as an actors’ tactic, and cannot necessarily account for the ways in which actors, subjects and objects are constituted in discourse. How hydropolitics is represented enables and justifies certain interventions. Environmental problems are articulated, defined, interpreted and produced through politics, and experienced differently by various actors and social groups (Furlong 2008). Masking this reality is an important aspect of an actor’s power, and one which is not necessarily captured by the framework for hydro-hegemony. Hegemonic discourses are not static over time, nor do they manifest uniformly across time and space due to their interaction with local dynamics (Furlong 2008).

In order to overcome the limitations of conventional IR approaches to hydropolitics and to account for the dynamics observed during the fieldwork period of the research, this thesis will utilise political ecology. However, the inspiration which the hydro-hegemony framework draws from critical IR theories, has opened up an avenue for utilising a number of critical IR theorists whose work is highly relevant to the concerns of this thesis. In these ways multiple actors and narratives can be integrated into approaches to transboundary hydropolitics and the complexity of water resources debates in the lower Mekong is explored.

Political ecology argues that environmental change is inherently political: it can be the result of interactions between human power relations and the environment (Bryant and Bailey 1997). As such, political ecology is concerned with geographic scale and nature-society interactions, and tries to understand the “complex relations between Nature and Society through careful analysis of social forms of access and control over resources” (Zimmerer and Bassett 2003; Watts and Peet 2004: 4). Baghel and Nusser (2010) argue that understanding the influence of humans on the environment necessitates a consideration of power relations and processes of meaning creation that manifest themselves in human-environment interactions. Discursive practices, such as narrative construction and representation are extremely important elements of political ecology analyses (*e.g.* Bassett and Zueli 2003).

Political ecology has been widely articulated with regard to local scales (*e.g.* Grossman 1993). However, whilst political ecology studies have analysed environmental change in specific geographic locales, they have done so with a high regard for scale, place and non-place based actors, and the articulation of environmental and developmental discourses. For example, Bassett and Zueli (2003) is a study of desertification in the Ivorian Savannah. However, in order to examine environmental change in this specific locale it explores how discursive practices (narrative construction and the ways in which donors institutionalise dominant narratives through aid practices), non-place based actors (*e.g.* the World Bank), and scale interact to produce particular environmental explanations, interventions and practices. These same dynamics are present in hydropolitical constellations. The debates surrounding hydropower development and the MRC in the lower Mekong cannot be adequately analysed unless an approach which accounts for these dynamics is adopted. As such, whilst political ecology is usually utilised to examine local scales, it is a highly relevant approach for analysing transboundary hydropolitical constellations.

Sensitivity to scale and to sub-state actors, as well as cross and inter-scalar relations between actors is missing from conventional IR approaches to hydropolitics. Utilising political ecology allows these important dynamics to be conceptualised and analysed. Unlike conventional IR approaches, which conceptualise the state as a unified actor and consider hydropolitics only at the inter-state level, political ecology conceptualises the state as a non-unified actor. The state is comprised of a number of different parts, existing in power relationships with both these other parts and with non-state actors both inside and outside of the state (Bryant and Bailey 1997). Transboundary hydropolitical debates and outcomes are conditioned by relations between actors operating over various scales, as well as actor relationships located outside the sphere of water governance. Conventional IR approaches cannot account for these dynamics as they are not visible components of IR analyses of hydropolitics, which focus on the inter-state level. However, these dynamics become visible if political ecology approaches are utilised. Political ecology, as mentioned above, is concerned with geographic scale and nature-society interactions. Consequently, non-state actors and the politics of scale (the ways in which processes are scaled and the scalar strategies that actors utilise to contest and promote environmental change and development) are extremely important components of analysis.

The application of insights from critical IR approaches complements the use of political ecology in a number of ways. Critical IR theorists such as Doty (1996) and Edkins (2008) have analysed discursive formations and discursive practices. This complements the focus in political ecology on tracing the genealogy of environmental narratives, and also helps to situate this focus within wider theoretical discussions on how actors and resources are constituted through discourse and interpretation. The international scale is an important one for the consideration of transboundary hydropolitics. Critical IR theorists, such as Doty (1996) are extremely important for analysing how discursive practices shape international relations. Combined with political ecology sensitivity's to scale, this ensures that the ways in which actors and discourses interact at the international scale is adequately theorised. Political ecology emphasises geographic scale, but some theorists, such as Rangan and Kull (2008), argue that political ecologists need to pay closer attention to the issues of how scale is produced and used. As well as considering the production of scale literature within the field of political geography, this thesis will utilise critical IT theory work. Cox (1987) offers a theory of the relations between both different scales and actors operating over

various scales, which is highly pertinent to the concerns of this thesis, and strengthens the understandings of scale that are utilised in political ecology approaches.

3. The politicised environment and the lower Mekong's hydropolitical constellation

The hydropower development debate in the Mekong is a struggle to define and control water resources development. As such, it is situated within a politicised environment. The concept of a politicised environment argues that environmental problems, changes and practices are not neutral, and therefore cannot be understood in isolation from the political, economic, and discursive processes and contexts in which they are articulated (Bryant and Bailey 1997). To “understand the workings of a politicised environment is to appreciate...the complex ways in which actors interact at the material and discursive levels over environmental questions” (Bryant and Bailey 1997: 47). However, this is a dialectical process as the physical environment also plays a role in determining political, economic and discursive processes.

Swyngedouw (1999) argues that nature and society are deeply intertwined, and cannot be separated into two distinct binary categories. Nature does not exist external to man, nor are all natural processes subsumed under man's control. Natural and social processes do not operate separate from each other, but combine in a historical-geographical production process of social nature (or socionature), whose outcome (historical nature) embodies chemical, physical, social, economic, political and cultural processes in highly contradictory but inseparable manners (Swyngedouw 1999: 447). Subsequently, river basins such as the lower Mekong are part natural and part social. This does not mean that river basins and other elements of the physical environment do not have a material existence, or that all natural processes are socially constructed. But, we cannot separate their material existence from our knowledge of them through social and discursive practices (Baghel and Nusser 2010). Consequently, discursive and symbolic representations of nature are important aspects of analysis.

Nusser (2003) in his critical review of the political ecology of large dams considers the promotion, construction, and contesting of large dams as taking place in a politicised environment, which includes multiple actors with different interests. Utilising an actor-orientated approach Nusser (2003) identifies a number of key place and non-place based actor types: states and governmental institutions, dam-building industry associations and engineering companies, multilateral funding institutions,

environmental non-governmental organisations (NGOs), and affected peoples. An actor-orientated approach “emphasises the multiple forms of power and knowledge relations” and the “asymmetries inherent in these relations” (Baghel and Nusser 2010: 234). Key actor types in the Mekong’s hydropolitical constellation are examined in Chapter Four and include national governments, donor states, the development banks, civil society actors (global, regional and local), the private sector, and experts. These types have been selected as a result of empirical analysis, and do not represent an exhaustive list of all actor types.

Baghel and Nusser (2010) argue that political ecology is an analytical framework that can be applied to the large dams debate as it is important to look at both the effects and causes of large dams. Shifting asymmetries and discursive flows sustain and promote dam building over time, consequently, analysis should focus on multiple actors, driving forces and underlying power relations (Baghel and Nusser 2010). These elements are all present in the Mekong’s politicised environment and the current hydropower dam development debate. Analysis and examination of these elements is a key aim of this thesis. Recognising that this debate is taking place within a politicised environment reveals its underlying political nature and challenges representations of it as a technical or managerial debate.

A number of different terms have been utilised to describe the lens through which water resources and water resources development are viewed. Baghel and Nusser (2010) utilise the term technological hydroscape to avoid privileging water as the central lens through which to view and analyse large dams. Molle *et al.* (2009a) apply the term waterscapes in the context of the Mekong. A waterscape is a landscape viewed through the lens of their water resources: waterscapes are “an expression of the interaction between humans and their environment and encompass all of the social, economic and political processes through which water in nature is conceived of and manipulated by societies” (2). This thesis explores the hydropolitical constellation of the Mekong. The term hydropolitical constellation emphasises the importance of politics, as well as multiple actors over different scalar levels and the relationships between them, and discursive dimensions.

4. Political Ecology

Political ecology is a developing field of research with a focus of empirical work and analysis (Bryant and Bailey 1997; Baghel and Nusser 2010). It has many strands

and does not pretend to cement a single or codified theory (Bassett and Zimmerer 2003). The field of political ecology can be viewed as developing in different phases: initially political ecology was influenced by structural explanations before post-structural themes began to emerge (Forsyth 2003; Bryant 1998). This has led to political ecology being defined in a number of ways: definitions have stressed political economy, political institutions, environmental change, and environmental narratives (Robbins 2004). However, a common set of concerns, areas of research and assumptions can be derived.

Political ecology developed in the 1970s in response to apolitical explanations of environmental change, which were based on neo-Malthusian assumptions linking population growth and increasing scarcity of resources, arguments around the use of technology, cultural practices, and poor land-use practices (Robbins 2004; Watts and Peet 2004). The coupling of politics and ecology was coined “as a way of thinking about questions of access and control over resources” and “how this was indispensable for understanding both the forms and geography of environmental disturbance and degradation, and the prospects for green and sustainable alternatives” (Watts and Peet 2004: 6). Political ecology developed from the fields of cultural ecology, radical development geography and hazards/natural disasters research (Bryant 1998). This first generation of political ecology research was influenced by neo-Marxist theories such as dependency theory, world systems theory and relations of production theory, as well as peasant studies (Bryant 1998; Watts and Peet 2004). First generation research argued that environmental degradation was not apolitical, but was the result of political and economic forces. As such, initial work in political ecology was structural in terms of the explanations it provided, linking local behaviour and environmental change to political and economic forces and structures at different scalar levels of analysis. For example rapid deforestation in eastern Amazonia:

“needed to be understood in terms of why those who were clearing tropical rainforests did so in the pursuit of economically inefficient and environmental destructive cattle ranching, and these social forces- ranchers, peasants, workers, transnational companies- were shaped by larger political-economic forces, not the least of which was the Brazilian government acting through subsidies, class alliances, and the military” (Watts and Peet 2004: 7).

Local communities and actors engaged in behaviour, such as deforestation, that led to environmental degradation as a response to larger political and economic forces.

Whilst no ‘classic’ text of political ecology exists, the work of Blaikie and Brookfield on land degradation is taken as exemplary in the field (Watts and Peet 2004).

The most widely quoted definition is that of Blaikie and Brookfield which states that political ecology “combines the concerns of ecology and a broadly defined political economy” (quoted in Robbins 2004; Baghel and Nusser 2010). A broadly defined political economy is concerned with the effects on people, as well as their productive activities, of on-going changes within society at the local and global levels (Watts and Peet 2004). Blaikie and Brookfield’s structural explanation for land degradation utilised a chain of explanation, which linked local land-use practices to social and economic processes at other levels of analysis, from the state up to the international political economy (Bryant 1998). The work of Blaikie and Brookfield can be viewed as initiating the start of a second wave of political ecology research, which has seen a diversification in approaches (Bryant 1998).

From the 1990s onwards, political ecology developed in a number of ways, and this second generation has been influenced by post-structural approaches (Baghel and Nusser 2010). Second generation political ecology seeks to understand how unequal power relations and the knowledge that mediates human-environmental interactions are reproduced as environmental change at all scales (Baghel and Nusser 2010). There has been an increasing focus on discourse and narratives. For example, Leach and Mearns (1996) explore the role of environmental narratives and discourse in environmental change, and how environmental narratives are simultaneously the outcome of politics and power relations, and also play a political role and underpin particular sets of power relations. Political ecology has “opened the possibility of a serious discussion of how Nature and environmental problems were represented and how discursive formations shaped policy and practice” (Watts and Peet 2004: 10). The social construction of environmental problems facilitates the control of peoples and environments by powerful actors: as such “conflicts are...as much struggles over meaning as they are battles over material practices” (Bryant 1998: 87). This argument is extremely important for this thesis as the ways in which the Mekong and its development are represented are sites of struggle which legitimise the development interventions of powerful actors and de-legitimise the concerns of less powerful actors.

Developments in political ecology also include feminist political ecology (exploring the ways in which environmental concerns are traced through gender roles, knowledges and practices); a focus on new social movements and social justice; environmental history; a deepening theorisation and appreciation of scale; and the role of knowledge, including indigenous and local knowledges (Watts and Peet 2004; Bryant 1998). Developments in political ecology represent for Watts and Peet (2004) the

possibility of a “more robust political ecology which integrates politics more centrally, [and] draws upon aspects of discourse theory which demand that the politics of meaning and the construction of knowledge be taken seriously, and engages with the wide ranging critique of development and modernity” (5-6). This illustrates the expansion of political ecology from a focus on political-economic structures to include insights from post-structuralism.

First generation political ecology emphasised material relations, nature existing external to man, a relatively stable nature/society dualism, and searched for structural solutions to environmental problems (Baghel and Nusser 2010; Mustafa 2005). In contrast, second generation political ecology shifted away from searching for structural explanations, causes and solutions. The move between the two generations did not simply shift the focus from material forces to discursive ones, but involved engaging with epistemological debates such as constructivism and anti-essentialism, and also a politicisation of environmental explanation (Baghel and Nusser 2010; Forsyth 2003). As such the composition of the environmental problem is different for the two generations.

In first generation political ecology work on environmental problems, such as land degradation or deforestation, it is accepted that the environmental problem exists, it is a problem and that it has structural and material causes (*e.g.* Bryant and Bailey 1997). Second generation political ecology rejects the idea of nature existing external to man, arguing that we cannot separate the material existence of nature from our knowledge of it. Therefore, environmental explanation is highly political: discourses construct the ‘reality’ of nature. Whether land degradation is accepted as taking place, is conceptualised as a problem, and what types of solution are proposed, are all the result of interactions between different social actors, their knowledges, and their power relationships. Actors co-construct environmental discourses and narratives about environmental change, and in doing so construct its meaning. This does not mean that environmental change does not exist, but that whether it comes to be conceptualised as a problem requiring a certain solution is a result of how it is constituted in environmental discourse. For example, a leaking oil tanker is a physical event: it only becomes an environmental disaster if it is constituted as such in environmental discourse (Hajer 1995). How the environmental problem is constituted by social actors justifies and enables particular types of interventions.

The field of political ecology has developed extensively since the 1970s. However, there are a number of common elements and points of departure that can be distilled. Political ecology is concerned with issues of access and control of natural

resources (Watts and Peet 2004). Resource use can be regulated through controlling access, and spaces can become arenas of conflict that result in distinctive patterns of resource use and management (Zimmerer and Bassett 2003). Ideas about ecological processes and the environment are also delimited and directed through political process (Robbins 2004). Consequently, both asymmetric power relations and asymmetric knowledge relations are important.

Bryant (1998) argues that political ecology research seeks “primarily to understand the political dynamics surrounding...struggles over the environment in the third world” (89). Investigations into the processes of knowledge construction and underlying discourses need to be integrated into understandings of environmental change as “human-environmental interactions are mediated by knowledge” (Baghel and Nusser 2010: 242-3). Political ecology is something that people *do*: it both critically examines dominant accounts of environmental change, and explores alternatives, adaptations, and creative human action in the face of mismanagement and exploitation (Robbins 2004: 12). Robbins (2004) terms these the hatchet and the seed: the hatchet of political ecology “works to ‘denaturalize’ certain social and environmental conditions, showing them to be the contingent outcomes of power”, and focuses on the stories, methods and policies that create social and environmental outcomes (12).

Forsyth (2003) argues for a critical political ecology which considers science, and its social and political framings, as the basis through which environmental change is understood. Environmental explanations have a political basis as political factors underlie the formulation, dissemination and institutionalisation of scientific knowledge and networks (Forsyth 2003). Consequently, it is important to view the evolution of environmental facts and knowledge as part of the political debate, rather than a pre-prepared basis for commencing debate (Forsyth 2003). This is important in the context of the lower Mekong as technical and scientific studies conducted by external experts in the 1950s provided the impetus for lower Mekong inter-state water cooperation and produced a particular representation of the Mekong which has endured (see Chapter Three). In his overview of the field of political ecology Forsyth (2003) recognises that an important challenge is to “integrate the structural focus on state, society and industry, and the poststructuralist attention to how interactions between such actors co-construct environmental discourses and narratives about the environmental change” (9). This thesis seeks to integrate these two focuses in its analysis of the lower Mekong’s hydropolitical constellation. Power relations, multiple actors, economic factors,

discourse, narratives and scale are all important elements which need to be integrated in approaches to hydro-politics.

4.1. Power

The role of power and asymmetric power relations between different actors has been emphasised in a large amount of political ecology work (*e.g.* Bryant and Bailey 1997; Tans-Mullins 2007). This includes both structural and post-structural conceptions. Structural conceptions of power have largely focused on the ability of actors to control access to resources, usually through material means. Tan-Mullins (2007) argues that power is conceptualised “by the differential ability to control access to valued environmental resources, the main objective of which is to control and/or access the economic benefits ensuing from resource exploitation” (348). As such assessing power relations between actors provides a way to “explain the uneven distribution of access to environmental resources” (348). Bryant and Bailey (1997) attempted to integrate power-knowledge relations into their understanding of power, arguing that it is necessary to adopt an inclusive understanding of power “that encompasses...non-material considerations as well as the apparent fluidity of power itself” (39).

However, Bryant and Bailey (1997) still conceptualise power in terms of controlling the environment of others. This has a number of dimensions: controlling access to environmental resources; influencing or determining the location of activities; allocating financial and human resources to intervene in particular types of human-environment interaction; and, discursive means and attempts to regulate ideas. This conceptualisation of power seeks to illuminate how no single actor has complete control over a resource, and how power relations are not fixed, but fluid and complex: “the ability of an actor to control or resist other actors is never permanent or fixed but always in flux” (Bryant and Bailey 1997: 46). Powerful actors stake claims to environmental resources both materially and discursively, whilst weaker actors resist this in a number of ways: there is continual tension and power is multi-dimensional and multi-centred (Bryant and Bailey 1997). Bryant and Bailey (1997) argue that environmental change results in costs and benefits which are distributed unequally and as such “reinforces or reduces existing social and economic inequalities”, which has “political implications in terms of the altered power of actors in relation to other actors” (Bryant and Bailey 1997: 28-29).

Bryant and Bailey's (1997) largely structural understanding of power is useful in the case of the lower Mekong to certain extent. The ability to allocate funds for development is a key element of the relationships between state energy actors and private sector companies in the lower Mekong, whilst the distribution of costs and benefits is an extremely important issue in the hydropower development debate. However, discourse is presented by Bryant and Bailey (1997) as one aspect of an actor's power, suggesting that it is something external to actors which they consciously control and deploy against other actors. Bryant and Bailey (1997) argue that actors seek to control the public transcript: the 'socially accepted' version of events "represented in public documents, legal political ideologies, popular music and theatre, and so on" (42). By controlling the public transcript actors seek to represent the triumph of their partisan interests as 'natural' (Bryant and Bailey 1997). Whilst actors may behave in such a way, this limited conception of discourse and power-knowledge relations cannot adequately capture the ways in which knowledge mediates human-environment interactions. Actors both co-construct environmental narratives and discourses and are shaped by them: as knowledge mediates interactions, discourse and processes of knowledge construction need to be integrated into hydropolitcal analyses.

Mustafa (2002) argues that whilst political ecology holds power relations to be central in determining resource management, power is largely under-theorised. Political ecologists have utilised surrogate concepts such as mode of production, political economy or social discourses to apprehend the role of power (Mustafa 2002). Whilst these surrogate concepts have enhanced the understanding of resource geographies, "the fundamental issue of power is...obfuscated...because the question of its sources and impacts is addressed indirectly" (Mustafa 2002: 737). Mustafa (2002) seeks to overcome this by utilising a structural conception of power to analyse access to irrigation water and vulnerability to flood hazard in Pakistan. This structural conception of power emphasises the connection between property ownership and social power (Mustafa 2002). Social power is the capacity to act possessed by social actors: as opposed to focusing on asymmetric relationships and the question of who has power over who, the focus is on what do actors have the power to do in their capacity as socially situated role-bearers (Mustafa 2002). Social power has its origins "in specific social structures, which differentially empower social actors", and as such "power differentials tend to have concrete geographical outcomes" (Mustafa 2002: 739). Property holds a central role in defining the structural modes of power, as property is one of the main building blocks of the social identities of actors (Mustafa 2002). Power

relations vary in the four villages studied by Mustafa (2002) according to the varying types of property ownership. Mustafa (2002) identifies three modes of power: feudal, bourgeoisie, and communal which respectively rely on force, socialisation and control over economic resources to ensure compliance. This structural conception of power is useful as it illustrates how geographical and environmental outcomes differ according to differing types of power relations between actors, which stem from particular sources, such as property.

Post-structural conceptions of power have been influential in both political ecology and critical IR approaches. Foucault's notions of governmentality and biopolitics are of particular importance. Within political ecology Goldman (2004) has analysed the eco-governmentality of the World Bank and its role in producing environmental knowledge. In critical IR Campbell (2005) uses biopolitics to reconceptualise the relationship between oil and security, whilst Dillon and Lubo-Guerrero (2008) explore the biopolitics of security contrasting it with traditional geopolitical discourses of security.

Foucault (1991) identifies three types of society or power (sovereign, discipline, and government), and traces the shift in the problematic of government from the Middle Ages onwards. Each of these types has a different end: sovereignty is concerned with control over territory, discipline with the practices of power over individuals (including normalisation and institutionalisation), and government with the problem of population (Foucault 1991). Governmentality refers to the tendency which has led to this type of power, government, becoming pre-eminent over the other types (Foucault 1991). However, it is not a case of one type of society/power replacing the others in a linear progression, but rather that there is a "triangle of sovereignty-discipline-government, which has as its target population" (102). Population is the ultimate end of government: the purpose of government is the "welfare of the population, the improvement of its condition, the increase of its wealth, longevity, health, etc" (Foucault 1991: 100). As such, the government acts either directly on the population through large-scale campaigns, or indirectly through tactics that stimulate birth rates, or direct the flow of the population into particular activities or regions (Foucault 1991: 100). Governmentality signifies the "ensemble formed by the institutions, procedures, analyses and reflections, the calculations and tactics that allow the exercise of this very specific albeit complex form of power, which has as its target population, as its principal form of knowledge political economy, and as its essential technical means apparatuses of security" (Foucault 1991: 102).

The concern with the population as a specific problem for government can be termed bio-politics. Foucault (2003a) defined bio-politics as the “endeavour, begun in the eighteenth century, to rationalize the problems presented to governmental practice by the phenomena characteristic of a group of living human beings constituted as a population: health, sanitation, birthrate, longevity, race” (201). Within this statistical techniques are extremely important as biopolitics is the means by which the group of living beings understood as a population are measured in order to be governed (Elden 2007). Statistics reveal that the population has its own regularities and economic effects (*e.g.* birth rates, cycles of scarcity, epidemics, spirals of labour and wealth), and make it possible to quantify specific phenomena of population (Foucault 1991: 99). The purpose of statistical mechanisms is not “to modify any given phenomena as such, or to modify any given individual in so far as he is an individual, but, essentially, to intervene at the level of their generality” (Foucault 2003a: 246). Consequently, power is situated and exercised at the level of population and biopolitics is a complex array of changing mechanisms, which seek to regulate the contingent economy of species life (Rainbow and Rose 2003; Dillon and Lubo-Guerrero 2008).

As bio-politics is concerned with matters such as birth rates, health and the optimisation of the life of a population, it must also be concerned with “the social, cultural, environmental, economics and geographic conditions under which humans, live, procreate, become ill, maintain healthy or become healthy, and die (Mitchell 1999: 99). Therefore bio-politics is concerned with “the family, with housing, living and working conditions, with what we call ‘lifestyle’, with public health issues, patterns of migration, levels of economic growth and the standards of living...[and] the bio-sphere in which humans dwell” (Mitchell 1999: 99). In order to optimise a state of life security mechanisms have to be installed around the random element inherent in a population of living beings (Foucault 2003a). Consequently, bio-politics involves surveillance, intervention and modification of the population. A population is “a cohort of biological individuals” and the epistemologies associated with biopolitics seek to establish patterns, profiles and probabilities (Dillon and Lubo-Guerrero 2008). In this context, bio-power refers to the ways in which characteristics of populations (such as race, fertility, gender *etc.*) can be shaped, managed, and selected in order to achieve political ends (Rainbow and Rose 2003).

Development in the lower Mekong involves surveillance and measurement of the population, in order to facilitate intervention. Statistical measures, such as Gross National Income, the national poverty line and indicators including literacy and life

expectancy, classify populations in the lower Mekong as undeveloped and in need of development. These measures privilege particular ways of knowing and provide the rationale for government interventions to modify the population. Hydropower dam development is justified in terms of the peoples' need for development and improving the population (see Chapter Three). Government-led development of water resources also seeks to steer the population into particular activities, such as industry and away from other types of activities, whilst also incorporating outlying communities into the government's networks of power in particular ways.

Post-structuralist political ecology, with its focus on narratives, discourse, meaning and power is highly relevant to this thesis. For example, Chapter Three of this thesis traces the history of the dominant development narrative of the lower Mekong and the types of interventions it has promoted. Although narratives are considered in section five of this chapter, it is necessary to make a few remarks here concerning power. Stott and Sullivan (2000) argue that contemporary political ecology is concerned with "tracing the genealogy of narratives concerning 'the environment', with identifying power relationships supported by such narratives, and with asserting the consequences of hegemony over, and within, these narratives for economic and social development, and particularly for constraining possibilities for self-determination" (2). Subsequently, questions such as 'who has the power to decide for society', and 'who decides the conditions of truth' become important questions that can lead to contestation and struggle as they make explicit the need to transform unequal power relations (Stott and Sullivan 2000: 2). Escobar (1995) has illustrated how "discourse results in concrete practices of thinking and acting through which the Third World is produced" (11). Discourse is produced under conditions of unequal power, and power is also exercised through discourse (Escobar 1995). Ferguson (1994), following Foucault, argues that discourse is a practice, it is structured and it has real effects. The thoughts, utterances, and plans of development officials are shaped by the structures of knowledge which they inhabit (Ferguson 1994). Power and discourse are therefore inseparable, and analysing power-knowledge relations is integral to the study of development. Discourse is not something external, but something which has real effects and includes particular practices that have different consequences for different actors. Ideas about the environment and development are underpinned by politics and by power, which is why it is necessary to trace the evolution of these ideas.

4.2. *Scale*

Scale is extremely important to political ecology analyses (Zimmerer and Bassett 2003). Three different meanings of scale can be differentiated in the literature: one, scale as a physical measure of space or nested territorial containers (local, river basin, nation *etc.*); two, scalar differentiation is mobilised to extend the analysis of dynamics perceived as pertaining to a definite scale to illustrate how power, discourse and knowledge circulate through channels that traverse rather than match conventional scales; and three, scale as social and political constructs utilised by different actors to frame a particular problem in a particular way in order to favour particular courses of action (Molle 2007). Zimmerer and Bassett (2003) argue that it is important to go beyond viewing scale as a set of hierarchical, pre-given spatial containers to examine how scale is socio-environmentally produced and how political-ecological processes incorporate and generate scaled spaces of interaction and distinctive political ecologies.

Marston (2000) argues that scale is not an ontologically given category or a pre-ordained hierarchical framework for ordering the world, but is socially constructed and helps to produce geographic realities (220). Scale has three facets: size, level and relation (Marston 2000). In her review of current geographic theorising about scale Marston (2000) identifies three central tenets: one, scale is not an external fact but a way of framing conceptions of reality (there is nothing natural about divisions such as local, urban, river basin, and region); two, the outcomes of these framings have tangible and material consequences; and three, framings of scale are often contradictory and not necessarily enduring (there is always the potential for change).

Scale is produced through social relations of uneven power, which create a hierarchy of differentiated spatial units. The majority of theorisations on the production of scale have focused on the role of capitalist production and have explored the massive restructurings of space that have accompanied globalisation (Marston 2000). For example, Brenner (1997) has examined how the state in the Federal Republic of Germany used regional and urban planning as a spatial tactic to regulate, produce and reproduce configurations of social space adequate to the continued accumulation of capital (280). However, Marston (2000) argues that the overwhelming focus on the capitalist relations of production means that the important roles that the processes of social reproduction and consumption play in the production of scale are under-theorised.

Marston (2000) examines the ways in which American urban middle-class women reconstituted and reclaimed the social geography of daily life, negotiating new and existing cultural ideas of their ‘proper’ place in society. The household was a key scale in this struggle for empowerment as it the scale at which relations of production, social reproduction and consumption intersect shaping access to social power and resources (Marston 2000). The women’s movement and popular domestic practices revolved around social reproduction and consumption processes and came to redefine the gender content of the public and the private and embodied an important transformation in women’s identities (Marston 2000). The modern US state was “remade with new responsibilities and transformed roles in direct response to the prolonged political activism of urban women organized around a discourse of domesticity and maternalism” (Marston and Smith 2001: 617). The transformation of the household scale provided a scale basis from which women’s movements contributed to the restructuring of other scales and dramatically altered the prevailing scalar configuration in the US (Marston 2000).

Brenner (2001) identifies two meanings of the politics of scale: singular and plural. The singular usage of the politics of scale denotes the “production, reconfiguration or contestation of some aspect of sociospatial organization *within* a relatively bounded geographical arena”, with the word ‘of’ signifying a relatively differentiated and self-enclosed unit, and understanding scale as a boundary separating units from each other (Brenner 2001: 599). Within this the relational aspects of scale are not considered (Brenner 2001). Brenner (2001) argues that Marston’s (2000) work utilises this singular usage to analyse the politics of scale within households. However, Marston (2000) does discuss the relational aspects of the household scale and illustrates how changes at this scale impacted other scales. Scales are constituted and transformed in response to socio-spatial dynamics, and scale-making is an embodied process which is undertaken by social agents, who are shaped by gender, class, race, and geography, and operate in particular historical contexts (Marston and Smith 2001: 617).

The plural usage of the politics of scale, which is defined by Brenner (2001) as denoting the production, reconfiguration and contestation of particular differentials, orderings and hierarchies among geographic scale, is highly relevant to the concerns of this thesis. The politics of scale refers to the production of differentiated spatial units and their embeddedness and position in relation to other spatial units in a multi-tiered, hierarchically configured geographic scaffolding (Brenner 2001: 600). Consequently, the process of scaling is highly important: how multiple spatial units are established,

differentiated and hierarchized, and then how they are re-jigged, re-organised and recalibrated in relation to one another (Brenner 2001: 600). It is important to explore the changing positionalities and shifting relationships between a range of intertwined geographic scales, and the ramifications this has for the representations, meanings, function and organisational structures of each of those scales (Brenner 2001: 600).

The politics of scale as a concept signifies that geographic scales and scalar configurations are socially produced, relational, contingent and politically contested through social struggle: they are not pre-given or fixed (Brenner 2001; Neumann 2009). Entrenched scalar configurations are continually junked and remade through intense socio-spatial struggles (Brenner 2001). Scale is critically important to actors' strategies: actors are geographically diverse and project across their own geographies into the geographies of other (Brenner 2001). The multiplicity of scale involved in the socio-spatial organisation of processes such as capitalism enables multiple opportunities for resistance and to create linkages across scales: the territorial requirements of capitalism articulate extensions of power at the same time that these manifold scales provide openings to resist that power (Marston 2000: 228). Sneddon (2003) argues that actors employ scalar narratives to "assert their positions and, in effect, their representations of means and ends" (2233). Within these narratives scale is a frame of understanding and an expression of power: "talking in terms of the 'local' or 'global' should be understood as a political strategy, as a way of representing the goals and desires of different actors" (Sneddon 2003: 2233-2234).

Actors' choices about scale can operate as a means of inclusion or exclusion as actors "can change power and authority by working at different spatial levels" and "can alter access to resources, and the decision-making processes with respect to those resources" (Lebel *et al.* 2005). Defining a problem at a particular scale allows actors to justify access, and extend or maintain control over resources (Bassett and Zueli 2003). Actors can 'scale-up' problems to analytical levels which legitimise their intervention. Bassett and Zueli (2003) illustrate how the World Bank has legitimised its intervention in the Ivorian Savannah and the problem of desertification by defining it as a problem that is continental in scope and therefore within its remit. Sneddon and Fox (2006) argue that the World Bank scaled its support for the Pak Mun Dam project in Thailand at the national scale. This represented the project as necessary for national development and therefore, prioritised the national scale over the claims and concerns of local communities and activists (Sneddon and Fox 2006). Lebel *et al.* (2005) argue that the ability to shift across levels and scales is often important to social movements, but the

capacity to make use of scale varies amongst stakeholders. These studies illustrate that scale is dynamic, that power flows between and within scales, and that actors can also 'jump' scales and engage in relationships with actors at other scales. Actors in the lower Mekong's hydropolitical constellation display these types of behaviour (framing interventions at certain scales and 'jumping' scales) as will be demonstrated throughout this thesis.

It is important to consider the relations between different scales, actors operating over various scales, how change occurs, and the ways in which scalar hierarchies are established. Cox (1987) considers a number of these issues from the vantage point of modes of social relations of production. As mentioned above, social relations of production have been the key focus of the majority of geographical theorising on the production of scale (Marston 2000). Cox (1987), however, provides a critical IR perspective on the relations between the scales of production, society, state, and world order. Cox (1987) argues that "production creates the material basis for all forms of social existence, and the ways in which human efforts are combined in productive processes affect all other aspects of social life, including the polity" (1). Production generates the capacity to exercise power, but is also determined by power (Cox 1987: 1). Examining the social relations of production focuses attention on the pattern or configuration of social groups engaged in production processes (Cox 1987). Social relations of production contain relations of dominance and subordination: in each mode a dominant group controls production, whilst a subordinate group works for the dominant group (Cox 1987).

Cox (1987) identifies twelve modes of social relations of production, including subsistence, household and central planning. Each mode contains a structure of social power (determines what and how of production), a form of organising the production process (the division of labour and the relationship of authority within production) and a form of distributing the rewards of production (Cox 1987). There is also a corresponding inter-subjective content (common ideas shared by the people in a mode about the relationships and purposes in which they are involved) and a typical institutional complex (which plays a role in legitimating the structure of relations within each mode) (Cox 1987). Modes are not fixed, pre-given or natural: they originated within different development processes (*i.e.* capitalist and redistributive), and then subsequently evolved (Cox 1987). For example, discontent over the distribution of the rewards of production can lead to the subordinate group struggling for greater control of

the production process, which can result in a change in the structure of social power within the mode (Cox 1987).

Modes do not exist in isolation, but in relationships with each other and in a society regulated by a state, and with links to the world economy (Cox 1987). By consecrating one of these modes as the dominant mode of production, the state structures the relationships between the different modes and therefore structures power within society (Cox 1987). The hierarchy of modes constitutes a structure of accumulation in which the extraction of surplus flows from weaker, subordinate levels of production to the dominant and stronger levels (Cox 1987). The pattern and structure of the social relations of production within a society gives the basis of its class structure, and in turn the nature of the state is also defined by the class structure on which it rests (Cox 1987). Consequently, state action is constrained by the knowledge of what the class structure makes possible and what it does not (Cox 1987).

Social formations are determined by the patterns of social relations of production (Cox 1987). But, they also shape and are shaped by world order, mediated by the state (Cox 1987). Differences between “one structure of world order and its successor are shaped by the forms of state and of production, and stabilized structures of world order in turn provide a framework conducive to certain forms of state and production” (Cox 1987: 7). In hegemonic world orders cross and inter-scalar linkages form and rescaling takes place, for example production in particular countries becomes connected through the world economy and linked into world systems of production, the social classes of the dominant class find allies in the classes of other countries, and states become internationalised as their mechanisms and policies adjust to the rhythms of world order (Cox 1987:7). These tendencies are reversed in periods of non-hegemonic world order. Within these scalar hierarchies there is the potential for change at all levels (production relations, class relations, the emergence of new historic blocs and alternative forms of state, and in the structure of world order). As the forces for system maintenance are strong where change does it occur it will be through mutually sustaining relationships at all levels (Cox 1987).

5. Environmental narratives, development, policy-making and persistence

Political ecology research has a strong focus on environmental narratives (Stott and Sullivan 2000). Narratives help to produce particular types of environmental change as they legitimise and de-legitimise certain actors and their strategies; they also play a

role in policy-making (Leach and Mearns 1996). By demonstrating that the environment can be approached in particular ways political ecology research has opened up the category of the environment itself and explored its multiform representations (Watts and Peet 2004). As such knowledge of the environment and key questions, including why do particular forms of knowledge predominate, circulate and how, are examined (Watts and Peet 2004: 19).

A development narrative can be seen as a story or an argument as it “has a beginning, middle, and end (or premises and conclusions, when cast in the form of an argument) and revolves around a sequence of events or positions in which something happens or from which something follows” (Roe 1991: 288). Environmental narratives have been cast as received wisdom by Leach and Mearns (1996): received wisdom is an “idea or set of ideas held to be ‘correct’ by social consensus or ‘the establishment’” and commonly represented in the form of a narrative (6). This is then translated into particular forms of policy and interventions which have practical consequences on the ground (Leach and Mearns 1996). Crisis narratives, such as those about encroaching deserts, are the “primary means whereby development experts and the institutions for which they work claim rights to stewardship over land and resources they do not own” (Roe 1995: 1066). As narratives suggest potential solutions and development/environmental interventions, they allow actors to make claims to resources. Chapter Six of this thesis illustrates how the development banks have engaged in this type of positioning in order to maintain their role in Mekong hydropower development in light of competition from new actors.

The aim of development policy is to “shape the world and generate change” and in doing so, “policy constructs versions of how the world is and how it should be” (Friend and Blake 2009: 15). Issues concerning the environment and development are complex. In order to deal with complexity policy-makers, decision-makers, practitioners and other actors tell stories about them, which reduce the complexity and uncertainty and suggest possible solutions. Narratives appeal to policy-makers and practitioners because they make stabilising assumptions, which describe both the problem and its solution, consequently, they can become institutionalised and resistant to change (Leach and Mearns 1996). Contained within this is the idea that problems exist, that solutions are needed and that policy-making can make a difference. As narratives suggest solutions and become institutionalised, they can box-in policy-makers and reduce the range of policies that can be selected (Leach and Mearns 1996). Roe (1991) argues that “the pressure to generate narratives about development is directly proportional to the

ambiguity decision makers experience over the development process” (288). The “more uncertain things seem at the microlevel, the greater the tendency to see the scale of uncertainty at the macrolevel to be so enormous as to require broad explanatory narratives that can be operationalized into standard approaches with widespread application” (Roe 1991: 288). Development narratives can become so persuasive that the assumptions and arguments on which they are based are rarely questioned (Friend and Blake 2009). This is evidenced in the lower Mekong where a dominant narrative linking hydropower and poverty reduction has framed powerful actors’ thinking since the 1950s (see Chapter Three).

Hajer (1995) argues that policy-making can be analysed as the creation of problems as it requires the definition of social phenomena in such a way that solutions can be devised. Policy-making “can be analysed as a set of practices that are meant to process fragmented and contradictory statements to be able to create the sort of problems that institutions can handle and for which solutions can be found” (Hajer 1995: 15). In light of this political analysis should “illuminate the places, moments, and institutions where certain perceptions of environmental change and social development emerge and are reproduced, and should reconstruct the...struggle that determines which perceptions at some point start to dominate the course of affairs in environmental politics” (Hajer 1995: 19). This thesis situates its analysis in this way by tracing how a particular regional discursive formation came to dominate in the lower Mekong as well as examining how the discussion of trade-offs has emerged.

The study of discourse illuminates how a diversity of actors actively try to influence the definition of the problem and exercise power by trying to impose a particular frame or discourse onto a discussion (Hajer and Versteeg 2005). Actors actively utilise discursive means to position themselves and others (Hajer and Versteeg 2005). Hajer (2005) defines discourse as “an ensemble of ideas, concepts, and categories through which meaning is given to social and physical phenomena, and which is produced and reproduced through an identifiable set of practices” (300). Discourse coalitions form around particular storylines and generate political effects once they gain enough socio-political resonance (Hajer 1995). Coalitions comprise different actors who may not have met and who do not follow a carefully laid out strategy, yet, they sustain a particular way of talking and thinking about environmental politics (Hajer 1995). The political power of coalitions is derived from the fact that they group around a particular storyline. For example, a loose discourse coalition exists around the storyline of the destruction of the rainforest, but a number of different stories

are told (*e.g.* deforestation, role of the rainforest in equations modelling the world as a biosphere, and the importance of the rainforests for indigenous cultures) as actors in a coalition have different social and cognitive commitments (Hajer 1995). Sustainable development is another example of a storyline: many different definitions of the concept exist which call for different things but, the coalition can only be kept together by being vague (Hajer 1995). Two discourse coalitions can be identified in the lower Mekong: one, powerful actors promoting hydropower on the basis of its contribution to poverty reduction, and two, less powerful actors who contest hydropower on the basis on its potential negative impacts (see Chapter Seven).

Doty (1996) argues that international relations are “inextricably bound up with discursive practices” (5). Representations of entities such as the global South and North, which frame policy makers thinking, underlie the production of knowledge and make certain policies and practices possible: alternative representations exist but they are marginalised or silenced (Doty 1996). Representation is a discursive practice, and refers not to the ‘truth’ and ‘knowledge’ but to the ways in which regimes of ‘truth’ and ‘knowledge’ have been produced (Doty 1996). Examining representational practices is important because it calls attention to the binary oppositions that regularly frame our thinking, for example developed/undeveloped, first world/third world: there is “nothing natural, inevitable, or arguably even useful about these divisions, they remain widely circulated and accepted as legitimate ways to categorize regions and peoples of the world” (Doty 1996: 2-3). The constructed and political nature of these oppositions have enabled and justified certain practices and policies (Doty 1996). For example, Doty (1996) examines imperial encounters between the Anglo-European world and the imperialised countries. These were asymmetric encounters in which the Anglo-European world constructed “realities” about the imperialised countries that were taken seriously and provided a basis for action. Consequently, it is important to examine how meanings are produced and attached to social subjects and objects, thus constituting particular representations that create certain possibilities and preclude others (Doty 1996).

Discourse has a material and performative character: material objects and subjects are constituted within discourse (Doty 1996). Representations produce meaning: what is ‘really’ going on in any situation is “inextricably linked to the discourse in which it is located” (Doty 1996: 5). Focusing on discursive practices allows examination of “how the processes that produce “truth” and “knowledge” work and how they are articulated with the exercise of political, military and economic power” (Doty

1996: 5-6). Discourse is a structured, relational totality which delineates the terms of intelligibility whereby a particular “reality” can be known and acted upon (Doty 1996). However, this does not mean that it is fixed, closed or stable. Discourse is inherently open-ended and incomplete: its exterior limits are constituted by other discourses that are themselves, open, inherently unstable and always in the process of being articulated (Doty 1996). Consequently, any “fixing of a discourse and the identities that are constructed by it...can only ever be of a partial nature...the overflowing and incomplete nature of discourses...opens up spaces for change, discontinuity, and variation” (Doty 1996: 6). That particular meanings and identities are taken as fixed illustrates the inextricable link between power and knowledge (Doty 1996).

A focus on discourse does not imply that the discursive is privileged over the non-discursive: the world exists independently of language, but its’ existence is literally inconceivable outside of language and our traditions of interpretation (Campbell 1998). As such social and political life comprises a set of practices in which things are constituted in the process of interpretation (Campbell 1998). Understanding “involves rendering the unfamiliar in terms of the familiar”, so there is always an “ineluctable debt to interpretation such that there is nothing outside of discourse” (Campbell 1998: 4). Campbell (1998) introduces the concept of a discursive economy, whereby “discourse (the representation and constitution of the “real”) is a managed space in which some statements and depictions come to have greater value than others” (6-7). In a discursive economy investments have been made in certain interpretations and dividends can be drawn by participants (Campbell 1998). Representations are taxed when they confront new and ambiguous circumstances (Campbell 1998). Participation in the discursive economy is through social relations that embody an unequal distribution of power (Campbell 1998). In the context of the lower Mekong certain representations of the river, its people, and its development dominate. Investments have been made in these interpretations and powerful actors have drawn dividends in terms of seeing their representations dominate and produce meaningful action. However, the existence of alternative representations and narratives as promoted by a wide discourse coalition of less powerful actors in the lower Mekong are taxing the representations that dominate at the official level. The open-ended and incomplete nature of discourse means that there is always tension between dominant and non-dominant representations and narratives.

5.1 *The importance and persistence of narratives*

Dominant narratives get their hearers to believe or do something: they are problem-solving and action-orientated (Roe 1991). As described above narratives play an important role in policy-making by making stabilising assumptions, reducing complexity, framing thinking, and suggesting possible solutions. The role of narratives in policy-making illustrates how narratives can have social, economic, developmental and geographic consequences on the ground. For example, the government of Lao PDR are promoting hydropower development as their key development strategy. Interviews conducted for this thesis illustrated how a dominant development narrative which conceptualises the problem as a lack of development and the solution as hydropower has framed the thinking of policy-makers and provided the underlying stabilising assumptions that have reduced the complexity of the problem:

“Where the minority people live, need very much to improve their lives. They do not have electricity. They need development. That’s why development there is of the highest priority. That’s why we need hydropower development” (State Official, interview, 06/08b).

The narrative linking poverty, development and hydropower is one that formulates both a problem and a solution. It is action-orientated and has led to the formulation and implementation of hydropower plans and projects, which are changing the social, economic, developmental and political geographies of Lao PDR.

Dominant narratives can render some actors or practices invisible at the national and regional levels of decision-making, or blame certain actors for environmental degradation in order to justify intervention by the state. Chapters Three and Seven of this thesis examine how the dominant development narrative of the Mekong positions development at the regional and national scales thereby rendering invisible at the policy-making level the myriad ways in which local communities and groups utilise the Mekong’s water resources. This thesis challenges this rendering by examining how dominant narratives are contested by less powerful actors, and illuminating how alternative representations and narratives do exist and challenge the dominant ones (see Chapter Seven). Critical IR theorists such as Weber (2006), and Blaney and N. Inayatullah (2010) have adopted approaches whereby dominant and alternative representations or interpretations are read side-by-side to challenge dominant representations/interpretations, thus opening them up for debate. By examining alternative representations and narratives in the lower Mekong hydropower debate, this

thesis seeks to illustrate how the official development discourse is contested, and is not a closed, technical discourse, but highly political. It also casts light on the multiple, local users of the Mekong's resources, who are not necessarily considered in official discourses at the policy-making level.

Political ecologists have illustrated how dominant narratives can also blame indigenous people for land degradation, stigmatising their land-use practices as part of the problem, and therefore de-legitimise these practices and local level actors (Bassett and Zueli 2003; Swift 1996). Narratives serve the interests of certain actors and can facilitate the extension of an actor's power over a certain territory or resource: they can provide the *raison d'être* for certain state agencies, legitimise intervention on the part of certain actors and stigmatise others, and allow actors to present themselves as possessing the solution to a particular problem (Leach and Mearns 1996; Bassett and Zueli 2003). Therefore, when discussing narratives we are inherently discussing power relations and issues of access to and control over resources.

Bassett and Zueli's 2003 study of the Ivorian Savannah illustrates the role that environmental narratives can play as well as how scale is central to an actor's analysis and intervention. Narratives are utilised as framing devices by developers to justify their subsequent interventions: actors such as the state and international aid donors "seek to simplify the social and ecological worlds of their subjects in ways that make the complex and unwieldy both 'legible' and more accessible to their modes of intervention" (Bassett and Zueli 2003: 18). In the case of the Ivorian Savannah the World Bank defined the problem in such a way as to present itself as having the solution, and therefore the expertise and projects to intervene (Bassett and Zueli 2003). Environmental narratives empower actors to intervene in different locales, extending their control over a resource or territory. Contained within the dominant narrative of desertification is the idea that local peoples' land-use practices are to blame, this is used to justify land privatisation, thereby allowing other agencies and the state to extend their control and power over the area (Bassett and Zueli 2003). Alternative narratives or voices are not really heard because they do not conform to the "discursive frameworks and simplifying narratives of donor agencies", which circulate in the networks of power and because "they do not have the requisite institutional authority and thus the ability to attract funds that will empower government ministries" (Bassett and Zueli 2003: 132; 133). In this way the concerns of less powerful actors can become obfuscated.

Narratives can persist despite evidence to the contrary. Swift (1996) has traced the history of the concept and dominant narrative of desertification to illustrate the

‘stickiness’ of ideas and how this has implications for policy. The dominant narrative of desertification emerged in a situation of scientific uncertainty and has endured over time despite evidence challenging its various assumptions or premises (Swift 1996). Experts play an important role in the development of narratives and in transferring ideas about the environment which originate in one locale to other locales (Swift 1996). The received wisdom on desertification stems from the work of British and French scientists in Saharan Africa in the 1930s and 1940s: the leading British scientist, Stebbing, had previously worked for the Indian Forest Service (Swift 1996). Ideas generated at this time have subsequently been exported to geographies as diverse as South-west Asia and South America through mechanisms such as international conferences and donor programs (Swift 1996). Swift (1996) argues that the dominant narrative has endured because it meets a need and provides a “convenient point of convergence for the interests of three main constituencies” of government, donors including the UN, and some groups of scientists (86). There are winners and losers in narratives, in terms of narratives favouring some groups and their interests over others: for example, the dominant desertification narrative confers legitimacy on certain actors designating them as the ones with the capacity and knowledge to make decisions (Swift 1996).

Leach and Mearns (1996) argue that the answers to why narratives are persistent can be found in “the broader historical, political, and institutional context for science and policy” (4). Narratives can become institutionalised over time due to certain dynamics, which see them being reproduced (Leach and Mearns 1996). This can be seen in government documents which conform to dominant narratives and in the documents of NGOs and other actors dependent on external donors for funding, who reproduce the narratives as a way to align themselves with donor agendas in order to access funds (Bassett and Zueli 2003; Leach and Mearns 1996). Donors also spread environmental narratives through capacity building, institution building and attaching environmental criteria to funding; whilst experts and consultations help to reproduce narratives in different locales through their work (Leach and Mearns 1996). As such, narratives are produced and institutionalised by a wide range of interacting factors, including: political and institutional contexts, science, epistemic communities, and the intended and unintended actions of a wide range of actors operating over various scales.

Narratives are embedded in the wider global environmental and development discourse. A number of narratives, such as desertification, have become enforced through international conventions and donor funding, and these “conventions, supported by meta-narratives legitimised by a western analytical science, act to constrain certain

development activities” (Stott and Sullivan 2000: 8). A range of concepts have also emerged from the global environmental discourse, including sustainability, biodiversity and desertification, which have “assumed something of a totemic significance in international donor and policy discourse” and help to shape development processes and opportunities (Stott and Sullivan 2000: 3). As will be shown in Chapter Four changes in the global water discourse have implications at the regional and national level.

Narratives are displaced by counter-narratives, not by counter-evidence. One of the most famous development narratives is the *Tragedy of the Commons* (Roe 1991). This narrative argues population growth leads to the over-exploitation of common resources (Hardin 1968). The solution is for the state to restrict and control access to common resources through a variety of mechanisms (Hardin 1968). Despite negative evidence to the contrary this narrative has persisted because it stabilises and underwrites the assumptions necessary for decision-making (Roe 1991). Contrary evidence is troublesome as it generates uncertainty and can undermine the assumptions of decision-making, leaving decision-makers without the means to make the transition from the discredited narrative to whatever is to replace it (Roe 1991: 290). However, narratives are not static: there is continual tension, as will be shown in Chapter Seven.

Science and politics are intertwined and help to construct narratives. Alatout (2008) has demonstrated how the dominant narrative of Israeli water scarcity replaced an earlier narrative of water abundance. Prior to the 1950s a narrative of abundance existed that was displaced by that of scarcity through a process of contestation (Alatout 2008). Alatout (2008) examines the actors, circumstances and effects involved in this displacement of the narrative of abundance. The construction and stabilisation of the scarcity narrative had a number of technical and political effects on the Israeli style of government and on water resources and their management (Alatout 2008). The shift to water scarcity is often seen as a result of better science, in terms of theories, methods, and equipments, however, water scarcity was produced in a technopolitical process and is a “technopolitical achievement, a negotiated framework that was settled not only in the field of science, but also in politics” (Alatout 2008: 965). Scarcity emerged out of a struggle between water experts and institutions with different visions about water availability, different theoretical frameworks, different mandates, and different political affiliations, as well as scientific and technical arguments (Alatout 2008). The ways in which science and politics are intertwined in the Mekong’s hydropower debate are considered in Chapter Seven.

Narratives and discursive practices such as representation can have technologisation and depoliticisation effects. Edkins (1999; 2008) argues that responses to famines exhibit processes of technologisation. Governments and aid agencies external to the crisis area “do not take account of the political processes that are under way, of which the crisis is a symptom...[but] rely on interventions derived from an abstract, technical analysis of the situation, one that looks for “causes”, not political reasons or motivations” (Edkins 1999: 10). Famines are framed as technical problems and are represented as failures of development and modernisation that can be overcome by more development and more advanced technology (Edkins 2008). Both the problem of famine and its solutions are framed within the same discourse: famines are natural disasters with scientific causes and linked to narratives of scarcity that emphasise a separation between man and nature where the maintenance of life depends on a battle with nature for limited resources and allows the growth of human populations to be contrasted with the increase in their ‘natural’ means of subsistence (Edkins 2008).

Famines are framed and analysed in terms of population growth, crop yields, population movements, difficulties in the agricultural system, and technical solutions which can rectify these problems are advanced based on modernity’s professed ability to identify and resolve problems through abstract analysis and the formation of general principles (Edkins 2008). However, such solutions “are inevitably inadequate to the problem, which is not a technical one but one that accompanies specific forms of social and political organization or the emergence of new arrangements” (Edkins 2008: xvi). As such technical solutions “merely reinstate and reproduce one of the precise forms of politics- modern politics- that produce famine in the first place” (Edkins 2008: xvi). Challenges or criticism of humanitarian aid relief efforts, policies and agencies does not prevent further technologisation as debates about humanitarianism are self-reinforcing (Edkins 2008). Humanitarianism is located within discourses of modernity and to question the effectiveness of humanitarian interventions is to participate in this discourse as such questions have to be located within the same framework (Edkins 2008). As such the power of discursive practices “is that the entities they bring into being seem to be products of nature rather than discourse- and hence beyond question” (Edkins 2008: xvii-xviii). This is evident in current development debates in the lower Mekong. Participants at official national and regional consultations and meetings I participated in as part of the fieldwork research for this thesis largely framed their questions in terms of the impacts of hydropower projects, rather than whether hydropower development was needed. National development was also framed as a

technical problem, which has a technical solution. This technologises and depoliticises development, and thereby removes questions of power (see Chapter Seven)

Visual representations are also extremely important and post-structural IR theorists such as Weber (2006) and Campbell (2007) have explored questions such as: what do images do, how do they function and the impact of their operation, as well as questions of identity and how representations construct the self and the other. Weber (2006) examines US cinema as an important site of the debate about what it meant to be a moral America and American identity, which took place in the immediate aftermath of 9/11. Post-9/11 cinema offered a number of different possibilities for US identity, and illustrates how US-ness was being constructed at the intersections of cinema, foreign policy and national trauma (Weber 2006). Theatres of culture are political as the administration engaged with or ignored films depending on whether they supported the administration's foreign policy decisions or not (Weber 2006). Campbell (2007) has illustrated how visual representations produce, reinforce and maintain oppositions such as self/other, civilised/barbaric, developed/undeveloped, and North/South: as such visual representations do not simply reflect geopolitics, but are themselves geopolitical. Contemporary visual representations of Africa through reportage on the Darfur conflict "reduces the plurality and hybridity of...[Africa]...and its people to a single entity marked by an iconography of despair, disaster and disease" (Campbell 2007: 359). This helps to render places as objects of colonialism, imperialism, military intervention and humanitarianism (Campbell 2007). Practices of representation are extremely important in enabling and justifying interventions in the geography of others, as will be demonstrated throughout this thesis.

6. Development

Actors in the lower Mekong's hydropolitical constellation promote and contest different development visions, which are used to legitimise or challenge particular development interventions. Subsequently, this thesis is interested in development as something that actors 'do': in development as a social entity (Ferguson 1994a). Arguments for and against hydropower development in the Mekong are located in different development visions, different development institutions and actors, narratives and over different scalar levels.

Ferguson (1994a) argues that development is a central organising concept and as such "presupposes a central, unquestioned value, with respect to which the different

legitimate positions may be arrayed, and in terms of which, different worldviews may be articulated” (xiii). Escobar (2007) locates different positions and camps of literature within the three main moments in the field of development studies. The first two moments were modernisation theory, which focused on the beneficial effects of capital, science and technology; and dependency theory, which argued that the roots of underdevelopment were located in the connection between external dependency and internal exploitation, not in an alleged lack of capital, technology or Western values (Escobar 2007). The third moment is critical approaches to development as a cultural discourse, which emerged in the second half of the 1980s and questioned the very idea of development (Escobar 2007). These three moments have different theoretical roots: liberal, Marxist, and poststructuralist (Escobar 2007). Poststructuralist critiques of development, such as Ferguson (1994a), Rist (2002) and Escobar (1995) are particularly pertinent to this thesis because they focus on discourse and power.

Poststructuralist critiques illustrate the ways in which “development is a discourse of Western origin that has operated as a powerful mechanism for the cultural, social, and economic production of the Third World” (Escobar 2007:18-19). As such, poststructuralist critiques do not propose another version of ‘development’ but question “why, through what historical processes, and with what consequences did Asia, Africa and Latin America come to be “invented” as “the Third World” through discourses and practices of development?” Escobar 2007: 19). Escobar (1995) locates ‘development’ as the result of a specific historical conjuncture at the end of the Second World War. The particular history and culture within which ‘development’ was constructed includes: decolonisation, the start of the Cold War and the establishment of the Bretton Woods financial and trading regime (which was designed to permit national governments to manage their economies so as to maximise growth and employment) (Rist 2002; Leys 1996).

Both Rist (2002) and Escobar (1995) identify ‘Point Four’ of US President Truman’s Inaugural Address in January 1949 as initiating the ‘development era’. This address labelled over half the world as underdeveloped, argued that developed societies should help undeveloped ones to develop, and identified key tools for development (capital, technology, science, natural resources, industrialisation and increased production) (Truman [1949] 1964). As such it ushered in a new way of conceptualising world relations and a new way of thinking about people, constituting the Third World and its peoples in a particular way. Rist (2002) argues that Truman’s ‘Point Four’ should be seen as the opening act of a new era because it is a form of discourse which

expresses more accurately than others a reality in the making, and because it illustrates that “power does not necessarily involve changing reality, but, rather, inserting it into a different problematic” (78). The ‘developed’ and ‘underdeveloped’ dichotomy altered the way North-South relations were conceptualised/organised, and replaced earlier organisations based on coloniser/colonised (Rist 2002).

‘Development’ in this context had a transitive meaning: an act performed by one agent on another with the possibility of bringing about change (Rist 2002). The term ‘underdeveloped’ placed developed and underdeveloped states in a relationship whereby the latter were not the opposite of the former, but rather an embryonic form: therefore, the acceleration of growth was the only way to bridge the gap between the two (Rist 2002). ‘Development’ theories and practices emerged in response to this new problematique with the goal of transforming ‘traditional/undeveloped’ states into ‘modern/developed’ ones. ‘Modern’ states were generally taken as Western, industrial states, and theories such as modernisation theory outlined stages of growth which would lead to ‘traditional’ (*i.e.* low in productivity and unindustrialised) states becoming ‘modern’ (*i.e.* high in productivity and industrialised) (Rist 2002). Growth, and by extension ‘development’, were measured by the indicator of Gross National Product (GNP), a new economic instrument developed in the 1940s. GNP was favoured by the US as national statistics had an aura of objectivity that offered an acceptable basis for comparison (Rist 2002). The use of economic indicators to measure growth and ‘development’ has continued. For example, the World Bank classifies and rank states according to measure Gross National Income (GNI) (World Bank 2010). According to this measurement states with a high GNI are developed and states with a low GNI are less developed.

Escobar (1995) argues that reality has been colonised by the development discourse: it has become a dominant representation which shapes the ways in which reality is imagined and acted upon, and results in “concrete practices of thinking and acting through which the Third World is produced” (Escobar 1995: 11). Development is a historically produced discourse “that has created an extremely efficient apparatus for producing knowledge about, and the exercise of power over, the Third World” (Escobar 1995: 9). Since 1945 the development apparatus has continued to produce “new arrangements of knowledge and power, new practices, theories, strategies” *etc.* which have “successfully deployed a regime of government over the Third World, a “space for ‘subject peoples’” that ensures certain control over it” (Escobar 1995: 9).

The development discourse conceptualises the Third World as existing ‘out there’, as something that can be acted upon, and universalises and homogenises Third World peoples and cultures in an ahistorical manner (Escobar 1995). The Third World and its peoples are constructed as poor, powerless, ignorant, and lacking in agency (Escobar 1995). As such, they can be acted upon by ‘development’ and the West. Consequently, the same problems and solutions are perceived, regardless of whether ‘development’ is being pursued in Africa, Asia or Latin America. Ferguson’s (1994) study of the Thaba-Tseka rural development project is a study about the operation of the international ‘development’ apparatus in a particular setting, Lesotho. However, he argues that throughout the Third World “one seems to find closely analogous or even identical ‘development’ institutions, and along with them often a common discourse and the same way of defining ‘problems’, a common pool of ‘experts’ and a common stock of expertise” (8).

The development discourse has been deployed through the professionalization of development knowledge, and the institutionalisation of development practices as these two mechanisms “made it possible to systematically link knowledge and practice through particular projects and interventions” (Escobar 2007: 20). The dominance of expert knowledge and practices has excluded the knowledges, voices and concerns of the people ‘development’ is meant to serve (Escobar 2007). The development apparatus includes international conferences such as the United Nations Conference on Environment and Development in 1992; national agencies such as the United States Agency for International Development (USAID); international agencies such as the United Nations Development Program (UNDP); multilateral development banks such as the World Bank, as well as a wide range of non-governmental organisations (NGOs) (Rist 2002). These institutions all employ a wide range of experts and produce certain forms of knowledge on the Third World and development, as well as engaging in a wide range of development practices, designing and implementing strategies, programmes and projects.

‘Development’ has entailed large-scale, systemic interventions in Third World societies. Contained within critical approaches to development are the ideas that development has largely failed and has been harmful to the Third World (Ziai 2007). However, practitioners and politicians never decide to ‘do away’ with ‘development’. Ferguson (1994a) argues that despite the continual failure of rural development projects in Lesotho there is always an actor ready to try again with a different project. Instead of questioning ‘development’ itself, the focus is on how to ‘do’ development better: failure

is the result of ‘bad’ development projects according to development agencies and actors, and this can be rectified with ‘good’ development projects (Ferguson 1994a). Escobar (1995) argues that this is because development has achieved such a certainty in the social imaginary that it seems impossible to conceptualise social reality in any other way (5).

Ferguson’s (1994a) study of the ‘development’ apparatus in Lesotho, and in particular the Thaba-Tseka rural development project is highly relevant to the concerns of this thesis because it demonstrates how the ‘development’ apparatus constructs Lesotho in particular ways in order to justify the intervention of certain actors. Similar processes have occurred in the lower Mekong (see Chapter Three). Ferguson (1994a) argues that ‘development’ “is a social entity in its own right: the set of ‘development’ institutions, agencies, and ideologies peculiar to our own age” (Ferguson 1994a: 9). As such, it is important to examine what it is that ‘development’ does; what happens because of it that would not have happened anyway; and how ideas about ‘development’ are generated and what are their effects (Ferguson 1994a).

The ‘development’ apparatus generates a particular form of discourse about Lesotho and then organises interventions based on this structure of knowledge (Ferguson 1994a). In order to ‘move the money’ ‘development’ agencies prefer to opt for standardised packages: “It thus suits the agencies to portray developing countries in terms that make them suitable targets for such packages” (Ferguson 1994b: 176). As such, it is not surprising that the country profiles and other documents on which interventions are based often bear little or no relation to economic and social realities (Ferguson 1994a). In the case of Lesotho, the World Bank constructed Lesotho in particular ways: a peasant, subsistence society, isolated from the cash economy, whose people respond to declines in agriculture by acting as migrant labour in South Africa (Ferguson 1994a). This representation of Lesotho obscures certain economic and social realities, including the long-standing economic relationship between Lesotho and South Africa, where Lesotho acts as a labour reserve for the South African mining industry (Ferguson 1994b). However, acknowledging these realities would not provide a convincing justification for institutions such as the World Bank to intervene in Lesotho, and to provide ‘development’ packages based on agriculture and incorporation into markets: political and economic realities that are inaccessible to ‘development’ planners are ignored (Ferguson 1994b).

The ‘development’ discourse on Lesotho removes politics from ‘development’ (Ferguson 1994a). The country’s economy and society are presented as lying within the

control of an effective, unitary, neutral government, and therefore it will be responsive to planners' blueprints: whether Gross Domestic Product (GDP) goes up or down is, therefore, the result of whether the government and 'development' agencies correctly implement plans (Ferguson 1994a). This presents development as a technical, neutral and managerial process. 'Development' plans and analyses exclude issues such as the political nature of the state, no mention is made of political parties, the state is represented as having no interest other than 'development', and there is no mention of uncomfortable issues such as corruption, or the political role played by 'development' agencies; the 'people' are also treated as an undifferentiated mass upon which the 'development' process works (Ferguson 1994b). This is not exclusive to Lesotho. As will be demonstrated in this thesis 'development' plans for the Mekong display a similar kind of apolitical nature.

Most importantly for the concerns of this thesis, Ferguson (1994a) illustrates how the 'development' apparatus is an anti-politics machine, depoliticising everything it touches. The majority of 'development' projects in Lesotho have failed. However, whilst interventions fail on their own terms, they do have regular side effects, including the expansion and entrenchment of state power (Ferguson 1994a). Consequently, it is important to go beyond simply looking at actors' interests in order to consider how "the outcomes of planned social interventions can end up coming together into powerful constellations of control that were never intended and in some cases never even recognized" (Ferguson 1994a: 19). Planned interventions "may produce unintended outcomes that end up...incorporated into anonymous constellations of control" (Ferguson 1994a: 20). In the case of Lesotho, whilst the Thaba-Tseka rural development project failed, it had a number of side effects that resulted in increasing bureaucratic state power: as such outcomes which appear as side effects become "legible in another perspective as unintended yet instrumental elements in a resultant constellation that has the effect of expanding the exercise of a particular sort of state power while simultaneously exerting a powerful depoliticizing effect" (Ferguson 1994a: 21). The combination of a representation of economic and social life which denies politics, and the regular side effects of 'development' project comprises the anti-politics machine (Ferguson 1994a). Politics is denied as the 'development' apparatus in Lesotho depoliticizes everything it touches, whisks political realities out of sight whilst "performing, almost unnoticed, its own pre-eminently political operation of expanding bureaucratic state power" (Ferguson 1994a: xv). The depoliticisation effects of the

'development' apparatus are extremely important in the case of hydropower development of the Mekong (see Chapter Seven).

Poststructuralist critiques of development led some theorists to suggest the idea of post-development, not as a historical period, but as the possibility of creating different discourses and representations that were not so mediated by the construct of development: development would no longer be the central organising principle of social life (Escobar 2007). Post-development argues that reality can be defined in terms other than those of development, and subsequently, people/social groups can act differently on the basis of those different definitions (Escobar 2007: 21). Post-development thought seeks to multiply the centres and agents of knowledge production and in particular "give salience to the forms of knowledge produced by those who are supposed to be the 'objects' of development so that they can become subjects of their own right" (Escobar 2007: 21). This is achieved by focusing on adaptations, subversions and resistance local people effect in relation to development projects, and by highlighting the alternative strategies produced by social movements as they encounter development projects (Escobar 2007: 21). Post-development argues that the traditional concept of development is Eurocentric (European or Western society is seen as the ideal norm, with the Third World being an imperfect deviation), and that it has authoritarian or technocratic implications, which have harmed and disempowered Third World peoples (Ziai 2007). As such, Nakano (2007) argues that post-development problematizes the foundational myth of international development as the heritage of Western civilisation, and proposes the institution of new social orders in which excluded existences can enjoy their autonomy: within this is the central concern of how a new social order can be grounded in a possibility that is absent in the imaginary of development (64).

Critiques of development and work within post-development seek to imagine or provide spaces for alternatives. Prior to poststructuralist critiques of development, criticism of/opposition to 'development', or the articulation of alternative approaches were all formulated within the limits of the development discourse (Ferguson 1994a; Escobar 2007). Post-colonial and critical IR scholars, such as Nandy (1983), Chakrabarty (2000), and Inayatullah and Blaney (2004) argue that in order to move beyond or transcend these categories it is necessary to render them 'exotic' or 'provincial', exposing their historical and cultural roots, as well as their links to specific social practices and thereby denaturalise them and destabilise their universalist claims.

Critical IR and post-colonial scholars have demonstrated how Western categories, concepts and representations of the Third World have come to be seen as universal and

have particular effects. Chakrabarty (2000) argues that it is impossible to think of political modernity without certain categories and concepts (the state, civil society, scientific rationality *etc.*) whose genealogies lie in the intellectual and theological traditions of Europe (4). These concepts are largely treated by social scientists as though they have transcended their European origins (Chakrabarty 2000). Consequently, it is important to trace their European genealogies, provincialising concepts and categories in order to provide space for alternative normative and theoretical thought enshrined in other existing life practices and their archives (Chakrabarty 2000). Inayatullah and Blaney (2004) argue that IR itself needs to be provincialised to reveal how its spatial and temporal demarcations came to be seen as self-evident. IR is itself part of the legacy of colonialism: the origins of the political imaginary which informs contemporary IR lie in the late medieval to early modern period of European history and its experience of the problem of difference (Inayatullah and Blaney 2004). As such, in its conventional neo-liberal/neo-realist approaches IR is unable to speak about the situation of the Third World, culture, difference, or confront colonialism/post-colonialism and needs to be re-imagined as the study of difference (Inayatullah and Blaney 2004).

Categories and the hierarchies within them were extremely important in British colonialism in India, which was organised discursively (Nandy 1983). Hierarchies in the categories of age and gender were mapped onto the British and Indian selves, such that British selves were masculine and mature while the Indian other was effeminate, infantile, or old: subsequently, the British self was conceptualised as superior to the Indian other within the British worldview (Nandy 1983). Nandy (1983) does not talk of post-colonialism, instead he argues that there is a second colonialism, which has survived the demise of Empires and is independent of its roots. This modern colonialism has generalised the concept of the modern West from a geographical and spatial category to a psychological one: the “West is now everywhere, within the West and outside; in structures and minds” (xii). Westernization produces not only models of conformity, but models of dissent: when in opposition there are ways to be anti-colonial that are considered ‘proper’, ‘sane’ and ‘rational’, such that even when in opposition, dissent remains predictable and controlled (Nandy 1983).

By tracing the origins of concepts, categories, modes of thought and academic approaches space is created for debate and other claims and voices become visible. Blaney and Inayatullah’s (2010) critical work on International Political Economy (IPE) and its origins destabilises the assumption that capitalism is the solution to poverty and backwardness. They argue that IPE’s roots lie within European classical political

economy and its thinkers, who were influenced by and contributed to a European understanding of time and history that was universal and conceptualised others elsewhere as temporally prior and backward (Blaney and Inayatullah 2010). Capitalism and modernity are presented by these thinkers as the solution to this backwardness, however, Blaney and Inayatullah (2010) argue that capitalism has left wounds in modern society, and this raises the possibility that poverty may be intrinsic to capitalist development. If this is the case then poverty cannot be merely ascribed to a pre-modern or non-modern age untouched by modern abundance, and modern capitalist societies “are forced to account for poverty not as an archaic characteristic of an external other, but as internal to the contemporary self” (Blaney and Inayatullah 2010: 3). Recognising that modern capitalism may not be the “exclusive and final solution to the human condition” admits the possibility that other forms of life may have valuable insights, and as such opens spaces where even the dominant may recognise that alternative modes of living have a claim on life (Blaney and Inayatullah 2010: 3).

The work of post-colonial and critical IR scholars, as well as the aim of post-development to liberate the discursive field, are important to the concerns of this thesis because they illustrate how debates about ‘development’ are constrained by the dominant discourse, and the categories and concepts which support it and purport to be universal. As will be shown through the following chapters representations and narratives have their origins within particular discourses and institutional and political contexts. The development discourse in the lower Mekong frames debates in particular ways and in order to participate civil society actors have to frame their opposition within the terms of this discourse. Ideas of modernity, capitalism, and progress frame the development agenda of dominant actors in the lower Mekong and justify particular types of development interventions. By opening up the category of development, this thesis provides space for alternative representations.

6.1. *Water resources development*

The exploitation of nature has been identified as one of the means to develop ‘modern’ states (Rist 2002). The development of water resources through irrigation and infrastructure has a long history. Specific concepts and ideas about water development have had enormous influence in a wide range of basins in diverse geographic settings. These concepts, which always originate from somewhere, are often presented as best-practice, neutral and transferable, and are related to a wider global water discourse,

which has real effects on the ground. It is hard to separate these different levels as they are entwined and affect each other. Trottier (2003b) argues that ‘water development’ is a hegemonic concept and includes assumptions that freshwater is abundant but needs to be redistributed so that it is in the right place at the right time. In terms of hegemonic concepts, or dominant narratives it is important to consider questions of where the concept and its assumptions originated from and which actors are promoting or benefiting from it (Trottier 2003b). This challenges the supposed neutral nature of water resources development.

State-led water development increased during the twentieth century and has incorporated a number of ideas including controlling nature, modernisation, infrastructure development, and progress (Wester *et al.* 2009; Swyngedouw 1999). Science and technology were conceptualised as tools to master nature and marshal it for man’s purposes. A conception of nature as an enemy to be subdued or mastered by man has been operationalised in geographies as the USA, China and Brazil (Molle 2008b; 2009). State-led water development has emerged as a sometimes intentional political strategy for controlling people, space, and water (Wester *et al.* 2009). The hydraulic mission has its roots in utopian ideas of the 19th century and usually involves state-dominated large-scale infrastructure development (Molle 2009). Contained within this are the ideas that nature can be controlled and water resources harnessed for economic development. Allan (2003) locates the hydraulic mission in water management paradigms associated with industrial modernity, arguing that the global South is deeply committed to the hydraulic mission in order to make up economic development ground. A zero-sum conception of economic development that “views farming, fishing and other traditional livelihoods as incompatible with industrialization and urbanization” is related to this ‘man over nature’ mentality (Cronin and Hamlin 2010: 14). These dynamics are found in the lower Mekong and are explored in Chapter Three.

The hydraulic mission is not a neutral project: it serves political and social purposes. Swyngedouw’s (1999) work on Spain has illustrated how water engineering and politics played a central role in Spain’s modernisation process. The hydraulic mission emerged at the turn of the nineteenth century as a response to the loss of Spain’s empire, a mounting economic crisis, and internal tensions due to a growing bourgeois in the North, and an antiquated feudal system in the South: Spanish elites needed a way to regenerate the nation’s social and economic base (Swyngedouw 1999). Regeneration would launch Spain on the path of modernisation, allow it to ‘catch-up’ to its European rivals, and provide a way to contain and work through internal tensions

without a revolutionary transformation in the system of power (Swyngedouw 1999). As such, the hydraulic mission was a discursive vehicle around which unlikely groups and partners coalesced (including previously excluded social groups). It included ideas that nature needed to be reworked as soil was poor and water was being lost to the sea: the solution was water infrastructure development, including dams and irrigation channels, undertaken by the central public authorities (Swyngedouw 1999). Consequently, Spain's hydraulic mission involved 'scaling-up' water resources development to the national scale (Swyngedouw 1999).

Water infrastructure and engineering are important components of the hydraulic mission. Dams are political and value laden: a shifting and contingent discourse of dam building has led to them being associated with modernity and development (Baghel and Nusser 2010). The era of large dam-building began in the inter-war period, with the formation of the Tennessee Valley Authority (TVA) acting as a turning point in the history of large dams (Baghel and Nusser 2010). The TVA model of large-scale river planning, involved regulating the entire river basin through a series of multipurpose dams for agricultural and industrial benefits (Baghel and Nusser 2010). Established in 1933 the TVA drew on assumptions about river development and progress that had their origins in the 19th century, and was exported as a model to places such as Mexico, India and the lower Mekong, where it influenced river basin planning (Molle 2009). The move from individual dams to river basin planning is by no means intuitive and illustrates the contingent and socio-political nature of dams (Baghel and Nusser 2010). Whilst water resources development paradigms are represented as technical, neutral and scientific they are conditioned by social and political processes.

Dams can be analysed as nodes in the intersection of flows of capital, ideologies, politics, technologies, knowledge and water (Baghel and Nusser 2010). Advocates and opponents of large dams form coalitions in order to strengthen their position and influence in the planning and implementation phases: these positions are derived "not only from their political and economic interests, but also from the symbolic and cultural aspects of both rivers and dams" (Baghel and Nusser 2010: 234). Within water resources development generally project planning can and tends to "acquire a life of its own, overriding criteria of hydrologic or economic relevance" (Molle 2008b: 217-218). A convergence of interests of all influential actors is the most obvious driver of water resources development, and five actor types are particularly important: the state, state line agencies, local politicians, private construction companies and development banks (Molle 2008b). These actors all have different interests in particular projects but

together they form powerful coalitions that are rarely challenged or defeated (Molle 2008b).

Garb (2004) argues that creating a sense of inevitability is a key dimension of any large infrastructure project. This has four discursive-political dimensions: one, shaping and proliferating a problem definition that points to the proposed project as the solution; two, rewriting and telling the project's history as the timely unfolding and gathering momentum of a long-established plan; three, limiting debate to issues contained within the project; and four, attempts to blur the boundaries between past, present and future by presenting a project that is still under consideration as an accomplished fact (Garb 2004). These create a sense of inevitability by narrowing the space of possibilities towards a single outcome (Garb 2004). Creating inevitability has been extremely important in the development banks promotion of the NT2 project in Southern Lao PDR, considered in Chapter Six of this thesis.

Within state-led water resources development there has been a large focus on engineering and technical solutions. The range of choice concept, developed within the pragmatic tradition of water resources geography, is extremely relevant to the concerns of this thesis as it illuminates how practitioners and policy-makers can perceive a limited range of water resources management options that helps to perpetuate a reliance on technological solutions (*e.g.* Wescoat 1987; Platt 1986; Mustafa 2005). This concept emerged from the work of Gilbert White, who extremely influential in the work of the Mekong Committee¹. White (1945) argued for a new approach to flood hazards: as opposed to focusing solely on structural responses (*e.g.* levees and dams) a new approach which “considers all possible alternatives for reducing or preventing flood losses” was needed (34). The range of choice was described by White as one of six key elements in water resources decision-making, with unwise decisions often resulting from misperception or unawareness of potential alternatives (Wescoat 1987). The theoretical range of choice is “the number of adjustments and uses that have been practiced in any similar environment, plus a possible innovation” (White 1961: 26).

However, in practice the theoretical range of choice is never available to managers and decision-makers (White 1961). The range of choice is “always influenced by practical judgements about feasibility in various contexts, about the knowledge that is

¹ The 1962 report ‘Economic and Social Aspects of Lower Mekong Development’ argued that mainstream dams should only be built when lessons about the economic and social aspects of basin development had been learnt from tributary projects (White *et al.* 1962). This report broadened the scope of the Mekong Committee beyond purely technical and engineering aspects and delayed construction of mainstream projects: plans for the big dams on the Mekong were voluntarily put on hold to gain experience from tributary development (Jacobs 1995).

relevant to any given problem, and about the relationships between awareness and technical assessment” (Wescoat 1987: 45). These constraints, and others such as, professional training and competence, limits to organisational authority, and difficulties in undertaking truly comprehensive analysis because of the many sectors that effective water management encompasses “impede the balanced formation of all potential solutions and options” (White 1998: 25).

Perception is extremely important in the range of choice. Theoretically the range of choice is limitless, however, in practice only a particular number of choices or solutions are perceived to be practical. Different actors perceive a different range of choice. Mustafa’s (2005) analysis of the Lai Nullah hazardscape in Pakistan reveals that local community flood victims perceive a greater range of choice in dealing with floods than policy-makers do. Factors which limited the practical range of choice in the Lai Nullah include: poor scientific understanding; the power/knowledge dynamic between policy and popular epistemologies which prevents development of a more democratic hazardscape view; and the lack of popular input into flood management; and, the modernist technocratic engagement of state agents with the Lai Nullah hazardscape (Mustafa 2005). Mustafa (2005) argues that the practical range of choice could be expanded if policy discourse drew on the lived experience of the Lai Nullah hazardscape as well as modern engineering knowledge.

Wescoat (1987; 1992) argues that scientific inquiry and democratic debate can expand the practical range of choice. However, this involves navigating a wide range of issues. Platt (1986) provides an overview of flood control and protection in the US which examines national policy from the 1930s to the 1980s. During this period flood protection and management expanded from purely structural responses (engineering solutions), to include non-structural responses (*e.g.* insurance, floodplain management, and relocation) in a policy shift from flood control to floodplain management (Platt 1986). The implementation of non-structural responses involves a wide range of political, organisational, economic, and cultural issues including the role of communities, formulation of regulation, coordination between different agencies and actors (Platt 1986). However, structural responses continue to be authorised in the US as part of a unified national approach, and in other basins, such as the Indus, where policy makers stress engineering solutions (Platt 1986; Mustafa 2005). This illustrates how technological solutions have an enduring appeal. Examining the range of choice in a basin, and how actors perceive a different range of choice can reveal why certain actors, such as state officials, are strong proponents of technological solutions. This is

particularly pertinent in the lower Mekong where hydropower dams dominate as the proposed solution to the problem of national development, despite a range of other possible options (including eco-tourism), and wide-spread opposition to mainstream dams.

7. Conclusion

Conventional IR approaches to hydropolitics are unable to capture the complexity of the lower Mekong's hydropolitical constellation as they focus on the transboundary scale in isolation from its wider context and conceptualise states as unified actors. In order to integrate narratives and multiple actors into approaches to hydropolitics political ecology combined with insights from critical IR approaches will be used. These approaches complement each other. There are three key dimensions or pillars of hydropolitical constellations: actors, scale, and discourse. Political ecology with its sensitivity to scale and place and non-place based actors, as well a focus of tracing the genealogy of environmental narratives offers the theoretical tools to analyse these three pillars. Critical IR approaches, which have examined representational practices and how they frame international relations, as well as ways in which subjects and objects are constituted in discourse allows the analysis of how the lower Mekong's hydropolitical constellation and its international relations are represented, framed, and constituted.

Critical work on development discourse, as well as work on environmental narratives, and how policy making involves the framing of problems in particular ways provide extremely important tools for analysing hydropolitical constellations. Development policy seeks to shape and change the world. Narratives play an important role in policy-making as they offer stabilising assumptions for policy-makers and shape problems into the type that the state can provide solutions for. Discourse coalitions form around particular narratives and storylines, which maintain or contest the dominant narrative. Actors also utilise narratives to extend or maintain their access to natural resources, representing themselves and others in particular ways. Development narratives are persistent because of the role they play in policy-making and in providing solutions to problems. However, there is continual tension as less powerful actors seek to destabilise dominant narratives.

Analysing discursive formations illustrates how development discourse, narratives, and representations depoliticise development interventions, strategies and debates by framing them as technical, scientific processes which disguise their inherently political

nature. The ways in which development is scaled by powerful actors also depoliticises development as it obscures the impacts of development for actors situated at alternative scales of analysis. Constructing a sense of inevitability around water resources projects also seeks to depoliticise development as it shapes the problem definition in ways that point towards the proposed project as the solution, obscuring impacts and the concerns of actors at different scales. Water resources development interventions are justified by narratives and involve the convergence of interests of a set of actors. However, they also have unintended consequences as they are embedded in and constructed in particular geographic locales.

Chapter Three: The lower Mekong, hydropower development and socio-economic development: the formation and endurance of a development narrative

1. Introduction

The lower Mekong's dominant regional discursive formation centres on an enduring narrative linking hydropower development of the Mekong River and socio-economic development. Conforming to Roe's (1991) definition it argues that:

- The people of the Mekong are poor;
- The potential of the Mekong River for development is huge;
- Developing the Mekong River will lead to socio-economic development.

This narrative emerged in the 1950s as the result of a convergence of interest between the geopolitical concerns of the US, contemporary water management paradigms, which focused on exploitation and domination of nature, and the role of outside experts and agencies such as ECAFE. This narrative permeates technical and scientific studies and plans for the development of the hydropower potential of the Mekong. Peet and Watts (1996) argue that regional discursive formations at times appear to disappear only to return with greater intensity in new guises. As social and environmental impacts of hydropower projects gained more salience at the international level, the Mekong's dominant regional discursive formation appeared to disappear. However, it returned with greater intensity after 2006 as plans for mainstream hydropower dams were resurrected by state actors. The problem, poverty, and the solution, hydropower have remained constant. But, a new dimension has been added to the problem definition: there is a lack of electricity for growth and development; the solution is hydropower.

Underpinning this narrative is a representation of the Mekong as unutilised and unharnessed. Despite growing awareness of social and environmental concerns, including the importance of fisheries, this representation has endured to the present day. This representation and the development narrative it underpins both inform policy and decision-making at the national level, as well as the strategies of actors such as the Asian Development Bank. Whilst it appears technical and neutral, this dominant narrative and representation are highly political, scaling development at the national and regional level, and obscuring impacts and actors at other levels of analysis.

The chapter traces the evolution of this dominant narrative from the 1950s and places it in its geopolitical context. Early development studies of the Mekong and the

formation of the Mekong Committee are considered before the chapter turns to changing regional dynamics after 1991. New regionalisms and the role of China are outlined, as are changes in the Mekong cooperation and the formation of the MRC. The chapter then explores current development strategies of the four lower Mekong states and arguments surrounding increased electricity demand.

2. The Mekong as an ‘object’ to be developed: hydropower and socio-economic development

The current debate over planned and proposed hydropower development of the Mekong River’s mainstream and tributaries has its roots in the 1950s and a particular set of ideas about development, which have endured and shaped national and regional policies and strategies to the present day. Since the mid-1950s a number of technical studies and investigations have been conducted into the development potential of the Mekong. These studies were largely conducted by experts from outside the region and funded by donors but administered or facilitated by the Mekong Committee (later the MRC). The Mekong was conceived of as a ‘sleeping giant...a source of tremendous potentialities for power production, irrigation, navigation and flood control, a source virtually unutilised’ (Schaaf 1968). This representation of the Mekong River has been both transmitted through and informed technical and planning studies to the present day.

Representing the Mekong as unutilised and possessing huge hydropower potential is one of the constituent parts of the development narrative described above. When combined with the premise that the people of the Mekong are poor it became apparent to planners and decision-makers that developing the Mekong for hydropower would solve the problem of poverty. Jacobs (1995) in his history of the Mekong Committee argues it was hoped “that the Mekong project would lift mainland South East Asia out of poverty by initiating socio-economic development through hydro-power, irrigation, and flood control projects” (139). This ‘hope’ born in the 1950s from the combination of experts and technical studies, as well as geopolitical dynamics has endured to the present day. It has become the dominant development narrative of the Mekong River, embodying a set of ideas about development, which are still translated into the same development policies and interventions as they were in the 1950s. The dominant development narrative has become institutionalised in state agencies and development institutions amongst others, and shapes the thoughts and actions of powerful actors.

This dominant development narrative and representation of the Mekong emerged at the convergence of interests between a particular set of actors and development paradigms: the US, the UN, the states of the lower Mekong, and paradigms concerning modernity and water resources development. As will be shown in later sections of this chapter and throughout the thesis, this narrative still operates at the convergence of actors' interests, but the actors have diversified and relationships between them have changed. Conceptualising the Mekong as unutilised and a mechanism for socio-economic development is located at the state and basin levels of analysis. This 'scales up' the appropriate level of intervention to that of the state and the basin and obscures other uses of the Mekong River such as fishing, subsistence agriculture and domestic uses. Within this the people of the Mekong are conceptualised as poor and appropriate subjects of development.

2.1. The Mekong prior to 1955

The Mekong River featured in a number of treaties and agreements prior to 1955 between France and Siam (modern day Thailand), including the 1856 Treaty of Friendship, Commerce and Navigation and the 1893 Treaty for Regulating the Position of the Kingdom of Cambodia. Navigation was the key focus of these treaties and others which followed in 1926, 1937 and 1950. Amongst other aspects these treaties established the thalweg² of the Mekong as the border between Thailand and Laos, which is still the border between the two today. Freedom of navigation was an important priority of the French colonial authority in Cambodia, Laos and Vietnam, as it initially believed that the Mekong River represented a passage into China, which would allow the French to access China's vast wealth and also provide a buffer to British colonial expansion through Burma (Osborne 2006b). Although navigation into China proved impossible, the main strategic French interest in the Mekong remained freedom of navigation, and the agreements signed between France, its colonial states, and Thailand, did not really touch upon development issues. The 1950 Pan Convention between France and Indochina granted the riparian countries the right to use the waters flowing in their territory for any purpose, including irrigation and hydropower, providing it did not interfere with the legitimate interests of the other countries, or navigation (Chi 1997). This focus on navigational uses of the Mekong mirrors the general phenomenon of the period: rules governing navigational uses emerged at the

² The thalweg is a line drawn to join the deepest points of a river bed.

beginning of the nineteenth century, but non-navigational uses were largely unconsidered (Salman 2007). Non-navigational uses of watercourses grew in prominence in the late nineteenth century, becoming particularly important after the end of the Second World War (Salman 2007). Actors' interests in the Mekong River have followed this general trend with the river becoming an important object for development after 1945.

2.2. Geopolitics, ECAFE and the formation of the Mekong Committee: 1955- 1970

The Economic Commission for Asia and the Far East (ECAFE) was established in 1947 by the UN. Its mission was to “make or sponsor...investigations and studies of economic and technical problems and developments within Asia and the Far East” (Chi 1997: 222). The organisation was inspired by the TVA model and dominant water resources development paradigms of the time congruent with the hydraulic mission. In 1955, ECAFE produced a manual on river basin planning which stated that “[t]he basic principle of a water resource policy should be to make the river an increasingly constructive contributor to the well-being of the people” (UN 1955). Involvement in the Mekong is the first example of the UN's direct involvement in international river basin planning and development (Jacobs 1995). Involvement in studies in the Mekong River offered ECAFE, a relatively new organisation with a particular water resources agenda, an opportunity to further its stated mission and establish itself relative to other actors.

The threat of communism and the US strategy of containment motivated increased US involvement in Southeast Asia after the Second World War. The Second Indo-China War between North and South Vietnam (1959-1975) saw US combat troops being deployed to Vietnam in 1965. Prior to this the US had, amongst other things, provided military advisors and equipment to the anti-communist forces of South Vietnam. Development of the lower Mekong River Basin was one element of the US strategy to combat the spread of communism in the region, restrain the ambitions of China, and utilise the moral dimensions of US foreign policy (Chi 1997). A 1956 report of the US National Security Council recommended:

“In order to promote increased cooperation in the area and to deny the general area of the Mekong River Basin to Communist influence or domination, assist as feasible in the development of the Mekong River Basin as a nucleus for regional cooperation and mutual aid” (quoted in Osborne 2006b: 177)

Hydropower development was a key part of this strategy. A 1968 cover of *National Geographic* magazine featured the Mekong as a river of hope (dams) and terror (communism). This conveyed the message that dams “were seen as the hope to pull the region out of poverty and hence tug the remote areas out of the sway of subversive ideology preying on poverty and hopelessness” (Hirsch 2006b: 107). The strategic concerns of the US connected hydropower development with poverty reduction and the rejection of communism in a causal relationship. The US attempted to capture the process of studying the Mekong, begun by ECAFE in 1955, and secured agreement from the four states to conduct a further investigation into the Mekong basin (Chi 1997). This study conducted by the US Bureau of Reclamation in 1955 suggested a number of possible sites for hydropower, reflecting the US view that the Mekong could be developed along the lines of the TVA (Osborne 2006b). The US Bureau of Reclamation played a central role in studies in the lower Mekong until 1975 (especially with regard to the proposed Pa Mong dam in Thailand), and also trained engineers from the region (Biggs 2006).

In 1957 ECAFE released its report *Development of Water Resources in the Lower Mekong*.³ This report was based on the premise that the construction of large dams was required in order to exploit the Mekong’s resources: this reflected the consensus in both developed and developing states at the time, where dams were viewed as symbols of modernity and progress (Osborne 2006b). ECAFE recommended development of the Mekong River through multipurpose projects for flood control, irrigation and hydropower (UN 1957). The 1957 report also recommended an ‘international approach’ whereby the four states cooperated closely in data collection and planning because proposed projects could have transboundary effects (UN 1957). To this end the report recommended an institutional mechanism be devised to obtain the resources, both technical and financial, that would be needed to conduct the studies into the development of the Mekong’s potential, and also for the projects that would be later developed (UN 1957). Although the US attempted to convince the four states to formulate their Mekong development plans under its auspices the four states choose to follow ECAFE’s recommendations (this was partly for geopolitical reasons, *e.g.* Cambodia was concerned that US involvement would threaten its neutrality in the region) (Chi 1997). However, the US continued to play a strong role in the development

³ Both ECAFE and the US Bureau of Reclamation’s studies focused on the area below the Burma-Laos-Thailand border for geopolitical reasons. China was not a member of the UN and therefore was not a member of ECAFE. US studies focused on the lower Mekong basin because of strategic concerns surrounding China and the spread of communism. This framing of the lower Mekong basin as the area below the Burma-Laos-Thailand border has endured and it is presented as a ‘natural’ unit of management.

of the Mekong River through its support for the Mekong Committee, motivated by its strategic geopolitical concerns.⁴

The Mekong Committee for the Coordination of the Investigations of the Lower Mekong Basin was established by Statute on 17th September 1957 (hereafter the Mekong Committee). ECAFE drafted the Committee's terms of reference (TOR) and its composition, whilst the UN drafted the Statute. This pattern of extensive involvement of external actors continues to this day, although, ECAFE and the UN have been replaced by other actors. The Mekong Committee comprised Cambodia, Laos, South Vietnam and Thailand and the four states were keen to participate because of the development potential of the river (Chi 1997). Between 1957 and 1970 a number of studies were conducted for the Mekong Committee by experts and external teams from donor states including the US, Japan, France and Australia. These studies focused on data collection and technical aspects. ECAFE had recommended that in the first instance a database of information was needed for the whole basin including tributaries (Chi 1997). This was supported by the 1957 Wheeler Report, a US report, which placed a great emphasis on the collection of technical data before dam construction could go ahead (Osborne 2006b). However, dam sites were also identified and proposed in the reports. By 1970 17 mainstream projects and 87 tributary projects had been identified. Feasibility studies for some projects, including the Pa Mong (located on the mainstream between Thailand and Laos), had also been conducted.

2.3. The emergence of an 'unutilised' Mekong River

Representing the Mekong River as utilised and an object which should be harnessed for socio-economic development reflect both the interests of actors such as ECAFE and the US, but also dominant water resources development paradigms of the period. It underwrites the dominant development narrative of the lower Mekong and is an integral part of the regional discursive formation running through the history of water resources development in the region. This particular representation of the Mekong and plans to develop hydropower for socio-economic development were widely supported in the academic literature of the period. Early Mekong studies were conducted at a time when water resources were conceptualised as a resource for development: sentiments at

⁴ The US was the largest financial contributor to the Mekong Committee until its withdrawal in 1975. The US also played a key role in the operations of the Mekong Committee: C. Hart Schaaf, an American, was Executive Agent of the Mekong Committee between 1959 to 1969, and US teams conducted a number of important technical studies, including the Wheeler Report of 1957, conducted by Raymond Wheeler who had previously been a senior officer in the US Army Corps of Engineers (Jacobs 2000).

the time were pre-disposed to the “construction of large, if not grandiose, schemes to harness the forces of nature for the benefit of mankind” (Chi 1997: 239).

Planners conceptualised the Mekong River as unutilised “with the paucity of hydrologic and climatic data and its low level of water development...[it] presented a 'clean slate' for basin development” (Jacobs 1995: 139). Studies in the 1950s found that the Mekong River was vastly under-utilised (Hudson-Rodd and Shaw 2003). The term unutilised was used by planners and those conducting the studies in a particular way: it signified a lack of control structures, such as dams or bridges spanning the Mekong. Utilisation is linked with engineering and infrastructure. This way of viewing utilisation is very narrow and does not include other important uses of the Mekong’s water resources which occur at other scalar levels of analysis, such as fisheries and livelihood uses. It also contributes to casting poverty and development as technical problems at the state, basin, and regional scales, which require expertise and planning solutions. Circular arguments are contained within this framework: the Mekong River is an unutilised river with a huge hydropower potential, which can be developed because it is not being utilised. Development planning occurs in politically loaded contexts (Ferguson 1994a). Casting utilisation, poverty and development in purely technical terms obfuscates the political context in which these early studies took place and the formulation of this representation of the Mekong.

Representing the Mekong in particular ways (unutilised, unharnessed) justifies particular kinds of interventions (infrastructure). It also provides a platform for actors (such as the newly formed ECAFE and the US) to extend their access in a particular area. By casting development of the Mekong, a transboundary river, at the state and lower basin scales it became intelligible to planners and decision-makers that an inter-government institution would be needed to coordinate and facilitate studies and investigations. This can be understood as a mechanism for the newly independently states of Southeast Asia to appropriate the terrain of development and stewardship over water resources in the region.

Representations of nature and the environment reinforce each other and signify particular types of intervention. Running throughout this discourse on developing the Mekong’s hydropower potential is a conception of the Mekong’s annual flood as destructive, and the idea that a river untamed by man is dangerous. After the 1966 floods, the executive secretary of ECAFE stated at the February 1967 meeting of the Mekong Committee that the flood’s devastation had “deepened the determination of all of us engaged in the Mekong effort to convert the wasted and destructive powers of the

Mekong untamed, into a giant tamed and harnessed to the uses of mankind” (U Nyun 1967: 19). Flood control provided the initial impetus for the 1957 ECAFE lower Mekong study and led to plans for multipurpose projects, which would have flood control impacts. However, the “annual flood and drought cycles are essential for the sustainable production of food along the river’s flood plains” (Hudson-Rodd and Shaw 2003: 268). They are also extremely important for fisheries migration and reproduction. As such, regulating the flood cycle through hydropower development could have disastrous livelihood consequences. Conceptualising the flood cycle as destructive and needing to be tamed justifies particular kinds of interventions, and obfuscates the links between it and livelihoods. This conceptualisation of the Mekong flood as destructive and harmful would later be used by China to partially justify its dam development of the upper Mekong mainstream as these dams will regulate flow and therefore lessen flood impacts (*e.g.* Wain 2004).

Commentators and academic literature from the early period of the Mekong Committee offered wholehearted support to what was termed the ‘Mekong Project’: the Mekong scheme is a “major potential instrument for human betterment” (Ingersoll 1968: 157). Jenkins (1968) argued that hydropower schemes would “greatly improve the lives of the 20 million people” living in the basin (464). Academic literature from the 1960s and early 1970s is replete with references to harnessing the Mekong (*e.g.* Ingersoll 1968), and the abundant water resources of the Mekong which are currently unutilised (Wheeler 1970), and are “one of the promising means of supporting economic growth” (White 1963: 414). Academic literature from the 1960s and 1970s conceptualises the Mekong River as an object to be developed for the benefit of the region’s people as it is an almost virgin river, unharnessed by man (Wheeler 1970; Ingersoll 1968; Sain 1966). This lack of water resources development is identified as providing a unique opportunity for the four states to cooperate in co-ordinated planning and development for mutual benefit, which could usher in an economic revolution (Wheeler 1970; Menon 1971). Within academic literature during this period there was a real sense that development of the mainstream and fulfilment of these grand schemes was about to be realised and an uncritical acceptance of this grand Mekong Project as ‘good’ and ‘desirable’.

2.4. Basin Development Plans: 1970- 1994

After its formation in 1957 the Mekong Committee conducted a large number of studies. A range of development projects were identified including hydropower dams, irrigation schemes, opportunities for the development of reservoir fisheries, electricity generation for industrial development, and model farms to further agricultural development. Mainstream hydropower projects such as Pa Mong (Thailand) and Sambor (Cambodia) were proposed and studied. Three basin development plans were also produced: the 1970 *Indicative Basin Plan (IBP)*, the 1987 *Perspectives for Mekong Development*, and the 1994 *Mekong Mainstream Run-of-River Hydropower*. All three studies proposed grand hydropower plans for the Mekong, which would harness the river and contribute to socio-economic development. These development plans were premised on the development narrative that hydropower development of the Mekong would lead to socio-economic development.

The 1970 IBP represented a major amplification of the skeletal plan contained in the 1957 ECAFE Report (Mekong Secretariat 1970). The IBP was completed with the assistance of the Governments of the Netherlands and the US and is a sectoral plan for the development of water and related resources (Mekong Secretariat 1970). The plan identified the needs of the basin between 1971 and 2000, and then identified development plans capable of meeting those needs. Those needs were largely framed in terms of infrastructure development, industry and electricity, in ways congruent with dominant water resources development paradigms. The IBP argues that water resources development will “provide the infrastructure and services...which are essential for the over-all economic growth and social improvement” in the lower Mekong states (Mekong Secretariat 1970: I-11). The report states that the four lower Mekong states are “intent upon the expansion and diversification of industrial and agricultural production, and the improvement of services, in order to raise the levels of living and welfare of their population” (Mekong Secretariat 1970: I-4-5) Hydropower will make “specific contributions...to these objectives” as it will provide an indigenous supply of energy to fuel industrialisation (Mekong Secretariat 1970: I-4-5). The IBP envisaged multipurpose projects and integrated development, so that hydropower projects would also provide flood control and agricultural benefits.

The IBP contained a short-term plan (1971-1980) which looked at individual projects within specific countries, and a long-term plan (up to 2000) comprised of a cascade of seven mainstream dams, of which Pa Mong and Stung Treng were

considered key. It was this cascade of mainstream projects that were viewed as capable of comprehensively uplifting the region (Molle *et al.* 2009a). Fifteen mainstream hydropower sites were studied before the Mekong Committee decided on the following seven, the first five of which are in Laos and the last two in Cambodia: Luang Prabang, Sayabouri, Pa Mong, Upper Thakhek, Ban Koum, Stung Treng and Sambor. The original list of fifteen included, amongst others, two more projects in Laos, Pak Beng and Khone Falls/Don Sahong. Aside from Upper Thakhek, these mainstream projects are the same ones being proposed, planned and debated in the present day (see Map 3, p.6). The long-term plan also included the Nam Theun 2 (NT2) dam as a project of international interest (NT2 is analysed in Chapter Six of this thesis).

The IBP was produced in a regional political context of increasing instability. Regional geopolitical dynamics lead to the suspension of the Mekong Committee in 1975 and its reformulation as the Interim Committee for Coordination of Investigations of the Lower Mekong Basin, hereafter the Interim Mekong Committee (IMC) in 1978. Aside from Thailand, the political composition of the Mekong Committee Member States changed in the 1970s. In 1975, the Royal Kingdom of Laos became the Lao People's Democratic Republic (Lao PDR), a communist state. Following the fall of South Vietnam in the Second Indochina War the two parts of Vietnam were reunited under the Socialist Republic of Vietnam in 1975. The Royal Kingdom of Cambodia fell under the control of Pol Pot and the Khmer Rouge entering a period of domestic instability and international political isolation which lasted from 1975-1991. The IMC was comprised of Lao PDR, Thailand and Vietnam on the understanding that the Mekong Committee would be reactivated once Cambodia requested re-admittance (Chi 1997). Funding for the IMC dropped drastically during this period: the UN and US, two of the Mekong Committee's biggest donors, withdrew support and riparian contributions decreased (Chi 1997). However, whilst the absence of Cambodia limited the possibilities of developing the Mekong mainstream and occasioned the IMC to focus more on national and tributary projects, this "did not entail that the vision of comprehensive development of the mainstream had vanished" (Molle *et al.* 2009a: 9). The IMC began work on revising the IBP in 1980 and in 1988 the revised report was published as *Perspectives for Mekong Development*.

The *Perspectives for Mekong Development* was formulated from the basis of the dominant development narrative. The Mekong River was characterised as a "huge, underused resource", that could through "irrigation, fisheries and hydropower feed and otherwise support" the basin's population and people outside the Mekong basin's

catchment (Mekong Secretariat 1988). The report argues that it “is clear there is indeed a will to harness the Mekong”, and that growth in the demand for electric power and rice will dominate “the scope and pace of basin development” (Mekong Secretariat 1988). Changes were made to the proposed Mekong cascade of mainstream dams. As opposed to the IBP proposed cascade, which had an estimated generating capacity of 23,000 megawatts (MW), the one proposed in the 1988 report would have a smaller storage capacity but still be capable of generating an estimated 23,000MW of electricity (Mekong Secretariat 1970; Mekong Secretariat 1988). The key difference in the two plans is that the 1988 report revised the Pa Mong hydropower project in order to reduce the amount of resettlement needed. In light of the growing salience of social and environmental concerns of large infrastructure projects at the international level (see Chapter Four, this thesis) the 1988 report recognised that the resettlement of 250,000 people was too high, and instead suggested that two dams be built: Low Pa Mong, and Upper Chiang Khan. According to the report changes to the Pa Mong project would decrease the flood control potential of the project (Mekong Secretariat 1988). However, this 1988 report saw hydropower as the key benefit of mainstream, and other concerns, such as irrigation and flood control, were insignificant in economic terms (Molle *et al.* 2009a). The report also focused on project development in the three member states, and proposed a number of tributary projects, including NT2.

Following the 1988 report the IMC continued to investigate mainstream hydropower. Whilst its future was unclear after 1991, the Mekong Committee continued to investigate and plan for mainstream hydropower development. The 1994 *Mekong Mainstream Run-of-River Hydropower* report proposed a revised version of the mainstream cascade of dams and stated that the mainstream had always been studied with “the perspective that one day they might be harnessed to provide enormous benefits” (CNR and Acres International Ltd 1994: I-1). The Mekong was again represented as a “bountiful but not a tame natural resource” (CNR and Acres International Ltd 1994: I-1). The Report suggested a new approach to the Mekong Cascade: ‘run-of-river’ dams, which would not have storage reservoirs. The Secretariat argued that projects with large storage reservoirs were now seen as socially and environmentally unacceptable due to the large numbers of people displaced and the large areas inundated (CNR and Acres International Ltd 1994). Candidate projects were ranked according to social impacts, defined in terms of how many people would be displaced, and categories of economic performance (CNR and Acres International Ltd 1994). This 1994 report presented a different version of the cascade, but the

representation of the Mekong and the narrative of developing hydropower for national development remained. This illustrates how counter claims (such as negative social impacts) can be incorporated by planners and decision-makers without changing dominant development narratives.

The 1994 report made changes to some of the project locations. For example, the Sayaboury project was moved 50km downstream of its earlier studied location. As opposed to earlier versions of the cascade which would displace around 250,000 people and generate 23,000 MW, the proposed 'run-of-river' cascade would displace 57,000 people and generate just over 13,000 MW of electricity. The proposed mainstream projects, Don Sahong, Ban Koum, Sayaboury, and Pak Beng (all in Lao PDR), were ranked as first priority category projects, with Sambor (Cambodia) ranked as a second category project, and Pak Lay (Lao PDR) as a third. As mentioned earlier, whilst these Mekong Committee plans for the Mekong never came to fruition, these six mainstream dam sites are being investigated once again. Don Sahong is particularly controversial and contentious in the current hydropower development debate.

The investigations and studies into the development potential of the Mekong River largely centred on engineering and technical aspects. The social impacts were given only small amounts of attention in the first phase of the Mekong Committee. However, they gained more prominence in the 1980s and 1990s. The Mekong Committee came to view projects such as Pa Mong, which would involve large resettlement programs, as unacceptable (Mekong Secretariat 1994). Ingersoll (1968) argues that Member State's prioritised engineering and technical studies because of their immediate concern with physical construction. Consequently, by the end of the 1960s no social research had been conducted relating the basin population to their changing environment and technology (Ingersoll 1968). The importance of fisheries in the basin was noted (Wheeler 1970; Jenkins 1968). But they did not have the same level of prominence in terms of academic and technical studies that they currently possess. Commentators in the 1960s noted that mainstream dams would act as a barrier to fisheries migration but they assumed this was a technical problem which could be solved with engineering: by installing "costly fish ladders at the mainstream dams, so that economically important species...will not be trapped at different reaches of the river" (Jenkins 1968: 463). This statement illustrates an anthropocentric valuation of fisheries, which conceptualises resources in terms of their economic value and usefulness. The assumption that fisheries impacts could be easily mitigated was questioned by the IMC in the 1994 *Mekong Mainstream Run-of-River Hydropower* report. This report argued that "fisheries

questions be given priority attention in preparation for further consideration of possible projects on the mainstream” (CNR and Acres International Ltd 1994: 19). The Mekong Secretariat recommended that further studies on fisheries impacts be conducted before any mainstream projects went ahead. However, these studies were never conducted: “this was partially because the politics of the region changed. But, also no-one thought these mainstream projects would go ahead. Thought they were too contentious” (MRC representative, interview, 07/08b). As discussed in Chapter Seven, actors are once again calling for studies into fisheries impacts, as they are the key issue in current mainstream dam debates.

2.5. The role of Mekong Water Cooperation

The Mekong Committee produced a number of plans and studies between 1957 and 1991. However, its output in terms of completed projects was minimal in comparison to its ‘grand plans’ for development. By the 1980s only 16 out of 180 projects proposed in the 1970 IBP had been implemented (Molle *et al.* 2009a). Despite its small number of completed projects, in both articles published prior to 1991 and institutional histories published after, the Mekong cooperation is regarded as playing a unique international relations role between the four lower Mekong states. Academic assessments of the Mekong Committee and the IMC in the 1960s and 1970s focused on its role as a cooperative institution against a regional backdrop of conflict and instability. The Mekong Committee is represented as a ‘heartening example’, which managed to foster a spirit of cooperation in a geopolitical situation where tensions and animosities abounded (Wheeler 1970; Jenkins 1968). From the early 1960s onwards there were no diplomatic relations between Thailand and Cambodia.⁵ However, both states continued to send representatives to the Mekong Committee and to communicate through the Committee until 1975. The Mekong Committee was the only cooperative scheme in which the four states worked together, and it continued its work through the 1970s and 1980s.

Mekong water cooperation is also utilised to illustrate a number of claims made by conventional IR approaches to hydropolitics about water cooperation and regimes. The Mekong Committee itself partially conceptualised its role in terms of international

⁵ The breakdown in diplomatic relations was partially due to the dispute between the two states over ownership of the Preah Vihear temple. Whilst the International Court awarded ownership to Cambodia in 1963, this dispute continues to resurface in relations between the two states, for example as recently as 2008.

relations. For example, the 1970 IBP stated that it was following an “international approach of harmony and understanding in its work; the Committee is convinced that continued and even broadened international cooperation is essential for the integrated development of the Lower Mekong Basin, and that Mekong development represents in itself a powerful instrument in strengthening cooperation in southeast Asia” (Mekong Secretariat 1970: ii.). By providing a neutral forum for discussion, the Mekong Committee allowed riparian states to steadily build “a foundation for resolving differences and disputes” (Jacobs 2002: 360). Ideas of functionalism, whereby cooperation over water ‘spills over’ into other areas, are implicit in these statements.

Mekong water cooperation has been categorised as a “remarkable example of institutional resilience through the turmoil of war and tectonic shifts in the region’s political economy” (Ratner 2003: 65). This resilience was evidenced by the three other member states (including the newly reunited state of Vietnam) renegotiating the terms of their cooperation and reformulating as the IMC after Cambodia withdrew in 1975 (Giordano and Wolf 2003). Mekong water cooperation has been conceptualised as a regime that made an “invaluable contribution to the maintenance of the Mekong neighbourhood and thus to developing sustained subregional association”, despite its limited practical output (Makim 2002: 42). Browder and Ortolano (2000) argue that the Mekong water regime has evolved through three distinct phases (the Mekong Committee, the IMC and the Mekong River Commission) and provides insights on how to build water management regimes. This reflects the problem solving nature of a large portion of the hydropolitics literature influenced by conventional IR approaches.

Norms are important in international relations and this is observable in the Mekong region. The ‘Mekong Spirit’ is offered by a number of commentators and practitioners as the explanation for why the four states have been able to avoid dispute despite tensions in other areas of their international relations, and continued to cooperate over water. U Nyun, executive secretary of ECAFE (1959-1973), defined the Mekong Spirit as “the great goodwill, the friendly spirit of collaboration, the abundant enthusiasm which animates Mekong work” (U Nyun 1963: 47). The ‘Mekong Spirit’ has also involved developing trust between the riparian states based on a common goal of developing the Mekong River, and through negotiations over the principles governing its development and utilisation (Le Huu and Nguyen-Duc 2003). During the current debate over mainstream hydropower development, state representatives interviewed for this thesis referred to the ‘Mekong Spirit’ as the mechanism which will carry the cooperation through this difficult debate: “The Mekong Spirit means we like to talk, we

want to cooperate and develop the Mekong, make it a link for peaceful relations and development. The Mekong Spirit is still here, even though the politics change” (State official, interview, 06/08b). This illustrates that perceptions, norms and actors’ shared understandings are important.

However, commentators argue that as the pace of development (*i.e.* dams and infrastructure construction) intensifies, strains upon the cooperative framework will increase. Ratner (2003: 61) argues that “until recently there have also been few tests to theories of cooperation and conflict over the Mekong, since most of the projects existed only in the minds of planners and in tomes of engineering studies”. Changing regional dynamics, as discussed below, offer opportunities for the realisation of these long-held plans and have intensified debates about the role of Mekong water cooperation (see Chapter Five).

3. Changing regional dynamics 1991 onwards: the Asian Development Bank, China and the Mekong River Commission

The end of the Cold War and resumption of peace in the region in 1991 following the negotiation of the Paris Peace Accords has resulted in an influx of new actors and new regional schemes in the Mekong. In 1992, Cambodia requested re-admittance to the Mekong Committee. However, the changing regional and geopolitical context meant that the incentives for cooperation had changed, and new terms of cooperation had to be negotiated between the four lower Mekong states. This process took place in a context where regional schemes were multiplying at the same time as non-state actors gained more prominence in hydropower, and Chinese use of the Mekong and involvement in the region increased. However, the dominant narrative linking the development of the Mekong’s hydropower potential with economic growth and poverty reduction endured despite these transformations. It is important to note that increased regionalism after 1991 has been followed by an expansion of private sector actors from the region active in hydropower development of the lower Mekong (see Chapter Four).

Growing awareness of environmental and social issues has affected water management paradigms, with an apparent shift away from infrastructure heavy, economic orientated management, to IWRM (discussed in Chapter Five). Consequently, debates have opened concerning the importance of Mekong fisheries (*e.g.* Baran and Ratner 2007; MRC 2008b), public participation in development (*e.g.* Sneddon & Fox 2007), and most recently, controversy has raged about the proposed construction of

mainstream dams (e.g. TERRA 2007). However, the conception of the Mekong outlined above, as an object to be developed and harnessed for socio-economic development is still operational within the Mekong's development. Sneddon and Fox (2006: 185) state that the aims of Mekong cooperation were, and "arguably remain", hydroelectricity for industrial development, storage of water for expanding irrigation and control of the annual flood: the resumption of peace in the region in 1991, meant that governments "once again contemplated the Mekong's resources as a source of rapid economic development" (187).

Hydropower plays an important role in current development discourse due to its depiction as "the only resource capable of generating large amounts of foreign exchange critical for development and economic stability", and producing energy for domestic consumption (Bakker 1999: 210). Within this discourse the Mekong is conceptualised as a "naturalised river, underutilised and unproductively variable" (Bakker 1999: 219). A 1999 Australian Mekong Research Centre study in the Nam Ngum watershed in Lao PDR highlighted that a focus on hydropower development as a source of foreign exchange and national income "potentially places industrial and export sectors at odds with the subsistence needs and livelihood security interests of the region's poorest people" (AMRC 1999).

3.1. Increased Regionalism: the Asian Development Bank and the Greater Mekong Subregion Programme

Increased regionalism since 1991 has attracted a lot of attention from academic commentators. Dore (2003) states that regional "forums and processes have been growing in the Mekong region" and that actors in "old and new regionalisms are learning how to co-exist, compete or combat with each other" (408). New regional schemes include quadrilateral discussions between China, Laos, Myanmar and Thailand commencing in 1994 to consider trade and international commercial navigation. This resulted in a controversial channel improvement scheme for the Upper Mekong to increase commercial navigation. Following an agreement between the states in 2001 rapids and shoals were removed by blasting to improve commercial navigation between southern China and Lao PDR. Other regional initiatives include Association of Southeast Asian Nations' (ASEAN) Mekong Basin Development Cooperation, launched in 1995 after Lao PDR, Cambodia and Vietnam became members of ASEAN. The Lower Mekong Initiative between the US and MRC was created in 2009 and has

four pillars: environment, health, education and infrastructure. However, it is unclear what the substance of the infrastructure component will be, and the funding for the initiative is quite small (Cronin and Hamlin 2010). In the light of increasing Chinese involvement in the lower Mekong and concerns over Chinese mainstream hydropower dams, US re-engagement in the region is being promoted as a mechanism to counterpoint Chinese influence and a possible vehicle to discuss water rights (Cronin 2009; Lee 2010). This illustrates how the Mekong and its development is still conceptualised in geopolitical and strategic terms by some actors.

Economic cooperation has increased between the six states of the Mekong basin, with the most prominent regional scheme being the ADB's Greater Mekong Subregion Programme (GMS). Commentators such as Bakker (1999) have identified the ADB as the most important regional actor. The GMS programme was launched in 1992 and sub-regional projects fall into nine priority areas: transport, energy, telecommunications, tourism, environment, human resource development, agriculture, trade facilitation, and private investment. The aim of the GMS programme is to "foster economic growth and reduce poverty through increased connectivity, improved competitiveness, and a greater sense of community" (ADB 2008a: 3). The GMS has identified certain activities to fulfil each of these three goals. In terms of connectivity key activities are transport corridors, power systems and telecommunications. Huge financial resources have been mobilised by GMS. Between 1994 and 2007, the ADB provided 3.4 billion united states dollars (US\$) in loans/grants, and mobilized another US\$3.5 billion in co-financing and US\$3.0 billion from GMS governments for 34 sub-regional development projects costing around US\$9.9 billion: a further US\$165 million was also provided by the ADB and other partners as technical assistance (ADB 2008b). Due to its ability to channel huge economic resources for development the GMS has superseded the Mekong Committee as the "most important forum for channelling economic development assistance for regional projects" (Ratner 2003). However, unlike the Mekong Committee and its successor the MRC, GMS does not have a water component.

The GMS has a strong infrastructure and hydropower focus, and is involved in a number of individual hydropower projects such as Theun Hinboun in Lao PDR. One of the cornerstones of the GMS programme is the proposed regional power grid. The Mekong Power Grid is a proposal for energy integration and trade: the hydropower potential of China's Yunnan Province, Burma and Lao PDR would be developed through hydropower dams, and the electricity produced would be transmitted through the regional power grid, a series of transmission lines linking the six Mekong states to

‘electricity hungry’ cities in Thailand and Vietnam (International Rivers 2006). In 2002, at the first GMS Summit the six states signed the ‘Intergovernmental Agreement on Regional Power Trade’ which committed them to establishing a regional power market. However, it is unclear if the Mekong Power Grid will be implemented. Concerns about the plan included the reluctance of the region’s energy utilities to commit to privatisation, and technical and environmental concerns (Middleton *et al.* 2009). The position of the ADB and GMS in hydropower development in the Mekong is also being challenged by new actors (see Chapter Six).

New schemes for regional cooperation, such as the GMS, operate from the same representation of the Mekong and the same development narrative as the earlier Mekong Committee did. Makim (2002) argues that “the new Mekong multilateral arrangements have been created largely in support of investment potential in which the Mekong’s considerable and underutilised resources are concerned” (36). Whilst the development paradigms which protagonists refer to have changed “from growth and modernisation to sustainable energy security, poverty reduction and geopolitical issues”, the goal remains the same: hydropower development (Klopper 2008: 339). The representation of the Mekong as an object to be developed is still flourishing despite changes in regional and political dynamics.

Representations of the Mekong River as unutilised and a suitable object for development have gained a new dimension since the end of the Cold War. Actors, such as the ADB have talked about capitalising on the ‘peace dividends’, whilst the Thai Prime Minister Chatchai Choonhavan coined the phrase ‘battlefield into marketplace’ to describe the change in the region (Diokno and Chinh 2006). In the current dam building debate in the Mekong, the river is represented as a “symbol of a new era in Southeast Asia, an era of peace, economic growth and development” (Bakker 1999: 209). Evidence of this is found in the GMS Programme. In 1993 the ADB identified a number of common interests in the sub-region, including that the six states are resource rich and that the Mekong River is a “central feature of the economy of the subregion, playing a key role in the agriculture, forestry, fishing and energy sectors” (Krongkaew 2004: 980). The GMS’s image of the Mekong is a “huge land area, a resource with vast potential, a huge development site” (Diokno and Chinh 2006: 12).

The Mekong is represented as a ‘natural’ subregion or economic area by the ADB (ADB 1996). However, this representation serves political purposes: it expands the role of the ADB in the region. Rendering it natural depoliticises these purposes. This is similar to the ways in which the Mekong Committee presented the lower Mekong as a

'natural' unit of water management despite the geopolitical concerns, which demarcated the boundary of the lower basin as the border with China. Diokno and Nguyen (2006) argue that defining the Mekong as a region should be critically analysed, asking whether the Mekong states share a distinct cultural identity, or whether the term refers to the territories which are bound by the river, or the countries who share the benefits from it. Bakker (1999) argues that within this conception of the Mekong as a 'natural' subregion, the river basin "is both naturalising and naturalised, simultaneously an imperative for development and a 'virgin' object to be developed, a potential source of hydro-electricity that will fuel the region's predicted rising energy needs" (210). In this way, "the Mekong is the resource that defines the boundaries of a region that will in turn exploit its potential" (Bakker 1999: 219). Sneddon and Fox (2006) argue that the combination of the ADB's ambitious program and China's interest in hydropower development result in the "conversion of the river's significant flows into energy for human consumption and industrial processes" becoming "the dominant geopolitical and development goal in the region" (187). Within the regional plans of actors such as the ADB, the Mekong is still represented in similar ways to those of the 1950s and the dominant development narrative linking hydropower, growth and development still informs and underpins actor's representations and plans for the Mekong.

3.2. China's increased involvement in the region and development of the Mekong

China's involvement in the development of the Mekong has increased dramatically since the 1990s. Prior to this the lower Mekong region did not have visibility or importance in Chinese foreign policy (Hirsch and Jensen 2006). The upper Mekong River or Lancang as it is called in China was also, prior to the 1990s, not a priority for development as it flows through an area of low population density and low economic importance (Hirsch and Jensen 2006). However, China's importance in development of the Mekong has grown considerably. China has followed a three-pronged approach: development of the Lancang, increasing bilateral relationships with the lower Mekong states, and encouraging Chinese companies to become actively involved in hydropower development in the lower Mekong.

China began construction of an eight hydropower dam cascade on the upper Mekong in 1988 with the first dam, Manowan, completed in 1996. As of 2010 four dams have been completed. The rationale behind developing the Lancang cascade is to develop the poor and remote Southwest region of China and provide electricity for

China's rapidly growing coastal cities (Cronin and Hamlin 2010). Whilst China is active in the GMS, commentators and scholars argue that China has not joined the MRC because it does not want to submit its dam construction plans for consideration by its downstream neighbours, and because it has "no desire for cooperation of Mekong resources to be subsumed in a Southeast Asia-dominated political framework" (Hirsch and Jensen 2006; Bakker 1999: 224). The governments of the four lower Mekong states were initially extremely quiet regarding China's dam building. Reasons for this include the lower Mekong states have their own hydropower plans; Thailand has an agreement with China to purchase 3,000MW of electricity from China commencing in 2015; and parts of the downstream governments share China dam-building paradigm (Dore 2003). Concerns are starting to be expressed that the commercial viability of several of the planned lower Mekong mainstream dams will be dependent on water releases from China's Lancang cascade: "this dependent relationship between the downstream countries and China will create an inherent and unhealthy geostrategic advantage for Beijing" (Cronin and Hamlin 2010: 3). China's dam development of the Mekong has a number of dimensions for the lower Mekong including both livelihood impacts and geostrategic issues.

Criticism of China's Lancang dam cascade increased sharply in early 2010. Uncommonly low levels of the Mekong mainstream were experienced in the lower Mekong basin in 2010, which impacted fisheries and local livelihoods (Storey 2010). Environmentalists and civil society actors blamed Chinese dams for the low water levels (MacLeod 2010). Lower Mekong state officials usually reticent to criticise China have raised their concerns with Chinese counterparts, for example, the Thai Prime Minister told the visiting Chinese Assistant Foreign Minister that Thailand expected Chinese cooperation in dealing with the problem (Storey 2010). Chinese representatives have blamed low levels on the "worst drought in decades" in southern China (Mingzhong 2010). However, China agreed to share increased volumes of hydrological data with the MRC and sent high level representation to the 2010 MRC Summit in Thailand.

China has embarked on a policy of 'good neighbourliness' with the lower Mekong states. Chinese Premier Wen Jiabao has defined China's interests in Southeast Asia as "friendly neighbours, stable nations and wealthy neighbours" (Diokno and Chinh 2006: 10). This has involved increasing both cultural and economic ties. In terms of cultural ties, China has given 'gifts' such as the construction of a Culture Hall in Vientiane, Lao PDR where artistic and dance events can be held. These gifts seek to

cement ties between the countries of the region and demonstrate Chinese commitment to being a good neighbour. China has also funded infrastructure developments in its neighbours, such as highway, bridge and sewer construction in Cambodia, as well as providing interest free loans so Cambodia could rebuild its National Assembly and Senate buildings (Bolton 2002). Osborne (2006a) argues that China's donor relationship with its neighbours has led to it becoming the paramount regional power. China is increasingly building bilateral relationships with its downstream neighbours.

China's official policy of 'Opening the South Gate' aims to increase economic links with its mainland Southeast Asian neighbours. China also has a state-level research group on planning development cooperation with the other states in the region. The goals of Chinese investment in Southeast Asia are securing regional peace and stability, and facilitating cross-border trade (International Rivers 2008b). In terms of hydropower China, and its companies, have become a global leader in dam construction and have filled the financial gap left by the World Bank and other actors (International Rivers 2008b). China is seeking to secure access to natural resources in order to guarantee its future economic development and has encouraged its companies to 'Go Out' from China and become active in natural resources development globally (International Rivers 2008b; Rutherford *et al.* 2008). In terms of the Mekong, by 2010 fifteen of the planned seventy-five hydropower projects in Lao PDR involved Chinese companies (Department of Energy Promotion and Development 2010). The role of Chinese companies is further outlined in Chapter Four.

3.3. The Mekong River Commission and changing regional dynamics

In 1991, Cambodia requested re-admittance to the Mekong Committee. Vietnam argued that the Committee should be reactivated immediately. Thailand, however, argued that the terms of cooperation needed to be renegotiated. Experts interviewed for this thesis argued that Thailand's position was due to perceived limitations on its water resources development plans:

“Thailand said we need to renegotiate because they felt that there were parts of the two previous arrangements that were not in their favour. The concept of water balance had been distorted to act as a limitation on the right of any riparian to use the water, and of course Thailand blamed Vietnam, saying its your fault because you need so much water to come down to combat salinity in the Delta” (Expert, interview, 06/08).

This resulted in four years of negotiation facilitated by UNDP. In 1995, the lower Mekong states signed the ‘Agreement On the Cooperation for the Sustainable Development of the Mekong River Basin’ (hereafter the Mekong Agreement) in Chiang Rai, Thailand. The Mekong Agreement committed its signatories to cooperate in all fields of sustainable development including hydropower, and to develop rules for water utilisation, including on the maintenance of minimum flow (MRC 1995). The Agreement also recognised the importance of the Tonle Sap and maintaining the flow of the mainstream to allow for the reverse flood pulse in the wet season (MRC 1995).

Thailand and Vietnam’s reactions to Cambodia’s request for re-admittance and state positions adopted during the four years of negotiation illustrate the changing political and economic landscape in the region and changes in the availability of funding for water resources development. The regional geopolitical situation in the late 1970s and 1980s meant that the IMC postponed work on mainstream projects and shifted its focus to data collection and training for projects within a single state (Browder and Ortolano 2000). As such the IMC began to “slip into irrelevance” as Thailand and Vietnam pushed ahead with their own water development plans (Browder and Ortolano 2000). One of the most controversial of Thailand’s plans was the Kong Chi Mun water diversion project, which would utilise water from the Mekong mainstream for agriculture in the arid Northeast region of Thailand.⁶ Vietnam was concerned about this project as diversions from the mainstream could result in reduced mainstream flows and increased salinity in the Mekong Delta (Nakayama 1999). The Mekong Delta is the key rice growing region of Vietnam and produces rice for both domestic consumption and export. The 1975 Declaration of Principles, if reactivated, would in effect give the other riparians a ‘veto’ over Thailand’s water development plans (Nakayama 1999). Consequently, Thailand favoured a renegotiation of the terms of Mekong cooperation.

1991, as described above, heralded a number of changes in the regional geopolitical situation. Changes in the broader political and economic context have “shifted the incentives for states to cooperate” (Ratner 2003: 62). An increase in regional schemes and alternative sources of funding have decreased the importance of Mekong water cooperation for the Member States as it no longer the focal point for donor assistance to the region (Nakayama 1999). Economic growth in Thailand in the

⁶ The Kong Chi Mun diversion project did not go ahead. However, like a large number of projects for the Mekong River it was resurrected in a different guise in 2008. In 2008 the Thai Prime Minister Samak Sundaravej outlined plans to divert water from the Nam Ngum basin in Lao PDR and transport it under the Mekong mainstream to Thailand. The plan is now subject to an agreement between the Thai and Lao governments, which was negotiated outside the MRC framework (see Hongthong 2008)

1980s created a socio-economic disparity between Thailand and its neighbours (Nakayama 1999). It also meant that Thailand could finance its own water resources development projects.

The interests of the four lower Mekong states in Mekong water cooperation are presented as neat and constant through time. Backer (2007), Das Gupta (2005) and Phillips *et al.* (2006) have all presented the interests of the lower Mekong states in similar terms, which are summarised in table 1. The lower Mekong riparian states also have interests in hydropower development (see table 1). Possible tensions exist between a state's interest in Mekong water cooperation, and its interest in hydropower development. Mainstream hydropower development of the Mekong prior to 2006 was largely considered unlikely by actors interviewed for this thesis:

“We wrongly assumed that Cambodia and Vietnam would always object to mainstream dams because of their interest in maintaining the flow of the mainstream. Subsequently, we assumed that a stalemate situation existed, which was self-regulating” (MRC representative, interview, 07/08b).

However, state interests in developing the Mekong mainstream have been revived and this stalemate is being undermined.

Table 1: State Interests in water cooperation and hydropower development

State	Interest in Mekong water cooperation	Interest in hydropower development
Cambodia	Protection of the Tonle Sap and the reverse flood pulse. Protection of fisheries.	Secure access to cheap electricity for Cambodia's expanding economy.
Lao PDR	Hydropower development	Increased government revenues and foreign exchanges by exporting electricity to neighbours. Becoming the 'battery of Southeast Asia'.
Thailand	'Greening Isaan': water for irrigation and development of its Northeast region.	Financing and supporting hydropower development of its neighbours in order to access cheap electricity to met growing domestic demand.
Vietnam	Protection of Mekong Delta (the 'rice bowl' of Vietnam) from salinity. Interested in maintenance of mainstream flow.	Hydropower development of the Sesan and Srepok Rivers (important Mekong tributaries) to meet growing electricity demand.

Proposals for mainstream hydropower plans have received little public official comment (Osborne 2009). Vietnam has adjusted its position on mainstream dams partially because of its dual position as a downstream state on the lower Mekong, and an upstream state on the Sesan (see Map 2, p.4). The Yali Falls dam on the Sesan was commissioned in 2000 and has been a controversial Vietnamese hydropower project as it has severe impacts on Cambodian communities living downstream (Middleton *et al.* 2009). Whilst Vietnam is not planning any mainstream dams in its territory, a Vietnamese company, PertoVietnam Power Corporation is financing and developing the proposed Luang Prabang mainstream hydropower project in Lao PDR (Cronin and Hamlin 2010). Cambodia also has its own plans for hydropower development, including two mainstream dams, Sambor and Stung Treng. Development of Cambodian hydropower is largely being investigated by Chinese companies. For example, China Southern Power Grid Company signed a Memorandum of Understanding (MOU) with the Cambodian government in October 2006 to conduct a feasibility study for the proposed mainstream Sambor hydropower project (International Rivers and RCC 2008).

4. Lower Mekong Government development strategies, electricity demand and a changing problem definition

All four of the lower Mekong states are planning hydropower dams either on the Mekong's mainstream or its tributaries. Lang (2006) argues that hydropower development "has become the top priority in the national development agenda in all Mekong states" (588). Despite changing regional dynamics and a diversification of actors in the Mekong's hydropower sector, the representation of the Mekong as unutilised and the dominant development narrative linking the Mekong, hydropower and socio-economic development has endured. This section will briefly review some current development strategies of the four lower Mekong states and demonstrate the continuity in development representations and narratives. It also explores how government strategies continue to position development of the Mekong and socio-economic development generally, at the state level. A new problem definition underpinning the development narrative linking hydropower, growth and poverty reduction has emerged. As opposed to arguments in the 1950s whereby hydropower development would lead to growth, part of the rationale behind current hydropower development plans is that growth has taken place, and hydroelectricity is needed to ensure more growth.

4.1. Lower Mekong Government development strategies

Poverty reduction is the state-level rationale for development of the lower Mekong. Hirsch (2006b) argues that it is not surprising that “development dominates all else” when three of the lower Mekong economies (Lao PDR, Cambodia and Vietnam) “are still amongst the poorest in the world when measured on a per capita income basis” (107). Lao PDR, Cambodia and Vietnam are classified as low-income countries by the World Bank as they have a GNI of \$935 or less per capita (World Bank 2010). Nearly 40% of the people of Cambodia and Lao PDR living within the basin are living below the poverty line (MRC 2006). The situation of Thailand is slightly different to those of the other lower Mekong countries as it enjoyed a period of industrialisation and high economic growth, and is classified as a lower to middle income country by the World Bank (World Bank 2010). However, poverty rates are also high within the Thai part of the Mekong basin (MRC 2006). Poverty has been identified as one of the key challenges in the basin in the MRC’s *Strategic Plan 2006-2010* (MRC 2006).

It is important to note that poverty is defined and measured by the governments and other actors, such as the World Bank, in terms of traditional indicators such as income per capita. Defining and measuring poverty in such ways can obscure the ways in which development of natural resources can result in some communities and other groups dependent on those resources for their livelihoods becoming poorer. A recent International Rivers report *Power Surge* characterised the development strategies of Lao PDR as “focused on transforming a largely traditional, subsistence-orientated rural economy into a modernized, market-orientated, agribusiness system” (International Rivers 2008c). Within this people are represented as poor because they have subsistence livelihoods and therefore creating a ‘modern’ economy will reduce poverty, in part by providing jobs. However, these transformations will fundamentally change the relationship between local communities and their environment and may lead to increased poverty (see Chapter Seven).

Representations of the Mekong as unutilised and arguments linking the Mekong’s hydropower potential and poverty reduction have appeared in debates with even greater intensity than before. In 2008, the MRC’s Chief Executive Officer (CEO) argued that the four states of the lower Mekong “regard the development of their hydropower potential as an integral component of their policies to continue...economic growth and so gradually eliminate poverty that is still all too prevalent within the Lower Mekong Basin” (Bird 2008c). This statement links hydropower, economic growth and

poverty reduction, and echoes earlier statements made by the Mekong Committee. The MRC's *Strategic Plan 2006-2010* identifies achieving higher levels of economic and social development as its Member States "most pressing priority" and that the "proper use and development of water and related resources will be a key driver" for achieving this growth (MRC 2006: iii). In the national development plans and strategies of the lower Mekong states development of water and related resources feature prominently and there is a strong focus on infrastructure development, including hydropower dams and water diversions. Hydropower development plays a particularly strong role in the government of Lao PDR's 2003 *National Growth and Poverty Eradication Strategy* (NGPES). However, all four lower Mekong states are interested in the development of the Mekong's hydropower potential.

Representations of nature endure as do development narratives. Two statements from the Lao government illustrate this point succinctly:

"The Mekong has considerable economic and human potentialities...These tributaries...have incomparable potentialities for the development of hydro-electric power, which might be put to use for the development of many types of production" (Phanareth 1966: iv-v).

"[Lao PDR's] hydropower potential is very considerable and its development offers extensive benefits for the country...development of the country's hydro-electrical potential...is thus integral to the national development framework" (Lao PDR 2003: 103).

The first statement is from a 1966 message from the Lao Mekong Committee member included in a special edition of the *Indian Journal of Power and River Valley Development*. The second appears in the 2003 Lao PDR's NGPES. Whilst these two documents were released nearly forty years apart they both subscribe to the same representation of the Mekong as an object to be developed for hydropower, which will lead to economic growth. The representation of the Mekong as unutilised or unharnessed is prevalent throughout Lao PDR's NGPES. Increased hydropower development is conceptualised as key to national development because out of a hydropower potential of 18,000MW only 623MW had been developed by 2003 (Lao PDR 2003). Development of the hydropower potential will lead to increased government revenues which can be spent on poverty reduction (Lao PDR 2003). These arguments operate from the same stabilising assumptions as those found in earlier Mekong Committee 'grand plans' for hydropower development.

Relevant national development strategies and plans include Lao PDR's NGPES, Cambodia's 2006 *National Strategic Development Plan 2006-2010* (NSDP), and

Vietnam's 2003 *Comprehensive Poverty Reduction and Growth Strategy* (CPRGS) which details objectives and targets up to 2005 and 2010. These national development strategies and plans privilege economic development and infrastructure. They are top-down strategies: operating from the assumption that economic benefits from development will trickle down to the basin's population. For example, the Lao PDR NGPES (2003) argues that without increased revenues the government will be unable to provide the services essential for enhancing social development and livelihoods. The Cambodian, Lao and Vietnamese development strategies argue that whilst growth was achieved in the 1990s and poverty rates declined, poverty still remains a challenge and there is a lot of work still to be done: poverty reduction is the overriding objective.

Strategies for poverty reduction include industrialisation, increasing private sector investment in various sectors including hydropower and rural development, and ensuring GDP growth of between 6 and 7% per year. The Lao government's strategy for industrialisation gives priority to development of the energy sector. Industrialisation is seen as markedly contributing to economic growth, and in turn economic growth is "a pre-condition for sustainable and comprehensive poverty eradication" (Lao PDR 2003: 102). All three states place a high value on industrialisation: Vietnam aims to increase the percentage of the labour force involved in industry and increase industry's share of GDP, as industry makes a significant contribution to economic growth; whilst Cambodia aims for significant industrial growth and sees the private sector as the engine of growth (The Socialist Republic of Vietnam 2003; Royal Government of Cambodia 2006). In this regard similarities can be drawn with the Mekong Committee's 1970 'Indicative Basin Plan', which is replete with references to industrialisation, for example arguing that is an "essential part of the development process" (Mekong Secretariat 1970).

Within the development strategies of the lower Mekong states, the state plays a key role in development. The state is responsible for providing a legal framework to support development and business, undertaking government and administrative reform, protecting the poor, and increasing and attracting foreign investment as a way to fuel development. There is also a concern with developing physical and rural infrastructure, such as roads, clean water, and bridges *etc.* Within this the three states want to increase rural electrification. Agriculture and fisheries feature heavily in the development strategies of Vietnam and Cambodia. Both states want to diversify and increase agricultural production. Vietnam's CPRGS states that agriculture is the foundations of the state's socio-economic stability (The Socialist Republic of Vietnam 2003).

Cambodia's NSDP argues that fisheries play a central role in the life of millions of Cambodians and therefore the government aims to ensure sustainable access of the poor in fisheries (Royal Government of Cambodia 2006). The state is represented as playing a key role in all sectors of development.

National development strategies are full of references to sustainable use of natural resources (Lao PDR 2003), pro-poor growth (Royal Government of Cambodia 2006), and safe-guarding and preserving the environment (The Socialist Republic of Vietnam 2003). However, the pressing and primary concern is how to increase economic growth. Natural resources are conceptualised as contributing to this goal. For example, Lao PDR's NGPES discusses developing the natural resource base for economic development. This development strategy links development of natural resources to economic growth, which in turns leads to both revenue growth and poverty reduction (Lao PDR 2003). References are made in national development strategies to the Mekong. For example, Vietnam's CPRGS highlights the Central Highlands and the Mekong Delta as two of the poorest parts of the state.⁷ Cambodia's NSDP highlights the importance of the Tonle Sap and water resources to the rural population, and their status as a "crucial component of the nation's environment and natural resources base" (Royal Government of Cambodia 2006: 22). The importance of the Mekong to Lao PDR is evident in the NGPES, which is full of references to the Mekong in relation to agriculture, navigation, tourism, and regional integration (Lao PDR 2003).

4.2. Electricity demand and changing problem definition

Within current arguments for hydropower development of the Mekong a new justification has emerged. This justification defines the problem as a lack of electricity for growth, and the solution to this is the development of the Mekong's hydropower potential. As opposed to the 1950s where hydropower would lead to growth, hydropower is currently being presented as necessary because electricity is needed for continued economic growth. This change in the problem definition illustrates how regional discursive formations return with greater intensity in new guises (Peet and Watts 1996). It is also underpinned by the dominant development narrative linking hydropower and development and represents the Mekong as unutilised and unharnessed.

⁷ One of the reasons offered by Viet Nam's CPRGS for the Mekong Delta being one of the poorest parts of the state, is its vulnerability to sudden events, such as floods, which make living and producing conditions difficult. This can be seen as part of the larger discourse on the Mekong's annual flood as harmful.

Arguments by the development banks and the MRC emphasise the hydropower potential of the lower Mekong and present it as unharnessed. The MRC has estimated that the hydropower potential of the Mekong mainstream and its tributaries is 30'000MW, of which only 5% has been developed (World Bank 2004). The ADB and World Bank's *Mekong Water Resources Assistance Strategy* (MWRAS) argues that scenario work conducted by the MRC has provided evidence that there remains considerable development potential in the Mekong and that development of this can bring widespread benefits (ADB and World Bank 2006). In this way, evidence of potential is in itself treated as a reason for development of that potential. King *et al.* (2007) argue that the "unharnessed hydropower potential of the region stands high on the options list [to meet electricity demand] and is therefore earmarked in national strategies to contribute an important share of the prospective demand" (iii). The MWRAS also identifies electricity demand with a demand for development:

"The region has a strong, pent-up demand for development. Demand for electric power, for instance, grows at 10-20% per year, depending on the locality. The development and management of the Mekong water can play a critical role in supporting this development" (ADB and World Bank 2006: 17).

In the above statement development, demand for electricity and utilisation of the Mekong's water resources are connected. This echoes earlier statements linking utilisation of the Mekong and development.

Commentators argue that electricity demand in the region is growing because of population increases and economic growth (King *et al.* 2007). Projections of growing energy demand include 16% per year for Vietnam, and a doubling of electricity demand in Thailand by 2021 (Middleton *et al.* 2009; Lee and Scurrah 2009). Cambodia's peak electricity demand is predicted to increase by five times by 2020, and therefore Cambodia wants to develop its hydropower potential to meet this demand (International Rivers and RCC 2008). It is important to note that predictions of electricity demand are contested, especially in Thailand, by civil society actors who argue that future estimates of energy demand are unrealistic and that they downplay the potential role of energy efficiency measures and renewable energy (Lee and Scurrah 2009; Middleton 2008a). However, despite these concerns predicted electricity demand is part of the current rationale for hydropower development.

Development of hydropower is a strategy to meet this demand and has also been viewed as an opportunity by Lao PDR to further socio-economic development. Lao PDR, specifically, has expressed a desire to become the "battery of south-east Asia",

providing hydro-electricity for its neighbours (International River 2008b). Hydropower is Lao PDR's most "saleable commodity" and there are many references to Lao PDR becoming the Kuwait of Asia (Usher 1996: 85). Thailand intends to meet growing energy demand through importing electricity from dams in Burma, China and Lao PDR; Vietnam will meet demand through developing its own hydropower potential and through imports from Cambodia, China and Lao PDR (Klopper 2008; Middleton 2008b). Thailand is interested in developing dams in Lao PDR because it has already developed most of its domestic dam sites and because domestic opposition to hydropower dams is high: developing dams in Lao PDR allows Thailand to export the social and environmental costs (Klopper 2008; Middleton *et al.* 2009). Four of the proposed lower Mekong mainstems dams (Sayaboury, Pak Chom, Ban Khoum, and Lat Sua) are being promoted or developed by Thai companies (Cronin and Hamlin 2010).

In 2009, impacts of the global financial crisis began to be felt in the realm of energy planning and hydropower development. The Government of Thailand reduced the amount of electricity it planned to import from roughly 13,000MW to 5,000MW and consequently, some tributary projects in Lao PDR such as Nam Theun 1 are being delayed (MRC 2009a). However, actors such as the Thai Minister for Natural Resources and the Environment have interpreted this as a "short breathing space before demand picks up again", and not an end to hydropower development plans for the Mekong (MRC 2009a). Hydropower projects in Lao PDR are premised on demand in Thailand, and illustrate the interconnections between actors and scales in the arguments for developing the Mekong's hydropower potential.

5. Conclusion

A dominant development narrative formulated in the 1950s at the convergence of interests of a number of actors and technical paradigms of the period has endured to the present day. This narrative linking hydropower development and poverty reduction makes stabilising assumptions which shape policy, underpin power relations and appear apolitical. A representation of the Mekong as unutilised and unharnessed was developed by planners in the 1950s who located development of the Mekong at the basin scale and defined utilisation in terms of infrastructure. Outside actors, including the US and UN agencies were key in the development of the dominant narrative. US involvement in the lower Mekong was motivated by concerns about the spread of communism in the

region, whilst the lower Mekong offered ECAFE, a new agency, the opportunity to establish a role for itself. Both ECAFE, and the US actors involved in studies of the Mekong, operated from the same water resources development assumptions: water should be harnessed and utilised for the purposes of mankind through infrastructure development; and hydropower development is inextricably linked to socio-economic development. Studies by ECAFE and the US Bureau of Reclamation provided the impetus for the formation of the Mekong Committee in 1957. The lower Mekong states were interested in water cooperation because of the predicted economic benefits. The dominant development narrative locates responsibility for development and its benefits at the state and basin level.

The Mekong Committee developed grand water resources development plans. These plans were premised on the stabilising assumptions of the dominant narrative. As such, the narrative was transmitted through the scientific and technical studies undertaken in the region. However, due to regional geopolitics these plans were never implemented. Changing regional dynamics ushered in by the end of the Cold War and resumption of peace in the region conditioned the negotiations between the four lower Mekong states, which culminated in the 1995 Mekong Agreement. New regionalisms and actors in the lower Mekong, such as the ADB's GMS Programme and the increasing involvement of China in Mekong hydropolitics have impacted upon water resources development dynamics in the region. However, the dominant development narrative of the Mekong has endured. Both the GMS Programme and Chinese involvement have a strong natural resources and infrastructure focus.

During the Mekong Committee era the water and hydropower interests of the lower Mekong states were both captured by the Committee. However, changes in the political and economic context in the lower Mekong shifted the incentives for water cooperation and resulted in the Mekong River Commission. The lower Mekong states have both water cooperation and hydropower interests, and there is the possibility of conflict between the two. Hydropower development is firmly on the water resources development agenda of the lower Mekong states. Underpinning this agenda is the dominant development narrative linking hydropower and development. Lower Mekong states such as Lao PDR conceptualise hydropower as integral to national development. Poverty and development are measured in terms of economic indicators such as GDP. Development is still located at the national scale and is conceptualised as state-led. Vietnam and Thailand are playing increasingly important roles in the investigations and

development of hydropower in their Mekong neighbours, including in the sphere of mainstream hydropower.

Arguments surrounding energy demand in the lower Mekong states have been added to the problem definition utilised by powerful actors in the basin. Meeting energy demand is represented as a key development ingredient, without it the lower Mekong can not develop, and the people will remain poor. This assumption is interlinked with those surrounding poverty and hydropower and reinforces existing assumptions, which have endured since the 1950s. In the current hydropower debate the Mekong is represented as an object for development, the harnessing of which will accrue massive economic benefits to the lower Mekong states, and in a state-led process will lead to poverty reduction. This dominant narrative is utilised by actors to justify hydropower development plans and locates development at a particular scale. Whilst this appears technical and neutral it is a highly political process, with political effects.

Chapter Four: Actors in the Mekong's hydro-political constellation

1. Introduction

The dominant and enduring narrative, outlined in Chapter Three, has been both framed the thinking of and been promoted by a number of powerful actors since the 1950s. The recent expansion of hydropower plans especially for the lower Mekong mainstream has accelerated and expanded debate over the development direction of the Mekong's water resources. The interviews conducted during the fieldwork period identified a number of key changing dynamics in the lower Mekong since the early 1990s: increased regionalism and the rise of China (see Chapter Three); changing donor-state relationships; an explosion of private sector involvement; and the expansion of global and regional civil society active in the Mekong. Interview respondents reported that these dynamics are impacting and diversifying the debate over the development of the basin, and plans for its development.

The types of actors involved in water resources development in the lower Mekong are changing as are the relationships between them. Key actor types in the lower Mekong's hydropolitical constellation include: state actors, old and new donors to the region, private sector companies, and global and regional civil society actors. Actor types have been selected for a combination of reasons including, visibility, access during the fieldwork period, interview respondents identifying them as important, and relevancy to the aims of this study. Each of these actors has their own goals, interests and visions for the Mekong, and differing relationships with each other. The MRC and debates about its role and relevancy are considered in Chapter Five.

The types of actors involved in Mekong hydropower development have diversified since 1991. As shown in Chapter Three, hydropower development of the lower Mekong was initially conceptualised and executed by the Mekong Committee, the development banks and bilateral donors. However, new actors, such as private sector companies from China, are now playing key roles in the investigation of mainstream hydropower possibilities. These new actors entail new power relationships and also impact existing ones, such as those between the lower Mekong governments and the development banks. In response actors, such as the development banks, are trying to reinvent their role in the basin (Middleton *et al.* 2009). Changes in actor types and power relationships illustrate that power is fluid, multi-dimensional and multi-centred.

The relationships between actor types in the lower Mekong's hydropolitical constellation are multi-scalar, they are not simply located over the inter-state level, and are impacted by relationships at other scales. For example, lower Mekong governments are signing MOUs with private companies to investigate mainstream hydropower sites, whilst simultaneously being members of the MRC. The lower Mekong states are also complex entities, and differences exist between state agencies concerning hydropower and water resources management. Member States have both bilateral relationships with donors and multilateral ones through the MRC. MRC donors, such as Finland and Sweden, provide overseas development assistance (ODA). New donors to the region are emerging who are keen to fund infrastructure development. Hydropower development affects local communities, and global and regional civil society actors are highlighting these. Scalar considerations are also important in terms of the justifications and rationales actors utilise when discussing hydropower development. For example, government representatives argue from a vantage point of national development, which overrides the concerns of local communities. In contrast civil society actors prioritise impacts on local communities and the costs of hydropower development. Scaling processes are integral to actors' strategies in the hydropower development debate.

2. State actors

National governments' official positions on hydropower development, including its role in poverty reduction, and their interests in Mekong water cooperation were outlined in Chapter Three. As illustrated in Chapter Three, the lower Mekong states have both hydropower interests and different interests in transboundary water cooperation. Focusing on the state as a unified actor in water resources development disguises the fragmentation of water resources and hydropower development planning and decision-making in the lower Mekong. It also positions natural resources as state resources, which can obscure how water resources development is sometimes a mechanism to extend state power over its territory. The political regimes in the lower Mekong vary. Thailand and Cambodia are democracies with constitutional monarchies, whilst Vietnam and Lao PDR are communist one-party states. Lao PDR and Vietnam have been moving towards market economies following economic reforms initiated in the late 1980s (Molle *et al.* 2009a). This has coincided with an expansion of actors operating in hydropower development in the region.

2.1. *State actors, the MRC and sub-state processes*

States are not unitary and unified actors: they are comprised of a number of different agencies, ministries and bodies *etc.* The state level actors who engage in the MRC are not necessarily the actors responsible for hydropower development decision-making. For example, in Lao PDR the Lao National Mekong Committee (LNMC) is part of the Water Resources and Environment Agency (WREA) which is headed by the Minister for Water Resources who represents Lao PDR on the MRC Council. However, the Ministry of Energy and Mines, and the Ministry of Planning and Investment are responsible for hydropower development and conduct negotiations with project developers.

Both civil society actors and MRC representatives interviewed for this thesis expressed concerns about the separation of water and energy actors, the role water actors play in hydropower decision-making, and whether energy actors are engaged in the work of the MRC (see Chapter Five, Section Six). The NMCs are isolated from hydropower planning and implementation. For example, the Cambodian National Mekong Committee (CNMC) has been informed that it will not play a role in relation to the proposed Sambor dam on the Mekong mainstream: discussions between Cambodia and the developers, China Southern Power Grid, are conducted by the Ministry of Industry, Energy and Mines (Osborne 2009). As such, hydropower development is largely located outside the sphere of operation of water agencies in the lower Mekong.

State representatives have utilised unacknowledged conventional IR hydropolitical assumptions to contextualise possible outcomes of national hydropower development in a transboundary context:

“water conflict may be coming. Don Sahong dam will have many fisheries impacts for Cambodia. But Don Sahong will provide development for Laos” (State Official, interview 05/08a).

“now we have the potential for conflict on the transboundary issue. Can see now with China and also in Laos have some plan for mainstream, so it may impact flow regime of river, in both terms, quantity and quality...If we have some dam on mainstream they cause a cumulative impact for my country. Issue is whether Member Countries will have good will to do, to work together, or if they base only on their own benefit, not care to other country, it will create some potential conflicts” (State Official, interview 06/08b).

Hydropower development will have negative impacts in terms of fisheries and livelihoods: these impacts will be transboundary due to the nature of fisheries migration

in the Mekong (ICEM 2010). For example, the proposed Don Sahong dam at the Khone Falls near the Lao PDR-Cambodia border will have disastrous fisheries impacts (see map 3, p.6). The Khone Falls is a ‘bottleneck’ for fisheries migration in the basin (fish migrate upstream to breed, and downstream to feed); and the Hoo Sahong channel (the proposed dam location) is particularly important as it is the only channel fish can effectively use to migrate up the Khone Falls in the low water season (Baran and Ratner 2007). The transboundary impacts of Don Sahong, whereby a dam built in Lao PDR will have impacts in Cambodia, was identified by a number of interview participants as containing the potential for transboundary water conflict.

As schemes for harnessing the Mekong move forward competing Member States’ interests pose a challenge (Ratner 2003). As discussed in Chapter Two, IR approaches to transboundary hydropolitics argue that water regimes or cooperative institutions can negate conflict potential. The four lower Mekong states are members of the MRC, and are committed through the 1995 Mekong Agreement to coordinate in all fields of sustainable development, produce a joint basin development plan, and make every effort to avoid, minimise and mitigate harmful effects which may result from the development of the Mekong (MRC 1995). However, there are debates over the role and relevancy of the MRC generally, and in relation to hydropower development particularly (see Chapter Five). The MRC’s involvement in Don Sahong has been limited. Assumptions about the role of cooperative water institutions need to be considered through a lens which also sees domestic politics, and competition between bureaucratic state agencies as important.

The proposed Don Sahong hydropower dam is being developed by Mega First Corporation, a Malaysian company. Mega First signed a MOU with the Lao government in March 2006 to conduct a feasibility study, which was followed in February 2008 by a Project Development Agreement (PDA) (Osborne 2009). Plans for the Don Sahong project have largely taken place in isolation from the MRC and the project was not in the public sphere prior to 2007. In May 2007, a group of 34 scientists sent an open letter to the government and international agencies responsible for managing and developing the Mekong River (AMRC 2007a). This letter was coordinated by the Australian Mekong Resource Centre (AMRC) at the University of Sydney, and expressed severe concern about the negative fisheries impacts on livelihoods in all four of the lower Mekong states (AMRC 2007a). In late 2007, the MRC produced a review of the initial draft Mega First Environmental Impact

Assessment (EIA). This report is widely believed to be critical of the project, but has never been publicly released (Osborne 2009).

Donor representatives interviewed for this thesis allege that the Lao government asked the MRC to review the feasibility at the behest of outside actors:

“there’s no demand for the advice from MRC. Like in the Don Sahong, yes MRC asked to review the EIA, but it didn’t come by itself, there was a dialogue, it was probably said to the Lao government well you better, why don’t you, they didn’t come running to the MRC office ‘please help us’. (Donor representative, interview, 05/08b)

The National Mekong Committees have also not played an overt role in the discussions and plans for Don Sahong. A 2007, letter from the CNMC to the LNMC contesting Don Sahong received no reply, and in March 2008 the CNMC were instructed not to engage in public criticism of the project (Osborne 2009). This constraining of the role of the NMCs should be viewed in light of Cambodia’s own plans for mainstream hydropower, which involve state agencies such as the Ministry of Industry, Energy and Mines.

Hirsch and Jensen (2006) argue that national interests have dominated transboundary interests in the context of the lower Mekong. This argument is valid to a certain extent, but, it is important to consider how a particular set of interests held by particular actors have dominated at the national level and subsequently, been represented at the transboundary level as the national interest. Differences over water resources development exist within the state agencies that comprise the state apparatus.

State officials interviewed for this thesis justified hydropower projects on the basis of their contribution to poverty reduction, for example: “Cambodia and Laos we need development, we would like to develop the hydropower potential of the river, our people are very poor (State Official, interview, 06/08a). However, despite this official justification which links hydropower projects, national development, and the national interests, some sections of the Lao government are concerned about the impacts of hydropower development. Civil society interview participants reported that they had discussed Don Sahong with some officials who were concerned about the project. But,

“these officials are generally located at the Director-General level or below and operate in a political culture whereby policy and senior politicians are not questioned” (Civil Society representative, interview, 06/08a).

For example, the Lao National Tourism Authority, a ministry-level government agency, is concerned about the Don Sahong because it may undermine the potential for eco-

tourism (Fawthrop 2009). Ecotourism is another possible development strategy for Lao PDR, and the lower Mekong basin generally (Phillips *et al.* 2006). However, the Lao National Tourism Authority is unlikely to see its interests dominate the state agenda as it is less powerful than the Ministry of Energy and Mines.

Sub-state processes also affect hydropower development in the Mekong. For example, the proposed Lao mainstream dam, Don Sahong is linked to the interests of powerful ministries and families. Osborne (2009) argues that the dam is “very much linked to the interests of the Siphandone family for whom southern Laos is a virtually fief” (vi). Don Sahong is planned for Champasak province, close to the Lao-Cambodia border. The Governor of Champasak is the son of a former Lao PDR prime minister, whilst his sister “supports the Ministry of Finance” (Civil society representative, Interview, 06/08a). Osborne (2009) links the plans for Don Sahong dam to a 1990s plan, also supported and promoted by the Siphadone family, to create a resort with casinos and an airport in the Khone Falls area. In this context, civil society actors have questioned whether Don Sahong is really part of a comprehensive plan for poverty reduction, or is it part of a narrow plan to develop a resort (Cronin and Hamlin 2010).

Experts working within the Lao hydropower sector argue that the proposed Don Sahong dam raises questions about decentralisation in Lao energy planning:

“First of all you have decentralisation in Laos so the governors are really powerful. In that province there is no other place to put a dam...The boss of the electricity department in Laos has just put out a document saying that the allocation of concessions has gotten out of step with the planning process because they are all allocated from regional governors. So, the government you know can just not handle development at this pace” (Expert, interview, 05/08)

These concerns are linked to concerns about corruption in the Lower Mekong. The 2009 Transparency International annual report ranked Lao PDR one of the most corrupt states in the world, placing it 158 out of 180 states assessed (Transparency International 2010). A number of forms of corruption in Lao PDR have been identified, including bribes to disregard environmental regulations or ignore illegal trade, and colluding with officials to under-report trade and therefore avoid tariffs and duties (Stuart-Fox 2006). Processes such as these help to condition state actions in particular areas and caution against considering states as unified actors with unified interests.

2.2. State actors, scalar processes and territorialisation

The state is comprised of a number of actors who participate differently in hydropower development in the lower Mekong. This includes both water and energy agencies within states, and sub-state processes such as corruption. The interactions between these actors and processes condition water resources outcomes. The involvement of certain state agencies, such as, the Electricity Generating Authority of Thailand (EGAT), illustrates how different actors interact to produce development outcomes in particular locales. The example of EGAT and its role in hydropower development in Lao PDR demonstrates how hydropower development is a process which involves a variety of actors deploying strategies over various scalar levels. Hydropower development allows actors to extend their control over resources and locate them in regular patterns of extraction.

State agencies with particular hydropower water resources agendas are promoting and driving hydropower development in the lower Mekong basin. Thai state agencies and power companies are playing a strong role in hydropower development of the Mekong, backed by the Thai government and financiers (Middleton *et al.* 2009). This includes state enterprises such as EGAT, and construction and power companies such as GMS Power. EGAT was established in 1969: the US and the World Bank were heavily involved providing financing and technical assistance (Middleton *et al.* 2009). EGAT is a state enterprise under the Ministry of Energy and a key player in both Thailand's energy sector and hydropower development. It builds, owns and operates power plants, purchases electricity from foreign states and independent power producers (IPPs), and owns and is responsible for the Thai transmission system. EGAT has strong links with IPPs such as the Electricity Generating Public Company, which was formed in 1992 from an EGAT subsidiary (Middleton *et al.* 2009). Power Development Plans are devised by EGAT's Systems Planning Division and include plans to import electricity from neighbouring Mekong states, including 4,000MW from Lao PDR by 2015 (EGAT 2008). EGAT's role in determining Thai energy demands and the means to meet them promotes hydropower development of the lower Mekong.

Thai plans to import electricity from neighbouring states are both an economic and a scalar strategy. Thailand has rescaled development strategies to the regional level in response to the success of Thai environmental movements and continuing economic growth in Thailand (Lebel *et al.* 2005). Thai actors are interested in Mekong hydropower development in neighbouring states because of the strong domestic

opposition to new dam projects: investing in and constructing projects in other Mekong states allows Thai actors to externalise social and environmental costs to states where public opposition is stifled and laws are less stringent (Middleton *et al.* 2009; Klopper 2008). The Thai strategy of promoting and financing hydropower dams in Lao PDR has created a relationship whereby Lao hydropower development is sensitive to predictions of energy demand in Thailand. For example, the global financial crisis (which began to be seen in the region in 2008) has impacted projected Thai energy demands and electricity import plans (Lee and Scurrah 2009; MRC 2009a). Decreases in estimates of Thai demand have resulted in delays to Lao PDR hydropower projects including Nam Ngum 3 and Nam Theun 1 (MRC 2009a). The relationship between Thai actors and Lao hydropower development, and the Thai civil society protest, which has contributed to conditioning this outcome, illustrates the multiple actor and scalar nature of hydropower development.

The hydropower development relationship between Thailand and Lao PDR has been the subject of a World Bank facilitated forum in 2007. The High-Level Forum on Lao-Thai Sustainable Hydropower Development is another example of separation between state water and energy actors. The Forum was hosted by the Lao Minister of Energy and Mines, and the Thai Minister of Energy. Participants included representatives from the Lao Ministry of Energy and Mines, and the Lao Ministry of Finance, Thai representatives from the Ministry of Energy and EGAT, the development banks, project developers, and NGOs (World Bank 2007b). The MRC, NMCs and state water agencies were not invited.

World Bank representatives interviewed for this thesis identified the Lao-Thai hydropower development as one of the key issues in hydropower development in the Lower Mekong, and argued that it is a relationship fraught with tensions.

“The World Bank and the Lao government are continually discussing hydropower and there are concerns over the quality of plans and the investments considering the immense interest of companies and others in developing hydropower projects in Lao. But, Thai actors are probably the most active in Laos at the moment and there are many projects planned” (Development bank representative, interview, 03/08).

“There are a lot of tensions in the Lao-Thai relationship because EGAT and project developers want to get the lowest price possible for the electricity, whereas the Lao government argue that if the tariff is too low there will not be enough money for poverty reduction programmes” (Development bank representative, interview, 04/08).

Interviews for this thesis indicate that both Thai and Lao actors justify tariff and price discussions in terms of development concerns. EGAT argues that low tariffs are needed to supply the levels of energy needed for Thailand's continuing economic development, whilst Lao government representatives argue that high tariffs are needed so there is sufficient funds for poverty reduction. For example, in discussions with Lao state officials references were continually made to the "need for development" and "using hydropower revenues for poverty reduction". The position of the Lao government illustrates how narratives are utilised by governments. Hydropower development is linked with poverty reduction: this obscures other motivations for promoting hydropower, and instead presents it in ways which are hard to challenge.

Water resources development, including hydropower, represents one mechanism through which the state can extend its control over resources and territory. For example, Thailand has formulated plans for diverting water from the Mekong to its arid north-east region since the 1970s. The north-east is one of the poorest regions of Thailand and successive governments and planners have dreamed of 'greening Issan': turning the Northeast into a agricultural powerhouse, which will simultaneously generate agricultural production, reduce poverty and reduce the burden on Bangkok and other Thai cities from seasonal migration during the dry season (Molle and Floch 2007). Hydropower development in the Mekong will extend state control into remote areas, integrating them into the wider territory through linking them into transport networks and markets. For example, the Nam Theun 2 project in Lao PDR has made the Nakai Plateau more accessible by developing new roads (Observation notes, site visit, 03/08). As such the project will incorporate a remote area into the processes of the state (Observation notes, site visit, 03/08). This 'side-effect' of a project designed to aid poverty reduction in Lao PDR, can be viewed as congruent with the 'side-effects' of aid projects in Lesotho identified by Ferguson (1994), that extend particular forms of state power.

3. Development Banks

Interviews with donor and civil society representatives in the lower Mekong identified the changing role of the development banks in hydropower development as a key unfolding dynamic in the region. Interviewees argue that the rise of a multitude of private sector actors have undermined the importance of the development banks. These

issues are considered further in Section Five. The following paragraphs outline the role of the development banks in the lower Mekong region.

The World Bank and the ADB are extremely high profile players in Mekong development. The ADB is a multilateral development finance institution founded in 1966 and owned and financed by its 67 members of which 48 are from the region (ADB 2010). ADB's vision is an Asia-Pacific free of poverty and under its 'Strategy 2020' it has three strategic agendas: inclusive growth, environmentally sustainable growth, and regional integration (ADB 2010). The ADB's water policy identifies water as a key ingredient of development, which needs careful management (ADB 2003). All lower Mekong states were founding members of the ADB in 1966. Bank operations in Cambodia, and Vietnam were suspended in the 1970s and 1980s due to political instability. Initial bank operations in these two states post-1992 focused on rehabilitation but later expanded into rural development, agricultural development, and infrastructure amongst others. In addition to these areas, ADB activities in Cambodia and Lao PDR have focused on social development and the environment. This includes strengthening IWRM capacity and establishing community fisheries in the Tonle Sap area of Cambodia. Assistance is provided to Cambodia, Lao PDR and Vietnam in the form of loans, credits and Technical Assistance (TA). Thailand receives mainly TA and knowledge sharing from the ADB. A large amount of assistance is channelled through the GMS program (see Chapter Three). Infrastructure development is a key focus of the GMS revolving mainly around hydropower and road development. ADB argues that its infrastructure projects in Vietnam especially, improvements to roads and highways have "helped generate employment and significantly reduce poverty" (ADB 2009b: 2). This justification once again links infrastructure and poverty reduction.

The World Bank was established in 1944 and comprises two development organisations: the International Bank for Reconstruction and Development (IBRD) and the International Development Association (IDA). The IBRD serves middle-income countries through capital investment and advisory services (World Bank 2006). Established in 1960 the IDA serves the world's poorest states and is committed to reducing poverty through grants, and interest-free credits for poverty reduction, economic and social programs (World Bank 2006). In the lower Mekong region Cambodia, Lao PDR and Vietnam are eligible for funds under IDA (although Vietnam is now starting to make applications to IRBD also). Like the ADB, the World Bank's operations in the region have been affected by geopolitics and instability. The World

Bank is active in the four states of the lower Mekong in areas such as rural development, agriculture, infrastructure, social development and the environment.

Hydropower forms a large part of the World Bank's strategy in Lao PDR, with Nam Theun 2 playing a central role in the bank's strategy, as it is a "development project which will help to reduce poverty" (Development bank representative, interview, 03/08). This statement illustrates how the development banks are informed by and support the dominant development narrative of the Mekong, linking hydropower and development. The development banks have promoted NT2 as a 'model' hydropower project which can be applied elsewhere (Lawrence 2009). A number of dynamics underpin this promotion, but two of the most important are the discursive struggle in the Mekong region over the promotion and expansion of hydropower, and the banks' struggle to maintain their position, access, and role in hydropower development vis-à-vis other actors (discussed further in Chapter Six). The development banks have facilitated a number of hydropower projects in the region, including guaranteeing loans and lending the states the necessary capital to purchase their shares of projects (Middleton *et al.* 2009). Civil society representatives interviewed for this thesis argue that the availability of finance from the multitude of new private sector actors and financiers has challenged the position of the banks (see Section Five, this chapter). In light of this, the development banks are attempting to reinvent themselves in order to maintain their position (see Chapter Six).

The ADB and the World Bank complement each other in a number of ways in the lower Mekong. The World Bank supports the ADB's GMS Programme and plans for regional power trade. In 2007, the World Bank made two grants, one to Cambodia and one to Lao PDR, to extend cross-border transmission lines between the two states and Vietnam: assistance was provided as part of the World Bank's support for the GMS Programme (World Bank 2007a). The development banks have also developed a joint strategy on water resources, the *Mekong Water Resources Assistance Strategy* (MWRAS). The MWRAS also argues that trade-offs are necessary in the Mekong as development increases: cross-border cooperation is needed to manage trade-offs (ADB and World Bank 2006). The MWRAS identifies three sub-areas of the Mekong Basin where win-win solutions can be sought: the Mekong area shared by Northern Thailand and Lao PDR, the Sekong, Sesan and Srepok (the 3S) sub-basins shared by Cambodia, Lao PDR, and Vietnam, and the Mekong Delta shared by Vietnam and Cambodia. Since 2006, the ADB and World Bank have concentrated activities in these areas. Development bank representatives argue that the:

“MWRAS represents a way for us to expand our role in water resources management at a time when water infrastructure loans are not worth as much as they used to be” (Development bank representative, interview, 04/08).

As such the MWRAS represents a strategy through which the development banks can extend their visibility and access in water resources management and development, at a time when development relationships in the basin are shifting.

4. Changing donors

During the fieldwork period for this thesis it quickly became apparent that there are three loose groups of donors in the lower Mekong region: one, old donors (active in the Mekong Committee or the region both prior to and since 1991, who are promoting regional cooperation and initiatives); two, new donors (emerged after 1991 and engaged in focused bilateral agreements with the lower Mekong states); and three, the multilateral development banks (discussed above). These three groups of donors have different interests, different areas of focus, and support different states. These are summarised in Table 2 (p.141).

Old donors generally have both a bilateral and multilateral relationships with the lower Mekong states as they also support the MRC. Old donors are predominately Western and largely European, although Australia and Japan are high profile donors to the region and the MRC. Elhance (1999) argues that the Mekong “stands out as a glaring example of the most extensive involvement by the international community in the efforts to develop an international river basin” (216). This has contributed to the notion among some actors that the MRC is donor-driven. Questions about support to the MRC have been expressed in the civil society of many donor countries and are explored in Chapter Five.

As opposed to new donors, who are facilitating unilateral water resources development, old donors are advocating regional cooperation and cautioning against rapid hydropower development. This has created some tensions in donor-Member State relationships:

“We had a meeting with the LNMC where I had to repeat we don’t have any personal relationships with hydropower, it’s a source of energy that’s well known, renewable source, we have it in Norway and Sweden and we have it all over the world, we don’t have any passionate views on it. We think it can be a healthy source and a sustainable source, provided *etc, etc*. I had to repeat that many times. Body

language was like this, closed, and they went slowly like that, open” (Donor representative, interview, 05/08b).

At a meeting about basin planning between representatives from the four Member States and three old donors in May 2008 differences in the positions of the two groups became apparent. Member States representatives made references to the need for development:

“We all joined the MRC to develop the Mekong: this includes its hydropower potential” (State official, observation notes, MRC meeting, 05/08).

“We need support as we want to build up the hydropower capacity for poverty reduction” (State official, observation notes, MRC meeting, 05/08).

In contrast to a loosely unified approach offered by Member State representatives about the need to develop, donor state representatives argued that there were concerns in the Member State governments about hydropower and that caution is needed:

“In the countries we have visited the NMCs have asked for a consultation on Don Sahong, and is disappointing to hear that this may not be possible at a regional level, when it may have transboundary impacts” (Donor representative, observation notes, meeting, 05/08).

“We are not being negative about hydropower, the point is to do it in an orderly manner, and look at the trade-offs it involves” (Donor representative, observation notes, meeting, 05/08).

In interviews and in meetings observed for this thesis donor representatives were keen to stress that there are not anti-hydropower. Member State officials’ utilisation of “need for development” arguments is potentially a strategy to deflect criticism of plans, whilst they simultaneously argued in interviews that donor states have already developed and therefore should not stop them from developing.

Table 2 illustrates that old donors provide both bilateral ODA and support to the MRC. However, bilateral ODA is targeted at particular lower Mekong states and in a number of cases is being phased out by old donors. For example, Finland only provides bilateral assistance to Vietnam, whilst Sweden provides bilateral assistance to Vietnam and Lao PDR. Donor interests and areas of support include environmental protection, human rights, scientific cooperation, and sustainable development (Sweden), infrastructure, integration and climate change (Australia). The majority of old donors including Finland, Sweden and Denmark are exploring options for phasing out bilateral assistance to Lao PDR and Vietnam in the near future. Trends in ODA from old donors

include shifting focus from Asia to Africa, and from bilateral assistance towards regional support (Donor representative, interview, 04/08; Donor representative, interview, 05/08b). As such, they are promoting the MRC as a mechanism for information sharing between the Member States, and a forum through which Member States can conduct their development debates (Donor representative, interview, 04/08; Donor representative, interview, 05/08b). As bilateral assistance is phased out, regional initiatives such as the MRC are one arena in which the relationship between Member States and old donors are conducted. This dynamic is explored in Chapter Five.

Old donors such as Australia also work in partnership with other regional and multilateral actors. Australia's 2007-2011 Greater Mekong Subregion Strategy identifies the GMS as a continuing area of priority for Australia and its objective is to "enable sustainable broad-based economic growth levels for the subregion through greater connectivity and cooperation" (AusAID 2007: 2). Activities such as improving infrastructure and improving water resources management are delivered through partnerships and collective co-financing with partners such as the development banks (AusAID 2007). Old donors to the MRC, in-line with global developments such as the Paris Declaration on Aid Effectiveness, are seeking to harmonize their contributions to the MRC and to coordinate their approach.

Concurrently, new donors, such as China, are emerging and are strengthening bilateral relationships, and are constructing relationships outside of regional forums and partnerships. Relatively little is known about this second loose group of donors, such as Kuwait and Qatar, who are providing funds for infrastructure developments in the form of 'soft' loans with low or no interest rates. For example, Kuwait is providing US\$546 million in 'soft' loans to Cambodia for infrastructure projects including irrigation, hydropower and roads (Sambeth 2008). Qatar is investing in Cambodia's agricultural and irrigation sector as a mechanism to secure access to food supplies in a context of growing global food prices (Bowman 2008). These loans are negotiated bilaterally and few details are publicly available about Cambodia's relationships with Kuwait and Qatar. Civil society actors and opposition politicians in Cambodia are concerned that these deals may involve land concession to Kuwait and Qatar and disadvantage local communities (Ferrie 2009). There is some regional press coverage of these loans, but it was not possible to interview or meet with representatives from these donors. China is the most high profile and established of the new donors. As outlined in Chapter Three, dams are only one part of China's strategy in the region as it increases bilateral aid, trade, and investment.

There is no dialogue between old and new donors, and old donors are ‘a bit unsure what to do’ (Dore 2008). The availability of financial resources from new donors challenges the prominence of old donors. Nakayama (1999) argues that as alternative sources of funding became available the relative importance of the Mekong Committee for its members decreased. Changes in donors and the types of financing available for infrastructure have similar effects on the MRC, which is committed to sustainable and coordinated development in a context where the availability of alternative sources of financing are an incentive for unilateral state development of shared water resources.

5. The changing role of the private sector

The private sector has always played a role in hydropower development in the Mekong. However, the nature of the private sector and the companies involved has changed over time. Western project developers and financiers initially dominated the development of hydropower projects in the Mekong region (Middleton 2008a). The current hydropower drive is being spearheaded by Asian developers and financiers: this includes private companies from China, Thailand, Malaysia and Vietnam backed by export credit agencies and commercial financiers who are “able to move quickly” and are “fast displacing the Western corporations and multilateral development banks that previously dominated the region” (Middleton 2008a: 13). Experts interviewed for this thesis suggested that Western companies had similar motivations to the current Thai project developers:

“Western companies had to come out of Europe, they had exhausted the dam sites and the public were becoming opposed to dams. Thailand, now, has the same problems, they can’t do dams at home because the civil society is getting stronger, and all the good dam sites are gone” (Hydropower industry representative, interview, 06/08).

This suggests that hydropower development has its own momentum, as well as highlighting the controversial nature of hydropower development in the lower Mekong, which is contested by a range of civil society actors.

5.1 The development banks, Western companies and tributary hydropower

Tributary hydropower projects developed since the end of the Cold War, such as Pak Mun (Thailand), Theun Hinboun (Lao PDR), and Nam Theun 2 (Lao PDR) (see

Map 2, p.4), have largely involved the multilateral development banks, Western companies and Western donors. For example, the Theun Hinboun dam built and operated by the Theun Hinboun Power Company (THPC) was completed in 1998 and exports 95% of its electricity to Thailand (FIVAS 2007). THPC is a consortium of three bodies: the Lao state utility Electricite du Laos (EdL), a Thai company GMS Power, and Nordic Hydropower AB (owned by Norwegian power utility Statkraft). Project financing came from ADB loans, the Nordic Development Fund (a multilateral development financing institution comprising the five Nordic countries), and the Swedish and Norwegian governments through government guaranteed loans from Nordic financing institutions (FIVAS 2007).

The links between the Theun Hinboun project and Norwegian government development institutions are controversial because they benefitted Nordic companies: the project's EIA and Technical design were financed by the Norwegian Agency for Development Cooperation and conducted by Norwegian company, Norconsult (FIVAS 2007). The project was monitored by civil society organisations, including International Rivers and FIVAS. The Theun Hinboun hydropower project has resulted in negative social and environmental impacts including: erosion and flooding of the riverbank resulting in loss of land and riverbank gardens; a decline in fisheries; and increased flooding which has led to farmers abandoning their rice fields (International Rivers 2009a). Monitoring of hydropower projects in the lower Mekong is an important strategy for international civil society actors in the region, as they seek to highlight the negative impacts of hydropower projects and ensure that promises are met (see Chapter Six).

The Theun Hinboun project followed the Independent Power Producer (IPP) model. Under the IPP model private companies or entities own and operate facilities for power generation and sell power to state utilities and end users. These are usually developed as Build-Own-Operate-Transfer (BOOT) schemes. Under a BOOT scheme a group of investors finance and construct the dam, and then operate it for a set number of years, selling the electricity and taking an agreed share of the revenue (Usher 1996). When the concession period is up, the investors either renegotiate terms or transfer the dam to the national government (Usher 1996). The BOOT concept has been endorsed by the World Bank in the name of increased efficiency (Usher 1996).

Hydropower industry and civil society representatives interviewed for this thesis suggested that the development banks endorsement of the IPP model was motivated by a desire to continue funding hydropower projects:

“the IPP model was devised by someone at the bank because they had all these NGOs on their back and for a period they couldn’t lend money as the ADB or the World Bank, but they could guarantee loans to private power producers. So, that was their way of getting around the hydropower ban that they slapped on themselves for a while” (Hydropower industry representative, interview, 04/08).

During the World Commission on Dams process, which culminated with a report in 2000, the World Bank placed a moratorium on dam funding until the commission had finished its work. However, as will be shown in Chapter Six, the World Bank continued to investigate support for the Nam Theun 2 hydropower project in Lao PDR.

5.2 The evolving private sector

Key changes in the nature of the private sector include the rise of new actors, and reduced government reliance of the development banks for facilitating hydropower projects. Private sector companies and consortiums developing hydropower projects as BOOTs raises questions about who should be developing hydropower, the private or public sphere, and what the impacts are on the states involved:

“The private sector is driving hydropower development in the region and this is rapidly eroding the sovereignty of the countries in terms of control of development” (Civil society representative, interview, 03/08).

“Right now there is no integrated development, no long term power development strategy, you’ve got IPP’s who come in and want to make money from generating power from turbines and that’s it. So, if the public sector were doing it they would be looking at irrigation, at fisheries, at integrated plans. But, the Lao government don’t have the capacity, or the resources, so when developers turn up and say we want to give you so much money to develop a project, they go along with it” (Hydropower industry representative, interview, 06/08).

Lower Mekong states, such as Lao PDR, lack the financial resources and capacity to develop hydropower themselves: to expand hydropower development they require the involvement of foreign private companies, foreign donors, and foreign financiers. Bakker (1999) argues that Lao PDR “best exemplifies the increasing involvement of private capital and private lending agencies in hydrodevelopment” and whilst public financed development would allow the government of Lao PDR to retain full control over projects it does not have the resources to do so (224). This dynamic underpins the relationship between states and the private sector. The asymmetric nature of this

relationship is also impacted by various factors, including: the weakness of relevant institutions in states such as Lao PDR, a lack of domestic technical capacity, and an absence of personnel who read and understand English to a very high standard (Usher 1996). The increasing involvement of the private sector may also impact on cooperative water management: the availability of alternative funding may act as a disincentive to cooperate, and lead to a different prioritisation of projects as the private sector operates from different assumptions to cooperative ventures such as the MRC (Bakker 1999). These dynamics are currently unfolding in the Mekong and the outcomes of them are still undetermined.

The nature of the private sector in the lower Mekong has changed in recent years. Commentators and civil society actors have expressed a diverse range of opinions on this change:

“the private sector has always been involved, but the nature of the private sector is changing. In Laos projects exist at the moment, often backed by the ADB, the UN, but at the same time a lot of them are under public-private partnerships. Situation now, see a lot of companies coming from newly industrialised economies, financing coming from non-western sources- China, Thailand, international debt market, bond market, Thai stock market, equity, there’s a lot of money here” (Civil society representative, interview, 04/08b)

“From 2007 until this day, I mean the whole transformation in the region in terms of private sector involvement has ballooned” (Civil society representative, interview, 06/08a).

“The argument that the government is weak vis-à-vis the private sector is too simplistic. Its not that the government is weak, its that it does not care. Hydropower offers a way to make a lot of money” (Hydropower industry representative, interview, 06/08).

The private sector and the governments in the lower Mekong have shared interests: the development of hydropower sites and the generation of revenue. However, the private sector is motivated by business and capital concerns, whilst lower Mekong governments rationalise hydropower development in terms of economic growth and poverty reduction.

The shift from predominately Western companies and financiers to predominately regional companies and financiers has decreased the importance of the development banks. Unlike earlier hydropower developers, the new companies and financiers are not facilitated by the development banks. Donors to the Mekong region, interviewed for this thesis, stated that “we assumed that private sector hydropower

development in the region would always be facilitated by the development banks. We were wrong” (Donor representative, interview, 05/08b). The new private sector actors in the Mekong do not need the development banks as they have their own financiers, including China’s EXIM Bank, and Thai credit export agencies (Middleton 2008a). The development banks have responded by trying to reposition themselves and promote the NT2 project as a model hydropower initiative in order to maintain their access, role and importance in this arena (see Chapter Six).

As identified by a number of participants interviewed for this thesis, one of the biggest changes is Chinese private sector involvement in the development of the lower Mekong. Under the Chinese government’s ‘Going Out’ Strategy, Chinese companies such as Sinohydro (China’s biggest dam builder) are being encouraged to build infrastructure projects in developing countries largely financed by China’s export credit agency, the China Exim Bank (International Rivers 2008b; Rutherford *et al.* 2008). The rationale behind the strategy is to secure natural resources abroad:

“to guarantee China’s future economic development. Trade and investment agreements with resource-rich countries, which often include infrastructure projects such as large dams, allow China to access such raw materials” (International Rivers 2008b: 5).

Sinohydro is currently building three Mekong tributary dams in Lao PDR and conducting a feasibility study for the Lao PDR mainstream dam Pak Lay (see Map 3, p.6). The involvement of Chinese companies illustrates the rich connections between state actors, the private sector, government policy and international relations.

Lower Mekong companies became increasingly active and visible in hydropower development in the region from the late 1990s onwards. Thai and Vietnamese companies and creditors are involved in a number of projects. For example, the Nam Ngum 2 hydropower project, Lao PDR, was financed and developed largely by Thai actors: the construction company Ch. Karnchang, Ratchaburi Electricity Generating Holding (a company who generate and sell electricity), Thai commercial banks, and the Lao government share held by EdL was obtained through a bond issue guaranteed by Thailand’s Export-Import Bank (Middleton 2008a). Five of the proposed mainstream hydropower projects in Lao PDR are also being investigated and facilitated by Thai and Vietnamese actors (Cronin and Hamlin 2010). This trend marks a change from previous hydropower projects in the Mekong, which combined either solely foreign companies and developers, or a mix of foreign ones and Thai companies.

Regional companies and financiers are in a position, both in terms of finance and access, to develop hydropower projects without the involvement of companies from outside of Asia, or the development banks. It has been alleged that Mekong governments have welcomed the new financiers and developers because the governments “increasingly view the social and environmental policies associated with Western aid as burdensome, time consuming and costly” (Middleton 2008a: 13). However, there is little public information about the relationships and negotiations between the lower Mekong states. Plans and agreements for new projects are announced in local media, such as the Lao PDR *Vientiane Times*, but few details are included (*e.g.* Thammavongsa 2008). Researchers and NGOs, including International Rivers, have been trying to identify and locate the new actors. International Rivers have released reports on China’s role in dam development globally as well as the new financiers in hydropower (International Rivers 2008b; Middleton 2008a). In 2008, the Heinrich Boell Foundation (HBF), the World Wildlife Fund for Nature (WWF), and the International Institute for Sustainable Development (IISD) conducted a study into China’s role in the lower Mekong, specifically Cambodia, Lao PDR and Vietnam. One of the study’s key findings is that Chinese state-owned enterprises are becoming major investors in the region, fuelling natural resource extraction (Rutherford *et al.* 2008).

The changing nature of the private sector has impacted the debate over hydropower development in the Mekong. Questions concerning financing and the relations between states and private companies are related to issues surrounding the location of development activities and the assumption that states have complete control over their territory and resources. As mentioned above, Lao PDR and Cambodia lack the financial resources to develop their hydropower potential. Consequently, they favour the BOOT model, whereby private developers construct and operate the project, with the state as one of a consortium of shareholders who receive revenues from the project. A financial asymmetry underscores the relationship between state and private sector actors. Tensions exist within these relationships whereby private companies expend resources to conduct studies on proposed projects sites under agreement with the government. If these studies are deemed satisfactory then a Concession Agreement is signed. In the case of Mega First, the company developing the proposed Don Sahong in Lao PDR, the company are keen to see the studies be accepted as they have already spent a large amount of money on investigating the project:

“I talk to the manager of Megafirst and he worry that we can pass or not when they explain, if our government say ok not reasonable explanation. They spend a number of money already, they don’t want to lose this money” (State official, interview, 06/08a).

The relationship between state governments and private companies in terms of hydropower development is complicated and illustrates that water development and management is not located simply at the state level.

6. Global civil society and evolving regional civil society

Civil society actors are challenging dominant representations of the Mekong and the plans of powerful actors for dam development. Critiques of hydropower plans bring together a number of concerns including: hydropower plans are moving ahead without genuine consultation with stakeholders and local stakeholders; planning processes at the national and regional level are weak; and challenges to Thailand’s and Vietnam’s power predictions and claims that energy efficiency could meet most of the projected demand (Middleton 2008a). In the Mekong region both global civil society actors and an emerging regional civil society are working to highlight the impacts of existing and proposed hydropower dams. Whilst a large number of actors can be grouped under the heading of civil society there are differences between them in terms of vision for the Mekong, purpose, relationships with other actors and strategies they employ to achieve their goals. For example, WWF is concerned about impacts on biodiversity and is working with the MRC and ADB to develop environmental sustainability criteria for hydropower development (ESCHD), whilst International Rivers is highlighting livelihood impacts and monitoring particular projects such as NT2 and engaging in advocacy to protect rivers and communities from destructive development.

Civil society actors have different development visions for the Mekong:

“Sustainable use of natural resources, equitable use of resources, encompasses everything really, development shouldn’t...be at the cost of some for the benefit of others...Vision would be that projects which have minimal cost and maximum benefit should be developed, where there are alternatives that are more equitable but provide better distribution or more efficient development benefit, then those projects should go ahead instead of large hydropower” (Civil society representative, interview, 04/08b).

“We need to keep the key functions and the integrity from an ecological perspective. We need to sustain the population and the wildlife. The Mekong is very important for the people and the culture and it is still a relatively free

flowing river. It is not yet developed so there is an opportunity to do something different here” (Civil Society representative, interview, 04/08a).

The Save the Mekong coalition, which brings together NGOs from inside and outside the region (including International Rivers, Towards Ecological Recovery and Regional Alliance (TERRA), and the NGO Forum on Cambodia), academics, researchers, journalists and concerned people emphasises the importance of fisheries in the basin, and the impacts of mainstream dams, arguing for a natural flow of the Mekong mainstream (Save the Mekong 2010).

There are complementarities between the visions of civil society actors including concerns with livelihoods, fisheries, and sustainability which allow them to work together in coalitions such as Save the Mekong and in forums, meetings and research. However, there are differences in how they approach issues and their relationships with other actors. For example, WWF works in partnership with the MRC and the ADB, whilst other NGOs prefer a strategy of non-engagement. Certain NGOs are privileged in terms of access. For example, WWF and IUCN have MOUs with the MRC and attend its annual governance meetings. Regional meetings such as the 2008 MRC Stakeholder Consultation on MRC’s Basin Development Plan Phase 2 (BDP 2) and its Inception Report included international, regional and local civil society actors, such as the Mekong Program on Water, Environment and Resilience (MPOWER), and the NGO Forum on Cambodia (MRC 2008a). However, MRC Member States are concerned about the participation of some NGOs (Observation notes, MRC meeting, 02/08). At a MRC meeting involving old donors and Member States representatives, the latter expressed concerns about the motivations of some NGOs:

“Not all the NGOs want to help, some they only want to criticise. We should not invite all NGOs to participate, as they are not all helpful (State official, observation notes, MRC meeting 02/08).

This suggests there are tensions between civil society and government actors, and whilst there are spaces for civil society participation these are framed by more powerful actors.

6.1. *Civil society in the lower Mekong basin*

Civil society in some parts of the basin is weak. There is “limited political space within most countries of the Mekong Region to articulate concerns over projects and other aspects of development that threaten social and environmental sustainability”

(Hirsch 2001: 245). For example, civil society in Lao PDR is largely organised through mass organisations such as the Lao Women's Union. International civil society organisations argue that they have a vital role to play in monitoring hydropower development because "of a lack of civil society and free media. There is also an issue about the effective implementation of projects, will developers and the government do what they say they are going to do as there is no independent monitor, no free press, no local civil society, so there aren't checks and balances" (Civil society representative, interview, 04/08b).

However, a strong environmental movement does exist in Thailand. Thai environmental and civil society groups such as TERRA have followed Mekong developments closely and have successfully challenged dam development in Thailand including the Pak Mun dam, resulting in a government announcement in 1995 that no more hydro-electric dams would be built within Thailand. Pak Mun dam, located on the Mun River 5km from its confluence with the Mekong (see Map 2, p.4), had been planned since the 1960s, but construction did not begin until 1991, funded by a World Bank loan (Foran and Manorum 2009). A coalition of Thai civil society groups including representatives of affected communities, domestic NGOs and Thai academics and researchers formed to contest the dam. This coalition began as a grassroots movement with affected villagers organising petitions and protests, including a protest village at the dam site (Foran and Manorum 2009). The coalition was supported by international NGOs such as International Rivers (Foran and Manorum 2009). In 1999, 5000 people occupied the dam site and the coalition called for the dam to be decommissioned (Foran and Manorum 2009). In 2001, the coalition secured concessions from the Thai government that the dam gates would be open for four months of the year to allow fisheries migration, and more studies would be conducted into fisheries impacts, Thailand's energy supply, and social impacts (Foran and Manorum 2009). Concessions secured from the government are contested and there is ongoing tension between the Thai government and the coalition concerning whether the dam gates will be opened annually (Foran and Manorum 2009). The activities of the Pak Mun coalition "constitute a powerful counter-narrative to the dominant geopolitical narrative of the Mekong as an exemplar of cooperative river basin development" (Sneddon and Fox 2006: 198). Examining individual projects illustrates how hydropower is highly contested at the sub-national scale. This is not necessarily visible if hydropolitics are only analysed at the transboundary scale.

The success of Thai civil society in combating dam development in Thailand has had consequences for its neighbours, Lao PDR and Burma. Thai dam developers have exported dam development to their neighbours as a strategy to avoid the types of civil society protest which have surrounding projects such as Pak Mun (Klopper 2008). Thai dam developers including Italian-Thai Development (ITD), and EGAT, are developing or supporting the development of dams in Lao PDR and Burma where civil society is weak, protest is constrained, and developers do not necessarily have to comply with international standards (Klopper 2008). The externalising of environmental and social costs associated with dam development from Thailand to its neighbours is a worrying trend as affected local communities are unable to protest.

Environmental and civil society groups are also growing in Cambodia in relation to water resources developments and plans. The Yali Falls dam in Vietnam, referred to earlier, has had negative impacts on Cambodian fisheries and livelihoods. In response to this and with the help of Oxfam Australia, the 3S Protection Network was formed to assist dam affected communities living along the SeSan River. It has since extended its activities to cover the Srepok and Sekong Rivers (see Mao Two, p.3), which together make up the 3S river basin (these rivers are also major tributaries of the Mekong with a large hydropower potential and a number of planned dams). Other active Cambodian civil society actors include: the Cambodian Centre for Study and Development in Agriculture which focuses on agricultural research and training; the NGO Forum on Cambodia which brings together international and local NGOs; and the Fisheries Action Coalition Team which also combines international and local NGOs and works on fisheries and livelihood issues in the Tonle Sap area and Mekong provinces of Cambodia.

Media coverage of dam development plans reflects the differences in the robustness of civil society in the lower Mekong states. English language media in Lao PDR and Vietnam largely report planned or proposed projects in simple details. For example, the Lao PDR's *Vientiane Times* covers announcements of projects, signings of MOUs, and reports from the developers, with comments from government officials about how the projects will benefit poverty eradication: no mention of adverse impacts are made (e.g. Thammavongsa 2008). In contrast, English language newspapers in Thailand and Cambodia provide some analysis and critique of plans, including interviews with individuals from affected communities, NGO representatives and academics. For example, Cambodia's *The Phnom Penh Post* has carried articles critiquing Lao PDR's proposed mainstream hydropower dams, especially the Don Sahong dam, and has also

criticised the MRC as well as seeking comments from both NGO representatives and the CNMC (*e.g.* Strangio and Rith 2008). It is important to note that whilst English language newspapers in Thailand and Cambodia are carrying more critical articles on possible hydropower development of the Mekong, this is not necessarily representative of media published in Thai and Khmer. Although it does suggest a larger space for debate and discussion than exists in Lao PDR and Vietnam as academics, NGO representatives and local people feel able to speak to journalists and to express opinions that run counter to official development discourse. Foreign media are also following events in the Mekong and critiquing proposed hydropower plans for the Mekong, for example the UK's *The Guardian* (Fawthrop 2009), and Finland's *Helsingin Sanomat* (Käkönen and Selin 2007).

6.2. Civil society strategies

Civil society actors are employing a number of strategies to challenge the dominant development narrative. Molle *et al.* (2009c) identified five pathways to improved water governance: knowledge production, negotiation and debating alternatives, promoting standards, advocacy, and efforts at improving transboundary water governance. Civil society actors are utilising these five pathways in a number of ways to contest hydropower development plans.

Reports by NGOs and researchers seek to contest the representations of the Mekong and the dominant development discourse and plans of powerful actors. This includes work documenting the impacts of hydropower projects, such as Theun Hinboun (FIVAS 2007); a review of current hydropower development and its impacts in Lao PDR (International Rivers 2008c); and offering alternative views on hydropower plans, for example, the 2007 WorldFish Centre Scientific Brief *The Don Sahong Dam and Mekong Fisheries*, which offered an independent scientific opinion on likely fisheries impacts (Baran and Ratner 2007). Civil society actors, such as International Rivers and MPOWER are investigating hydropower standards such as the International Hydropower Association's *Sustainability Protocol* and the Equator Principles. Information is being disseminated via the internet through groups such as LAOFAB, which also has an online document repository. Civil society actors are also convening their own forums in which to disseminate information and to allow alternative voices to be heard, such as the Mekong Mainstream Dams: People's Voices Across Borders Conference in November 2008. Forums such as this also bring together a range of actors

and allow civil society groups to question actors such as the MRC and debate planned dam development.

Civil society actors are engaging in both meetings with more powerful actors, and advocacy. Meetings such as the MRC's 2008 Regional Multi-stakeholder Consultation on the MRC Hydropower Programme offered an opportunity for civil society actors to engage with state representatives, and hydropower developers (Observation notes, MRC meeting, 09/08). This offers civil society actors access to decision-makers in a region where civil society is constrained in places. However, presence does not necessarily correlate with impact. Engagement with the MRC allows civil society actors to contribute to improving transboundary water governance because it enables alternative perspectives to be heard at the regional level.

As plans for hydropower dams on the Mekong mainstream have intensified, civil society actors have coalesced into a loose coalition of opposition. The Save the Mekong coalition brings together foreign and national NGOs as well as researchers, academics, and local people. The coalition has engaged in advocacy work and run campaigns such as a postcard petition sent to the Thai Prime Minister (PM) in June 2009. This was followed by a meeting between representatives from the coalition and the Thai PM. The Thai PM committed to raising the issue of mainstream dam construction in bilateral and multilateral meetings with the other lower Mekong states, but stated that the Thai government "alone cannot make a decision to agree or disagree with the construction of any particular dam on the Mekong River as the Mekong is an international river" (Stimson 2009). This suggests that Thailand will seek cooperative not unilateral development of the Mekong River. Some commentators have interpreted this as a shift in Thailand's hydropower position (Stimson 2009). However, this is not necessarily the case as in 2010 a MOU was approved by Thailand's National Energy Policy Committee to start tariff negotiations with Lao PDR over the electricity generated by the Sayaboury mainstream dam (Save the Mekong 2010). This is despite the EIA for the project and the MRC's Strategic Environmental Assessment (SEA) not being completed (Save the Mekong 2010). This illustrates that relationships between civil society and more powerful actors are embedded in wider political and developmental contexts.

7. The role of experts and consultants

In the lower Mekong region, experts and consultants play an important role. They are employed by Member State governments, the MRC, the development banks and the private sector, to conduct studies, write EIA reports, conduct training programs, facilitate meetings and conduct reviews of projects. Experts and consultants are extensively utilised by actors in both water resources management and hydropower. Due to the technical and complex process that constitutes hydropower development, it is a field which is dominated by international consultants and is an expert-led process (Bakker 1999). The presence and utilisation of experts and consultants raises questions about knowledge generation and how knowledge is utilised. Experts and consultants are selected to conduct particular studies for particular purposes. Scientific discourse is socially and politically constructed (Forsyth 2003). These issues are not unique to the Mekong.

Leach and Mearns (1996) argue that the independent expert's influence over the shape of development policies, projects and programmes is now indisputable: they also play a unique role in the reproduction of environmental narratives due to the nature of their work. Consultants and experts are accountable not only to the beneficiaries of their work but also the agencies who employ them, they work on pre-set TOR, within a specified (usually short) time-frame, and may be concerned with being employed again in the future (Leach and Mearns 1996). Consequently they can contribute to the fixing of certain environmental narratives and analyses, without questioning the underlying premises (Leach and Mearns 1996). These dynamics are at play in the Mekong:

“One of the fundamental problems is the developer contracts the EIA consultant so they're not really an independent party. They are paid for by the developers and it's in the developers' interest to look over the consultant's shoulder...EIA's are a series of judgments that a consultant makes about possible or likely impacts, if there is something that looks like it might be expensive for the developer, they ask the consultant to write it in a different way” (Hydropower industry representative, interview, 07/08).

EIAs are then utilised by project developers and state agencies to justify and promote the project as necessary and 'good' in terms of environmental and social impacts, and to combat counter-claims from civil society. This raises questions about the impartiality of EIAs and their role in legitimising hydropower projects. Issues surrounding knowledge generation and utilisation are explored in Chapter Seven.

8. Conclusion

The lower Mekong's hydropolitical constellation comprises a wide range of actor types with different interests in hydropower development. Actors interact in a number of different ways in relationships located over various scalar levels. Key actor types include: state actors, the development banks, donors, the private sector, civil society and experts. The individual actors comprising each actor type have changed since 1991. For example, private sector companies from China are replacing western companies in hydropower development. Actor relationships overlap and condition each other. Thai state actors, such as EGAT, have rescaled their electricity development plans to focus on hydropower development in Lao PDR, partially in response to Thai civil society protests over domestic hydropower. This illustrates that actor relationships do not exist in isolation and have to be examined from a perspective that considers their embeddedness in wider scalar relationships. Different actors have different interests, goals and visions for the development of the Mekong. Water resources debates in the lower Mekong reveal the struggle between different actors to determine the direction and type of development, as well as to legitimise certain actors and their plans.

Each of the lower Mekong states is comprised of a number of different agencies, ministries and bureaucracies. There are power relationships between different state actors who have different interests. Water and energy actors in the lower Mekong states, such as the NMCs and the energy ministries, are largely isolated from each other. Proposed and planned hydropower projects, such as the Don Sahong, illustrate that hydropower development is conducted outside of the sphere of transboundary water cooperation. Hydropower development is also a mechanism by which states can extend their power and reach in remote areas. National level justifications, such as poverty reduction, can mask this reality, and also obscure the nature of processes, such as corruption, which condition development outcomes.

New actors challenge the status of traditional actors, which results in the former engaging in strategies to maintain or extend their access to resources. The ADB and the World Bank are extremely involved in hydropower development in the lower Mekong. However, the emergence of new private sectors actors means that the lower Mekong states no longer need the development banks to facilitate hydropower development. The development banks have responded by promoting Nam Theun 2 in Lao PDR as a 'model' development project (see Chapter Six), and developing the MWRAS as a vehicle to increase their access and visibility in Mekong water management.

The development of hydropower by the lower Mekong states is located in a wider context of donor relations. Traditional donors to the lower Mekong states and to the MRC have concentrated their support in a number of areas, including: rural development, water resources management and climate change. In contrast, new donors are providing soft loans and other types of financing for infrastructure development. This support from states like China and Qatar has to be contextualised within the aims of those states to secure access to resources such as energy and food. Relationships between traditional and new donors overlap and condition each other in the sense that new donors offer alternative avenues for infrastructure funding at a time when traditional donors are urging caution, the use of the MRC, or shifting support to Africa.

New private sector actors have increased in importance in the lower Mekong's hydropolitical constellation and hydropower development. Plans for mainstream hydropower in Lao PDR are increasingly involving Thai and Vietnamese private sector companies and financiers. This is in contrast to earlier hydropower projects, which were largely facilitated by the development banks and financed and constructed by Western companies (and sometimes including Western government development agencies). China's bilateral relationships with the lower Mekong states have increased since the 1990s (see Chapter Three). The expansion of Chinese private sector involvement in the development of both mainstream and tributary hydropower is intertwined with Chinese state policy. Chinese companies have been encouraged to 'go out' from China in order to secure access to natural resources.

Civil society actors are challenging both hydropower plans and the dominant representations and narratives, which are utilised to justify and promote them. Different civil society actors have different agendas, interests and development visions for the Mekong. Global, regional, and domestic civil society actors are participating in the hydropower debate in the Mekong. There is limited space for domestic civil society to express opinions and question development interventions in the lower Mekong. However, Thailand does have a strong environmental movement who have challenged domestic dam development, such as the Pak Mun dam. Civil society actors have adopted a number of strategies to challenge the dominant hydropower narrative. These include: conveying their own meetings; establishing links and coalitions between domestic, regional and global civil society; producing counter-evidence; targeting the MRC; and promoting hydropower standards.

Interactions and power relations between the various actor types, described in this chapter, are integral in promoting and contesting hydropower development over various

scalar levels in the lower Mekong. The rich interconnections between actors, narratives and power relationships over different scales condition the key water resources debates in the lower Mekong, and illustrate the complexity of its hydropolitics.

Table 2: Traditional and new donors in the lower Mekong hydropolitical constellation

Donor	Donor Type	Strategy	Donor interest and area of support	Recipient	Donor to MRC/ MRC programmes
ADB	Multilateral Development Bank	1.Greater Mekong Subregion Programme 2.Mekong Water Resources Assistance Strategy	1. Increased interconnectivity. Infrastructure. Development of economic corridors. 2. 'Balanced development'. Three key areas: 3S basin, Mekong Delta and Mekong subregion shared by Lao PDR and Thailand.	1.Six Mekong states 2.MRC, Cambodia, Lao PDR, Vietnam ADB also provides various types of assistance for individual hydropower projects in the region.	MOU with MRC. Flood Management and Mitigation Programme. Two actors liaising on ADB's work on 3S basin.
Australia	Old	1.Greater Mekong Subregion: Australia's Strategy to Promote Integration and Cooperation 2007-2011 2. Mekong Water Resources Strategy	1. Greater cooperation and connectivity. Infrastructure (including roads), energy, health, education, HIV/AIDS and Climate Change. 2. Regional cooperation, sustainable development and improving water management.	1. Cambodia, Lao PDR, Vietnam 2. MRC is designated a key partner. ADB and World Bank also identified as partners in 1 and 2.	Basin Development Plan, Environment Programme, Integrated Capacity Building Programme, Navigation
China	New	1.Opening the South Gate: cultural gifts and 'soft' loans 2.Going Out	1.Increasing economic ties and bilateral relations. Increasing trade. 2.Chinese private companies encouraged to build infrastructure projects abroad. Secure access to natural resources.	1.Cambodia and Lao PDR have received gifts and loans. 2.Cambodia and Lao PDR, but strategy is global and seen increased Chinese involvement in Africa and Asia.	No. Dialogue partner. Attends yearly meeting. Shares water level data in wet season to assist MRC flood forecasting.
Denmark	Old	A World for All: Priorities of the Danish Government for Danish Development Assistance 2008-2012	Climate Change, environment and poverty reduction. Favours a partnership approach	Cambodia and Vietnam. Special Environmental Assistance has also been provided to Cambodia, Thailand and Vietnam.	Basin Development Plan, Environment Programme, Fisheries Programme, Institutional Support

Finland	Old	Ex-ante Evaluation of Finish Development Cooperation in the Mekong Region. Strategy covers till 2010.	Regional Cooperation. Focus on water and environment sectors as resources for 'turning poverty into prosperity'. Three strategic areas: Governance, Livelihoods, and Transport and Communication	Vietnam	Hydropower Programme, Information and Knowledge Management Programme, Integrated Capacity Building Programme
India	New	Bilateral assistance	Bilateral assistance includes IT training, capacity building, funding for irrigation projects	Irrigation projects in Cambodia. IT training and capacity building Lao PDR and Cambodia.	No
Japan	Old	Official Development Assistance White Paper 2006	Capacity building, agriculture and forestry, rural development, environmental resources management	Cambodia, Lao PDR, Vietnam	Support to Hydropower programme formulation through ASEAN. Technical support. Agriculture, Irrigation and Forestry Programme.
Kuwait	New	'Soft' loans to Cambodia. No official strategy.	Infrastructure projects: irrigation, hydropower and roads	Cambodia	No

Qatar	New	'Soft' loans to Cambodia. No official strategy.	Agriculture. Investing in Cambodia's agriculture sector, including irrigation for rice farming, in order to secure access to crops.	Cambodia	No
Sweden	Old	Strategy for development cooperation with parts of Southeast Asia 2005-2009	Environmental protection, democracy and human rights, HIV/AIDS, and scientific cooperation. Regional cooperation designed to supplement bilateral priorities.	Lao PDR, Vietnam	Basin Development Plan, Environment Programme, Fisheries Programme
United States	Returning	Lower Mekong Initiative	Building capacity to manage natural resources. Four areas of support: Environment, health, infrastructure and education. Partnership approach.	MRC: sister-river partnership with Mississippi. Cambodia: forestry and land management training Vietnam and Thailand: clean energy development.	USAID facilitates a program of dispute prevention and management activities across the MRC.
World Bank	Multilateral Development Bank	1. Country Assistance Strategies for Cambodia, Lao PDR and Vietnam 2. Mekong Water Resources Assistance Strategy	1. Poverty reduction. Sectors including rural development, agriculture, and healthcare. 2. 'Balanced development'. Three key areas: 3S basin, Mekong Delta and Mekong subregion shared by Lao PDR and Thailand.	1. Cambodia, Lao PDR 2. MRC, Cambodia, Lao PDR, Vietnam World Bank also provides different types of assistance for individual hydropower projects in the region.	Water Utilisation Programme. Modelling work of this programme used in MWRAS. Mekong IWRM Support Programme. MOU with MRC

Chapter Five: The MRC at the intersection of actor relationships and discourses

1. Introduction

The MRC operates at the intersection of competing actor relationships and discourse. The reorientation of Mekong water cooperation in 1995 with the signing of the Mekong Agreement reflects and is situated in changes at the global water discourse level. The MRC is also at the intersection of discourses surrounding water resources cooperation, and water resources development. The global hydropower debate has included the incorporation of civil society concerns into processes such as the World Commission on Dams. Whilst spaces now exist, globally and regionally, to oppose and challenge hydropower plans, hydropower development is still viewed as a key development option.

Since 1995 concerns about the role and relevance of the MRC have been growing: these intensified with public awareness in 2007 of the resurrection of plans for lower Mekong mainstream dams. Civil society actors have accused the MRC of abdicating responsibility for the lower Mekong (TERRA 2007), whilst old donors have urged Member States to use the MRC more (Development Partners 2007). The debates about the relevancy of the MRC and the wider debates concerning IWRM and sustainable development in the Mekong illustrate how different actors conceptualise the space for transboundary water governance differently, and as such have differing ideas about the role of the MRC. The MRC and transboundary water governance are embedded within wider actor relationships and socio-political contexts, which condition its role and relevance. Actor relationships, both inside and outside of the water governance sphere, impact outcomes at the transboundary scale. Analysing this complexity is necessary in order to adequately consider key questions in the debate about the role and relevance of the MRC, such as the role of information and knowledge in decision-making.

Interview participants identified three key sets of relationships or dynamics, which are producing debates about, and conditioning the role and relevance of the MRC in current hydropower development debates. These are: one, interactions between state water and energy actors; two, interactions between old donors and Member States (which, in turn are partially conditioned by global discourses concerning water development and governance, and the concerns of civil society in donor states); and

three, civil society actors 'scaling up' their opposition to hydropower to the transboundary scale as the MRC is one arena in which alternative representations can be articulated.

2. Water and development debates at the global level

Water resources management and development have featured prominently in global development discourse since 1945. During this time water resources management paradigms have developed from a focus on harnessing water resources for mankind, to Integrated Water Resources Management (IWRM), which integrates economic, environmental and social concerns into water management. The global consensus about hydropower development has also shifted during this time period as social and environmental concerns have gained visibility and resonance at the international scale. This culminated in the World Commission on Dams process in 2000. However, hydropower has not disappeared as a development option, but has been repackaged as a debate about standards.

2.1. The global water resources agenda and Integrated Water Resources Management

Environmental issues have slowly risen in prominence on the international agenda since the 1960s. Initially concerns centred on particular environmental problems including acid rain, nuclear testing and sea pollution (Greene 1997). But in the 1970s international environmental conferences and new actors emerged, including the 1972 UN Conference on the Human Environment in Stockholm, and the UN Environmental Program. International treaties in the 1970s and 1980s were problem specific and focused on problems such as protecting the Ozone layer, and halting the trade of endangered species. In the late 1980s the focus shifted from specific problems, to the twin considerations of environment and development.

The 1987 Brundtland Report of the UN World Commission on Environment and Development (WCED) gave birth to the concept of sustainable development. Sustainable development was defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987: 43). However, the report did not define needs. Despite this, sustainable development has been promoted by the international community and transmitted through international conferences and agreements. The 1992 UN Conference on

Environment and Development in Rio resulted in *Agenda 21*, a comprehensive blueprint for sustainable development covering a wide range of issues including social and economic dimensions, conserving and managing resources for development, and strengthening the role of major groups (*e.g.* women, youth and NGOs). In 2001, eight Millennium Development Goals (MDG) were adopted by the UN and its' members. The MDG were derived from the 2000 United Nations Millennium Declaration. Goal 7 is to ensure environmental sustainability. This includes a target to halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation (UN 2007). The World Summit on Sustainable Development in 2002 in Johannesburg confirmed a full commitment to implementing *Agenda 21* and achieving the MDGs.

Water management and development became increasingly visible on the international agenda from the 1970s onwards. At first water was considered in a narrow and unproblematic fashion. For example, at the 1977 UN Conference on Water the focus was largely on water supply and sanitation, whilst the Brundtland Report only mentioned water in relation to pollution and water supply (Savenije and Van der Zaag 2008). However, in the 1980s and 1990s members of the water profession began to conceptualise water problems as multi-dimensional, multi-sectoral and multi-regional and filled with multi-interests (Biswas 2004). At the 1994 International Conference on Water and Environment in Dublin the four principles which underpin IWRM were defined (GWP 2000). Briefly the principles are: one, water is a finite and vulnerable resource that is essential to sustain life, development and the environment; two, water development and management should be based on a participatory approach; three, women play a central role; and four, water has an economic value and should be recognised as an economic good (GWP 2000). According to the Global Water Partnership (GWP) these principles have gained universal support in the international community (GWP 2000). The development and definition of IWRM has been an expert-led process (Varis *et al.* 2008a). The Dublin Principles informed the 1992 Rio Conference and the discussion of Chapter 18 of *Agenda 21*, which focused on water. Following these two conferences the GWP was established in 1996 by the UNDP and the World Bank, with a secretariat in the Swedish International Development Agency (SIDA) in Stockholm (GWP 2006a). GWP activities include developing a conceptual framework for IWRM, contributing to its implementation and developing Country Water Partnerships with states around the globe (GWP 2006a). The definition of IWRM

developed by the GWP is widely utilised, including in the lower Mekong states, the ADB and the MRC.

IWRM has been presented as a paradigm shift in water resources: a shift from exploiting water resources to integrated management (Savenije and Van der Zaag 2008). As an approach IWRM draws on the principles of efficiency, equity and environmental sustainability, and argues that “waters should be used to provide economic well-being to the people, without compromising social equity and environmental sustainability” (Varis *et al.* 2008b: 146). IWRM, like sustainable development, seeks to integrate these three goals within the same framework. This differs from previous ideas about development, which suggest an ‘either/or’ picture: a choice between economic development on the one hand and the environment/social concerns on the other.

However, civil society representatives interviewed for this thesis argued that in the lower Mekong states officials and developers still conceptualise development in ‘either/or’ terms:

“A large part of our work is to dispel the myth believed by state officials and communities that wildlife conservation is counter to development, that you have to choose between people and animals, it is possible to have both” (Civil society representative, interview, 06/08b).

“The discussion that the government needs to have, which is not happening now, is hydropower the most appropriate development option for Laos given that most Lao communities are dependent on natural resources. Hydropower increases GDP but it undermines the natural resource base. The government is focused on hydropower, on electricity, they are happy to sacrifice the environment and local communities’ livelihoods” (Civil society representative, interview, 07/08b).

IWRM features in lower Mekong government strategies but there are concerns about how to implement it and how to integrate economic, social, and environmental concerns (discussed further below). This integration is also widely debated in the academic literature as it is unclear how to balance these three goals, which may be antagonistic (Molle 2008a).

IWRM is widely accepted at the international level: it features in conferences and statements of action such as the 2002 World Summit on Sustainable Development; and it is promoted by international actors such as the World Bank, the United Nations and GWP. It has also been adopted into national water laws and plans, including the 2007 Cambodian Water Law. The spread and dissemination of IWRM is often presented as natural, technical and unproblematic. For example, the GWP (2006a) argues that IWRM emerged out of a growing awareness of the problems of past water practices. This

suggests that once policy and decision-makers recognised there was a problem, a solution was devised. This obscures the social and political processes surrounding the development of IWRM.

IWRM, despite its popularity, is still a contested concept. Concerns have been expressed that adoption of IWRM allows actors to repackage old projects, to continue business-as-usual under a new label, and to use this to gain access to new funds or more international legitimacy (Biswas 2004; Molle 2008a). The paradigm reformulations which paved the way for IWRM are compatible with both large-scale infrastructure solutions and state centralisation of water control (Trottier 2008). Biswas (2004) argues that IWRM is a vague concept and actors' ideas of what it means vary widely. This ambiguity in meaning partially explains the popularity of IWRM (AMRC 2007b: 3). Sustainable development is also ambiguous: Brundtland's broad definition is at the root of a number of controversies, and scholars are unclear how to operationalise and measure sustainable development (Banerjee 2003). However, states and organisations, including those in the lower Mekong and the MRC, have made commitments to IWRM and sustainable development. Within these commitments and the work to operationalise them, both concepts are treated as technical and unproblematic.

2.2. Hydropower debates and the World Commission on Dams

Changes in water resources and environment paradigms at the global level were debated in a context of growing civil society and local community concerns about hydropower dams. Civil society groups, environmental activists and communities coalesced into loose alliances around particular dams and campaigned to gain space on the international agenda. Controversial projects included the Narmada Project in India (a series of 3200 dams in the Narmada River basin), the Ilisu Dam in Turkey, and the Belo Monte Hydro-electric complex in Brazil. Movements included the Brazilian Movement of Dam Affected People, formed in the 1980s in response to big dam projects in Brazil, and the Assembly of the Poor, in Northeast Thailand. Civil society groups and movements focused a large amount of attention on the World Bank and the hydropower dams it had funded (Imhof *et al.* 2002). In 1994, over 2000 organisations signed the Manibeli declaration calling for the World Bank to establish a review of all Bank-funded large dams (Imhof *et al.* 2002). The first conference of dam affected people was held in Curitiba, Brazil and called for a moratorium on dams and a comprehensive and independent review. Following a meeting of diverse dam-related

stakeholders convened by the World Bank and the International Union for Conservation of Nature (IUCN) in 1997, the World Commission on Dams (WCD) was established in 1998 in response to growing opposition to large dams, which included protests at dam sites around the world (Dubash *et al.* 2001; Imhof *et al.* 2002).

The WCD mandate was to review the development effectiveness of dams and develop criteria, guidelines, and standards for the future of dams. It consisted of 12 commissioners and a Forum with 68 members. The work of the WCD included: brief reviews of 125 dams in 56 countries; in-depth case studies of 8 dams; papers reviewing the overall dam-building record of China, Russia and India; 17 thematic reviews; four public hearings; and 950 submissions by individuals, groups and institutions (Imhof *et al.* 2002). The 2000 WCD report argued that whilst dams had made a significant contribution to human development, in too many cases, an unacceptable price in terms of displacement of people and social and environmental costs had been paid to secure those benefits (WCD 2000). The report proposed seven strategic priorities to guide future dam decision-making, and 26 guidelines of good practice for complying with the strategic priorities. However, the World Bank endorsed the principles of the WCD but not the framework. Civil society actors in the lower Mekong are concerned that the development banks and the dam-building industry are unwilling to commit to the WCD-recommended minimum set of guidelines, which they feel are necessary to develop a hydropower project “that would truly allocate costs and benefits to all involved in a democratised process” (Civil society representative, interview, 04/08b).

Dam development is still extremely controversial and contested by civil society actors. Nam Theun 2 in Lao PDR was the first World Bank supported dam after the WCD process and was the subject of an intense and divisive global debate (Lawrence 2009). Civil society actors have been pressurising donors and the hydropower industry to apply the WCD strategic priorities and guidelines. However, some parts of the hydropower industry have responded by formulating their own standards. For example, the International Hydropower Association (IHA) has generated its own set of guidelines, the IHA’s *Sustainability Protocol*. The IHA is an industry association formed by the UN’s Educational, Scientific, and Cultural Organization in 1995 to disseminate good practice and knowledge, and advance the role of hydropower in meeting energy needs (IHA 2006). The IHA’s *Sustainability Protocol* guidelines mirror those of the WCD as a tool for decision-makers and were piloted between 2008 and 2010 through the Hydropower Sustainability Assessment Forum. This Forum included representatives from developing and developed countries, NGOs, researchers, banks and

hydropower companies. The Forum held meetings at various strategic locations, including the Yangtze River in China, did quick audits of projects, and held public consultations. Civil society actors in the Mekong, such as MPOWER, a network of researchers and organisations whose coordination unit is based at Chiang Mai University, Thailand, engaged with the IHA process.

3. The impact of global water resources debates in the lower Mekong

Changes in orientation in the global debates on water management, development and hydropower have been mirrored in the Mekong region illustrating the links between the global, regional and national levels of environmental discourse. Implementation of global ideas in regional and national contexts is difficult and in some cases has proved controversial. Sustainable development and IWRM have been, officially and rhetorically, adopted by the four states of the lower Mekong both individually and collectively through their cooperative arrangements in the MRC and collaborative work with the development banks. However, this is not as straightforward as it sounds. Both sustainable development and IWRM are contested concepts. Rhetorical adoption of them can allow for business-as-usual.

3.1. Sustainable development and the Mekong River Commission

The signing of the 1995 *Agreement on the Cooperation for the Sustainable Development of the Mekong River* committed the four lower Mekong states to cooperate in all fields of sustainable development. The MRC is committed to sustainable development as defined under *Agenda 21* (MRC 2005), and its vision for the basin is an “economically prosperous, socially equitable, and environmentally sound Mekong River Basin” (MRC 2006), which mirrors the 3E principles incorporated in IWRM. The stated overall goal of the *MRC Strategic Plan 2006-2010* is to support the Member states for “More effective use of the Mekong’s water and related resources to alleviate poverty while protecting the environment” (MRC 2006: 24). This is supported by four goals which relate to the role of the MRC: one, “promote and support coordinated, sustainable and pro-poor development”; two “enhance effective regional cooperation”; three, “strengthen basin-wide environmental monitoring and impact assessment”; and four, strengthen the IWRM “capacity and knowledge base of the MRC bodies, NMCs, Line Agencies, and other stakeholders” (MRC 2006: 24). Strengthening the IWRM

knowledge base involves providing training for various MRC actors. Training is conducted by outside experts. The vision and goals of the MRC are in line with the global level environmental discourse as they emphasise elements such as cooperation and balancing the needs of economy, society and the environment, as well as placing sustainable development centre stage.

As opposed to the earlier Mekong Committee, which developed Basin Development Plans for mainstream and tributary hydropower and identified/studied a range of project sites, the sustainable development-orientated MRC talks of helping countries to identify the development space, trade-offs, environmental concerns and the ecological balance of the River (*e.g.* MRC 2006). The language of sustainable development is operationalised by both the MRC and government representatives in private meetings and public forums. For example, at the 2008 MRC's Regional Multi-Stakeholder Consultation on the MRC Hydropower Programme, the Lao government representative gave a presentation on state hydropower plans, which utilised the assumptions of the dominant narrative (see Chapter Three) to link socio-economic development and sustainable development:

“hydropower development in Laos will help the development of the people. It is important that we work together to ensure accountability and transparency of environmental and social impacts and thereby achieve sustainable development (Lao state official, observation notes, MRC meeting, 09/08).

Within this statement hydropower, with consideration for its social and environmental aspects, is a tool for achieving sustainable development. Civil society representatives present at the meeting questioned the links made between hydropower and sustainable development:

“Hydropower to date has been unsustainable. Hydropower exacerbates poverty, it does not reduce it. It cuts communities off from natural resources that they need” (Civil society representative, observation notes, MRC meeting, 09/08).

“you have to sacrifice fish and forests to build dams. How do you compensate for that? Studies show it can't be mitigated” (Civil Society representative, observation notes, MRC meeting, 09/08).

The above statements illustrate that state officials and civil society representatives understand and define sustainable development in different ways. They also place emphasis on different elements. State officials emphasise the potential economic

benefits, whilst civil society actors emphasise its negative social and environmental impacts.

Sustainable development is a contested concept. Banerjee (2003) argues that, despite claims of a paradigm shift, sustainable development is based on an economic not an ecological rationality and that its imposition on developing countries is problematic. In terms of the Mekong, Lang (2006) argues that for Member States the 1995 Mekong Agreement represents “an ambitious management plan for the Mekong River” that they were “calling sustainable development” and entailed both mainstream and tributary dams as tapping the energy potential of the Mekong in the most profitable way was high on the agenda (552). This illustrates how incorporation of new concepts can be viewed as a discursive device to re-package projects and goals under a new label. This allows for the promotion of a certain development agenda, and does not necessarily represent a change in how powerful actors conceptualise development.

3.2. IWRM in the lower Mekong

In order to achieve its vision the MRC has adopted IWRM. In the 2005 *Strategic Directions for IWRM in the Lower Mekong Basin* the MRC identified eight strategic priorities including economic development and poverty alleviation, environment protection, integration through basin planning, and regional cooperation. The MRC’s current strategic plan which runs to 2010 states that the MRC will focus its efforts on basin-wide projects and plans, transboundary projects and national projects with significant/cumulative basin-wide implications (MRC 2006: iv). As part of the work of the Basin Development Plan (BDP) programme, an *IWRM Based Basin Strategy* is currently being developed. This strategy will guide implementation of IWRM at the various levels and provide a planning framework and directions to guide the long-term sustainable development of the lower Mekong. The IWRM Based Basin Strategy is one of the three elements that will constitute the Rolling IWRM Basin Development Plan that is currently being produced by the MRC (the other two elements are a Project Portfolio and Development Scenarios).

At the national level the four riparian states have made commitments to IWRM, for example to the World Summit on Sustainable Development 2002 Plan of Implementation, which committed states to developing IWRM and water efficiency

plans by 2005.⁸ New water laws have been drafted in the four lower Mekong states to reflect IWRM principles, for example in 2005 in Lao PDR and 2007 in Cambodia. These new laws have draft status in Thailand and Vietnam and include provisions for the establishment of river basin organisations. Similarities in national water policies can be partially explained by the fact they have been guided by mainstream thinking and by measures prescribed by development agencies and banks (IWMI 2006). For example, Apex bodies have been promoted by the ADB as best practice in water management (IWMI 2006). Apex bodies, such as the WREA in Lao PDR have been established. The pursuit of IWRM in the national context has largely centred on legal aspects and civil society actors are concerned that there has only been limited application of IWRM to date (Turner *et al.* 2009).

Mekong state officials at MRC meetings have expressed concerns about their capacity to implement IWRM, and expressed confusion over what IWRM means:

“There is not a clear definition of IWRM. What does it mean? Somethings can’t be implemented because touch on our different national contexts” (State official, observation notes, MRC meeting, 05/08).

“We don’t have the capacity to apply IWRM. The Minister always says to me, “you are always on about IWRM, but how?”” (State official, observation notes, MRC meeting, 06/08).

The implementation of IWRM in the lower Mekong is further complicated by the fact that the four states are committed to both national and regional IWRM. How to balance the three goals of IWRM in a regional context where state actors are emphasising infrastructure development as a way to meet growing energy needs and contribute to poverty reduction and socio-economic development is highly debated. Organisations, such as the MRC, have suggested trade-offs as a potential solution. These issues are considered in Chapter Seven.

4. Hydropower development in the lower Mekong: an intensifying debate

Concepts such as *sustainable development* and *IWRM* are utilised by a range of actors in the current debate over the development future of the basin. These concepts demonstrate the interplay between the environmental discourse at the global level and in

⁸ Implementation of this target has been complicated. A Global Water Partnership survey, conducted at the end of 2005, found that of 95 states surveyed 21% had made good progress, 53% some progress and 26% were in the initial stages (GWP 2006b).

specific regions and locales. Whilst a range of actors with different interests and goals debate and use these concepts they are usually proffering competing visions for the Mekong and emphasising different issues. The adoption and utilisation of these concepts by more powerful actors is not necessarily a co-option of the terrain of actors who contest Mekong hydropower development, but it does have a number of possible effects. One, it creates an environment whereby all actors are speaking the same language, albeit meaning different things; two, it allows powerful actors to incorporate the concerns of less powerful actors into their discourse and thereby extend their power; and three, it can allow powerful actors to re-dress old projects as new ones.

For example, the Nam Theun 2 hydro-electric project in Lao PDR was originally conceived by the French colonial authority in 1927. It has gone through various incarnations, but after the WCD and the incorporation of other concerns into development projects and plans, it has been recast as a social development project, which includes a number of elements not necessarily directly related to building a hydro-electric dam: livelihood components and elephant conservation. As such NT2 has been repackaged (although it is still justified in terms of the dominant regional discursive formation):

“In NT2 we are developing not just a hydropower project. We support it because it will help to reduce poverty. This is an attractive project for Laos and hydropower is one main driver of growth. We are working with the government to track all revenue and it is then allocated for poverty reduction” (Development bank representative, interview, 03/08).

Consequently, the scope of the debate changed. Proponents of hydropower projects incorporated NGOs’ concerns (*i.e.* resettlement, conservation, and environmental concerns) into their justifications for projects. This affects the nature and terms of the discursive struggle between actors to determine the development vision and direction for the Mekong (see Chapter Seven).

Questions and concerns about hydropower development in the lower Mekong have slowly built from the 1970s. Rudimentary social and environmental concerns appeared in the grand development plans of the Mekong Committee, such as the 1988 *Perspectives for Mekong Development*. Nodes of resistance and struggles have formed around particular dams. High profile examples include the Pak Mun dam in Thailand, and the Nam Theun 2 dam in Lao PDR (see Chapter Four). The constellation of actors involved in these hydropower projects includes local actors, global civil society actors,

development banks, and donors. This illustrates that water resources development transcend scalar levels and involve a wide range of disparate actors.

Hydropower has been promoted as a development option for the Mekong since the 1950s (see Chapter Three). Whilst hydropower was proposed for the Mekong mainstream none of the grand plans ever came to fruition. Tributary hydropower was developed in a number of places, including Nam Ngum in Lao PDR. Powerful actors, such as the ABD and World Bank, argued that the majority of the Mekong's remaining hydropower was in the tributaries, and that the development of mainstream hydropower was unlikely:

“even a run-of-the-river dam would inundate a comparatively large area and would have major impacts on fish migration in that stretch of the river. Such development would pose serious ecological, social and economic risks that could outweigh the potential benefits from power generation” (ADB and World Bank 2006: 15).

Civil society actors considered plans for mainstream hydropower dams to be “things of the past”. At meetings observed for this thesis civil society representatives repeatedly referred to these dams as “old dams” and “1960s dams” (Civil Society Representative, observation notes, MRC meeting 03/08; Civil Society Representative, observation notes, MRC meeting 09/08). Prior to 2007 actors, such as the development banks and civil society organisations, focused on tributary projects.

In 2007, interest in damming the mainstream of the Mekong erupted in the public arena. Official announcements were made about MOUs signed between the governments of Lao PDR and Cambodia and a number of private sector companies, including the Malaysian company Megafirst, to conduct feasibility studies into mainstream dam locations (see Map 3, p.6). Initially, civil society groups were aware of six projects (TERRA 2007). By 2008, this figure had grown to eleven. These mainstream dam projects are the latest incarnation of the original dams proposed and studied by the Mekong Committee (see Chapter Three). Civil society actors were largely unaware of the plans to resurrect these proposed dams, and expressed surprise that these “old dams” are being considered again:

“in this last iteration, I feel like it only came back in the last year...nobody mentioned it...in 2006. It was not on the agenda, the mainstream dams, I mean nobody was talking about it...I mean it was like 2007. But then I mean that's the thing if the government was talking about this we wouldn't even know...because how would we know” (Civil society representative, interview, 06/08a).

“A lot has changed in the last few months. I’m surprised to see we are still talking about these issues. Assessments in the 1960s showed that these dams would have massive consequences for fisheries and they were not built. But, now in the past twelve months the pace of development has accelerated and we are talking about these dams again” (Civil society representatives, observation notes, MRC meeting, 03/08).

Interest and debate over proposals for mainstream dams is rife both within the region and globally. Civil society actors based in the Mekong as well as media and civil society from outside are actively engaging in the debate. Key focuses of the debate include local livelihoods, fisheries, mitigation of fisheries impacts, the role of the MRC in mainstream dams, and to a lesser extent whether these dams are needed.

The renewal of interest in mainstream hydropower has intensified the debate about how to develop the water resources of the Mekong. State officials, both in interviews for this thesis and public meetings, thesis located hydropower within a narrative linking it to poverty reduction and development. Meanwhile, other actors accused state officials of “1960s thinking”:

“Our region is endowed with natural resources. Hydropower can help poverty alleviation and provide mutual benefits” (State official, observation notes, MRC meeting 09/08).

“The people need development. Hydropower is a top priority. We need more electricity to develop. Development means the people will not be so poor” (State official, interview, 06/08c).

“in other places the precautionary principle would be applied. But the way in the Mekong is that developers will do what they want unless someone proves to them otherwise, in that way, in the Mekong, development is still being done in the 1960s/1970s way” (Expert, interview, 05/08).

State officials’ rationales for hydropower are located at the national scale. In contrast, civil society actors are arguing from the basis of communities, and focus on the livelihood and fisheries impacts of hydropower development. Consequently, the claims, arguments, and justifications are located over different scalar levels of analysis.

5. Debates about the role and relevance of the MRC

One of the key ways in which the challenges to the dominant regional discursive formation have been articulated is through the relevancy debate surrounding the MRC. Civil society groups have targeted the MRC as a mechanism to express concerns over

proposed hydropower plans, and to access development debates in a region where civil society is largely weak and lacks links to state agencies (see Chapter Four). The MRC has participation processes, such as inviting NGOs to regional meetings, which allow certain civil society actors to engage with state representatives. Donors and civil society organisations have expressed concerns about the role of the MRC (Hirsch and Jensen 2006). However, the proposed mainstream dams have intensified the debate and “signal an especially critical time for MRC...[as how]...MRC addresses key concerns and balances different interests in the basin will have significant bearing on MRC’s perceived relevance to its member states, donors and the people of the basin”. (Lee and Scurrah 2009: 6). As outlined below, a number of interview participants echoed this view, arguing that this is a crucial moment in the history of Mekong water cooperation.

5.1. Background to the relevancy debate

Against a backdrop of regional conflict and instability the signing of the 1995 Mekong Agreement was heralded as a landmark step forward in Mekong cooperation (*e.g.* Jacobs 2002). Old donors to the MRC welcomed the Mekong Agreement as “a constructive state-of-the-art development framework with a primary concern for the environment and the peoples whose livelihoods depend on the river” (Hirsch and Jensen 2006: iii). Consequently, from its beginnings in the mid-1990s the MRC was the object of a large amount of goodwill from different actors. State officials, as well as donor representatives have interpreted the Mekong Agreement as a development agreement, albeit with caveats. However, civil society actors interpret the 1995 Mekong Agreement as primarily an environmental and social agreement, which does not allow hydropower development:

“We share the need to develop, and the agreement will help us to do that. It will help us with room to compromise based on the real need for development” (State official, interview, 06/08b).

“the agreement has a huge development flavour. It’s a development plan almost for the river, with environmental and livelihood concerns integrated into it” (Donor representative, interview, 05/08b).

“The Mekong Agreement was meant to signal a move towards sustainable development, environmental protection and river management. Large dams represent an outdated development model and the MRC is failing to ensure compliance with the 1995 Agreement (Civil Society representative, observation notes, regional civil society meeting, 02/08).

As outlined above, as opposed to the Mekong Committee, which focused on infrastructure development, the MRC is officially and rhetorically committed to sustainable development. To a certain extent the MRC is an organisation with a bifurcated mandate: the Mekong Agreement commits the four lower Mekong states to coordinate in all fields of sustainable development (including hydropower), and develop a Basin Development Plan, simultaneously the organisation is committed to protecting the ecological balance of the basin (MRC 1995). Different actors with different development representations of the lower Mekong have emphasised one or the other of these aspects.

Water resources developments in the basin resulted in actors questioning the role of the MRC. These developments included Chinese dam development on the Upper Mekong, the Nam Theun 2 hydroelectric project, the Chinese-led navigation channel improvement scheme (which involved Myanmar, Thailand and Lao PDR), and the social and environmental impacts of the Vietnamese Yali Falls dam on Cambodian communities living downstream (Dore and Lazarus 2009). The MRC was either not involved or became involved in these incidents at a later stage or to a minimal degree. For example, the MRC first alleged that it did not have a mandate to intervene in the Se San/Yali Falls Dam, in contrast to other actors who alleged it did have a mandate to intervene (Dore and Lazarus 2009). The MRC Secretariat became involved after impacts had been reported, organising a taskforce to visit the area and convening a meeting between the Cambodian and Vietnamese NMCs.

The above issues cultivated a growing perception, amongst donors and civil society actors, of an organisation absent from the important decisions and debates in the Mekong:

“people have been saying for years that...MRC is not involved in the big decisions of the Mekong...[and] there’s been this question of where, where is the MRC” (Civil Society representative, interview, 06/08).

“the long development of the problems which are related to the MRC are not new, we have been discussing these things are lot. The organisation needs to become stronger. The MRC has been passive. They need to increase their role, their visibility” (Donor representative, interview, 05/08c).

Both civil society actors and donors interviewed for this thesis were concerned that the MRC was not involved in important debates, decisions, and projects. This illustrates how questions about the role and relevance of the MRC originated both within and

outside of the MRC. By 2006, donors to the MRC and some civil society actors perceived the MRC as at an impasse, and that it was ‘crunch time’ for the organisation (Hirsch and Jensen 2006).

The ‘Independent Organisational, Financial and Institutional Review of the Mekong River Commission Secretariat and the National Mekong Committees’, (hereafter Organisational Review), was initiated in 2006. It was conducted by a team of eight experts (four international, and one from each Member State). Its report argued that the review was “initiated by the MRC member countries and the MRC donors in order to help MRC meet the organisational and strategic challenges that the institution will be facing in the future” (MRC 2007a). The review issued 35 recommendations for the organisation, including riparianisation and increased Member State financial contributions (MRC 2007a). MRC donors were heavily involved in initiating the Organisational Review:

“in donor side they allocate money but not get anything from it, did not see any development in the organisation. They think that the Member Countries ignore the MRC. So they wanted a review” (State official, interview, 05/08b)

“When we talk with the donor community they were always concerned with ownership, want countries to take more ownership. So they want to come up with recommendations for this” (State official, interview, 06/08b).

“This external review was financed by the donors: we have been waiting for a while to see some change” (Donor representative, interview, 04/08).

During the same time period, a joint research project on the MRC was conducted by the Danish International Development Assistance (DANIDA) and the University of Sydney. The impetus behind this research project was a “perception that donor assistance to the MRC’s capacity development was not taking the MRC forward as an engaged river basin organisation” (Hirsch and Jensen 2006: xv). An international conference on the MRC was also held in Hanoi in 2007, bringing together the MRC, and development partners such as donors and the development banks to discuss how to “strengthen the MRC as a politically and technically important intergovernmental mechanism for the sustainable development of the Mekong Basin” (MRC 2007b).

These three activities, which took place almost simultaneously, illustrate how a number of actors were expressing concerns about the MRC. A number of key messages can be extracted from these activities, including: the NMCs do not have a high profile in Member States; the MRC should work closely with the development banks;

stakeholders should be more involved in the MRC and there should be more stakeholder participation and communication; and, donor involvement is important. The involvement of donors and the development banks in these activities demonstrates how different actors represent water cooperation in different ways and have conceptualised the MRC in particular ways. An underlying theme in these three activities is that the MRC is weak and needs to be strengthened. This is an interpretive grid which involves representing the problem and the solution in particular ways.

Problem and solution framing are integral ways in which actors position themselves in development. The ADB and World Bank's MWRAS strategy illustrates how the development banks have formulated the problem and solution of transboundary water resources governance in ways which justify their increased involvement. The MWRAS argues that the MRC is a key regional institution (ADB and World Bank 2006). But, it has "substantial flaws and weaknesses", which mean that Member States are beginning to view it as a hindrance rather than a help: perceiving it "as a regulatory agency imposing rules instead of helping to solve problems" (ADB and World Bank 2006: 5-6). The development banks express the concern that if the MRC fails to live up to its members' expectations "that it should grow into an organization capable of supporting the countries in making wise decisions for balanced investment and integrated management of the water resources, the current, growing level of trust in regional cooperation will be undermined" (ADB and World Bank 2006: 5).

In this context, the MWRAS argues, development partners have a responsibility to foster cooperation and play a strong role because of their skills and experiences. The argument running through the MWRAS constructs the problem in a particular way (the weakness of the MRC threatens gains made in regional cooperation), and also provides a solution (the involvement of the development banks). The development banks' solution to this problem involves pursuing a number of key activities over a 5 to 7 year period that will contribute to building the capacity of the MRC, as well as strengthening IWRM capacity at multiple levels, and helping the countries to manage and develop the shared sub-basins of the Mekong (ADB and World Bank 2006). As such, the development banks present themselves as the solution to the MRC's weakness, justifying extension of their involvement in transboundary water governance.

5.2. The MRC, hydropower and contested roles

Increasing awareness of plans for lower mainstream dams amongst civil society actors intensified questions surrounding the role of the MRC. Civil society actors interviewed for this thesis expressed concerns that the MRC was failing to respond to the renewed hydropower push: “where, where is the MRC?” (Civil Society representative, interview, 06/08a). MRC donors have also expressed concerns about the role of the MRC in the region’s hydropower debate and development:

“the MRC has been in a limbo in terms of its involvement in development in the region. Now development will bring changes to the basin and the MRC needs to be involved, they can do it, they have the capacity, but will they do it?” (Donor representative, interview, 05/08b).

However, donors have largely chosen to express their concerns through MRC forums and private meetings. In contrast civil society actors have utilised the media to target the MRC and access debates.

Civil society concerns gained visibility and resonance at the MRC level in November 2007 when Thai NGO, TERRA held a press conference in Bangkok. This was to publicise a letter sent by TERRA to the MRC to coincide with the MRC’s annual governance meetings. TERRA charged the MRC with “an extraordinary abdication of responsibility” as it had remained “notably silent” on the proposed mainstream dams (TERRA 2007). TERRA argued that the MRC should fulfil its mandate, as derived from the 1995 Mekong Agreement, and also urged donors to review and reconsider funding to the organisation (TERRA 2007). Donors at the MRC’s 2007 Donor Consultative Group Meeting issued a statement urging the MRC to show leadership in the assessment of development initiatives (Development Partners 2007). The statement also expressed concern that stakeholders are not being consulted and the impacts of dams on fisheries and livelihoods are not receiving adequate attention (Development Partners 2007). Comments were also expressed at the meeting that donors were also unclear about the MRC’s role in relation to the proposed mainstream dams (Observation note, MRC meeting, 11/07). Concern about the impacts of dams on livelihoods and fisheries is a recurring theme in donor comments at MRC meetings (*e.g.* MRC 2008a; MRC 2008b). This is explored further in Chapter Seven.

The MRC’s initial response to the concerns of civil society, as expressed in TERRA’s November 2007 letter, was that the MRC was an intergovernmental organisation which served the needs of its Member States (Bird 2008a). TERRA

deemed this as a failure to respond and a contradiction of the MRC's 'Strategic Plan' (TERRA 2008). In March 2008, TERRA sent a second letter to coincide with the appointment of a new MRC CEO. In this TERRA argued that the "need for a credible and effective river basin management organisation in the Mekong Region has never been more apparent, yet for the MRC a crisis of legitimacy and relevancy is looming" (TERRA 2008). The letter asked for clarification of the MRC's Procedures for Notification, Prior Consultation and Agreement (PNPCA). The PNPCA were approved in 2003. The procedures cover both tributary and mainstream uses of the Mekong and Member States' commitments to provide information and notice to the MRC about development projects. TERRA also called for the public disclosure of documents and research, including a MRC review of the EIA for the proposed Don Sahong dam in southern Lao PDR (TERRA 2008). Civil society actors have continually called for the Don Sahong EIA to be released. For example at the 2008 MRC Hydropower Consultation regional NGO representatives asked for the EIA to be made public (Civil society representative, observation notes, MRC meeting 09/08). The MRC argues that it cannot release this review as it was commissioned by the Government of Lao, who have not authorised the MRC to release it (Bird 2008a). This response utilises the MRC's status as an intergovernmental organisation as its justification.

The MRC operates at the intersection of discourses and actors surrounding development of the Mekong. Debates over its role and relevance partially stem from how different actors interpret the MRC's mandate. Hydropower is mentioned in the 1995 Mekong Agreement and there are a number of articles which relate to the MRC's role. These include, amongst others:

- Article 1: parties will cooperate in all fields of sustainable development including hydropower;
- Article 2: 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 programs through the formulation of a basin development plan, that would be used to identify, categorize and prioritize the projects and programs to seek assistance for and to implement at the basin level" (MRC 1995);

- Article 3: parties agree to protect the environment and the ecological balance from harmful effects resulting from pollution or “other harmful effects resulting from any development plans” (MRC 1995).

According to these articles the MRC has a role in the development of the basin. This role includes support and coordination. The MRC is also mandated to protect the environment, which suggests a dual role in hydropower.

As presented above, actors have conceptualised the 1995 Mekong Agreement in different ways. State officials interviewed for this thesis argue that it is a development agreement. This representation is largely premised on Article 2 and the commitment to develop a Basin Development Plan:

“The 1995 Agreement says we must have a basin development plan. This plan will guide development: it is like the engine of a car. We will develop the river for mutual benefit. If one country wants to build a dam and it will impact other country, we will have compromise, its called a trade-off, and this is in our agreement” (State official, interview, 06/08b).

In contrast NGOs, such as the Thai People’s Network for the Mekong and the Rivers Coalition in Cambodia (RCC), argue that the MRC’s role should be reviewed to “ensure it is acting in a manner befitting an objective, scientific river basin management organization that it was set up to be” (Thai People’s Network for Mekong and RCC 2008). These two NGOs publicly requested that the MRC call for a moratorium on dams until scientific evidence has been collected, placed in the public domain and a consensus reached (Thai People’s Network for the Mekong and RCC 2008). Other civil society actors interviewed for this thesis emphasised the environmental role of the MRC, which they argue means that the MRC should be involved in hydropower debates and advocating on behalf of the environment:

“The MRC should play a strong role in hydropower, that’s part of it mandate. It is meant to maintain the ecological balance, and hydropower is the greatest threat to the ecological health of the river” (Civil Society representative, interview, 04/08b).

These statements by different actors identify a number of roles for the MRC: development, management, and environmental protection.

The MRC has defined its role as a “mature, effective and efficient knowledge-based River Basin Organization” (MRC 2006: 1). MRC representatives interviewed for

this thesis conceptualised this knowledge-based role as a key strategy through which the MRC can access current development debates:

“The first thing is to produce good quality information. This is where we can add value. If the organisation has good quality information it can get a place at the table” (MRC representative, interview, 07/08a).

Implicit in this is the assumption that decision-making is a neutral process involving assessing the available information to select the best option. However, civil society actors argue that this is not necessarily the case:

“The MRC is producing good information, but it doesn’t get out into the public domain. And none of that information on water utilisation, on fisheries is being taken up by the governments in decision-making” (Civil Society representative, interview, 06/08a).

The MRC defining its role as knowledge-based, raises questions about the process of knowledge-generation, its accessibility, and the utilisation of knowledge in informing decisions (AMRC 2008: 5). Politics are involved in both the generation of knowledge and its utilisation in decision-making (see Chapter Seven).

The debate over the role of the MRC in hydropower and development raises the principle of sovereignty. The MRC is an intergovernmental organisation. Consequently, the MRC has no authority to act ‘over’ its members or compel them towards certain actions. The MRC’s space for action is constituted by its intergovernmental status, its mandate and its constituency. In the case of the MRC this is further complicated by the fact that a multitude of actors other than the four Member States play a role in the cooperation. These actors combine to create spaces for action for the MRC that are not necessarily congruent with individual actors’ priorities and interests. For example, the formulation of MRC programmes is a process which involves both the four lower Mekong states, the donors who want to support the programme, and the MRC Secretariat:

“The donors have the money and a little more capacity in certain areas. They are interested in certain areas and this feeds into the programme development. The programme formulation cycle provides opportunities for interaction between donors and the countries and then there is general agreement on what should be done. Each programme has aims, goals and work packages, and is negotiated” (MRC official, interview, 07/08b).

These negotiated outcomes orientate the MRC towards particular areas, including fisheries research, developing procedures for water utilisation, and navigation. Despite developing a Hydropower Strategy in 2005, the MRC did not receive funds until November 2007 to develop a hydropower programme. In January 2008 the MRC hired a consultant to help define the programme and its content. The proposed programme was the subject of a regional consultation in 2008 involving a range of actors, including state representatives, fisheries scientists and civil society representatives (MRC 2008b). The length of time which it took to initiate the MRC's Hydropower Programme contributed to the perception that the MRC was not involved in the 'big issues' of the Mekong.

The MRC has been largely absent from tributary hydropower. Backer (2007) argues that this is because of the MRC's limited definition of tributaries. The MRC defines a tributary as a "natural stream of the Mekong River System whose flows have a significant impact on the mainstream" (MRC 2003b). This definition acted as an incentive to the Member States to develop tributary projects and made the MRC largely irrelevant to these plans (Backer 2007). However, mainstream hydropower is widely accepted to fall under the purview of the MRC and the organisation spent 2008 and 2009 trying to define its role.

Renewed interest in mainstream hydropower development resulted in the MRC fast-tracking certain activities including: convening a 2008 Fisheries Expert Group Meeting to discuss the fisheries impacts of mainstream hydropower and possibilities for mitigation; and a 'fast-tracked' development scenario based on the proposed lower Mekong mainstream dams. These activities and others coalesced into the Initiative on Sustainable Hydropower (ISH) in 2009. The ISH includes a number of existing activities such as the MRC's joint work with ADB and WWF on *Environmental Criteria for Sustainable Hydropower Development* as well as new activities including a strategic environmental assessment (SEA) of the proposed mainstream dams (MRC 2009b). These activities are orientated towards knowledge generation, dialogue facilitation and the development of hydropower standards (MRC 2009b).

6. The wider hydropolitical constellation: interactions between different actors

The relevancy debate surrounding the MRC illustrates how the MRC is a key arena through which multiple actors deploying strategies over various scalar levels confront each other, negotiate, and cooperate. Debates and outcomes at the

transboundary cooperation scale (the MRC) are embedded in and conditioned by the overlapping power relationships of different actors operating over and transcending different spatial scales. Three sets of interactions are important: state water and energy actors; Member States and donors (and the ways in which these are embedded in the global environmental discourse and the concerns of civil society); and civil society strategies to access development debates.

6.1. State agencies and MRC isolation from planning processes

The debate about the relevance of the MRC is concerned with two interrelated issues: one, what is the MRC's role in hydropower, and two, whether the MRC is or should be involved in decision-making. The resolution of these two issues involves navigating the separation of state water and energy actors in the lower Mekong. The state is an actor that "rarely speaks with one voice but rather represents an amalgam of institutional interests" (Bryant and Bailey 1997: 65). In this context tensions between the state's dual role as developer and steward of the environment are played out through conflict between rival agencies in a state (Bryant and Bailey 1997). Control over environmental resources and a state agency's power are related, as the most powerful state agencies are often those who have derived their institutional power from control over activities such as energy generation, whereas in contrast, environmental agencies are relatively new and have little substantive power (Bryant and Bailey 1997). State interests are not monolithic: states pursue diverse agendas and parts of the state may support one type of water use, such as energy generation, whilst other parts may resist or be in favour of alternate uses (Lebel *et al.* 2005). These institutional dynamics impact upon transboundary water cooperation and the ability of the MRC to establish its relevance to, and role in, hydropower development in the Mekong.

The 1995 Mekong Agreement commits the MRC to the development of a basin development plan (BDP). State representatives interviewed for this thesis argue that the development of a BDP will negate any potential conflict resulting from hydropower development:

"Now there is some potential for conflict coming, but we will negotiate together. The BDP will help to steer things. It will serve how we have cooperation between four countries, work for four countries" (State official, interview, 06/08a).

The BDP which is being developed by the MRC comprises three elements: an IWRM Based Basin Strategy, a Project Portfolio, and Development Scenarios. These three elements have been developed in conjunction with a range of MRC stakeholders, including line agencies and civil society (MRC 2009c). MRC officials interviewed for this thesis were keen to stress that: “the BDP will not determine which projects are implemented by Member States but provide an agreed development space” (MRC official, interview, 07/08a). A development space is defined as more than the volume of water that can be safely used for development, it is a space of sustainable development that is supported and shaped by a range of strategic guidance, procedures and guidelines (MRC 2009c). The BDP will articulate a common development vision for the basin and provide directions for a rolling planning framework which will bring the basin perspective into national planning and vice versa (Hang and Lennaerts 2008).

The MRC’s aim is that national planning will synchronise with the BDP:

“The BDP will bring the regional perspective into national planning. Hopefully, national plans will be in line with regional basin plan” (MRC official, interview, 07/08a).

“If the work of the BDP is not accepted at the national level then it is pointless” (State official, observation notes, MRC meeting, 06/08).

Increasing coordination between the MRC and national planning was a key concern at the 2007 International Conference on the MRC. The *Joint Statement* released by the conference committed Member States to undertake to “ensure that MRC strategies and plans are adequately reflected in national development policies, strategies and plans in all relevant sectors – and vice versa” (MRC 2007b : 6). Interviews with donors and state representatives for this thesis expressed similar opinions that the BDP is a space for negotiation about development, but this does not necessarily mean that the BDP’s findings will be accepted or implemented by Member States:

“We can through the BDP have a space for negotiation. But there are limits as we are talking about four different governments” (Donor representative, interview, 05/08b).

“BDP will include proper use of water, future not current, for the countries. If countries follow what we are doing then good. But this may not be true” (State official, interview, 06/08b).

MRC officials are concerned that in order to have impact they will have to engage more with decision-makers: “we need to talk to higher level people, have to get the Deputy Prime Minister’s office involved or the Ministry of Finance and so on, because this is where the people who make decisions are. Currently ministers do not really pay attention to the MRC” (MRC official, interview, 07/08a). This suggests that the willingness of Member States to align themselves with MRC planning tools, plans and strategies is determined by something other than the quality or usefulness of those tools.

A lack of coordination and collaboration between state level actors, as well as the power relationships between them hampers the effectiveness of the MRC in transmitting regional perspectives and plans into national planning processes. A focus on explanations located at the regional and transboundary level (such as sovereignty) obscures this reality. The governance and management structure of the MRC includes the MRC Council, the Joint Committee, the NMCs and the MRC Secretariat: as such there is no single MRC and joint positions have to be negotiated between the different parts. Member States are represented on the Council and Joint Committee by their respective heads of the NMCs. Thailand and Vietnam are represented on the MRC Council by their respective Ministers for Natural Resources and the Environment, whilst Lao PDR is represented by the President of WREA, and Cambodia by the Minister for Water Resources and Meteorology (MRC 2009d).

Each Member State has a NMC, which coordinates MRC activities at the national level providing the link between the transboundary and national levels. However, NMCs are largely weak and isolated from decision-making power over natural resources development. The NMCs are usually drawn from, or located under, the environmental or natural resources related ministries. Hydropower planning and decision-making is located outside of water resources agencies. To a certain extent parallel track processes have developed in these two important water resources management areas- governance and development- with limited interaction between them:

“The representatives of the National Mekong Committees, so that usually they are coming from the environment side or the natural resources related ministries which are not very strong in the countries and what is related to the decision-making of hydropower construction, so that it is done in the Ministry of Finance or Planning or the PM’s office. So that these ministries that are related to the MRC are quite out of the decision-making system” (Donor representative, interview, 04/08).

“The MRC is a basin level organisation so it communicates with national water counterparts. But this isn’t necessarily where the power lies. MRC parts like the Council or the NMCs do not make decisions: it is up to the governments to agree to things and implement them” (MRC official, interview, 07/08a).

Hydropower planning and decision-making is located within government agencies and ministries concerned with, amongst others, finance, energy, planning and investment. Civil society actors expressed concerns at a civil society meeting in Vietnam in February 2008 about the separation of water and energy actors and the consequences this could have for both planning and local users dependent on water resources for their livelihoods (Observation notes, Civil Society meeting, 02/08). Subsequently, the coupling of electricity and water planning is crucial to determining the true costs of hydropower development (Middleton *et al.* 2009).

NMCs are not mentioned in the 1995 Mekong Agreement. Their structure, composition and effectiveness vary from state to state (Hirsch and Jensen 2006). NMCs usually have two parts: an inter-ministerial policy making committee, and a secretariat which provides support and coordination. For example, the Cambodian NMC (CNMC) is directly accountable to the Council of Ministers, and the NMC secretariat (NMCS) is located in the Ministry of Water Resources and Meteorology, whose Minister is the Chairman of the CNMC. CNMC members include, amongst others, the Ministry of Environment, the Ministry of Public Works and Transport, Ministry of Agriculture, Forestry and Fisheries, Ministry of Planning, and Ministry of Industry, Mines and Energy (MRC 2007a). The role of the CNMC is to assist and advise the Government in all matters related to water - policy, strategy, management, development *etc.* (MRC 2007a). Despite differences in government preference and mandate, the two part structure is common to all NMCs (MRC 2007). NMCs are comprised of a number of line agencies. However, governance arrangements between agencies are not well-coordinated and the NMCs have to establish their own role and working space within their national politics (Hirsch and Jensen 2006; Dore and Lazarus 2009). NMCs are one part of the water and environment ministries in their respective states: their functional power is less than that of the key water-related ministries (Dore and Lazarus 2009).

Management of environmental resources by the state developed along functional lines with separate departments for agriculture, fisheries, forestry, and water *etc.* (Bryant and Bailey 1997). However, IWRM argues for integration in water management (GWP 2000). In 2006, Lao PDR restructured a number of government departments including those for water and the environment and created WREA as an apex agency.

The aim of apex agencies is to improve coordination between the various water and related ministries (IWMI 2006). However, the apex agencies established in Lao PDR, Thailand and Vietnam have made relatively modest achievements since their establishment as they lack the power and resources to change more established line agencies (IWMI 2006).

The weak relationship between state water and energy agencies contributes to the isolation of the MRC from national planning process, and also contributes to the concerns of civil society actors about the role and relevance of the organisation:

“The MRC is not involved in the big decisions of the Mekong. A lot of the decisions are made at the national level, a lot of them are made in Laos by the Ministry of Planning and Investment signing agreements, and the water agencies like WREA have very little role... whilst WREA has very little role, LNMC has even less role. Both of them don't have any role in the decisions that are being made. So you have ministers of water resources or ministers of the NMCs on the council representing interests of the countries, yet they're not the players that are making the decisions on these types of investments. There's a significant disconnect, and traditionally water agencies in the countries are not very strong and often marginalised. In Vietnam the MRC is not actually mentioned in any of their national strategies” (Civil Society representative, interview, 06/08a).

The position of water and energy actors in Lao PDR illustrates a number of the dynamics outlined in the statement quoted above. Along with the creation of WREA in 2006, the Lao government also established the Ministry of Energy and Mines. Within this ministry are two departments (Department of Electricity, and the Department of Energy Promotion and Development) and three state-owned enterprises (Electricite du Laos, Lao Holding State Enterprise, and Electric Construction and Installation).⁹ The Department of Electricity (DOE) is responsible for policy and regulation, and strategic master planning. The Department of Energy Promotion and Development is responsible for development and management. As such it works closely with project developers, promotes IPPs, advises decision-makers, analyses the financial feasibility of projects, and drafts and negotiates contracts and agreements. The Ministry of Planning and Investment is also important as it is responsible for administering foreign and domestic investments.

In terms of decision-making processes for mainstream and tributary hydropower development WREA has a formal role in both. A representative of the Lao Department

⁹ The description of the Lao Ministry of Energy and Mines is derived from the Department of Energy Promotion and Development's website, *Powering Progress*. This website was established to share information of the Lao hydropower sector, and re-states the dominant argument that hydropower development is an integral part of poverty reduction. This website is supported by the Agence Francaise de Developpement (AFD), the French government agency for international development.

of Electricity outlined the roles of WREA, LNMC and the DOE in a presentation to an international MRC consultation in September 2008 as follows:

- A Feasibility Study Report is prepared by the project developers and submitted to the DOE and WREA,
- DOE review and comment on the Report and pass these comments to the project developers,
- The final Feasibility Study, Environmental Impact Assessment (EIA), and Strategic Impact Assessment (SIA) are passed from the DOE to the LNMC, who in turn submit them to the MRC Secretariat,
- At this stage the MRC Secretariat may offer some technical advice. The MRC Secretariat also submits the final Feasibility Study, EIA and SIA to the Joint Committee and the other NMCs,
- A prior consultation, according to the 1995 Mekong Agreement, will be held and agreement reached,
- The DOE will then approve the Feasibility Study, and WREA the EIA and SIA (Viravong 2008).

The existence of formal decision-making processes is not necessarily congruent with the implementation of those processes. Also, power relationships exist within these processes: they are not neutral and disinterested. Whilst a role has been identified for the LNMC and WREA in hydropower decision-making, planning and project development according to the above process still seems to lie within the remit of the DOE and the Ministry of Energy.

There are also concerns, amongst both MRC officials and donors about the capacity of WREA and the LNMC to execute these roles substantively:

“The Lao NMC has not been involved in discussions for Don Sahong, it has no information on it, and this is a mainstream hydropower project. The NMC is just one agency inside WREA, an apex agency. APEX agencies have no real power or authority yet” (MRC representative, interview, 07/08a).

MRC representatives at a planning meeting in March 2008 expressed concerns that until NMCs and Apex agencies are empowered impact will be limited (Observation notes, MRC meeting, 03/08). Development bank representatives interviewed for thesis argued that the NMCs and APEX agencies are weak for a number of reasons: “they are unstable, have no role in water resources development. At the moment NMCs have no power or authority because they have no money to allocate” (Development bank

representative, interview, 07/08). These dynamics illustrate that the state is comprised of many actors who all exist within power relationships, which condition the role and impact of the MRC in transboundary hydropolitics in the region.

The processes articulated by the Lao Department of Electricity situate WREA and the LNMC as communication conduits, between the DOE and the MRC. According to the process outlined above the MRC will conduct a prior consultation once a number of other steps have been conducted by the DOE and the project developers. This suggests that there is little direct interaction between other parts of the MRC (such as the Secretariat) and energy actors in the lower Mekong states. There is also a low level of understanding about the role of the MRC, its possible hydropower roles, and the requirements of the 1995 Mekong Agreement amongst state energy agencies in the lower Mekong (Bird 2008b). In 2008, activities were initiated to overcome this knowledge gap and increase engagement between the two. In August 2008, the Lao Department of Energy approached the LNMC and the MRC for advice and support to ensure that the provisions of the Mekong Agreement were met, that projects were optimised in an integrated basin context, and that other sectoral interests such as fisheries were fully considered in the department's mainstream dam studies (MRC 2009b). A lack of awareness about the MRC's role and the largely separate spheres of water and energy actors constrain the MRC's ability to influence national planning.

6.2. Donors and Member States: interactions at the transboundary level and the hydropolitical constellation

State actions are conditioned by the relationship of the state to other actors, both inside and outside the state (Bryant and Bailey 1997). A focus on states as unified entities that interact with other unified states risks falling into the territorial trap as it obscures the links between international and domestic politics. Agnew (1994) argues that treating international and domestic politics as polarities obscures the interaction between processes operating at different scales. It also masks the ways in which actors and processes challenge or support the state at multiple scales (Sneddon and Fox 2006). The ways in which relations between domestic and international actors condition state actions is demonstrated by the wider dynamics of donor- Member State interaction in the MRC. The positions that donors adopt in relation to key issues and also their relationships with Member States are conditioned by donor relationships to civil society and the global discourses on water and development.

The scale of proposed hydropower development has created tensions in the donor- Member State relationship. The interests of key donors in funding the MRC were outlined in table 2 in Chapter Four (p.141). It is worth noting here that traditional donors to the MRC are interested in regional cooperation, fisheries, joint basin planning and environmental protection (AusAID 2007; SIDA 2005). This group of traditional donors to the MRC are concerned about the scale of the proposed hydropower development of the Mekong and have urged caution (Development Partners 2007). In a number of MRC meetings observed for this thesis donors have expressed a number of key concerns: more active utilisation of the MRC and its tools by Member States in hydropower decision-making; and questions about whether proposed mainstream dams would proceed if scientific evidence demonstrated that technological mitigation of fisheries impacts was not possible (Observation notes, MRC meeting 11/07; Observation notes, MRC Meeting, 09/08).

Donor concerns and questions have contributed to a perception amongst Member States that donors are anti-hydropower development. Donors are urging caution and are keen to stress that they are not anti-hydropower: “It is not that we are against it, we have hydropower at home, but they have been lessons learnt that the Mekong countries can learn from” (Donor representative, interview, 04/08). However, Member States view this caution as constraining: “we need to have development now, we share the need to develop, we cannot wait (State official, interview, 07/08). Three interactions or relationships are important here: one, the interaction between the global development discourse and donors; two, the financial asymmetry between donors and Member States, and the wider context; and three, interactions between donor states and their civil societies.

Donor state policies and positions are the product of a number of overlapping interactions, including between the donor community and global water and development discourses. Donor states have made international commitments to IWRM and are promoting the paradigm through ODA. Traditional donors to the MRC have been at the forefront of discussions at the global level about water resources development. For example, Sweden was involved in the establishment of the GWP and hosts its secretariat (GWP 2006a). International commitments, such as those to IWRM, help to shape donor development strategies in particular areas. Australia’s 2007-2011 Mekong Water Resource Strategy is committed to strengthening the MRC and NMCs to improve IWRM in the basin (AusAID 2007). Its financing of capacity building in WREA is congruent with this strategic objective.

Another salient issue for traditional donors in the MRC sphere is donor harmonisation. The 2005 Paris Declaration on Aid Effectiveness was developed by the Organisation for Economic Co-operation and Development. The Declaration is the result of changes at the global level concerning the effectiveness of aid and the donor-recipient relationship, which sought to reformulate the relationship as one of partnership as opposed to a one-way relationship (Manning 2006). This declaration was endorsed by a wide range of states, including traditional donor states to the MRC. During a series of donor-Member State meetings facilitated by the MRC donor harmonisation featured regularly and highly on the agenda, championed particularly by the Scandinavian states (Observation notes, MRC Meetings 10/07 and 02/08). The issues which donors champion within transboundary water cooperation, such as the MRC, reflect broader commitments made at the international level, and paradigms and strategies at the level of global development discourse.

Underlying donor-Member State interactions is a power asymmetry premised on financial contributions. In 2006 89.5% of funding came from donors and 9.5% from Member States (MRC 2006). MRC officials interviewed for this thesis indicated that this asymmetry can fuel perceptions amongst some actors that the Member States are uninterested in the MRC and that donors dominate:

“Donors put in more money, so to an extent they will always tend to dominate the relationship a little bit. This is a natural structural imbalance in any regional undertaking where one party puts in more money than the others. Donors have felt the need to put their foot down over Member States’ contributions and that feed into the Organisational Review. And the countries pulled back a little, go quiet in meetings” (MRC official, interview, 07/08b).

Increasing Member States’ financial contributions is linked to donors’ perceptions about commitment: “Donors are upset with Member States lack of contributions. How important is the MRC to the countries? They don’t want to pay for it. This suggests that it is not important: increasing contributions would be an indicator of increased commitment” (Development bank representative, interview, 04/08). However, if Member States do not increase contributions, civil society actors argue that it is unlikely that donors will cease to finance the organisation: “Donors have no choice but to support the MRC- it is the only institution for sustainable development of water resources” (Civil society representative, interview, 03/08). During interviews with donors, a number of representatives stated that donors will continue to work with the MRC and are keen to see it succeed: “we are in this for the long haul”; “donors are very

active, we are interested in what happens here” (Donor representative, interview, 05/08b”; Donor representative, interview, 04/08).

The power asymmetry between MRC donor states and Members in terms of financial contributions has conditioned outcomes at the MRC level (for example it was part of the rationale for the Organisational Review). However, the relationship between donors and Member States is situated within a context of changing donor dynamics in term of both actors and financing. As outlined in Chapter Four old donors are rescaling and re-orientating their ODA in the Mekong region. Scaling-up support for water resources management to the basin level is congruent with the principles of IWRM: IWRM advocates water management at the basin level (GWP 2000). As demonstrated above, hydropower development and energy planning is located in energy agencies and ministries which are largely separate from state water agencies and the MRC. Subsequently, the sphere of donor- Member State relations is differentiated from the sphere of hydropower development.

Shifts in old donors ODA also takes places in a wider context where new donors are emerging. In the Mekong Committee era donor funding and development plans both flowed through the organisation. This dynamic has changed fundamentally. The end of the Cold War saw a diversification in actors and regional schemes which offered new financial opportunities for the lower Mekong states, and this reduced the importance of Mekong water cooperation (Makim 2002; Nakayama 1999). The importance of traditional donors is challenged by the emergence of new donors such as China and Kuwait (see Chapter Four). The private sector in terms of project developers and new financiers is also important due to its ability to fund hydropower projects. These new funding avenues for hydropower coincide with a strong interest on the part of certain state agencies in the lower Mekong to develop hydropower. Convergence of interest between different actors is a key driver of water resources development (Molle 2008b). The interests of powerful state agencies in the lower Mekong, the private sector, and new donors, such as China who favour infrastructure development, converge to promote hydropower development. This interaction largely falls outside the sphere of the MRC and the mechanisms promoted by traditional donors. The availability of alternative sources of financing for water resources development provides an opportunity for lower Mekong states to pursue their hydropower interests outside of the confines of the MRC system and in parallel to their relationships with traditional donors. A focus on monolithic state actors fails to grasp this complexity: relationships between donors and

Member States in the MRC sphere are conditioned by their relationships with actors and processes outside this sphere and at different levels of analysis.

Donor relationships with Member States are also conditioned by interactions between donor states and their domestic civil societies. Civil society groups and the media within traditional donor states to the MRC have publicly questioned their states' funding for the MRC and expressed concern over the proposed hydropower development of the lower Mekong. Articles have appeared in Finnish newspapers such as *Helsingin Sanomat* questioning Finnish funding for the MRC, an organisation it labels as suffering from "toothlessness" in the hydropower debate (Käkönen and Selin 2007). Donor representatives interviewed for this thesis identified a number of episodes where civil society concerns have contributed to action at the official level, including: Swedish development officials questioning the MRC and calling for it to become more proactive; questions from the Green Party in the Belgian Parliament in early 2008, which resulted in the MRC preparing a document for the Minister of Development cooperation to use in answering these questions; and official questions in the Finnish Parliament concerning Finnish support to the MRC, including what has been done in the past, what are the possibilities now and what is Finland's role (Donor representatives, interviews, 04/08; 05/08a, 05/08b).

Donor representative reactions to concerns from domestic civil society are mixed:

"There is going to be a stronger and stronger opinion in the Scandinavian civil society that we are supporting this kind of organisation that is weak when they are concerned about the hydropower explosion. But of course, this is part of our society, this questioning is normal" (Donor representative, interview, 04/08).

"Hydropower development is a concern for our societies, and there is the worry of "bad publicity" about our support for the MRC" (Donor representative, observation notes, MRC meeting 05/08).

The interaction between domestic civil society and the state's ODA conditions the donor-Member State relationship in the MRC. Donor states must be seen to be responsive to the concerns of their constituencies, and consequently they raise questions with the MRC and Member States. This interaction between state actors and civil society actors is only captured once a multi-scalar, multi-actor approach is adopted.

6.3. Civil society actors and the MRC: a strategy to be heard?

Civil society actors in the Mekong, constrained by limited domestic political space to express opposition to hydropower development, have ‘scaled-up’ their concerns and sphere of operation to the MRC level in order to gain access to debates. Lebel *et al.* (2005) argue that both powerful and less powerful actors engage in scalar politics, and the ability to shift across levels and scales is important to social movements. This is particularly important in the context of the Mekong.

Different actors have different interests, for example local communities within Lao PDR have livelihoods based water resources interests. Hirsch and Jensen (2006) argue that there are a range of interests within the Member States which are not adequately captured by the descriptor of ‘national interest’. These include civil society interests, local community interests and private sector interests. There is limited space for local communities to express their interests. Civil society responses are shaped by the nature of political space within state boundaries and there is limited space to “articulate concerns over projects and other aspects of development that threaten social and environmental sustainability” (Hirsch 2001: 245). Ratner (2003) argues that “communities that rely on the resources of the river basin frequently find themselves poorly represented in the international arena by their own national governments or in direct conflict with domestic resource development policies” (64). Local community and livelihood interests do not necessarily feature on the national agenda as promoted by state actors in the MRC.

However, to a certain extent livelihoods based interests are recognised at the MRC level. For example, the MRC argues that a lack of control structures should not be interpreted as the Mekong River being unutilised as it plays a significant role in the lives and livelihoods of the basin’s population (MRC 2008b). A wealth of fisheries research conducted by the MRC outlines the importance of the Mekong’s fisheries resources for livelihoods, subsistence and food security (Poulsen *et al.* 2004; Hortle 2007; Coates *et al.* 2003). The MRC also opens up spaces for public participation, convening multi-stakeholder forums and consultations which include a small number of NGOs and civil society actors.¹⁰ Donors have also promoted public participation processes in MRC programmes, for example, stakeholder participation is part of the

¹⁰ However, concerns have been expressed by civil society actors about the MRC’s public participation processes. Only a handful of NGOs are invited to participate in MRC forums. Local stakeholders and community representatives are largely absent and this has been questioned by civil society actors (MRC 2008b).

funding agreement between the BDP Programme and its donors (Donor representative, interview, 05/08b). Local community interests and concerns are not necessarily heard or accommodated at the state level in the Mekong. By targeting the MRC, as civil society groups such as TERRA have done through the letters and press releases described above, local community and livelihood interests are ‘scaled-up’ to a level at which they are heard and recognised.

Changing civil society dynamics are widening the debate over proposed hydropower development and increasing its media profile. As described in Chapter Four, civil society is varied within the basin. Despite limited spaces for civil society in parts of the basin the visibility of some regional and domestic civil society groups is growing and impacting the debate:

“Letters from civil society are a new dynamic. Civil society is limited but growing in the region: we are seeing more organisation. There is the possibility of a new opening up, in terms of people having access to information, to external domains, with news and internet. There are new processes at the MRC where civil society actors are involved, and there are links between national, regional and international NGOs” (Donor representative, interview, 04/08).

Domestic civil society actors are also interacting with and influencing global civil society actors. The November 2007 TERRA letter was referenced in a Finnish newspaper article questioning Finland’s support to the MRC, and in the questions raised in the Belgian parliament (Käkönen and Selin 2007; MRC official, interview, 05/08). Domestic civil society groups and NGOs are forging links with international and regional networks and organisations, as well as academic institutions both within and outside of the region. For example, the 2008 conference *Mekong mainstream dams: People’s voices across borders* was organised by a group of actors including the Thai National Human Rights Commission, the Social Research Institute at Chulalongkorn University, Bangkok, Thai NGO TERRA, Rivers Coalition in Cambodia, International Rivers (an American NGO), Oxfam Australia and the Australian Mekong Research Centre at the University of Sydney, Australia. This illustrates that civil society actors from different geographic locales are forming loose coalitions, which increase their impact and visibility. Conferences such as the one referred to above are covered in the regional press and also via the internet, they are also attended by donors to the region and the MRC.

7. Conclusion

Actors and discourses intersect at the MRC level. Developments at the global level, such as the formulation of sustainable development and IWRM, have impacted the regional and national levels. The 1995 Mekong Agreement orientated water cooperation in terms of sustainable development, whilst both the MRC and its Member States have made commitments to implement IWRM. As opposed to previous phases of the Mekong water regime where infrastructure development plans were formulated by the Mekong Committee, the MRC has conceptualised its role in terms of knowledge generation for sustainable development. However, despite the apparent reorientation of the MRC, critics claim that sustainable development and IWRM allow actors to continue business-as-usual.

Hydropower is a contested development option. The World Commission on Dams emerged in response to ever-increasing civil society protests and critiques of hydropower dams. Hydropower development is also criticised and contested in the Mekong region, where the incorporation and inclusion of environmental and social aspects into hydropower studies and investigations has slowly increased since the 1970s. The hydropower debate in the Mekong intensified dramatically in 2007 with public awareness of the resurrection of plans for mainstream dams. In a global context, whereby the negative impacts of hydropower development are well-publicised, and a regional context where actors such as the development banks had labelled mainstream hydropower unlikely due to its negative impacts, civil society actors were shocked by the re-emergence of mainstream hydropower plans. Plans for mainstream hydropower have intensified the debate about the role and relevance of the MRC.

Civil society and donors expressed concern from 2007 onwards that the MRC was sidelined from the hydropower debates in the region and did not have a role in hydropower decision-making. These concerns are premised on assumptions about water resources management and development in a transboundary context influenced by global paradigms. The MRC initially conducted its work in a regional context where civil society actors and a large proportion of donors assumed mainstream dams were 'off the agenda'. For example, the development banks labelled them unlikely due to the negative social and environmental impacts (ADB and World Bank 2006). However, the lower Mekong states operating on the assumptions of the dominant development narratives have resurrected plans for these dams and are investigating them in conjunction with private sector actors from the region. These processes are occurring

outside the MRC sphere. Donors and civil society actors assume that these activities should be located under the MRC purview due to its status as a transboundary river basin organisation with an agreement that commits the Member States to cooperate in all fields of sustainable development.

The role of the MRC, and debates about it, need to be located within the wider hydropolitical constellation in order to capture how outcomes at the MRC-level are conditioned by interactions between various actors over different scalar levels. Three sets of relationships are important: state water and energy actors; donor-Member States relations (and how they are conditioned by global discourse and civil society); and, civil society strategies concerning the MRC. These demonstrate that conceptualising states as monolithic and similar actors as homogenous fails to capture the complexity of water cooperation and development in the lower Mekong, and the interactions and processes which challenge and support it at multiple scales.

States are not monolithic, but are comprised of a number of different agencies and bureaucracies with competing interests and different levels of power. The MRC is partially sidelined from water resources development debates and decision-making in the lower Mekong states due to the separation of water and energy actors at the national level. Interactions between donors and Member States have involved tensions over mainstream hydropower plans. Donors questioning Member States' plans and urging caution is an outcome conditioned by a number of other overlapping actor relationships, which donors operate within. Funding commitments by donors are partially conditioned by the global development discourse and donors' relations to their domestic civil society. These overlapping fields of interaction illustrate that actors' relationships are embedded in webs of overlapping relationships, which inform and condition each other. Domestic and regional civil society actors target the MRC as a scalar strategy, 'scaling-up' their concerns to a level where they can be expressed. Highlighting the MRC and engaging in MRC forums allows civil society actors access to debates and state representatives in a regional context where there is limited space for civil society debate.

Chapter Six: ‘Model’ development: the development banks, civil society, and contested hydropower

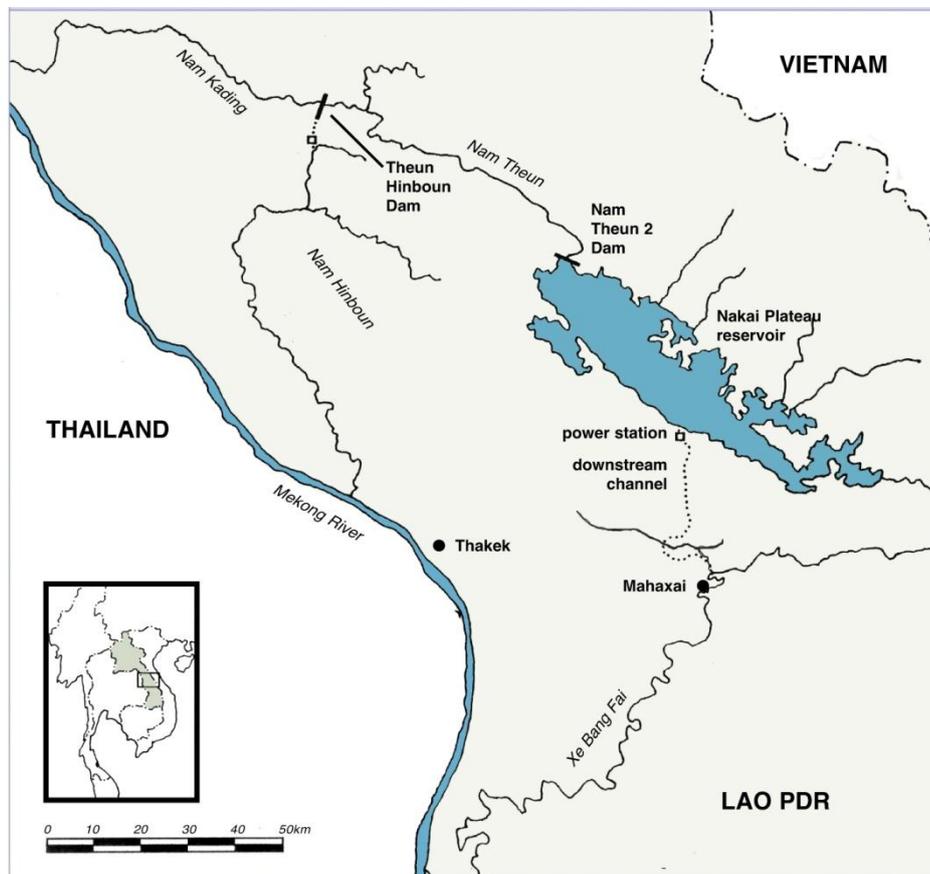
1. Introduction

Actors utilise narratives to maintain or extend their access to natural resources and construct inevitability around hydropower projects in order to justify their involvement and promote their role in development. These dynamics are explored through the example of the Nam Theun 2 (NT2) hydropower project in Southern Lao PDR (see map 4, p.182). The development and construction of NT2 was facilitated by the World Bank and ADB. The development banks and other project proponents, aware of the controversial nature of the project, constructed a sense of inevitability around the project to obscure its contested nature. NT2’s hydropolitical constellation includes a range of actor types: the development banks, the Government of Lao, the private sector, traditional donors, civil society, and the MRC. The project has livelihood impacts for local communities in the Nam Theun and Xe Bang Fai basins: their concerns are largely represented by civil society actors in a context where there is limited space for affected communities to express their views. NT2’s hydropolitical constellation illustrates the importance of both place and non-place based actors in conditioning, contesting, and producing water resources development outcomes.

This chapter analyses how the development banks represent and promote NT2 as a ‘model’ hydropower project as a strategy to maintain and extend their involvement in hydropower development in the lower Mekong, and beyond. Through their promotion of NT2 the development banks have utilised dominant development narratives linking hydropower and poverty reduction. The World Bank and ADB, in light of civil society concerns and global level debates on hydropower (such as the WCD), have constructed the problem and solution in particular ways: the problem is ‘bad’ hydropower projects, and the solution is ‘good’ hydropower projects, *i.e.* NT2. As such, the development banks represent themselves as possessing the solution to an acknowledged problem. The ‘model’ nature of NT2 includes three key elements: participation, social and environmental programmes, and revenues utilised for poverty reduction. Simplification of the project to these three elements disguises its complex nature and the ongoing process of civil society monitoring and critique. The development banks are determined to promote NT2 as a ‘model’ for hydropower development because of the changing roles of the development banks and the private sector in the lower Mekong region.

2. The Nam Theun 2 hydropower project

The NT2 hydropower project has featured heavily in development plans for the region, including the 1970 IBP, and has been developed in the context of the Lao-Thai hydropower export relationship (see Chapters Three and Four). NT2 should generate 1,070 MW of electricity, of which 995MW is reserved for export to Thailand (MacGeorge 2009). In economic terms NT2 is only a feasible hydropower project if Thailand purchases the electricity produced (Mekong Secretariat 1988).



Map 4: The NT2 project site ([http://www.internationalrivers.org/en/southeast-asia/laos/nam-theun-2/map-nam-theun-2-project-area?size= original](http://www.internationalrivers.org/en/southeast-asia/laos/nam-theun-2/map-nam-theun-2-project-area?size=original))

Located in Khammuan province, Southern Lao PDR, construction of NT2 commenced in 2004 and consists of a number of infrastructure elements: a 39m high dam on the Nam Theun creating a 450km² reservoir on the Nakai Plateau, a tunnel system which delivers water to a powerhouse 350km below the plateau reservoir, a regulating pond below the powerhouse, and a 27km channel which links the regulating pond to the Xe Bang Fai River (ADB 2008c). NT2 is a trans-basin diversion project as it utilises water

from the Nam Theun and discharges it into the Xe Bang Fai River (see Map 4, p.182). A 130km transmission line linking NT2 and the Thai electric grid has been constructed, as well as 70km transmission line linking the project to the Lao domestic grid.

3. Constructing Inevitability: A brief history of Nam Theun 2

Constructing a sense of inevitability is a prerequisite for any large project: “from a contested tenuous notion, one among many, it must be stabilized and ultimately come to overwhelm the space of possibilities” (Garb 2004: 180). Project proponents utilise four discursive-political to construct inevitability: one, shaping and proliferating a project definition that points to the proposed project as the solution; two, rewriting and telling the project’s history as a timely unfolding and gathering of momentum of a long-held plan; three, concentrated efforts to limit discussions to the project box, excluding issues outside the project box such as debate about whether the project is needed or not; and, four, bringing the project’s future into the present and past, *i.e.* present the project under discussion as an accomplished fact by means such as getting ongoing schemes which will interface with the project labelled the first phase (Garb 2004).

Paradigm reformulation is important to constructing a sense of inevitability (Garb 2004). The dominant narrative underpinning hydropower development in the lower Mekong reformulates a problem of poverty, into a problem of development, which in turn is reformulated into a problem of infrastructure (see Chapter Three). This linked argument is persuasive to development planners and project proponents because it can be read in both directions. In re-shaping the justifications for NT2 in terms of its social and environmental commitments the development banks reformulated the problem definition, but the solution remained the same, albeit with some added components. The problem was still defined in terms of poverty and development, and hydropower still offered as the solution, but the development banks’ problem definition now included the concerns of civil society and the recognition that hydropower projects had had negative impacts for local communities. The problem, therefore, was how to implement hydropower in ways that served its stated goals: development and poverty reduction. Consequently, it was not that hydropower was the wrong solution, but that it had not been implemented properly in the past:

“A bad image of hydropower projects developed by international cooperation came to prominence in the 1980s. The World Bank was involved in many of these projects. We stopped funding hydropower until NT2 because we didn’t want to be

part of poorly designed projects that do not take the social and environmental to the proper standards of mitigation. NT2 is an opportunity to do these things differently. We are working with international standards so that we can design projects better, projects like NT2 where impacts are cared for” (Development bank representative, interview, 03/08).

Within this statement a distinction is made between ‘good’ hydropower projects which have social and environmental safeguards, and ‘bad’ projects, which do not. In this way, the development banks present themselves as possessing the solution to the problem (‘good’ hydropower instead of ‘bad’ hydropower), and restrict debate to aspects of the project. This excludes questions about whether the project itself was needed, as the project rationale is presented as self-evident.

The World Bank has supported NT2’s development since the 1980s. However, the intensification of discussions between the World Bank and the Lao government in the late 1990s took place in a wider context of international awareness of the harmful aspects of dams, and the instigation of the WCD process, during which the World Bank, and to an extent the ADB undertook a self-imposed moratorium on hydropower funding (see Chapter Five). NT2 signified the World Bank’s re-engagement with large-scale infrastructure after a ten year hiatus (Singh 2009). The World Bank instigated a Decision Framework in 2002, which identified three criteria that the Government of Lao PDR and the project would have to meet in order to receive the bank’s support:

- the project is embedded in a development framework aimed at poverty reduction and environmental conservation;
- the project is technically, financially, managerially and economically sound and adheres to the Bank’s environmental and social safeguard policies; and,
- it must have greater understanding and wider support within the international community and civil society (World Bank 2002).

Within this Decision Framework the question is not whether or not hydropower is an appropriate poverty reduction strategy, but whether it meets certain social and environmental criteria.

The orientation of the World Bank’s Decision Framework towards sound management and environmental and social safeguards established the debate firmly in aspects of the project, and circumvented discussions about whether the project was needed. Limiting the debate to questions internal to the project and silencing ‘why’ questions helps to ‘close the project box’ and contribute to the construction of inevitability (Garb 2004). In the debate surrounding NT2 questions about whether the project was needed or not did not feature heavily. Thai civil society actors questioned

the rationale behind the project, arguing that the energy provided by NT2 would not be as cheap as claimed in relation to other sources of electricity generation, and that Thailand's energy demand could be met partially through energy efficiency measures (Kuankachorn 2005). However, these questions were largely silenced in a debate where alternative options for development were not offered by project proponents and the development banks: activists argue that "NT2 was presented as the only option for development" (Kuankachorn 2005: 60). Consequently, opposition to the project largely focused on the following key issues: one, the Government of Lao PDR lacked the capacity and political will to manage the project correctly; two, the risks of the dam outweighed its benefits; and, three, the impacts on affected people (Lawrence 2009). Opposition to the project came from a range of civil society actors including amongst others, Thai NGO TERRA, Japanese NGO Mekong Watch, and international NGOs International Rivers, Environmental Defense, and Friends of the Earth-France (Lawrence 2009).

Despite the formulation of Decision Framework in 2002, the World Bank appeared committed to NT2 long before its formal announcement (Singh 2009). In 1989-1991 the World Bank funded a feasibility study conducted by Snowy Mountains, an Australian company. Discussions in 1996 between the World Bank and the Government of Lao highlighted that more studies would be needed focusing on whether NT2 is an appropriate project for Lao PDR (economically, socially and environmentally); the project's economic impact on Lao PDR; and development of the conservation management plan for the Protected Area (Iverach 1997). The project's future was also brought into the past and present as the Panel of Experts (POE) and the International Advisory Group (IAG) were both established in 1997 by the World Bank as independent monitors. The POE would "provide independent review of and guidance of the treatment of environmental and social issues associated with a project in preparation" (Scudder *et al.* 1997:4). The IAG's role is to inform decision-making, providing guidance on environmental and social issues, including independent assessment of the concerns of project affected people (IAG 2006). These two independent monitors were established five years before the announcement of the World Bank's Decision Framework, suggesting that the World Bank always intended to finance NT2. Project proponents have argued that there was "increasing understanding that one day someone will build it", therefore, it is better that it is 'done right' *i.e.* with environmental and social safeguards (Iverach 1997: 77). Proposals and discussions about NT2 also had an impact on the Nakai Plateau before construction commenced in

2005. For example, NT2 prompted extensively illegal logging in Nakai years before its formal commencement (Singh 2009). As will be shown below, practices such as illegal logging which are conceptualised as ‘bad’ environmental practices by powerful actors form part of their justification for NT2, as NT2 will conserve the environment.

The World Bank and ADB approved sovereign guarantees and loans to the value of US\$270 million and US\$120 million respectively in March and April 2005, which mobilised other sources of support. Financiers include the European Investment Bank, the Nordic Investment Bank, Swedish, Norwegian, French and Thai export credit agencies, and the Agence Francaise de Développement (AFD) (Lawrence 2009). The official announcement of development bank support effectively closed the project debate and limited all subsequent debate to issues surrounding the project. Construction of the project began in May 2005 and finished in late 2009.

Inevitability is also constructed through viewing the history of NT2 as that of a project long recognised as worthwhile but hindered by the region’s geopolitical instability. This masks the ways in which civil society contested the project. Project proponents offer a view of NT2’s history as a logical progression from 1927. The website of the Nam Theun Power Company states that the potential of the Nam Theun for hydroelectric power was identified in 1927, and then lists a series of progressions in the project, such as feasibility studies and the concession agreement (NTPC). In 1927, the French Colonial Authority in Laos published a report entitled *L’Eveil Economique de l’Indochine* (The Economic Awakening of Indochina), which identified potential development projects including a hydropower dam on the Nam Theun:

“The French authorities at the time thought it would take one hundred years to bring this project to fruition, and they were very nearly right. The planning that started in colonial times has now been brought to fruition and the project is very nearly complete. All in all it will have taken 83 years” (NTPC representative, observation notes, site visit, 03/08).

In statements such as the above, the project is presented as inevitable: the site’s potential was recognised in the 1920s and over time this potential has been realised. Within this story arc regional and economic dynamics are the causes for delays in bringing the project to fruition:

“The project has been delayed many times. Perhaps we could have finished sooner, but things like the Asian Financial crisis meant that the government and the Thai government agreed to delay the project. So it has taken time” (NTPC representative, observation notes, site visit, 03/08).

Project histories such as these obfuscate the civil society contestation of the project and contribute to constructing a sense of inevitability.

4. Actors in Nam Theun 2's hydropolitical constellation

A wide range of actors are present in NT2's hydropolitical constellation, including: the development banks, the Lao Government, the private sector, traditional donors, the MRC, and civil society. Powerful actors, such as the Lao Government and the development banks have deployed narratives linking NT2's 'good' hydropower and poverty reduction. This storyline fits within the dominant regional discursive formation outlined in Chapter Three. This storyline deployed by the banks legitimises their development intervention in Lao PDR and seeks to extend their access in the hydropower sector. A discourse coalition has formed around this storyline including the development banks, NTPC and Lao Government actors. In contrast, civil society actors have coalesced around a storyline that contests every aspect of NT2's 'model' status.

4.1. *The multilateral development banks*

The development banks are promoting NT2 as a 'model' hydropower project, which can be replicated elsewhere:

“The preparation of NT2, with the numerous studies conducted and the at-length consultation processes, paved the way for more participatory, transparent and improved hydropower development in Laos. These lessons can be evaluated and replicated in future projects so the best social and environmental programs are put in place in order to effectively manage impacts” (World Bank 2008: 4).

The elements of 'model' hydropower development are: participation, social and environmental programmes, and utilisation of revenues for poverty reduction:

“NT2 is a model project. It the first project to take serious the social and the environmental, to look at these things long term. Hydropower has to be multipurpose: the benefits have to be shared with the people. This is a long term commitment to the resettlement, to alternative livelihoods. This is the change” (Development bank representative, interview, 07/08).

“Not only are the impacts properly cared for NT2, but also the revenues. This is a new thing. NT2 is an attractive project for Lao PDR. We have worked with the Ministry of Finance to establish the NT2 Revenue Management Arrangement-track all revenue from NT2, which is then allocated for poverty reduction, for

education, environment, social development” (Development bank representative, 03/08).

These three linked arguments on environmental and social protection, benefits to local communities and revenues for poverty reduction form the basis of the development banks’ narrative on NT2. For the banks NT2 is the result of an effort to ensure a large-scale hydropower project “could be designed and managed in a way that would ensure proper environmental and social protection, assist local rural communities, and enhance revenue management by the Lao PDR authorities” (World Bank and ADB 2006: 20).

In the statements quoted above, development bank representatives portray NT2 as a win-win project: benefits accrue to the nation, affected communities and the environment. This is in contrast to past hydropower projects which have been criticised for privileging some actors and scales over others (*e.g.* FIVAS 2007). In this context NT2 is “intended to exemplify the [World] Bank’s achievement of socially and environmentally responsible development” (Singh 2009: 488). The WCD (2000) was critical of a number of World Bank funded dams. In the Mekong region ADB funded hydropower projects, such as Theun Hinboun in Lao PDR have been widely and heavily criticised (*e.g.* FIVAS 2007). Consequently, the development banks are in need of a “successful dam story” or “a platinum project” (Klopper 2008: 334). NT2 is a high risk project and has a significant reputational risk for the World Bank (Shivakumar 2007). Witton Permpongsacharoen, a member of Thailand’s National Economic and Social Advisory Council, argues that NT2 is a project which “justifies the World Bank’s existence” and that they went to great lengths to justify the project (quoted in Imhof 2005: 15). To ensure a ‘good’ dam story the development banks are involved in narrative construction, establishing a large PR machine around the project, which widely proclaims the environmental and social aspects of the project. These communication efforts are “necessary to convince the general public that the World Bank has learnt from its dam mistakes of the past” (Lawrence 2009: 90).

Civil society representatives interviewed for this thesis argued that the Banks need NT2 to be a success because of the ways in which they are situated at the intersection of development and finance:

“There is now a difficulty for the banks in getting water infrastructure loans out because they are not competitive anymore. At the same time they have this obligation to, they are there to fight poverty. So there is a kind of dichotomy between both, between the need to be more competitive in order to stay in the market and the need to have strong safeguards towards more sustainable outcomes.

The banks are trying to determine how they will look in the future and NT2 is one vehicle for that (Civil society representative, interview, 04/08a).

However, as will be discussed below, the ‘success’ of NT2 for the development banks is still unclear.

The development banks link infrastructure and poverty reduction. The World Bank’s 2009 report *Directions in Hydropower: Scaling up for Development* argues that the expanding role of hydropower offers “important opportunities for poverty alleviation and sustainable development” (Fields *et al.* 2009: ix). Whilst its’ 2003 *Water Resources Sector Strategy* links infrastructure development, water management and poverty reduction (World Bank 2003). The ADB also links water, development and poverty reduction arguing in its 2003 *Water for All Policy* that water is a key development ingredient and requires “careful management to sustain equitable economic growth and to reduce poverty” (13). Developing water resources through infrastructure to combat poverty and increase socio-economic development has been promoted by the development banks in various global locales, including Ethiopia and Lesotho (Thurow 2004; Furlong 2006). However, the link between water resources development and poverty reduction for local communities is contested (Furlong 2006).

The development banks represent and promote NT2 in terms of its environmental and social aspects: its status as a hydropower project is secondary to the benefits it will accrue to the Lao people. Lawrence (2009) argues that the development banks have attempted to transform a large, destructive hydropower project into a development project. In the lower Mekong powerful actors have always represented hydropower in terms of its development and poverty reduction potential and utilised a narrative linking these elements (see Chapter Three). However, following global concern and widespread civil society challenges to hydropower development, which culminated in the WCD process (see Chapter Five) the development banks represent their involvement in terms of a new ‘model’ of hydropower development. According to the development banks NT2 represents a new approach and not business-as-usual (Shivakumar 2007):

“The World Bank has a completely different perspective. We are involved long term, developing alternative livelihood. But, also we are committed to the downstream where water is coming: have to protect people, use water for more productive things like navigation, we’re supporting that. Also upstream have to protect the biodiversity, watershed from illegal logging. This entire approach, watershed approach, is really good. This is a new approach” (Development bank representative, interview, 07/08).

In contrast civil society interview participants argue that this is not a new approach but represents a recasting of NT2:

“So what has NT2 done? It’s basically positioned itself as a development project rather than an industrial project, which it essentially is. Hydropower projects are projects to generate electric...NT2 came along and said...we’re not just about making electric we’re bringing development to Laos, we’re ...helping these communities...It was recast in that light. So now rather than just the way to make money, hydropower’s the development strategy”. (Civil society representative, interview, 04/08b).

In 2003, following a visit to the project site the World Bank’s Managing Director stated that the bank sees “Nam Theun 2 not as a project per se, but as a vehicle through which to make a considerable progress in the effort of poverty reduction” (quoted in poweringprogress.org). These arguments are congruent with those utilised by powerful actors in the lower Mekong since the 1950s, however, they are now utilised in a context of civil society opposition to hydropower.

This re-conceptualisation of NT2 as an environmental and social development project, which just happened to be a hydropower project began prior to the World Bank’s Decision Framework in 2002. The Panel of Experts, established by the World Bank in 1997, stated in their first report that NT2 is “a very complicated attempt at river basin development...which involves the World Bank family of agencies in a pioneering effort with the private sector and a national government” to build a major hydropower project (Scudder *et al.* 1997: 6). By 2009, the Panel of Experts were arguing that they “regard many of [NT2’s]... features and procedures as models for other projects elsewhere in Laos and beyond. As it has steadily evolved...from a single sector hydropower project into a multipurpose development enterprise we have become more convinced of its potential as a global model” (McDowell *et al.* 2009: 8). As such, project proponents are lauding NT2 as a model that will pave the way for best practice dam development (Lawrence 2009).

The overriding benefit of NT2, according to project proponents, is poverty reduction in Lao PDR:

“The big change is with the revenues. These will be spent for poverty reduction: we have designed a management scheme for these to ensure they are spent on poverty activities” (Development bank representative, interview, 07/08).

In 2005, the World Bank’s president stated that Lao PDR had few options to escape the poverty trap and that the bank believed “that a sound approach to selling

hydroelectricity, supported by improved government policies is the best way for the country to increase the amount of money it can invest in health, education and basic infrastructure for the benefit of the poor” (Wolfensohn quoted in Imhof 2005: 5). As such, the impact of NT2 is much broader than that of an energy project: its primary benefit is the “incremental revenues flowing to the Government for several decades starting in 2009”, which will be utilised for “additional spending on priority poverty reduction and environmental protection programs” (World Bank and ADB 2006: 23). The development banks have funded a series of fiscal and management reforms within the Lao bureaucratic and government sectors, which are aimed at strengthening the government’s ability to manage the revenues from NT2 correctly and direct them towards poverty reduction programmes (Lawrence 2009). Civil society actors are concerned about the government’s capacity and political will to manage the revenues and contest whether project revenues will be utilised for poverty reduction (Lawrence 2009).

Political ecologists have illustrated how powerful actors stigmatise local land-use practices in order to delegitimize those practices and justify their intervention and extend their control over resources or territory (*e.g.* Bassett and Zueli 2003). Powerful actors and project proponents have represented NT2 as an environmental project which will counter ‘bad’ local land-use practices:

“NT2 has established a Water Management and Protection Authority with a budget of US\$1 million a year for 31 years. This is much bigger than the normal US\$7000 such an agency would have” (Development bank representative, interview, 03/08).

“On of the biggest problems in the area is illegal wildlife trade, as well as some animal populations being threatened by hunting. One of WMPA’s principle goals is to conserve wildlife and help stop this trade” (Civil society representative, interview, 06/08b).

“Villagers use slash and burn agriculture as some of the land is bad for rice. We have moved them to new lands, but we have some problems, have to teach them to rotate crops and not use slash and burn” (Development bank representative, interview, 03/08).

Within these arguments the operating assumption is that the environment has to be protected from local communities who engage in ‘bad’ environmental practices: the solution to these problems is NT2.

4.2. *The Lao Government*

The Lao Government locate NT2 within broader arguments linking hydropower and development. At public meetings state representatives have argued that NT2 is an important component of the national poverty reduction strategy: the poverty of Lao PDR is the only necessary justification for NT2 (Singh 2009). This is congruent with the dominant development narrative linking hydropower with poverty reduction, whereby poverty is defined in terms of indicators such as GDP, and the solution is increased government revenues and economic growth. NT2 is predicted to generate huge revenues for Lao PDR estimated at US\$1.9 billion in its first 25 years (ADB 2008c). As quoted above, project proponents interviewed for this thesis argue that these revenues will be channelled into poverty reduction programmes.

The social, environmental and financial commitments that comprise the development portion of NT2 were included because of the financial power of the development banks. Development bank support was considered vital for NT2 due to the size of the investment and concerns financiers and other actors had about investing and operating in Lao PDR, which is classified as one of the most corrupt states in the world by Transparency International (Lawrence 2009). In this context, Lawrence (2009) argues that the Government of Lao PDR and NTPC have acquiesced to the social and environmental commitments favoured by the development banks in order to gain access to concessional funding and guarantees from the banks, which would lead to financing from other actors. This seems likely as both the Government of Lao PDR and NTPC were keen to secure World Bank support for the project and the fact that financial closure was only reached after the development banks announced their support.

NT2 has played a strong role in the relationship between the development banks, particularly the World Bank and the Government of Lao PDR: for example, in light of the World Bank's commitment to socially and environmentally responsible development, the Lao government was obliged to issue and revise laws, establish new government agencies, as well as consent to a wide range of workshops and consultation activities (Singh 2009). This suggests that the power asymmetry between the development banks and the Lao Government (whereby the Government needed development bank support to realise NT2) affords the development banks a certain amount of leverage over the Government to ensure compliance with its policies:

“There is no reason to doubt that we have leverage. Both the government and NTPC know that the project has to meet World Bank standards. We work closely with each other, and sometimes there are daily meetings on different aspects of the project” (Development bank representative, interview, 03/08).

However, as NT2 moves into the operations phase, civil society actors argue that there is less incentive for the Lao Government and NTPC to comply with social and environmental commitments:

“We can hammer on at the development banks, and maybe they push the issues with the government and the company. But, whether they can actually get anything done is another question. Now the reservoir has started filling there is even less impetus for the government and the company to do the social and environmental programme well. What can the banks do, they can’t reverse the decision to close the gates” (Civil society representative, interview, 04/08b).

The asymmetric relationship between the development banks and the Lao Government should not be interpreted as casting the latter in a passive role. Whilst the Lao Government have committed to a number of reforms and processes at the behest of the development banks, this does not mean that these reforms and processes will be implemented in the ways agreed. The effects of the World Bank are dependent on local complexities (Singh 2009). The interaction between the Lao Government and the development banks is strategic. The Lao Government have agreed to a number of reforms and processes in order to secure funding for NT2. According to the development banks NT2 has buoyed the hydropower sector in the region (ADB and World Bank 2006). However, the expansion of actors in development of hydropower in the region has ‘opened-up’ new avenues of financing for the Lao Government.

Despite the development banks promotion of NT2 as a model for future hydropower projects in Lao PDR and elsewhere, the Lao Government response is varied. In 2007, the Lao Minister of Energy and Mines stated at the World Bank facilitated Lao-Thai High Level Forum on Hydropower that “it would be very good if any project, not only in our country, could follow this standard” (World Bank 2007c). At the MRC’s 2008 Regional Multi-Stakeholder Consultation on the MRC Hydropower Programme Lao government representatives labelled the project excellent and praised it for its transparent process (State official, observation notes, MRC meeting, 09/08). However, during the discussions at the meeting, one of the lead Lao state officials argued that “you cannot ask for the same standards in all projects because other dams

are bigger, so you cannot ask for same as NT2 in others” (State official, observation notes, MRC Meeting, 09/08).

Civil society representatives interviewed for this thesis argue that:

“We’ve already been told by the Lao government they’ll never be another NT2. They’ll never be another process of consultation and discussion like NT2” (Civil society representative, interview, 04/08b).

The decade long approval process for NT2 “has left the Lao government and regional investors largely uninterested in seeking support” from the development banks for other hydropower projects as they “view the banks’ safeguard policies as burdensome, time-consuming and costly” (Middleton 2007: 12). Development bank and donor representatives interviewed for this thesis echoed this view:

“The NT2 approach is a real pain in the neck for the government, because it reaches into questions of accountability and governance. The government can no longer do certain things if we are involved” (Development bank representative, interview, 07/08).

“The standards in NT2 maybe are discouraging, because it is not necessarily an incentive for the private sector to know that anything they do will be known by any who at any moment...discouraging for people who are investing because they are very much criticised” (Donor representative, interview, 05/08a).

The above statements illustrate the importance of positionalities. Whilst some actors are concerned that the NT2 standards are seen as too high by the government or the private sector, civil society actors interviewed for this thesis argue that there has not been enough transparency in the project because not all the relevant documents have been released.

4.3. Traditional donors to the lower Mekong

Traditional donor states to the lower Mekong have also been interested in and supportive of NT2. In April 2005 AFD, granted the Lao government 5 million Euros to fund their share in NT2, and also provided 60 million Euros in commercial loans (Lawrence 2009). Other traditional donors, such as Australia and Finland have not supported the project financially, but have offered public approval of it. As such, they are part of the discourse coalition which is constructing a narrative of NT2 as a ‘model’ project:

“NT2 is a project with important social and environmental consequences, so we wanted to show that it could be done right. Also important for the government, and this is what we agreed, to have a public-private partnership where most of the public funds are used to support sound political behaviour from the government, so they learn how to protect the environment, how they can do something socially acceptable, maybe more than acceptable for people who are affected by the dam and more than to support them in managing the revenue. That was what was interesting and why we choose to support” (Donor representative, interview, 05/08a).

“I have just visited NT2 and I have seen how well the social and environmental work is progressing. 6000 people have been resettled and other people are now complaining because the relocated have received better houses. The standards are very high” (Donor representative, observation notes, MRC meeting, 10/07).

Traditional donors to the region are also keen to support the development banks involvement in the project: “We were very happy to see that the World Bank was coming back and we wanted to be with them” (Donor representative, interview, 05/08a). This support can be viewed through the lens of changing development bank-private sector dynamics in the lower Mekong. Prior to 2007, traditional donors to the MRC, interviewed for this thesis, conceptualised hydropower projects in the region as always being facilitated by the development banks (Donor representative, interview, 05/08b). The increasing involvement of private sector actors from the region threatens this dynamic, and the coalition of actors that surround it. Donor support for NT2, and by extension the development banks, is a show of support for development bank facilitated hydropower.

4.4. The Private Sector

Nam Theun 2 has been developed under the IPP model and is the largest foreign investment in Lao PDR (MacGeorge 2009). In 1993, the Government of Lao and the Nam Theun Electricity Consortium (NTEC) signed a project development agreement to develop NT2 as a BOOT project. NTEC was comprised of Transfield Holdings (one of Australia’s major construction and engineering companies), the Lao Government, Jasmine International and Merrill Lynch Phatra Thanakit Securities (Iverach 1997; Lawrence 2009). By the time the Concession Agreement (CA) was signed in October 2002, the actors in the consortium had changed. The French company, EDF, and Thai company Italian-Thai Development (ITD) joined NTEC in 1994. In September 2002, the Nam Theun Power Company (NTPC) was established as a Lao company replacing

NTEC. EDF International is the key shareholder in NTPC (35% share). The other shareholders are the Electricity Generational Public Company of Thailand (25%), Italian-Thai Development (15%) and the Lao Holding State Enterprise (25%) (MacGeorge 2009). The Lao Holding State Enterprise is a state enterprise owned by the Ministry of Energy and Mines and represents the Lao Government's share in the project. The October 2002 concession agreement granted a 31 year BOOT concession to NTPC (6 years construction and 25 years operation), after which it will be transferred to the Lao Government free of charge.

Private sector actors involved in NT2 utilise the same development and poverty reduction rationales for the project as the Lao Government and the development banks:

“Because of their proximity to, and therefore exposure to, developing economies like Thailand, China and Vietnam, the people of Laos know about and want development and a more modern lifestyle... Laos has an unacceptable level of poverty. The people want that to change. Their options are limited and...hydro is a good option...It is very much about ensuring that the promise of a better living standard can be delivered in a poor country in a sustainable way without mortgaging its environmental future. It is about changing a nation's future for the better” (Iverach 1997: 67-77).

Within the above statement the emphasis is placed on the socio-economic benefits of the project: its nature as a hydropower project is secondary to these. These types of arguments were utilised against a backdrop of growing civil society opposition to the project in the 1990s. After project approval and construction private sector actors continue to utilise arguments which emphasise NT2's 'model' nature and environmental and social focus:

“The company are spending \$1 million on conserving the elephants, this is unheard of. NT2 care to all the aspect of the environmental and the social. This is part of the agreement with the government, but the company is happy to do it, because all these things are important. Other projects they have not done this” (Discussion with NTPC staff, observation notes, site visit, 03/08).

Conservationists interviewed for this thesis are concerned about the elephant population and a rise of human-elephant conflict as the elephants' habitat has been depleted by the project: as an adaption strategy the elephants may encroach on farmland (Civil society representative, interview, 06/08b). An elephant conservation project is part of the concession agreement between NTPC and the government. The development banks, the Lao government, NTPC and traditional donors to the MRC are all members of a loose

discourse coalition, which is emphasising the social and environmental storylines of NT2.

4.5. Civil society

Civil society actors argued extensively against NT2 prior to its approval in 2005. The discourse coalition, which formed in opposition to the project, involved a wide range of NGOs located at the domestic, regional and global levels (Lawrence 2009). However, IUCN and the World Conservation Society (an American NGO) have been involved in developing some aspects of NT2, such as conducting conservation studies and designing the elephant programme. After the approval of NT2 funding the majority of NGOs ceased their campaigns against the project. International Rivers, an American NGO, decided to continue their involvement in the NT2 debate by monitoring the project. This decision is justified in terms of ensuring that the development banks, the Lao government and NTPC upheld their commitments to affected peoples (Imhof 2005):

“proponents and financiers of the project had all made a series of promises that we believed would not follow if not closely monitored...[and because of] a lack of civil society and free media” (Civil society representative, interview, 04/08b).

International Rivers’ monitoring process includes: visiting the project site and meeting with villagers; preparing trip reports and having follow-up meetings with NTPC and the Lao Government; and, writing letters expressing their concern to the Lao Government, NTPC and the development banks. Whilst some of this monitoring activity is conducted via the media, there is also a lot of communication between the actors outside the public domain.

Reactions to civil society monitoring illustrate how powerful actors represent or label the concerns of less powerful actors in particular ways to undermine them:

“Criticism because some people do not like dams. They do not like dams” (Hydropower industry representative, observation notes, site visit, 03/08).

“IRN are selectively interviewing villagers to show the negative. There are some problems with the project, but also lots of good things like it will decrease infant mortality and there are more schools. They never mention these things” (Hydropower industry representative, observation notes, site visit, 03/08).

“Why are they picking on the one Lao hydropower project that is going well, instead of encouraging the government? This is bad because it could turn the government against doing projects well” (Development bank representative, interview, 03/08)

Representing the concerns of civil society actors as anti-hydropower, misleading/selective, and possibly dangerous because they could result in ‘good’ hydropower projects not being constructed are ways of undermining the position of civil society actors and the space given to their concerns. This labelling represents a strategy by powerful actors to delegitimize the position of less powerful actors.

4.6. *The MRC*

The MRC has been largely excluded from the development of NT2. NT2 was one of the key hydropower projects proposed and studied by the Mekong Committee and Interim Mekong Committee. The 1959-1961 Japanese Reconnaissance Mission to the Mekong identified NT2 as a potential project site, and it was included in the 1970 IBP (Mekong Secretariat 1970). The Interim Mekong Committee’s 1988 *Perspectives for Basin Development* identified NT2 as a project of international significance due to the Lao-Thai electricity export relationship (Mekong Secretariat 1988). In 1987, the Mekong Secretariat revised the layout of the project, and a prefeasibility study was initiated by the Lao Ministry of Industry and Handicraft (Mekong Secretariat 1988). The Mekong Secretariat argued that NT2 enjoyed ‘very attractive economics’ and therefore, should be built as soon as possible (Mekong Secretariat 1988). The involvement of Mekong water cooperation in the development of NT2 ceases after this point.

From the late 1980s the World Bank began to play a stronger, more visible role in the project, and neither Thailand nor Lao PDR “sought a meaningful role for the MRC” in the development of NT2 (ADB and World Bank 2006: 21). The absence of the MRC from NT2 can be explained by three factors: the uncertainty about the future shape of Mekong water cooperation between 1991 and 1995, and the shift away from project development in the new incarnation of water cooperation, the MRC; the rise of other funding sources for infrastructure projects (see Chapters Three and Four); and, the MRC’s limited definition of tributary, which excluded it from involved in most hydropower projects prior to 2007 (see Chapter Five). In 2007, the MRC undertook a review of an NTPC study on the hydraulic discharges from the NT2 regulating pond

and their impacts on the Xe Bang Fai River, at the request of the external monitors of the project (MRC 2007c). Aside from this review the MRC has had little involvement in the NT2 process.

5. Elements of ‘model’ development: contestation between the World Bank and civil society

Elements of the development banks’ ‘model’ development include: a commitment to participation; social, environmental and livelihood restoration programmes, and revenues for poverty reduction. The World Bank argues that “the overall success of the project will eventually be judged by its ability to achieve the longer term environment, social, and revenues management outcomes” (World Bank 2009). These three elements are reflected in some of the commitments that the Lao Government and NTPC made in order to secure funding for NT2. These commitments include: participation in the planning process and procedures for affected people to submit grievances; US\$90.5 million provided for social and environmental mitigation and compensation with a commitment to raise resettled villagers’ incomes to the national poverty line in five years; US\$16 million to restore affected communities on the Xe Bang Fai livelihoods by year nine of the project; and a revenue management framework including a dedicated account in the Lao Treasury for the channelling of NT2 revenues into eligible poverty reduction programmes (Lawrence 2009).

Two discourse coalitions are engaged in processes of narrative construction and contestation around these three ‘model’ elements, both in the public discourse of NT2 (reports, documents, presentations, and media coverage) and in interviews for this thesis. Within these, actors’ scale impacts and benefits at different levels of analysis. Civil society approach the livelihood and resettlement issues from a local level, bottom-up, on-the-ground approach, which involves interviewing and discussing with villagers, as well as reporting the concerns of individual villagers (International Rivers 2008a). In contrast, project proponents scale impacts at the project level, viewing them in aggregate terms in a top-down approach: “there will be a school in every village, instead of now where there is only a school in one-third of villages. Education will increase” (Hydropower industry representative, observation notes, site visit, 03/08). The scale used to evaluate impacts conditions how the project is represented.

5.1. Participation

Participation is a broad theme permeating NT2's project documents and Social Development Plan: requirements include consulting with a range of stakeholders from villagers affected by the project, government agencies, and global NGOs (Singh 2009). The consultation process for NT2 is a key element of the development banks' 'model' hydropower: the World Bank argues that it has "paved the way" for more participatory hydropower development in Lao PDR (World Bank 2008: 4). NT2's project proponents committed to public participation and the World Bank claimed responsibility for achieving this outcome (Singh 2009). However, social and political complexities surround this commitment: participation is not a technical and neutral process, which can be applied in a universal fashion regardless of temporal-spatial setting. At a rhetorical level there is widespread agreement amongst actors that participation is an important principle, however, in practice it is "a concept and process intimately connected to the political and economic dynamics of the particular geographical and historical contexts within which it is being applied" (Sneddon and Fox 2007: 2161). Lao PDR has no domestic NGOs and limited space for civil society participation (see Chapter Four). Singh (2009) argues that the Lao government views participation as "a requirement of the international domain that has little bearing on existing institutions" (497). Consequently, these factors condition the potential for affected communities and other stakeholders to participate in hydropower projects.

Within the Lao context both civil society actors and the development banks have expressed concern about the ability of stakeholders to effectively participate. Public participation in Lao PDR is "especially contentious given that Laos is governed by a one-party state that strictly limits civil society and promotes deference to social hierarchies" (Singh 2009: 493). A consultant hired by the development banks in 2004 to assess local consultations argued that stakeholders had limited ability to express opinions without fear of reprisals and that there was a tendency to agree with government representatives (Chamberlain 2004). At a public consultation in Vientiane in September 2004 participants included representatives from NGOs, international organisations, embassies, foreign academics, Thai media, and village representatives from the Nakai district (Singh 2009). Village representatives endorsed NT2 in terms of poverty reduction and development, arguing that they were poor and had a need and a right to development: these endorsements were couched in the same terms of those of Lao government representatives and contributed to a sense that the public consultation

was a negotiated performance and not a forum for broad-based, free discussion as claimed by the World Bank (Singh 2009). At a behind the scenes meeting between Lao government representatives and the World Bank one Lao government representative questioned the validity of information collected from villagers and requested their names so that officials “could go and ‘talk’ with them and correct their misunderstanding” (Singh 2009: 496). Civil society actors have also contested the participatory nature of NT2. International Rivers (2008) argue that whilst they speak to only a small number of people affected by the project, the people consulted raise similar concerns and in “a country where people are reluctant to speak openly and critically about a government-supported initiative, this is especially significant” (5). These brief remarks illustrate that participation is a contested element of the NT2 ‘model’.

5.2. Social, environmental, and livelihood restoration programmes

The social, environmental, and resettlement programmes of NT2 are a key component of the development banks’ construction of ‘model’ hydropower. These programmes involve the resettlement of 6,200 villagers from the Nakai Plateau (see Map 4, p.182), including physical infrastructure in terms of 1,265 new houses and wells, and livelihood restoration measures, such as providing new land for cultivation, and rice and protein support for villagers as they adapt to their new homes (World Bank and ADB 2008b). The goal of the livelihood restoration programme is to double incomes five years after relocation (roughly 2012/13) (World Bank and ADB 2008b). Livelihood restoration measures include: land for rice cultivation, house gardens, grazing land, a community forest, and boats for fishing in the reservoir (Lawrence 2009). Compensation measures for villagers who are affected by the construction of the project include, cash payments for villagers who lose less than 10% of their productive assets and replacement land for those who lose more than 10% (Lawrence 2009). NTPC is administering a Downstream Livelihood and Asset Restoration Programme for villages in the Xe Bang Fai basin affected by the project (see Map 4, p.182). This programme focuses on microcredit funds to support agriculture, aquaculture and livestock projects, such as tomato cultivation or pig farming (Lawrence 2009). These programmes have been monitored by civil society, and by the external monitors, the POE and IAG.

Documents such as the World Bank and ADB’s July 2008 progress report on NT2, which present goals achieved and actions undertaken obfuscate the contested

nature of these programmes and delays to them. Civil society actors have expressed concern about the livelihood programs. A September 2009 letter to the World Bank and ADB from International Rivers identified a number of issues: new livelihood programs such as vegetable gardens and pig breeding are still at the pilot stage and only one or two villagers have tried them out per village; and villagers are able to catch less and less ‘big fish’ in the reservoir. This could lead to food security issues (International Rivers 2009b). Concerns have also been expressed about the livelihood programs in the Xe Bang Fai, where 120,000 people will be affected according to civil society, or 75,000 according to NTPC (Lawrence 2009; International Rivers 2008a). Downstream livelihood activities are funded through a savings and credit scheme and include fish ponds, pig farming, mushroom production and textile production. However, a number of these activities have failed leaving villagers in debt to the scheme and having to sell buffalo and other assets in order to make re-payments (International Rivers 2009b).

The POE have also critically assessed the livelihood programs during their monitoring visits and subsequent reports, and expressed a variety of concerns. In 2006, the POE were concerned about the speed of implementation of livelihood programs and warned of a two-track process whereby villagers could lose land and natural resources before the livelihood programs were in place leading to declining incomes for villagers and other problems (McDowell *et al.* 2006). Such were their concerns that the 13th Report issued February 2008 warned that it may be unrealistic to seal the diversion tunnel and start reservoir filling on 10 April 2008 as planned, as resettlement was unlikely to be completed in time and livelihood programmes were behind schedule (McDowell *et al.* 2008). In order to achieve the POE ‘signing off’ on reservoir impoundment their 13th Report set out a list of actions that must be completed, including: resettlement houses, village access roads, and fencing new farming plots (McDowell *et al.* 2008). In response to this NTPC stepped up the resettlement program and other aspects. If the POE did not ‘sign off’ on reservoir impounding around the original planned date on 10 April 2008 it could mean that NTPC would have to wait until the rainy season in 2009 in order to do so (Mc Dowell *et al.* 2008). This would mean delays in commercial operation and electricity generation. In light of this, it is likely that it was the threat of the POE not ‘signing off’ on reservoir impounding and the impact this would have on commercial operation, which motivated NTPC to increase its momentum on resettlement and livelihood programs and not the ongoing pressure of the development banks and civil society.

The 13th POE Report also noted that NTPC emphasised resettlement infrastructure and how some villagers have acquired new assets such as motorbikes in their assessments, but it is the livelihood programs which are more important and villagers are concerned about delayed implementation of the program and rice availability (Mc Dowell *et al.* 2008). Private sector actors view the livelihood programmes through an infrastructure lens:

“Some of the people in the resettlement villages never look very happy, but they have been given new houses with sanitation and well-built. They should be happy” (Hydropower industry representative, observation notes, site visit, 03/08).

According to this positionality communities should be happy because they have new, better housing. However, resettlement involves a number of complex issues other than the provision of new infrastructure: “communities have a spiritual attachment to the land that it is being flooded; they are also worried about being settled into new communities, and leaving their traditional land” (Civil society representative, interview, 03/08).

The emphasis on assets such as motorbikes illustrates how project construction can give local economies an artificial boost:

“Maybe there is a slightly false picture in the villages at the moment because of the boom you see. This is because there are some villagers working construction on the project, and because of the workers who live in the workers’ village and provide a boost to the local economy. Because of this some families have been able to buy motorbikes and mobile phones” (NTPC staff, observation notes, site visit, 03/08).

Data collected in 2007 showed that 80% of households were exceeding the target of US\$820 annual household income largely due to construction jobs on the project (World Bank and ADB 2008a). However, data for 2007 also showed that incomes had started to drop as construction activities dried up (McDowell *et al.* 2008). Now construction is complete villagers will have to rely on the livelihood programs.

The development banks argue that they are aware of concerns about the resettlement and livelihood programs, and that establishing “sustainable livelihoods and achieving income targets remains the most difficult challenge- but one that must be met” (World Bank and ADB 2008a: 3). Development bank representatives interviewed

for this thesis argued that resettlement and livelihoods programmes are challenging in a number of ways:

“There have been delays in constructing the new houses because when we consulted with villagers they requested a particular type of wood that was in short supply and had to be imported from Vietnam” (Development bank representative, interview, 03/08).

“Villagers have also chosen to remain close to their traditional lands, so they have been resettled near these lands, and their new land is a difficult soil for rice, and villagers are now farming a smaller area” (Development bank representative, interview, 03/08).

Within these statements project proponents are keen to assert that villagers’ requests and choices have been respected as much as possible, which is one of the reasons why the livelihood programs have been challenging. Adaption to new lands and livelihoods is also complicated:

“we have to get the villagers to understand that they can not do slash and burn but have to rotate the crops with rice one year and vegetables the next and also as they will not use vegetables in the same way as rice they have to be taught how to sell vegetables” (Development bank representative, interview, 03/08).

“we are having to train villagers in new livelihoods and helping them to adapt to different ways of life...We are doing new mind-frame development” (Development bank representative, interview, 07/08).

Project proponents argue that the complexity of this “new mind-frame development” is such that some people will fail:

“You are taking forest people and turning them into cultivators, and some people will fail to adapt” (Development bank representative, interview, 07/08).

“Yes some people will lose their way of life, but what are you supposed to do? Put a black box around them?” (Hydropower industry representative, observation notes, site visit, 03/08).

The above statements illustrate how project proponents scale arguments about benefits and impacts: in this scaling it is acceptable that some people are left behind, or fail to adapt, because the majority will adapt. In contrast civil society actors argue that: “For us a very basic tenet of developing a project should be that people are not worse off than they were before” (Civil society representative, interview, 04/08b). As such, IRN raise the concerns of individual villagers in their meetings with the development banks and

NT2. This conflicts with the development banks' scaling of the project: "They come and say this villager thinks this, but we have 6000 villagers" (Development bank representative, interview, 03/08). The contestation of resettlement and livelihood programmes illustrates how actors' scale project assessment differently and how this impacts the discursive struggle over the 'model' nature of NT2.

5.3. Poverty reduction

Powerful actors' fundamental justification for NT2 is that revenues from electricity sales will be utilised for poverty reduction programmes. Lao PDR is one of the poorest states in Asia in terms of "conventional development indicators" (Lawrence 2009). However, civil society actors contest whether NT2 will contribute to poverty reduction:

"When you look at the rhetoric the government, the ADB, and the World Bank are using hydropower is, or is one of the main ways in which Laos will achieve middle income status by 2020. Haven't seen numbers to demonstrate that that's even possible, and GDP and eco dev are two different things" (Civil society representative, interview, 04/08b)

Whilst hydropower will increase GDP it may actually increase poverty. GDP is a national scale indicator, which can mask changes at the sub-national scale: "Hydropower increases GDP but at same time undermines the natural resource base, which rural communities depend on" (Civil society representative, interview, 04/08b). Hydropower projects, such as NT2, impact livelihood strategies such as fishing, and therefore whilst national development indicators may increase, local communities may become poorer in terms of food security. This illustrates how the indicators or scales used to analyse development or represent poverty reduction are highly political and not neutral.

6. Nam Theun 2 and the wider hydropolitical constellation

The development banks' promotion of NT2 as a 'model' hydropower project, which can be replicated elsewhere must be located with the wider lower Mekong hydropolitical constellation. The rise of new private sector actors and possible funding avenues for hydropower challenges the dominance of the development banks:

“In all the discussions we have had about private investors we always said “well they would need to be facilitated by the banks”. That was wrong. They don’t need them at all” (Donor representative, interview, 05/08b).

In this context the development banks are promoting NT2 as a ‘model’. Singh (2009) argues that NT2 is the World Bank’s flagship project: if the “idea of World Bank-directed development is not supported by its flagship project in Laos, then its applicability elsewhere becomes highly questionable” (488). As such the success of NT2 is directly related to the World Bank’s reputation. Despite the rise of new private sector actors the development banks still possess strong political capital and remain key actors in hydropower development.

The World Bank is re-engaging with hydropower on a global scale. Since 2003 the World Bank has supported a number of projects, including Bujagali in Uganda, and Bumbuna in Sierra Leone. Its 2009 report *Directions in Hydropower: Scaling up for Development* argues that “the role of hydropower and multi-purpose water infrastructure is expanding, with important opportunities for poverty alleviation and sustainable development” (Fields *et al.* 2009: ix). The World Bank’s goal is “to maximize the strategic value of hydropower investment to economically, environmentally and socially sustainable development” (Fields *et al.* 2009: ix). Within this the World Bank will play a role in both investment and in sector strengthening (promoting good practice and building partnerships) (Fields *et al.* 2009). These roles have been identified as areas where the World Bank can add value and have a comparative advantage compared to other actors.

In contrast, the ADB’s *Energy Policy* focuses more broadly on how it will assist its’ member states in developing their energy sectors. The policy covers a range of areas including governance, energy efficiency, regional power trade and supporting hydropower projects (ADB 2009a). ADB is committed to selectively supporting “large hydroelectric power plants...with multipurpose benefits” with financing based on the economic benefits and compliance with ADB’s social and environmental safeguards requirements (ADB 2009a: 7).

The development banks have made pre-emptive claims about the success of NT2, in part to secure its status as a ‘model’ project. The development banks argue in their joint MWRAS that the region’s hydropower sector has been buoyed by the progress of NT2 (World Bank and ADB 2006). This strategy was released in 2006, a year after construction of NT2 had commenced. In mid-2007 the World Bank began preparing a book entitled *Doing Dams Right: the challenge of Lao Nam Theun 2*,

scheduled for release in February 2010 (Lawrence 2007). In 2007, NT2 was roughly half-way through construction and two years away from commercial operation.

However, the publication has been postponed and the title changed to *Doing A Dam Better: The Lao People's Democratic Republic and the Story of Nam Theun 2* (Porter and Shivakumar 2010). The World Bank states that the book will cover how in the “wake of an acrimonious debate on big dams, the World Bank brokered a global agreement on financing as well as on the sharing of the rewards and risks of the controversial Nam Theun 2 project” (Porter and Shivakumar 2010). The December 2010 book also describes how “skilful management, effective communications, and technical expertise helped to reach consensus and nurtured private-public partnerships, engaged stakeholders, strengthened the country's development framework and poverty reduction efforts, and addressed the project's environmental and social impacts” (Porter and Shivakumar 2010). This book is part of the development banks’ process of narrative construction about NT2, which is taking place against a backdrop of uncertainty concerning the project’s legacy.

The promotion of NT2 as a model is largely for economic and geopolitical reasons (Klopper 2008). As detailed in Chapter Four, the position of the development banks and the role of the private sector in hydropower development in the Mekong are changing:

“the development banks used to have a greater role and their role is diminishing because the...the region is very attractive to investors and the laws, conditions for those development banks are not competitive anymore” (Civil society representative, interview, 04/08a).

“In the past ADB and World Bank, especially ADB with its plans for a Mekong power grid, was a stronger voice in the overall shaping of the discussion of Lao’s hydropower development, and they were supported by a number of western financial donors, and associated consultancy companies...Now they have a weaker voice and I think that’s what different, that’s what changed. Private sector always there but the development banks have a weaker voice in the milieu of what’s going on” (Civil society representative, interview, 04/08b).

The extent to which the development banks are needed by the lower Mekong states to facilitate hydropower development has been reduced. As such, the rise of new private sector companies has impacted the power relationship between the development banks and the lower Mekong states.

Middleton (2007) argues that “with the arrival of a new set of private companies, alternative sources of finance, and regional government players keen to support the development of the region’s hydropower sector, multilateral bank support is also

unnecessary” (12). Consequently, the development banks are trying to reinvent themselves. The banks want to build on the success of NT2 but recognise that their financial capital is no longer essential: although their political capital is still quite strong (Dore 2008). The promotion of NT2 as a model to be replicated is one mechanism through which the development banks are seeking to maintain their position and access in the region. Middleton (2007) argues that the banks have not given up on supporting the hydropower sector in the region and are using a number of mechanisms including funding transmission line projects, touting IWRM and promoting NT2 as a ‘model’. Development bank representatives interviewed for this thesis argued that: “the international reputation and profile have gone up because of NT2. People know it and recognise the government and NTPC for it” (Development bank, representative, 03/08). Emphasising these aspects represents one discursive strategy which the development banks are using to promote their ‘model’ of hydropower development to the lower Mekong governments.

The World Bank has strong political capital. Large multilateral donors are regarded as key institutions that direct patterns of global change through development: the World Bank is pre-eminent amongst these and because of its “decisive role on a global scale, the World Bank is often seen by adherents and critics alike as the most influential partner in bringing about particular types of change in developing countries” (Singh 2009: 477). In conjunction with promoting NT2 the development banks, recognising that their political capital is still quite strong, are pursuing a number of other activities to maintain their visibility and presence in hydropower development in the region. These include: the joint MWRAS activities; the 2007 Lao-Thai Hydropower Forum convened by the World Bank; and the ADB’s joint work with MRC and WWF on *Environmental Criteria for Sustainable Hydropower Development*. These activities are extending the development banks’ purview and represent ways in which they are becoming involved in a multitude of activities, which promote them as possessing or aiding the solutions to particular problems.

7. Conclusion

Constructing a sense of inevitability around hydropower projects obfuscates the ways in which projects are contested. NT2 project proponents have constructed inevitability in a number of ways, including: rewriting the project history as a logical progression from 1927, which explains delays to the project in terms of economic

factors such as the Asian Financial Crisis that are outside the sphere of the project; and, reconceptualising NT2 as a 'model' hydropower project. This 'new' hydropower project is the solution to the problem of 'bad' hydropower projects, which have not fulfilled their potential and delivered socio-economic development. In constructing a sense of inevitability, project proponents have utilised the dominant hydropower narrative in the Mekong, which links hydropower and poverty reduction, but have added an extra dimension distinguishing between 'good' and 'bad' hydropower.

NT2's hydropolitical constellation demonstrates that actors operate within multiple, overlapping power relationships. For example, the development banks' funding for NT2 has been conditioned by an awareness of the controversy surrounding hydropower dams and contributed to the development banks seeking certain commitments from NTPC and the Lao Government. The project also has significance for actors such as traditional donors to the region. These donors are not necessarily directly involved in the development of NT2, but, they are contributing to promoting it as 'model' through mechanisms such as making positive statements about it in public forums. Traditional donors are motivated by an awareness of changing regional dynamics in the lower Mekong's hydropolitical constellation, such as the emergence of new private sector actors undermining the need for development bank facilitation of hydropower projects.

Asymmetric power relationships between actors should not be conceptualised as involving a dominant and a passive actor. The Lao Government agreed to a number of social and environmental commitments in order to secure funding from the development banks. Without development bank support other financiers would not have supported NT2. Consequently, Lao government social and environmental commitments can be viewed as a strategic. Commitment and implementation are two distinct fields. Ferguson (1994a) argues that development projects have unintended consequences and outcomes cannot be 'read' from intentions. Development bank motivated commitments to, for example participation are implemented through local complexities. In the Lao context this includes limited space for public participation and civil society concerns about the possibilities for affected communities and other stakeholders to openly express their views.

Disseminating a representation of NT2 as a 'model' hydropower project involves simplifying the project to a number of key elements. These are: participation, social and environmental commitments, and revenues managed for poverty reduction. The success of the development banks promotion of NT2 as a 'model', in terms of it gaining acceptance from other actors and inclusion in the public transcript of

hydropower development, depends on the ability of the development banks to combat and silence critiques of the project. Civil society actors contest all three of the key elements of ‘model’ hydropower. The development banks argue that their involvement has improved the project resulting in a ‘better’ project. Through their official documents, which present positive social and environmental outcomes, and through their concerns that civil society critiques could result in the Lao government returning to ‘bad’ hydropower, the development banks are seeking to silence opposition, and scale impacts and evaluations at the project and national scales. Within this framing, success is dependent on an aggregate-level of improvement in the livelihoods of affected communities, and contributions to poverty reduction in terms of the government channelling funds into programmes in health and education. This scaling at the level of evaluation disguises both individual impacts (which are highlighted by civil society actors) and locates success within technical processes administered by the government.

The development banks motivations for representing NT2 as a ‘model’ hydropower project are two-fold. The development banks are expanding their involvement in hydropower after sustained criticism of projects by civil society actors lead to the WCD and a hiatus from direct hydropower funding. The World Bank’s 2009 hydropower strategy identifies the sector as key to development and an area in which the bank can play a strong role: a successful dam story in NT2 contributes to this role. Two, the position of the development banks in the lower Mekong hydropower sector is challenged by the emergence of new private sector actors and availability of new sources of financing for infrastructure projects. However, the promotion of NT2 as a ‘model’ by the development banks may have destabilising effects for the banks. NT2 is meant to help maintain the development banks’ position in relation to new hydropower actors, but the standards imposed by the banks are considered ‘very high’ by Lao government representatives, and as such they may not replicate the project.

Chapter Seven: Contesting hydropower: the debate over trade-offs

1. Introduction

Justifications for mainstream hydropower dams emphasise their contribution to poverty reduction. Civil society actors, including fisheries experts and scientists challenge proposals for mainstream dams on the Mekong. Their challenges target the large-scale fisheries impacts of hydropower dams and the effects these will have on the food and livelihood security of local communities and vulnerable groups dependent on the Mekong's fisheries. Instead of ceding ground in the face of mounting fisheries evidence, which suggests that the consequences of mainstream dams will be disastrous, powerful and visible actors such as state agencies, governments, and the development banks and the MRC are framing the discussion in terms of trade-offs. Empirical material from three key moments in the hydropower debate, as well as interview material, is utilised in this chapter to illustrate the ways in which actors are framing and contesting the debate, and how framing the debate in terms of trade-offs depoliticises the impacts of hydropower and the distribution of costs of benefits. These three moments are the Independent Expert Fisheries Group, the 2008 MRC Regional Multi-Stakeholder Consultation, and the MRC's 2010 Strategic Environmental Assessment.

A discussion of trade-offs allows the promotion of hydropower development whilst simultaneously recognising fisheries impacts. This strategy of co-option shifts the discussion to a technical discourse situated at the national and regional scales, which masks the distribution of costs and benefits and attempts to divorce fisheries impacts from the impacts they will have on people. A focus on issues such as quantifying fisheries and comparing sectors contributes to situating the discussion of hydropower and fisheries as a state, regional, and technical discourse. This excludes actors located over other scales, and helps to construct both the environment and affected actors as objects to be acted upon. It also depoliticises hydropower dams, rendering the debate technical and thereby obfuscating the political nature of dams and their impacts.

Environmental and developmental narratives play a fundamental role in the justification of hydropower, challenges to this, and the discussion of trade-offs. The dominant narrative linking hydropower and poverty reduction simplifies complexity for decision-makers and legitimises particular courses of action, *i.e.* mainstream hydropower. Counter-evidence presented by fisheries scientists and civil society actors increases complexity and de-stabilises the assumptions of decision-makers. This

illustrates that narratives are not fixed temporally or spatially: there is continual tension. Narratives also play a role in the discussions of fisheries and trade-offs in the region. Fisheries are represented both as doomed, due to their open access nature, and an unsuitable object for development. These types of narratives surrounding fisheries allow powerful actors to place hydropower and fisheries in a trade-off relationship. This depends on attributing instrumental values to both hydropower and fisheries: attributing a substantive value to fisheries would not allow a trade-off to be made.

Mainstream dams will transform the Mekong River completely and affect livelihood strategies in a number of ways. Changes in flow type and speed as well as sediment transportation may severely impact irrigation systems and riverbank agriculture (ICEM 2010). This chapter focuses on fisheries impacts because they have emerged as a key discursive battle ground in the region, and because fisheries are extremely important for livelihoods in the basin.

2. Narratives and counter-evidence

The dominant regional discursive formation in the lower Mekong links hydropower development and socio-economic development (see Chapter Three). This narrative revolves around of sequence of events: the people of the Mekong are poor; the potential of the Mekong River for hydropower development is huge; therefore, developing the Mekong River will lead to socio-economic development. It has endured despite the emergence of a range of new actors in hydropower and water resources development (see Chapter Four), and challenges to the position of established actors (see Chapters Five and Six). State actors, such as government ministries and state enterprises, throughout the lower Mekong basin express and conform to this dominant narrative. State officials interviewed for this thesis conceptualised hydropower in terms of its contribution to socio-economic development:

“we are poor. We need energy for my people. Maybe you have seen, been in the rural area, the people they have no electricity they use candle, use fire. They need development. We will develop based on hydropower” (State official, interview, 06/08a).

Statements such as these illustrate the endurance of narratives and how they frame policy-makers’ thinking. The dominant regional discursive formation in the lower Mekong has endured since the 1950s, and whilst actors, power relationships and

geopolitical contexts have changed the definition of the problem (poverty), the solution (hydropower) has remained constant.

The resurrection of plans to dam the mainstream of the lower Mekong has intensified the struggle between actors to frame and control the debate over hydropower development in the region. Powerful actors such as government ministries and the development banks are continuing to promote hydropower development as a poverty reduction strategy (Viravong 2008; ADB and World Bank 2006). The MRC has also presented its Member States hydropower development ambitions in terms of the narrative described above, arguing that Member States regard hydropower development as an “integral component” of their policies for economic growth and poverty elimination (Bird 2008c). However, a range of actors including civil society actors, traditional donor representatives, researchers and scientists, both within and outside of the region are challenging this dominant narrative and its representation of the Mekong as an object to be developed.

Narratives play an important role in policy-making and decision-making. Complexity and uncertainty is reduced by narratives, which offer stories about development and the environment which suggest possible solutions (Roe 1991; Leach and Mearns 1996). In the case of the Mekong, as discussed in Chapter Three, complexity concerning socio-economic development and how best to develop water resources that span six states is reduced to the simple, problem-solving narrative outlined above, which in defining the problem also offers the solution. In light of this, questions concerning the suitability of this development path are met simply with appeals to the narrative itself or to slogans. For example, state officials interviewed for this thesis expressed concern about fisheries impacts, but legitimised these in terms of the obvious need for poverty reduction:

“Don Sahong [a proposed mainstream dam] is my concern also because of the fisheries, and fisheries management. But, we will find a way to manage to the fisheries. Hydropower will bring many benefits, and the people need those benefits” (State official, interview, 06/08a).

Poverty reduction acts as a meta-justification, which can override and silence opposition: no-one is against poverty reduction (Molle *et al.* 2009b). This has implications for the ways in which actors contesting the dominant narrative and the proposed hydropower development present their arguments.

Scalar considerations, such as the scaling of development interventions, and the scalar distribution of costs and benefits, are extremely important in this context.

Hydropower dam impacts are situated largely over the local scale. However, benefits will be accrued and distributed largely at the national scale: projects are also justified at the national scale.¹¹ Scaling development at the national scale can obfuscate the distribution of costs, benefits and risks attached to hydropower projects:

“The obvious issue is the payoff between the services the river provides for poor communities against the industrial benefits- irrigation or electricity- which generally benefit urban areas. Not just a question of who benefits, who wins and loses, but who shoulders the proportion of the risk” (Civil society representative, interview, 04/08b).

The utilisation of poverty reduction and national development as rationales for hydropower development ‘scale-up’ discussions from the local level and disguise issues surrounding impacts and the distribution of costs and benefits in water resources development.

As detailed in Chapter Four, changes at the global level in the water discourse with the rise, and now prominence, of IWRM seek to integrate social and environmental concerns into water resources development. This has been reflected at state and basin levels of analysis where environmental and social concerns surrounding water resources development projects have become more visible. For example, rising awareness of social and environmental issues, particularly surrounding resettlement are cited in the IMC’s 1987 *Perspectives for Mekong Development* as the reason for scaling down the proposed Pa Mong dam into two smaller projects (Mekong Secretariat 1988). Social and environmental concerns have also led civil society groups in Thailand to challenge hydropower development, such as the Pak Mun Dam (see Chapter Four, Section Six). The protests against Pak Mun were boosted by the WCD process, which was highly critical of the dam (Foran and Manorom 2009). This illustrates the interconnections between processes at the global scale and hydropower development in specific geographic locales. These two examples demonstrate that political space has opened up for the consideration of social and environmental concerns.

The rationale for hydropower development largely presents the lower Mekong River as unutilised (see Chapter Three). This masks the on-ground reality in which the lower Mekong River permeates the livelihoods of the basin’s population. A growing awareness of social and environmental issues is destabilising this representation of the

¹¹ The transboundary nature of the Mekong River basin complicates this picture. Proposed mainstream hydropower projects, such as the Don Sahong located in Southern Lao PDR close to the border with Cambodia, may have transboundary fisheries impacts. However, whilst the impacts may be transboundary they will largely affect communities dependent on the fisheries resource.

Mekong as unutilised. Challenges to the dominant narrative and to the proposed hydropower development plans, which it underlines and supports are centred on fisheries and livelihood impacts.

2.1. Fisheries in the basin: importance and impacts

Fisheries play a vital role in livelihoods and food security in the lower Mekong basin. The Mekong's fisheries are one of the most valuable, productive and diverse inland fisheries in the world, valued at approximately US\$2.5 billion annually. Around 120 species of fish are commercially traded in the Mekong region (Coates *et al.* 2003). Fisheries resources play an integral role in livelihoods in the basin with between 64 and 93% of rural households in the lower Mekong involved in fisheries to some extent (Coates *et al.* 2003). Fisheries provide various types of employment: direct and non-direct, full and part-time, commercial and non-commercial. They are also extremely important for food security. Consumption of fish and aquatic resources provides between 47 and 80% of the animal protein intake of people living in the basin, and in 2006 consumption of fish and other aquatic animals was estimated at 2.6 million tonnes (Hortle 2007). The subsistence and nutrition roles of fisheries enable people to engage in other means of employment (Hortle 2007). Whilst these pieces of evidence present a general overview of the importance of fisheries in the basin, it is important to note that fisheries and the relationships between local communities and fisheries resources are varied throughout the basin. When talking about 'the fishery' in the Mekong, it is important to remember that there are many different types of fisheries, including large visible fisheries such as the Tonle Sap, and numerous diffuse small-scale fisheries in ponds and rice fields (Friend *et al.* 2009).

The fisheries and subsequent livelihood impacts of mainstream hydropower development have emerged since 2007 as a key battleground. Hydropower dams impact fisheries in a number of ways. The most important of these, in terms of Mekong mainstream hydropower development, is that they act as barriers to fisheries migration. A large number of Mekong fish species are migratory, migrating up- and downstream to breed and feed. It has been estimated that more than 70% of the total fish catch in the Mekong (roughly 1.8 million tonnes) is dependent on long distance fish migration, with the Mekong mainstream acting as a corridor for fish migration (Dugan 2008b). Mainstream dams will impair the connectivity of the Mekong system for fish migration. Dams on the mainstream in Lao PDR and Cambodia will effectively stop fish migrating

up and downstream, which will severely impact important fish migration routes such as those connecting the Tonle Sap in Cambodia and the Khone Falls in Lao PDR, and between the Mekong mainstream and the 3S rivers (important Mekong tributaries shared by Lao PDR, Vietnam and Cambodia) (see Map 3, p.6) (ICEM 2010). Blocking fish migration will also have impacts on biodiversity and productivity in the Mekong's tributaries (ICEM 2010).

A 2008 MRC review of the size of the catch which could be affected by mainstream dams estimated impacts to be between 700,000 and 1.6 million tonnes (Barlow *et al.* 2008). Fisheries experts interviewed for this thesis argued that blocking fish migration routes impacts not only fish themselves, but livelihoods:

“It's the impact of no fish in the river on the people who live here, that's the important point. Decreasing the amount of fish available...means there is less food for people, less food security. So it's an economic and livelihood impact on poor people” (Fisheries expert, interview, 05/08).

Consequently, to fully analyse the political nature of framing the debate in terms of a fisheries-hydropower trade-off it is necessary to situate fisheries impacts within the context of the role that they play in livelihoods.

Determining the scale and extent of fisheries impacts is complicated and as will be shown below is located at the intersection of science, politics, and the role of knowledge in decision-making. Fish in the Mekong largely fall into two categories labelled black and white (Dugan 2008b). Black fish species have limited lateral migrations from the rivers into floodplains, they do not migrate up and downstream but remain in floodplains; in contrast, white fish species undertake long-distance migrations up and downstream, between lower floodplains and the mainstream (Dugan 2008b). Fisheries impacts will differ for the two categories, such that:

“Some with only limited migrations over short ranges may not be impaired by dam structures. Others are highly adaptable to habitat modification including impoundment. Species most likely to be affected will be those that undertake significant passive and active migrations along the mainstream between critical spawning, feeding, and refuge habitats as part of their life histories” (Barlow *et al.* 2008: 16).

The above statement illustrates that fisheries' resources are varied and that impacts will also vary. This has implications for determining impacts and presenting a coherent message to decision-makers.

2.2. Challenging the dominant narrative

Since 2007, a discourse coalition has been contesting the dominant narrative of hydropower development and has coalesced around a storyline that argues mainstream hydropower development will have immense negative fisheries, livelihoods and environmental impacts. Hajer (1995) argues that discourse coalitions form around specific storylines, and involve a range of actors who may never have met and who, whilst they share a storyline, tell different stories. Actors in the discourse coalition which are contesting mainstream hydropower include Thai NGOs such as TERRA and Living Rivers Siam, Cambodian NGOs such as the Rivers Coalition in Cambodia, the domestic branches of international NGOs such as Oxfam Australia which has an office in Cambodia, NGOs such as International Rivers, researchers and scientists from regional and international organisations, and some domestic and foreign media. Within this coalition of diverse and varied actors, a range of stories are told including amongst others: mainstream hydropower dams will block fisheries migration (Baran and Ratner 2007), will affect livelihood and food security (Imhof 2009), will be disastrous for biodiversity including the dolphin population (Bezuijen *et al.* 2007), and will impact other development sectors such as eco-tourism (Fawthrop 2009). Different actors highlight different areas of concern about mainstream dams illustrating the multi-dimensional nature of the debate. However, these stories have yet to coalesce into a coherent counter-narrative with the same appealing and prescriptive logic of the dominant ‘hydropower leads to development’ narrative, which is helping to drive policy and decision-making in the region.

Once a storyline gains enough socio-political resonance it generates political effects (Hajer 1995). In terms of the Mekong, the ‘mainstream hydropower will have immense negative impacts’ storyline has had a number of effects, including: discussions of the possible fisheries impacts at multi-stakeholder forums, the convening of an Independent Expert Fisheries Group to discuss fisheries migration and mitigation, and state level actors requesting the MRC to conduct more studies into fisheries impacts (MRC 2008b). These activities and the production of counter-evidence to the dominant narrative linking hydropower development and socio-economic development illustrate a number of interesting points concerning the role of science and information in policy-making, narratives and counter-narratives, and the discursive strategies which powerful actors utilise to co-opt the terrain of less powerful actors.

There is always tension surrounding narratives. Narratives are not ‘fixed’, they are challenged and contested. Counter-evidence in the Mekong has destabilising effects for policy-makers as it increases uncertainty and complexity. However, narratives can also endure despite the accumulation of counter-evidence (Swift 1996), and the more complex a situation the more likely it is that narratives endure (Friend *et al.* 2009). The case of the lower Mekong illustrates how decision-makers and powerful actors attempt to co-opt the terrain of less powerful actors. Counter-evidence that hydropower dams will impact fisheries is acknowledged by powerful actors such as the development banks (ADB and World Bank 2006). However, this counter-evidence does not ‘overthrow’ the underlying dominant development narrative. This is partially because, as will be seen below, counter-evidence has yet to coalesce into a counter-narrative, which can offer the same stabilising assumptions to decision-makers. In light of the uncertainty that counter-evidence has produced, and the challenges to hydropower development, powerful actors are predominately employing two strategies: one, calling for more studies into fisheries impacts and mitigation measures; and two, framing the discussion surrounding fisheries and hydropower in the language of trade-offs.

3. Calls for more studies: science, information and decision-making

One of the key questions being debated between actors both inside and outside of the Mekong region is the degree to which fisheries impacts can be mitigated. Civil society actors including fisheries experts and scientists have compiled evidence that negative impacts of hydropower dams cannot be mitigated (*e.g.* Dugan 2008b). However, state representatives have requested further studies and placed their faith in technological solutions. Calls for further studies into fisheries impacts and the possibilities of mitigation need to be evaluated in light of assumptions about decision-making: will decisions be made on the basis of this information, or is decision-making a political process which conditions how information is utilised? Isolation of the processes and actors who collect information and conduct scientific studies from those where hydropower decisions are made is also relevant here. Scientific studies, such as those conducted into fisheries impacts by the MRC, take a long time to conduct and there are issues surrounding whether this information is utilised by decision-makers or has impact on decisions.

3.1. Possibilities for mitigation

In 2008, the MRC convened an Independent Expert Fisheries Group comprising seventeen fisheries scientists and researchers to consider five main areas: the importance and nature of fisheries migration in the Mekong, the impacts of barriers on that migration, whether fish-passage facilities can be used effectively for fish migrating upstream/downstream, and the possibilities for compensating decreases in fisheries yields (Dugan 2008b). The results of the Group were publicly disseminated at the 2008 MRC Regional Multi-Stakeholder Consultation on the MRC Hydropower Programme, and in an article in the MRC's fisheries newsletter *Catch and Culture* (Dugan 2008a; Dugan 2008b). MRC representatives at the 2008 MRC Regional Multi-Stakeholder Consultation argued that: "This Group is part of the MRC's attempt to play its role in shedding light on important questions. We see it as part of our fast-track activities" (MRC Representative, observation notes, MRC Meeting, 09/08). This work must be situated within the broader context of the debate over the role and relevance of the MRC, which has provided an impetus for the MRC to become more pro-active and define its role in hydropower (see Chapter Five). In 2009, the MRC defined its role in terms of knowledge generation and facilitating stakeholder forums (MRC 2009b).

The findings of the Independent Expert Fisheries Group were clear and consistent: the impacts of barriers on fisheries migration will be severe and it is not possible to mitigate those impacts with current technology due to the volume of migration in the Mekong and the large number of species involved (Dugan 2008a). These findings are supported by those of the 2010 draft Impact Assessment report of the MRC's Strategic Environmental Assessment (SEA) for *Hydropower on the Mekong Mainstream*. The SEA is one of the MRC's activities under its Initiative on Sustainable Hydropower: this Initiative outlines the role of the MRC in hydropower and includes basin-wide studies on the impacts of hydropower (MRC 2009b). This is consistent with the MRC *Strategic Plan* which states the MRC will focus on transboundary projects and national projects with significant/cumulative impacts, and the role of the MRC as a knowledge provider (MRC 2006). The SEA was conducted by the International Centre for Environmental Management (ICEM), an expert consultancy based in Australia and Vietnam, which focuses on Asia and achieving ecologically sustainable development (ICEM).

The 2010 draft SEA report argues that "current designs of fish passage are unlikely to be effective for more than a few species" and that options for mitigating

these effects “are not capable of compensating for the losses” (ICEM 2010: 23, 24). ICEM (2010) considered the proposed hydropower projects and their impacts as a cumulative whole and then also as different sets of projects. The draft report argues that even if all six of the proposed mainstream hydropower dams in upper Lao PDR are equipped with “efficient and effective fish passages, the stretch of six dams in cascade over a distance of nearly 800km represents an impossible barrier for the long distance migratory species” (ICEM 2010: 23). If all proposed eleven mainstream dams go ahead throughout the lower Mekong basin then “no mitigation measure will prove effective” due to the diversity and magnitude of the Mekong’s fisheries and their migrations (ICEM 2010: 24). Mainstream dams will also impact tributary and sub-basin fisheries as these are also dependent on seasonal mainstream fish migrations (ICEM 2010). The Independent Fisheries Expert Group suggested that if dams are to go ahead they should be located further upstream or on the tributaries in order to lessen fisheries impacts (Dugan 2008b). However, these would still have fisheries impacts.

During discussions at the 2008 Regional Multi-stakeholder Consultation on the MRC Hydropower Programme, state officials requested more studies into fisheries impacts (State officials, observation notes, MRC meeting, 09/08). These requests came after the presentation by the Independent Expert Fisheries Group, which stated that mitigation was not possible (Observation notes, MRC meeting, 09/08). In contrast, state officials at the consultation were actively engaged by the US Army Corps of Engineers’ (USACE) presentation about fisheries mitigation in the Columbia River Basin and asked a number of questions: “How much do fisheries mitigation measures cost?”; “Lots of different fish passages, which is the appropriate one for getting fish past a dam to the spawning ground”; “Which technology in your experience is the good one?” (State officials, observation notes, MRC meeting, 09/08). These remarks illustrate how state representatives have placed their faith in technological solutions, view the example of the Columbia River Basin as proof that technological mitigation of fisheries impacts is possible, and also view the utilisation of technological solutions from a different geographic locale as unproblematic.

The Columbia River Basin has, to a certain extent, been treated as a model by state actors in the Mekong basin. In early 2008, officials from the four lower Mekong states undertook a study tour to the Columbia River Basin. The Columbia River basin was chosen by the MRC because it shares some similar natural characteristics with the Mekong, faced similar development and management decisions a few decades earlier, and offered opportunities to learn about the cost and effectiveness of fish mitigation

measures (BDP2 2008). Following the study tour state officials made comparisons between the Columbia and the Mekong:

“Basically the high ranking people went to Columbia basin and now they understand. Along the Columbia how many dams? Maybe more than 60 you see, but they have measures for the fish. Maybe a little more difficult here as they are between two countries, whereas we have four countries in Mekong (State official, interview, 06/08a).

Representatives from USACE attended the 2008 Regional Multi-stakeholder Consultation on the MRC Hydropower Programme and participated in the Independent Fisheries Expert Group meeting in September 2008. USACE representatives detailed how they have utilised different technologies including construction of fish passages, the use of fish-friendly equipment (*i.e.* fish-friendly turbines), and operating the reservoirs in ways that prioritise fish passage in order to mitigate the impacts of hydropower dams on salmon (Tanovan 2008).

State officials’ requests for further studies and interest in the Columbia River Basin as a model illustrate how powerful actors represent fisheries impacts as a technological problem, which will have a technological solution. However, it is important to remember that technology cannot be divorced from the contexts in which it is developed, located and operated. It is not simply a case of transferring technological solutions from the Columbia River Basin to the Mekong River Basin. USACE representatives at the 2008 MRC Regional Multi-stakeholder Consultation stressed that: “Our results are for salmon. It will be different in the Mekong. You have to be specific to location” (USACE representative, observation notes, MRC meeting, 09/08). Fisheries experts interviewed for this thesis also warned against comparing the Mekong and the Columbia:

“Their mitigation measures are largely targeted at salmon...very big fish, very powerful swimmers. So there are ways in which you can get them upstream...to where there’s good habitat and they spawn, and the young don’t come back downstream until they are two or three...Now a fishery like we have in the Mekong consists of dozens and dozens of species, which will all come downstream as either eggs, larvae or juvenile fish of different sizes. You can’t trap them and move them round a dam because they are too tiny and fragile. So by and large these mitigation measures for migratory Mekong fish are nonsense” (Fisheries expert, interview, 06/08).

Even if technological mitigation measures were effective in getting a percentage of fish upstream past the dams, this would not necessarily mean that the Mekong’s fisheries

would be preserved. A focus on mitigation measures such as fish passes casts fisheries impacts as a technological problem, and thereby ignores the hydrological and biological processes and aspects of the problem. If all the proposed mainstream hydropower projects are implemented it is estimated that 66% of the total length of the mainstream in the Lower Mekong Basin (LMB) will be turned into a reservoir (ICEM 2010). This has a number of implications including changes to the speed of the river's flow, major changes to sediment transportation, and a disruption of the flood pulse of the river (ICEM 2010). Changing ecological and hydrological contexts of the river will have serious implications for fisheries:

“Even if you can get fish upstream past the dam, what's up there for them? Upstream is a lake, its no longer a river...what is planned in Laos will wipe out the suitable habitat...Getting fish past these dams may be actually deleterious as there's no good habitat for them upstream. So you get them upstream and they don't reproduce. Or then you've got the problem that even if they do spawn, spawning upstream the eggs drift in a lake. The lake is effectively Stillwater so the eggs drop out of suspension and the young die” (Fisheries expert, interview, 05/08).

Therefore, even if mitigation measures are designed and have some success in getting the migratory fish past the dams, it may not be possible to maintain the existing fishery as dams change the habitat and ecology, which the Mekong's freshwater capture fisheries are dependent on. A focus on technological mitigation masks this reality as it represents the problem as a simple engineering one of moving fish up and downstream past the dams.

3.2. Information and decision-making

State officials' requests for more studies into fisheries impacts suggests that information gaps exist, which are hindering decision-making. This presupposes that decision-making is a neutral process whereby relevant information is collected and assessed, and directly leads to decision outcomes. However, this is not necessarily the case as decision-making is a political process. Focusing on knowledge gaps can also lead to questions concerning how much information is enough information, what is the relevant information, and how are the answers to these questions defined. As shown in Chapter Five, there is a separation between water and energy actors in the lower Mekong states, with the former involved in the MRC, and the latter largely outside the MRC's sphere of engagement. This raises the possibility of a two-track process

whereby institutions such as the MRC will be engaging in further studies whilst hydropower decisions are being made elsewhere on the basis of other factors.

Important knowledge gaps concerning fisheries, which could have implications for decision-making, were identified in interviews for this thesis:

“We don’t know where all the spawning grounds are...There are all these plans for dams on the mainstream...and there is every likelihood that most of the fish are caught downstream but most of the spawning happens upstream. The young fish are drifting back downstream and are being caught and the big ones come back up and breed again and again. Now the fish are being caught downstream and that’s all that fishermen, the politicians and the public see. This is where the fish are so they don’t realise how important upstream might be...Other information gaps include what are the triggers for migration, and what are the ecological and physical factors that stimulate fish to move upstream” (Fisheries expert, interview, 05/08).

Studies such as the 2010 Impact Assessment of the MRC’s SEA of proposed mainstream dams have identified further information gaps including the impact of sediment retention on water productivity and fish production; the impacts of changing species composition and losses (*e.g.* what impacts this will have on nutrition and the shifts of benefits between social groups); and the impacts of the changing quality and value of fisheries products (ICEM 2010). This 2010 report, commissioned by the MRC, argues that the “magnitude of possible impacts calls for major additional investment in in-depth assessments of impacts of hydropower development on food security in the Mekong Basin” (ICEM 2010: 26). This illustrates that further studies can lead to calls for further studies, as there are always questions to be answered and areas which have not been studied in depth.

However, fisheries scientists argue that, despite these gaps there is already enough information to make a strong argument: “I’m sure that we’ve got enough information to put up a very solid argument that large dams on the Mekong will have an irreversible impact on the fisheries” (Fisheries expert, interview, 06/08). MRC studies including Hurtle (2007) and Coates *et al.* (2003) have detailed areas such as fisheries yields and the percentage of protein populations in the basin derive from the fishery. The importance of fisheries to the basin’s populations can be intimated from these studies. Against this backdrop, fisheries scientists have labelled calls for further studies a “convenient excuse”:

“its an excuse to ignore it. We have enough information now to show the importance of the fishery for the people...People who ignore that just want to ignore

it because it gets in the way of their argument to have hydropower. So that's the convenient excuse [information gaps]" (Fisheries expert, interview, 05/08).

In this context, more science or studies may help, but fisheries scientists argue that "it is really a governance issue, failure to understand the bigger picture, and a communication issue" (Fisheries expert, interview, 05/08). Current knowledge about fisheries illustrates how counter-evidence is troublesome for policy-makers because it increases complexity and destabilises key assumptions. As such, calls for further studies represent both a strategy to 'ignore' the complexity presented by counter-evidence and faith in science and technology to provide solutions to the hydropower-fisheries tensions, which is being defined as a technological problem.

At the 2008 MRC Regional Multi-stakeholder Consultation, donor representatives during the panel discussion followed state officials' calls for more studies with questions about how to proceed: "Presentations have said can't mitigate impacts on fish. If this is correct would you undertake mainstream hydropower projects?" (Donor representative, observation notes, MRC meeting, 09/08). This question is premised on certain assumptions, including that decisions in the Mekong will be objectively-based solely on the information and knowledge generated about key questions such as fisheries, and that economic, social and environmental outcomes are all valued equally by decision-makers. It also presupposes a number of things about the role of the MRC, including that knowledge generated by the MRC impacts decision-making. This is contested, as it is "uncertain to what extent the MRC can project its scientific knowledge to influence the politicized decision-making process" (Middleton *et al.* 2009: 47). As detailed in Chapter Five of this thesis there are wide ranging concerns surrounding the relevancy and impact of the MRC.

Civil society actors at the 2008 *Mekong mainstream dams: People's voices across borders* conference in Bangkok, Thailand, which was convened by civil society actors including TERRA and Chulalongkorn University, called on the MRC to utilise its knowledge to inform and impact decision-making (Lee and Scurrah 2009). However, donors have expressed concern that whilst their funding has helped the MRC to produce a lot of data, knowledge and guidelines, this has not translated into pro-active engagement with Mekong water governance or informed decision-making (Hirsch and Jensen 2006; Lee and Scurrah 2009). As detailed in Chapter Five, MRC representatives interviewed for this thesis argue that knowledge production is a key area where the MRC can access debates. By disseminating this knowledge to a wide range of actors the MRC hopes to provide a common basis for debate and create a common understanding

of development needs in the basin (Bird 2008b). However, the MRC is largely isolated from hydropower decision-making in the basin (see Chapter Five). This raises questions surrounding how the MRC can ensure impact in the area of trade-offs and navigate challenges such as asymmetric power relations between actors. The intensification of MRC activities since 2008 is an encouraging sign that the organisation is becoming more proactive and engaging with key debates in the region. Whether this will be translated into impact in decision-making is dependent on the dynamics of the wider hydropolitical constellation in which the MRC operates (see Chapter Five).

4. Trade-offs: solution or discursive device?

Powerful and highly visible actors in the Mekong region such as government representatives, the MRC and the development banks are promoting trade-offs and trade-off negotiation as a solution to the hydropower-fisheries opposition. However, whilst trade-offs have a ‘common-sense’ appeal, they are framed and situated at the national or inter-state scale and therefore repackage fisheries impacts in ways which make them appear as acceptable or unavoidable losses. Conceptualising hydropower and fisheries as a trade-off is supported by particular narratives and representations of fisheries. If capture fisheries are not conceptualised as development and are represented as a doomed resource, then they can be easily traded-off for hydropower, which as a development option that will bring wide-ranging economic benefits.

The tension between water resources development and other values and sectors is acknowledged by a number of commentators and actors in the Mekong basin. Phillips *et al.* (2006) argue that the “most controversial aspect of any future development of the basin involves the dichotomy between *exploiting its natural resources*, while at the same time *maintaining an ecological balance*” (97, emphasis in original). Hydropower dams have a legitimate place in the trade-off between development and the environment if long-term costs and benefits are fully assessed: however, this full assessment rarely happens (Cronin 2009). In the MWRAS the development banks encourage policy-makers to “found their policies on the economic, environmental and social dimensions of the *trade-offs* that emerge when water use is changed”, arguing that ‘balanced development’ should be the guiding principle (ADB and World Bank 2006: 4). This will require trade-off choices between “economic, social and environmental values; between the competing interests of the riparian countries; and between the different sectors and beneficiary groups at the sub-basin level” (ADB and World Bank 2006: 4).

The MRC also argues that trade-offs are likely between different sectors, with the key trade-off centring on hydropower and fisheries (Lennaerts 2008). A particular focus of the MRC's Initiative on Sustainable Hydropower (ISH) will address the extent to which the barrier effects of mainstream dams on fisheries can be minimised or mitigated (MRC 2009b). Outcomes from this will be utilised in discussions on the trade-off among "economic growth, poverty reduction and sustaining environmental services of the river" (MRC 2009b: 1). This would suggest, as the ADB and World Bank's position does, that economic, social and environmental goals are antagonistic and not necessarily compatible. However, the MRC has in the past argued the opposite.

The MRC has developed a triple-bottom line approach whereby any development should be evaluated in terms of its contribution to economic efficiency, social equity and environmental sustainability (MRC 2006). Within a triple-bottom line approach economic, social and environmental outcomes are all "seen as part of the development benefit/dis-benefit...[and] not that there is a simple trade-off between economic benefit, on the one side, and socio-environmental costs on the other" (Hirsch 2006a: 24). However, within the current debate over hydropower and fisheries, civil society actors are casting the debate in terms of mainstream hydropower being disastrous for fisheries and livelihoods, with the implication that it is a case of having either energy or fish, not both (Imhof 2009). In this sense economic, environmental and social goals are antagonistic.

The language of benefit-sharing is also entering debates in the Mekong, albeit in a rudimentary fashion. Benefit-sharing is the "development of water uses in their 'optimal' locations, and the distribution of these benefits, rather than the water, to users across the basin" (Alam *et al.* 2009: 93). These benefits are largely located at the inter-state and basin levels. Whereas the impacts of hydropower development will largely be situated at the sub-state, local levels of analysis. While it is recognised that benefits should be shared within a state, statements are largely un-substantive: they reference the principle but not practical mechanisms or tools for operationalising it. For example, the MRC's CEO argued in a presentation at the 2008 World Water Week in Stockholm that the key for future macro-development projects will be to ensure that development benefits such as foreign exchange revenues earned by the state are shared with the wider community (Bird 2008b). The MRC's ISH states that in the discussion of trade-offs considerations of the distributions of benefits and costs should be included (MRC 2009b). Despite appeals or references to the concept of benefit-sharing the majority of

the hydropower-fisheries debate is being framed in terms of the negotiation of trade-offs.

The promotion of trade-offs by powerful actors masks the tensions that are inherent in this approach due to the current state of knowledge concerning fisheries impacts. Fisheries scientists and experts contest whether there is indeed a trade-off in the sense that the term is utilised by powerful actors:

“When you come to dams on the mainstream like are being planned now there really is no trade-off to be honest. If they go ahead you just have to accept that we have wiped out the fishery, not only in that area but also for a long way downstream too, or diminished the fishery for a long way downstream” (Fisheries expert, interview, 05/08).

The findings of the Independent Expert Fisheries Group were quite conclusive: fisheries impacts will be severe and cannot be mitigated with current technology (Dugan 2008a; Dugan 2008b). These findings were supported by the MRC’s SEA (ICEM 2010). In light of this the representation of trade-offs as a solution to the tension between hydropower and fisheries is slightly misleading. Possibilities for mitigating fisheries impacts include technological mitigation and alternative livelihood measures such as aquaculture. Aquaculture is “the farming of aquatic organisms: fish, molluscs, crustaceans, aquatic plants, crocodiles, alligators, turtles, and amphibians. Farming implies some form of intervention in the rearing process to enhance production, such as regular stocking, feeding, protection from predators, *etc.*” (CWP 2003). However, as discussed elsewhere in this chapter, according to fisheries experts and scientists both technological mitigation and measures such as aquaculture are not capable of mitigating the scale of estimated impacts in the Mekong region.

Discussions of trade-offs in the Mekong are appealing because trade-offs as a term and an approach has connotations of balance, reasonableness and a compromise (Friend and Blake 2009). The term also suggests that it is a technical process whereby information is collected and options assessed. However, this masks the political aspects of both the framing and discussion of trade-offs: it is a depoliticisation process (Ferguson 1994a).

4.1. *Trade-offs: hydropower and fisheries*

Shifting discussions to issues surrounding the trade-off between hydropower and fisheries contains different ways of representing the problem: one, hydropower and

fisheries are a zero-sum situation; two, negative fisheries impacts can be mitigated; and three, the fisheries side of the trade-off can be down-played. These different representations overlap in discussions, and powerful actors in particular utilise the latter two in their arguments.

The threats that large infrastructure can pose for fisheries are well documented (Poulsen *et al.* 2004; ABD and World Bank 2006; MRC 2003a). The MRC's 2003 *State of the Basin* Report documented the impacts of existing tributary hydropower projects in the basin, such as Pak Mun in Thailand, including a decline in the abundance of fish and the disappearance of some migratory species. Fisheries impacts of the Pak Mun dam were also documented in a case study for the WCD (Amornsakchai 2000). As shown above, powerful actors have also accepted that mainstream hydropower dam development will impact fisheries. The threat of hydropower development to fisheries, both in terms of productivity and sustainability is well-established, widely cited and rarely challenged (Friend *et al.* 2009). In this context powerful actors, such as the development banks and government actors, are utilising the language of trade-offs in order to make the choice between hydropower and fisheries appear acceptable or inevitable. The discussion of trade-offs acknowledges that hydropower will have negative impacts on fisheries. However, "the issue becomes one of being in a tough situation where choices between fisheries and dams have to be made, however unpleasant such choices might be" (Friend *et al.* 2009: 317). This is premised on a particular conception of development and poverty. Framing the discussion as one of trade-offs suggests that losses in one area can be compensated for by gains in another.

Trade-offs recognise that there are costs and benefits to development options and interventions, but it removes these from the geographical, social and political locales in which they are situated. Placing hydropower and fisheries in a trade-off relationship represents development decisions in a particular way. The scalar level of analysis at which the discussion is situated is that of the state: hydropower brings national level benefits. Consequently, aggregate or quantitative measures of fisheries value are utilised, which obfuscate the distribution and location of impacts. Detaching fisheries impacts from their contexts and utilising arguments such as "capture fisheries can be replaced by aquaculture" allows hydropower and fisheries to be located in a relationship where the latter can be exchanged for hydropower benefits.

Viewing the two in a trade-off relationship closes the space for alternative development visions and pathways (Friend *et al.* 2009). Discussions of trade-offs between hydropower and fisheries suggest that hydropower is the chosen development

option. What is being discussed is not whether hydropower is an appropriate development strategy, but how to manage the impacts of that strategy on other sectors, such as fisheries. This contributes to constructing a sense of inevitability around the proposed hydropower dams on the Mekong mainstream. In this way trade-offs “are central to the rhetoric of an established agenda with a particular set of values and interests” (Friend and Blake 2009: 27). By focusing discussions on how to manage impacts or questions such as ‘what are the impacts’ and ‘what is the size of the impact’, powerful actors are limiting discussions to internal elements and excluding broader questions about whether these projects should be developed. Alternative development options are not discussed or even visible. In this way conceptualising hydropower and fisheries in a trade-off relationship is an attempt by powerful actors to control public discourses of hydropower development in the Mekong and ‘box-in’ civil society actors to a particular set of terms of debate. Civil society actors are resisting this strategy through coalitions such as Save the Mekong, which was formed on a platform of opposition to construction of mainstream hydropower dams. However, despite campaigns such as petitions and mass sending of postcards to politicians in the region, the debate as framed and conducted by powerful actors is still one where trade-offs are discussed and promoted.

4.2. The inevitable decline of fisheries?

Narratives reinforce each other. Narratives surrounding capture fisheries in the Mekong tell stories of inevitable decline. When combined with the simplifications of the complexity of the region’s fisheries that are utilised in discussions and policies, this leads to the marginalisation and neglect of capture fisheries in development policy (Friend *et al.* 2009). Capture fisheries are represented as doomed. This is in part due to thinking framed by the narrative of the Tragedy of the Commons (Hardin 1968). Hardin (1968) argued that open access resources are inevitably over-exploited, therefore to protect resources measures such as enclosure and state management should be adopted. Some actors, including decision-makers and civil society actors (as will be shown below), in the lower Mekong are telling stories about the inevitable decline of fisheries because of over-fishing. This narrative of doom reinforces the hydropower push in the Mekong as it is entrenched in policies, fisheries departments and research agendas, and shapes the way in which issues, problems and debates are framed and the ways in which fisheries enters the debate (Friend *et al.* 2009). Cronin and Hamlin (2010) argue

that false assumptions inform hydropower development decision-making in the lower Mekong, with one of the most detrimental being that fisheries are already a dwindling resource, and “therefore their destruction is justified if they are replaced by another use of the river” (12). Representing fisheries in this way suggests they can be ‘traded-off’ for hydropower.

This storyline is supported by one which argues that fisheries are not development:

“The fisheries are just there are they are exploited by millions of people. But, they have always been there and you are not doing anything new with them...Then this is this attitude that we must develop, and fisheries are not seen as development” (Fisheries expert, interview, 06/08).

This way of conceptualising and representing fisheries in the Mekong has a long history. From the 1960s onwards fisheries were largely ignored as the focus was on hydropower, and fisheries were perceived to have limited development potential (Friend and Blake 2009). In the Mekong Committee basin development plans hydropower presents an opportunity to develop aquaculture and therefore make fisheries more productive (Mekong Secretariat 1970; 1988). The MRC’s Fisheries Programme, active since the late 1990s has generated immense amounts of fisheries knowledge and has helped to raise the profile of capture fisheries in the basin. Hortle (2007) argues that current data shows that most of the basin’s inhabitants fish at some time and that about 90% of consumption is derived from the capture fishery: this should justify an increased allocation of resources for their conservation and management.

However, fisheries still do not have a high profile in development debates. When fisheries do enter the debate “they do so in a constrained manner, as something as an afterthought and as an unavoidable, slightly unfortunate cost of the inevitable march of progress and development” (Friend *et al.* 2009: 307). State level development plans such as Lao PDR’s NGPES (2003) focus on the benefits which will accrue from hydropower. The importance of fishing for the Lao people is mentioned a number of times, but fishing is also identified as a coping strategy, *i.e.* an activity that the Lao people engage in because they are poor and do not have access to other resources or employment (Lao PDR 2003). The development potential of fisheries is represented as part of increasing agricultural production and is a question of aquaculture (Lao PDR 2003). In contrast, fisheries scientists interviewed for this thesis argue that building a dam is seen as development by decision-makers: “to develop you need to do something,

you need to build, you need to change in order to progress” (Fisheries expert, interview, 05/08). Within this conceptualisation of development maintaining fisheries is not necessarily seen as development.

A 2007 WWF report identified over-fishing as the key threat to the Mekong river in a report entitled ‘World’s Top Ten Rivers at Risk’ (Wong *et al.* 2007). The report argues that the “threat of over-fishing is high because of the huge scale of subsistence fishing, the majority of which goes unrecorded, as well as poor fishing practices” (Wong *et al.* 2007). Subsistence fishing is identified as “heavy” and “destructive” and the report argues that there is evidence of declining fish populations as a result. Illegal and destructive fishing practices, including using the wrong types of nets, using car batteries to administer electric shocks and using poison have negative effects on fish stocks (Wong *et al.* 2007). Through describing subsistence fishing and fishing practices in these terms, a picture is created of a productive and diverse fishery threatened by the very people who depend on it. Within the context of these representations of fisheries, fisheries cannot meet the poverty reduction and development needs of the basin’s population. Consequently, decreasing people’s dependence on aquatic resources and providing alternative economic opportunities becomes a strategy to lift people out of poverty (Friend and Blake 2009). According to this reasoning continued dependence on the capture fishery will lead to its decline.

Fisheries scientists interviewed for this thesis criticised the report:

“In that report what they had done was select ten rivers, big rivers with a geographic spread across all the countries and then they separately looked at what can be risks to rivers and then they attached one of those risks to each river. So they come and say in the Mekong the greatest threat is over-fishing. Absolutely rubbish the greatest threat is dams. And the loss of habitat that results from dams” (Fisheries expert, interview, 06/08).

WWF define their motivation in releasing the report as encouraging dialogue and provoking debate in response to three questions: one, what are the key pressures and drivers of change in freshwater ecosystems; two, what are the most illustrative examples of those threats; and three, what recommendations or solutions can we pose (Wong *et al.* 2007). In the section describing over-fishing in the Mekong WWF outlines its Living Mekong Programme which is working, amongst other things, to conserve biological integrity and ensure local communities manage their aquatic resources to contribute to sustainable development (Wong *et al.* 2007). Whilst the WWF report identifies over-fishing as a threat to the Mekong, large infrastructure, *i.e.* hydropower dams and roads,

were identified as ‘other threats’. In a footnote to the report it was acknowledged that large infrastructure is identified as the primary threat in WWF’s Living Mekong Programme’s revised conservation plan (Wong *et al.* 2007). The report also recognises that beneficial flooding, in terms of the flood pulse which inundates the Tonle Sap Great Lake in Cambodia, and the consequent fish harvest is threatened by large infrastructure (Wong *et al.* 2007). Representations of inevitable decline and over-fishing in the lower Mekong are also not supported by estimates of fisheries catch, which have risen steadily since the 1960s (Friend *et al.* 2009). Fisheries scientists also argue that if there has been a decline this is due to mismanagement and pollution, not over-fishing (Cronin and Hamlin 2010).

Narratives of fisheries decline allow hydropower to be represented as an option for developing fisheries. Hydropower creates reservoirs and is an opportunity for the development of aquaculture and reservoir fisheries. Sverdrup-Jensen (2002) states that preliminary estimates predict a 20% rise in fish demand by 2012 and that fishing in the basin will increase as a result of population growth and ease of access. In this context the expansion of aquaculture can contribute to meeting this increased demand (Sverdrup-Jensen 2002). Aquaculture is proposed by a number of actors as a means of compensating for the losses in capture fisheries: increased fisheries production through aquaculture is a central feature of state fisheries policy in the region and reflects development strategies that are focused on modernisation and technocratic solutions (Friend *et al.* 2009). Aquaculture is being promoted as a solution to the problem of capture fisheries.

The portrayal of a fisheries cost (in terms of decline in capture fisheries) as presenting a fisheries opportunity (development of reservoirs and aquaculture) is a discursive strategy which conjures up images of balanced development and trade-offs. This has a certain appeal as it suggests that the fisheries costs of hydropower are not as severe and overwhelming as portrayed by civil society actors. The argument is presented simply: “while capture fisheries is likely to decline significantly when all [mainstream] dams are pursued, impoundments will create new opportunities for the development of reservoir fisheries” (ICEM 2010: 14). Statements such as these imply that the ‘problems’ of hydropower development have been considered, and ‘solutions’ have been devised. In this context it becomes straightforward to substitute reservoir fisheries for capture fisheries. This obfuscates problems surrounding the development of reservoir fisheries and the scale of fisheries impacts.

Arguments against the promotion of reservoir fisheries and aquaculture as an opportunity facilitated by hydropower development can be split broadly into two categories: those which critique past and current experiences of aquaculture in the Mekong, and those which attempt to quantify and/or compare capture fisheries and reservoir fisheries to illustrate that losses in the former cannot be compensated by gains in the latter. Arguments in the first category include that the uptake of aquaculture in parts of the basin where it has been promoted by government actors is disappointing and yields are low (Friend *et al.* 2009). Issues of capacity, technical support and the contrasting natures of aquaculture and capture fisheries also mean that it is not a simple case of substituting the former for the latter, as some actors are trying to suggest:

“There is no relationship between being a person who goes out and catches fish in a river through to being a farmer who grows fish and understands fish disease and understands procurement of seed stock and breeding of fish and getting the feed to feed the fish etc. Totally different activities...The only thing in common is the fish. Everything else is different, totally different...You go into an aquaculture operation it’s a business type operation, it’s a farming operation where you’ve got to put in, it depends on the species, type of farming, type of aquaculture, but you know 50-90% of your return you have to put back in to grow the fish. So, just a completely different thing to the capture fishery.” (Fisheries expert, interview, 06/08).

Aquaculture activities are also usually “geared towards production for the urban market and not necessarily the production needed for daily subsistence and livelihoods (Fisheries expert, interview, 05/08).

Arguments from the second category state that even if aquaculture was widely embraced it could not compensate for the losses in capture fisheries. The Independent Fisheries Expert Group was quite clear in their assessment of the compensatory possibilities of reservoir fisheries:

“the Panel concluded that compensation for loss in yield from river fisheries is impossible to achieve through development of reservoir fisheries. Fisheries enhancements through stocking and some forms of aquaculture may be possible, but they will only be able to compensate for a small part of the production that is lost from the river fishery. They will also be costly, will not benefit the same people who currently benefit from the fishery, and can create substantial environmental problems” (Dugan 2008b: 12-13).

This assessment is supported by arguments in the 2010 draft Impact Assessment of mainstream hydropower commissioned by the MRC. This report quantified fisheries in terms of tonnes with one tonne equivalent to US\$680. Table 3 briefly presents the

possible losses in capture fisheries due to hydropower development, and the potential gains from the development of reservoir fisheries. The figures presented illustrate that development of reservoir fisheries cannot compensate for the losses in capture fisheries in purely numerical and economic values.

Table 3: Losses and Gains in Fisheries Resources dues to hydropower development (figures from ICEM 2010: 15)

	Capture Fisheries	Reservoir Fisheries
Loss/Gain tonnes	-700,000 to -1.4 million	+25,000 to +250,000
Loss/Gain US\$	-476 million to -956 million	+ 17 million to +170 million

Despite the large range of the figures presented for reservoir fisheries development in Table 3, the ICEM report estimates that the probable gain is most likely to be 63'000 tonnes or US\$42.8 million (ICEM 2010: 15). A gain of 63'000 tonnes or US\$42.8 cannot compensate for the estimated losses in capture fisheries of between 7000'000 to 1.4 million tonnes. This simple comparison illustrates that losses in capture fisheries are vast in comparison to the gains from the development of reservoir fisheries. However, what this quantification does not show is the impacts this loss will have on livelihoods and food security. There are a number of important issues surrounding the quantification of fisheries, which will be considered in the following section.

4.3. Poverty and the distribution of costs and benefits

Civil society actors interviewed for this thesis were concerned about the distributional aspects of development interventions: “There are not so many rivers where the people are this dependent on the river...Mainstream dams will have huge impact on the people” (Civil society representative, interview, 04/08a). The language and debate of trade-offs largely does not consider issues such as: who are the winners and losers, who benefits and who bears the costs. Technical, neutral language which suggests that fisheries can be traded-off for hydropower detaches the comparison from its socio-political contexts. Trade-offs are located at the state and basin scales. Arguments such as those which quantify fisheries losses and gains do so at the basin scale or aggregate project level. This allows comparisons to be made. However, it does not convey information about the distribution of losses and gains. Important questions

including how are costs and benefits distributed, are they experienced the same by different actors, do they represent losses and gains for the same communities, and can you compare losses in localised areas with gains in the overall picture? This range of questions illustrates that the discussion of trade-offs is not a neutral, technical one, but political as costs and benefits are not distributed evenly or experienced the same by all actors involved. The distribution of costs and benefits reflects and affects power relationships between different actors in the Mekong.

Hydropower is presented by state actors and strategies such as the government of Lao PDR's NGPES as a poverty reduction strategy. This frames the problem of poverty as a "simple category requiring a simple solution" (Friend and Blake 2009: 21). Issues of complexity are reduced to simple slogans such as Lao PDR's ambition to become the 'battery of Southeast Asia'. This slogan neatly encapsulates Lao PDR's hydropower strategy of developing dams, exporting the electricity to its neighbours and thus developing the state. Within this, both the problem, poverty, and the solution, developing hydropower for export are defined. In this way the complexity of poverty is reduced and is orientated towards particular policy solutions. For example, in justifying the state's hydropower development strategy, state representatives interviewed for this thesis argued that the people are poor and that they need development: "We are poor: we need energy for my people. Maybe you have seen, been in the rural area, the people they have no electricity: they use candle, use fire" (State official, interview, 06/08a). A lack of electricity is seen as an indicator of poverty, therefore if communities gained access to electricity they would be 'less poor'. However, poverty is more complex than this suggests, and trading-off fisheries for hydropower may actually increase poverty in the Mekong basin:

"It will convert a generalised wealth accessible to anyone into a concentrated wealth, which poor people cannot access" (Fisheries expert, observation notes, MRC meeting, 03/08).

"Mainstream hydropower will impact food security. People will have to buy food instead. Currently, poor people are spending 50% of their income on food, but with rising food prices, and then you've taken away the natural resource they've got, suddenly they are spending 80-90% of their income on food. And that just plunges them further into poverty" (Fisheries expert, interview, 05/08).

As such mainstream hydropower will impact food security and may result in local communities becoming poorer. Transforming or breaking the access modalities between local communities and natural resources will also transform the types of economic activities in which they participate. Arguments surrounding the benefits of hydropower

are premised on the assumption that these benefits will ‘trickle down’ either through poverty reduction programmes or the development of secondary industry. However, these benefits are not mechanisms to replace food security:

“All that wealth from the poor people gets narrowed down and focused up to a different group of people up here. Its rubbish when I hear governments’ say we’re going to build these dams and it’ll give us the money to undertake poverty reduction... But, will that money trickle down to the poor people who’ve lost their fisheries resource and allow them to buy food? It’s just absolute nonsense. The money won’t flow out” (Fisheries expert, interview, 06/08).

This challenges the arguments of state representatives who link hydropower development and poverty reduction. It also illustrates how narratives and justifications operate at particular scalar levels and contribute to policy and decision-making by reducing complexity. Arguments in favour of hydropower development utilise the idea that revenues will be spent on poverty reduction. However, there is currently little information on revenue flows over time from the mainstream projects and how this will be spent, and the distribution of economic benefits from hydropower will depend on government decisions and capacity (ICEM 2010). Complex issues such as the relationship between hydropower, fisheries and poverty are simplified within the discussions of trade-offs.

The rationale for hydropower development is located at the state level: development of a state resource, water, will lead to national development. Identified advantages include national revenue generation, cheaper electricity prices and improved transportation (ICEM 2010). These are all benefits which will accrue to the state. In contrast, identified risks include the loss of common property resources, electricity supply not being available to local communities, and loss of livelihoods leading to increased food insecurity (ICEM 2010). These are all costs which will be distributed amongst local communities and actors dependent on the Mekong, both directly and indirectly, for their livelihoods. Consequently benefits and costs are located at different scales. This makes both comparison between the two difficult and conceptualisation of benefits and costs in the same framework difficult. This is one of the reasons why narratives such as hydropower leads to poverty reduction are enduring and possess an intuitive appeal to policy and decision-makers.

Consideration of fisheries impacts is also largely located at the regional or state level, but they will be experienced at the local level in different ways. For example, figures are presented in the draft 2010 Impact Assessment report for basin-wide losses

in capture fisheries and gains in reservoir fisheries, and then also for three groups of the proposed mainstream projects (the upper Lao cascade of 6 dams, the two middle Lao dams, and then the proposed mainstream dams in Cambodia) (ICEM 2010). Cambodia will be the most affected state with an estimated 43% loss of its fisheries with substantial numbers of people who live in the Tonle Sap being affected (ICEM 2010). The MRC has classified a 15km corridor on either side of the Mekong mainstream as the highest impact area: twenty three and a half million people live within this corridor (ICEM 2010). The advantages of this approach are that it provides a cumulative picture of the fisheries and other impacts of hydropower. However, this approach cannot show the stratification of impacts, costs and opportunities. As quoted earlier, civil society actors interviewed for this thesis argue that hydropower development provides industrial benefits such as irrigation, increased availability of electricity and the development of industry, which generally benefit powerful actors, such as state agencies, hydropower and construction companies and urban areas, at costs to local communities who are dependent on services the river provides such as fisheries (Civil society representative, interview, 04/08b). Fisheries impacts will also not be distributed evenly amongst actors, with some local communities and groups more vulnerable to changes in livelihoods than others.

The interplay between the localised impacts of hydropower development and the cumulative impacts of any dam on the Mekong mainstream complicates discussions and negotiations concerning trade-offs. Friend and Blake (2009) argue that whilst it might be conceivable to identify impacts, assess trade-offs and determine appropriate mitigation at a localised scale for a particular project, it is extremely difficult to do so for the cumulative impacts of mainstream projects. The migratory nature of fisheries in the Mekong means that hydropower dam development will have far-reaching implications (Friend and Blake 2009). Consequently, considerations of scale and of localised and varied impacts, as well as cumulative impacts of hydropower development are highly relevant and need to be explored. It is extremely difficult to do so within one frame of reference which is partially why the discussion of trade-offs appeals to decision-makers. Conceptualising hydropower and fisheries as a trade-off allows two highly distinct categories to be situated in the same frame of reference and suggests that comparisons can be made.

4.4. Valuing fisheries

The discussion of trade-offs implies that, in the case of hydropower and fisheries, the two are comparable. However, fisheries are extremely hard to value in economic terms and are hard to compare to hydropower. Despite an economic value of US\$2 billion being placed on the Mekong's fishery, "the value of this natural resource is largely unrecognised in regional infrastructure development plans" (Middleton *et al.* 2009: 49). As described above, fisheries are not really conceptualised as a development option in the Mekong and subsequently they are not necessarily valued in government strategies. Estimates and values of the fisheries catch threatened by dam development are "fundamental for effective basin development planning and balanced decision-making" (Barlow *et al.* 2008: 16). This is where knowledge gaps, such a lack of a basin-wide assessment of fisheries resources, can be a hindrance as they do not allow for a quantitative estimate of the importance of migratory fish (Barlow *et al.* 2008). Hortle (2007) argues that a lack of quantitative data on fisheries "leads to relative neglect in development planning, which tends to emphasise other sectors that may compete with the fishery for use of water" (1). As fisheries are difficult to value, it can be hard to relay the importance of them to policy and decision-makers in terms that they can understand and utilise in planning. Concurrently, reducing fisheries to a quantitative value can fail to capture the complexity and importance of fisheries in the basin.

There are two important issues surrounding the valuing of fisheries. One is technical and methodological: it is extremely hard to value fisheries both in the Mekong and elsewhere. Fisheries in the Mekong are highly complex. Assessing both the size and the value of the Mekong's capture fishery is:

"extremely difficult to do. All these different species, in different countries, at different times of the year, fetching different prices all throughout those countries. Plus, quite a lot of the fisheries resource isn't traded, it's bartered or exchanged for goods. So, its hard to put the value of those fisheries together" (Fisheries expert, interview, 05/08).

The fisheries yield also varies seasonally, whilst the fisheries have a dispersed geographic spread and there is a huge variability in the range in scale of different types of fisheries (from solitary fishers to industrial enterprises) (Hortle 2007: 1). It is difficult to determine a picture of fisheries across the basin in terms of stocks and production that can be compared year on year because people fish with different gear, target different

species in different habitats at different times of the year (Friend *et al.* 2009). Consequently, it is hard to put the value of fisheries together.

The second issue surrounds commensurability. Within a discussion of trade-offs hydropower and fisheries need to be placed into the same categories in order for simple comparisons to be made by decision-makers. Comparison of the two is difficult because the two represent very different types of value and economies:

“In terms of doing a cost-benefit analysis I don’t think people understand the big macro economics of these things...Fisheries is an informal economy that is very hard to measure, that is exploited by millions of people, it’s always been there. Hydropower is a very concentrated formal economy, very easy to measure, very easy to extract money from, very easy to see the benefits from. So they’re hard to compare” (Fisheries expert, 06/08).

Initial attempts to value fisheries in terms that can be compared to hydropower have focused on quantifying fisheries in US\$. The MRC’s 2010 SEA is an initial attempt to assess the impact of hydropower investments worth US\$18,847 million on a resource that is worth between US\$2,100 to 3,800 million (ICEM 2010). A simple quantified comparison such as this one reduces both hydropower and fisheries to monetary value, and on the basis of this alone it would appear reasonable to accept losses in the latter because of the sheer economic size of hydropower benefits.

However, fisheries occupy an extremely important role in the livelihoods of the basin’s population and also embody cultural and spiritual values. Barlow *et al.* (2008) argue that estimates of first sale value for fish catch in the Mekong are conservative estimates because they do not “take into account the economic benefits that flow from the trade and processing of fish products” (21). Economic estimates of value also do not “include the very considerable indirect values of the Mekong fisheries, such as their contribution to the nutrition, employment and well-being of millions of rural people in the LMB, who generally have few other livelihood options” (Barlow *et al.* 2008: 21). Quantifying people’s dependence of fisheries for food security, or the indirect benefits which people gain from fisheries is difficult.

A large portion of fisheries data in the Mekong is derived from information collected concerning what people catch, what they consume and what they observe about the fishery. As such, the utilisation of local knowledge plays a strong role in the collection of fisheries data. The MRC utilises local knowledge in a large part of its fisheries work, for example a 2007 study on consumption and yields utilised methods such as interviewing people about what they had eaten (Hortle 2007). As fisheries

values and data collection methods are largely situated in various locales they are framed in different terms to that of hydropower. This contributes to the problem of valuing fisheries in terms that can be compared to hydropower, which is the comparison that decision-makers want to make. Hydropower is a development pathway, which accrues national economic benefits in terms of revenues and royalties to governments. In comparison fisheries benefits are located at the local level and vary in ways which are hard to quantify. However, in order to be able to compare hydropower and fisheries as 'trade-offs' suggest conveying the wide ranging values of fisheries for livelihoods, communities and economies is imperative. Simple monetary comparisons do not capture these values or the scale at which they are located, or the important roles they occupy in livelihoods, and instead help to create a picture whereby fisheries losses can be traded off for hydropower gains.

5. Conclusion

The debate over hydropower development is constructed in different ways by different actors. Key actors frame it in particular ways in order to suit their perceptions and goals. A counter discourse in the lower Mekong involves a greater diversity of less powerful actors, yet, it is not succeeding in destabilising the dominant discourse. Narratives are replaced by counter-narratives and not by counter-evidence. Shifting the terrain of the debate to trade-offs depoliticises the proposed mainstream hydropower dams and limits the debate to particular issues. The distribution of costs and benefits is masked by this depoliticisation process.

A loose coalition of actors has formed in opposition to the proposed mainstream hydropower development. This coalition has produced counter-evidence and represented the Mekong in different ways to that of powerful actors, for example focusing on the livelihood values of the Mekong. Counter-evidence and representations have gained visibility in the Mekong's hydropower debate. Powerful actors have shifted the terrain and are attempting to define the terms of the debate as a discussion of trade-offs. Defining the debate in terms of trade-offs limits discussion to scientific and technical issues concerning fisheries migration and mitigation, and excludes discussion about whether hydropower is an appropriate development strategy for the lower Mekong. Fisheries scientists are clear that the barrier effects of Mekong mainstream dams on the region's fisheries cannot be technologically mitigated. State representatives

have responded by calling for more studies, and placed their faith in technology to provide a solution to the problem of fisheries mitigation.

The discussion of trade-offs is supported by narratives and representations surrounding the Mekong's fisheries. The size and importance of Mekong fisheries for livelihoods is well-recognised by fisheries scientists, the MRC, and civil society actors. Representations of the Mekong's fisheries as in inevitable decline produce a situation whereby fisheries resources can be replaced by another use of the river. Hydropower development is presented by project proponents as offering an opportunity to develop aquaculture. However, fisheries experts, and research on the fisheries impacts of hydropower dams, suggest that aquaculture could never replace the capture fishery. Assessing impacts involves valuing fisheries, which is a complex activity.

Locating hydropower and fisheries in a trade-off relationship removes the distribution of costs and benefits from discussions. It locates discussions at the national scale and aggregate level, and attempts to place hydropower and fisheries into similar categories of value so that they can be compared. The quantification of fisheries values in the Mekong is complex due to the importance of fisheries for livelihoods, problems with estimating fisheries catch, and the fact that the majority of fisheries resources do not pass through commercial markets. Placing a monetary value on fisheries, which allows it to be compared to hydropower, disguises the importance of fisheries for livelihoods suggests that hydropower benefits at the national scale can compensate for fisheries losses at the sub-national scale.

Chapter Eight: Actors and narratives in the lower Mekong's hydropolitical constellation

1. Introduction

This thesis has explored the hydropolitical constellation of the lower Mekong and the debates surrounding hydropower development and transboundary water governance. The thesis has addressed the following question:

How can considerations of multiple actors and narratives be integrated into approaches to transboundary hydropolitics in order to understand and analyse the debates surrounding the MRC and hydropower development in the lower Mekong?

Considerations of multiple actors and narratives can be integrated into approaches to transboundary hydropolitics by utilising political ecology and insights from critical IR approaches. This allows sensitivity to the production and politics of scale, the multiple actors operating over various scales, discourse, and more nuanced understandings of power. Political ecology and critical IR theorists complement each due to the focus on discursive practices and post-structural conceptions of power. Political ecology has largely focused on the sub-state scale. But it analyses place and non-place based actors and development/environmental discourses to explain outcomes in specific geographic locales (*e.g.* Bassett and Zueli 2003). Critical IR theorists, such as Doty (1996) have analysed discursive practices in international relations. Combining insights from these different approaches allows the international relations of the lower Mekong's hydropolitical constellation to be situated within the multiple scales and relations between actors operating over various scales, which condition water resources outcomes at the transboundary scale.

Utilising political ecology and insights from critical IR approaches allows analysis of the multiple actors and narratives of the lower Mekong's hydropolitical constellation and the exploration of debates about hydropower and the MRC. This is a key theoretical contribution of this thesis. Conventional IR approaches to hydropolitics largely focus on the international scale, unified state actors and material conceptions of power. Commentators have questioned the appropriateness of these approaches and have suggested the application of political ecology (Sneddon and Fox 2006; Furlong 2006). This thesis contributes to this theoretical debate about approaches to

hydropolitics through its application of political ecology combined with insights from critical IR approaches. The thesis also contributes to knowledge in a number of ways, including: mapping the actors in the lower Mekong's hydropolitical constellation; exploring the scalar politics and strategies of lower Mekong hydropolitics; tracing the dominant regional discursive formation, which links hydropower and development; and examining the two discourse coalitions, which have formed around the hydropower development and water governance debates in the lower Mekong. As such, it also contributes to the two debates by opening up the category of water resources development to reveal its political and contested nature. By doing so, this thesis provides a space for alternative representations to be considered and analysed. This thesis also situates the MRC within its wider socio-political contexts, which suggests possible spaces for action for the MRC in both hydropower development and water resources governance.

2. Transboundary hydropolitics: Actors, Scale and Discourse

Chapter One of this thesis claimed that in order to explore the hydropolitical constellation of the lower Mekong and the two dominant debates through which it is currently being represented and contested it is necessary to integrate considerations of multiple actors and narratives into approaches to hydropolitics. As outlined above, this thesis utilised political ecology and insights from critical IR approaches to integrate these concerns and explore the hydropolitical constellation of the lower Mekong. Challenging conventional IR approaches to hydropolitics, which focus on the inter-state level of analysis and conceptualise states as unified actors, the analysis outlined in the thesis argues that to explore hydropolitics in the lower Mekong it is important to:

- Integrate the concerns of hydropower and water governance, so that they are no longer analysed as separate spheres;
- Challenge the notion of unified states to reveal the various national-level actors engaged in hydropower development and water resources governance;
- Explore the multiple actors operating over various scales to demonstrate how water resources outcomes at the transboundary level are conditioned by relations between different actors and scales;

- Trace the regional discursive formation, which has shaped water resources development in the lower Mekong and continues to frame the thinking of powerful actors;
- Consider the discourse coalitions, which form around hydropower and water governance and the ways in which they represent and contest these.

The insights gained from exploring transboundary hydrogeopolitics in these ways has contributed to both theoretical and substantive knowledge in three key areas: actors, scale, and discourse.

2.1 Actors

Transboundary hydrogeopolitical constellations contain a wide range of actor types operating over various scalar levels of analysis. In order to analyse these constellations it is necessary to situate them within their wider socio-political contexts. Hydrogeopolitical constellations are embedded in webs of overlapping power relations and scales: they are not detached from other socio-political arenas and actors outside of official water governance structures condition hydrogeopolitical outcomes. Analysing debates about the MRC and hydropower development in the lower Mekong through the lens of its hydrogeopolitical constellation, reveals the wide range of actor types and the asymmetric relations between them, which condition water resources development and governance. Water resources development is highly political because it alters patterns of access to resources and the distribution of benefits, as well as incorporating them into new constellations of control and access. It is not a technical, neutral process as water resources management paradigms or the arguments of state actors suggest.

Actor types in the lower Mekong's hydrogeopolitical constellation include: state water and energy actors (*e.g.* the National Mekong Committees and the Lao Ministry of Planning and Investment); traditional donors to the region and the MRC (*e.g.* Australia and Finland); new and emerging donors (*e.g.* China and Kuwait); the Asian Development Bank and the World Bank; private sector companies and financiers (*e.g.* SinoHydro and GMS Power); and civil society actors including national and regional NGOs (*e.g.* TERRA), international NGOs (*e.g.* International Rivers) and the media. Changing regional dynamics have affected both the actor types in the lower Mekong's hydrogeopolitical constellation and the prominence of transboundary water cooperation.

Important dynamics include the end of the Cold War and the proliferation of regional schemes, such as the ADB's Greater Mekong Sub-region Programme, which challenge the position of the MRC. Prior to 1991, lower Mekong water cooperation was the only cooperative or regional scheme in which the four states participated and was also an important conduit for channelling development assistance to the region (Nakayama 1999; Makim 2002). New donors, including China, have also emerged who are interested in funding infrastructure and natural resources development. New private sector actors are also becoming more visible and important in water resources development, including Thai and Vietnamese actors who are investigating mainstream hydropower sites.

The international relations of the lower Mekong's hydro-political constellation are embedded in wider socio-political contexts and webs of overlapping power relationships operating over various scalar levels of analysis. In order to explore transboundary hydro-political constellations and debates about water resources development and governance, it is necessary to consider these, as well as a wide range of actor relationships. Conventional IR approaches to transboundary hydro-politics are state-centric, conceptualising states as unified actors with easily identifiable hydro-political interests, and as such are unable to adequately explore and account for the complexity of transboundary hydro-politics. Political ecology with its sensitivity to scale, place and non-place based actors, and a variety of power relations between a multitude of actors is an appropriate framework for studying hydro-political constellations.

Intra-state and cross-state relationships operating over various scalar levels are driving hydropower development in the lower Mekong basin, such that hydropower development is largely located outside the sphere of transboundary water governance. States are not monolithic entities, they are complex and their actions are conditioned by their relationships with actors both inside and outside the state. Different state agencies have different responsibilities. In the lower Mekong state water and energy actors are usually separate from each other with little interaction between the two. For example, in Lao PDR state water actors include WREA and the LNMC. Lao state actors responsible for hydropower development include the Ministry of Energy and Mines and the Ministry of Planning and Investment: these actors negotiate with hydropower developers such as Megafirst and sign agreements that allow developers to investigate and construct projects. State water agencies, whilst having nominal, official roles in hydropower development, play no substantive role in negotiations, planning or

construction. For example, in Cambodia discussions about the Sambor mainstream hydropower project are being conducted between the Ministry of Energy and Mines and China Southern Power Grid: the Cambodian National Mekong Committee will not play any role (Osborne 2009).

This separation of water and energy actors at the national level has implications at the transboundary hydropolitical scale. The MRC framework and the state representatives within it are drawn from water and environmental ministries in the lower Mekong. However, decision-making power about hydropower dams lies with state agencies such as the Lao Ministry of Energy and Mines. This dynamic separates the MRC from hydropower decision-making and contributes to actors' perceptions that it is sidelined in current debates. State hydropower actors are largely unaware of the role of the MRC or its work (MRC 2009b). The state water agencies, such as the NMCs, which are part of the MRC family, are also weak in relation to state hydropower actors. Participants at the 2007 International Conference on the MRC and MRC officials interviewed for this thesis called for more integration between national plans and the MRC's regional Basin Development Plan (MRC 2007b; MRC official, interview, 07/08a). However, due to the weak links between state water and hydropower actors, this integration is unlikely. MRC officials interviewed for this thesis detailed how the organisation does not really engage with national level decision-makers, who are located in different ministries and agencies to the ones who are part of the MRC system: as such, decision-makers are either not aware of the MRC or choose not to pay it any attention. The MRC is isolated from hydropower decision-making in the basin and this contributes to debate about its role and relevance, and the perception amongst civil society actors that it is absent from the important hydropolitical development decisions of the lower Mekong.

Debates about the role and relevance of the MRC also stem from how different actors have different perceptions of what the MRC is, and represent it in different ways utilising different interpretive grids. The 1995 Mekong Agreement and the commitments the MRC has since made to implement IWRM illustrate how changes in the global water discourse influence water cooperation in particular basins. The MRC's new commitments to sustainable development, coupled with growing awareness at the global discourse level of the negative impacts of hydropower, generated an assumption amongst both civil society actors and the development banks that mainstream hydropower was "off the agenda" in the lower Mekong (*e.g.* ADB and World Bank 2006). Civil society actors and some traditional donors to the MRC also conceptualise

the 1995 Mekong as an environmental agreement which prioritises environmental and social protection (*e.g.* Hirsch and Jensen 2006). As such, civil society actors interviewed for this thesis argued that the 1995 Agreement cautions against mainstream hydropower and mandates the MRC to play an active role in hydropower decision-making in the basin (Civil Society representative, interview, 04/08b). In contrast, state officials conceptualised the 1995 Mekong Agreement as a development agreement and a framework for coordinated development, which includes hydropower (State official, interview 06/08a).

This conceptualisation of the Mekong Agreement as a development agreement must be located within wider state-level arguments, which rationalises hydropower development in terms of its potential to fuel economic growth and reduce poverty (*e.g.* Lao PDR 2003). Hydropower development has been a key priority for powerful state-level actors since the 1950s and also a motivation for water cooperation (Sneddon and Fox 2006; Lang 2006). MRC officials assumed that: “Vietnam’s key water interest is in maintaining a minimum mainstream flow to protect the Delta from salinity. We assumed that this would always create a stalemate situation, such that there would not be mainstream hydropower development” (MRC official, interview, 07/08b). However, Vietnamese companies are investigating one of the proposed Mekong mainstream dam sites, and Vietnam is pursuing hydropower development of the 3S basin, where it is the upstream state. This illustrates the complexity of transboundary hydropolitics and why they must be located in wider socio-political contexts.

2.2 Scale

Scale is an extremely important consideration in the analysis of hydropolitical constellations in two key ways: one, relationships between actors operating over different scalar levels of analysis impact and condition each other; and two, actors’ scalar strategies. Scale is socially constructed and helps to produce geographic realities (Marston 2000). The politics of scale involves the production of differentiated spatial units, which are embedded and positioned in relation to each other hierarchically (Brenner 2001). The ways in which socio-economic processes, such as capitalism or hydropower development, are differentiated into spatial units and the relations between these units are highly important for the analysis of transboundary hydropolitics. There is nothing natural or pre-given about scalar distinctions such as regional, national, local. But, these scalar distinctions have important consequences for hydropolitics. For

example, scaling hydropower development at the national level obscures the impacts which hydropower will have for local communities. Changes in actor relationships operating over a particular scale, such as the national, have implications for both actor relationships and hydropolitical outcomes at other scales, including the local and the transboundary. Due to the embedded nature of differentiated spatial units and their positionalities in relation to each other, scale it is highly important to explore scale when analysing hydropolitical constellations.

Actor relationships located over different scales overlap and condition each other in webs of power relationships, which impact transboundary hydropolitics in a number of ways. Traditional donors to the MRC, in meetings observed for this thesis, have expressed concerns to Member States about mainstream hydropower development and are encouraging caution and the use of the MRC as a forum for debates about hydropower development (*e.g.* Development Partners 2007). This donor position is constituted by debates and changing dynamics operating over various scalar levels. Domestic civil society in donor states such as Sweden, are concerned about hydropower development in the lower Mekong and have expressed these opinions through the media (*e.g.* Käkönen and Selin 2007). Concerns amongst civil society actors have had resonance at the national political scale in a number of traditional donor states resulting in questions in donor parliaments and governments about the role of donors' overseas assistance in the lower Mekong. Traditional donor states to the MRC are also re-scaling their overseas development assistance from the bilateral level, to the regional, transboundary level (*e.g.* SIDA 2005). As such, traditional donors are promoting regional initiatives and regional cooperation through their overseas development assistance.

This rescaling is occurring at the same time as new donors such as China are scaling their overseas development assistance with a new emphasis on 'Opening the South Gate' and strengthening relationships with their lower Mekong neighbours. As part of China's resurging interest in the lower Mekong, Chinese state enterprises and hydropower companies are investigating and promoting a number of tributary and mainstream hydropower development projects in Lao PDR (International Rivers 2008b). This relationship largely operates outside the sphere of transboundary water governance as enacted through the MRC. The importance of traditional donors to the MRC and region is challenged by the emergence of new donors and new private sector companies and financiers (discussed below). Powerful state agencies such as the Lao Ministry of Energy and Mines are able to pursue their hydropower development agenda,

facilitated by new donors and private sector actors, outside of the MRC and water governance spheres, and also in parallel to their relationships with traditional donors.

The changing role of the development banks in the lower Mekong, as discussed in Chapters Four and Six, also illustrates the importance of scalar relationships and dynamics in analysing and exploring hydropolitical constellations. Throughout the 1990s tributary hydropower development was largely facilitated by the ADB and the World Bank, as states such as Lao PDR did not have access to the financial resources to develop hydropower themselves. The increasing engagement of private sector actors in the lower Mekong's hydropower development sector has impacted the development banks' hydropower position in basin, which was already under pressure from changes in the global water discourse at the international scale. New private sector actors, such as Chinese companies, Malaysian companies, and hydropower companies from the region such as Thailand's GMS Power, have access to their own financiers and credit export agencies and are negotiating hydropower development projects with Lao state actors such as the Ministry of Planning and Investment (Middleton *et al.* 2009). This access to new sources of finance means that the lower Mekong states no longer need the development banks to facilitate hydropower development. The development banks are responding to this changing dynamic by promoting NT2 as a 'model' hydropower project whose standards can be replicated elsewhere.

The development of NT2 by the development banks is also a response to changes in the global water discourse. Widespread civil society opposition to dams built steadily throughout the 1980s and 1990s. A discourse coalition of civil society actors including both international NGOs such as International Rivers, and local NGOs and civil society movements such as Brazil's Movement of Dam Affected People (Imhof *et al.* 2002). Once this coalition had generated enough resonance it started to have socio-political effects at the international scale as the World Bank convened the World Commission on Dams. During this time the World Bank ceased funding hydropower development. NT2 was the World Bank's first hydropower project after the World Commission on Dams process, and the Bank was keen to show that lessons had been learnt and that NT2 was a 'good' hydropower project, done differently to projects in the past (see Chapter Six).

The embeddedness of actors' power relationships in webs of overlapping relationships which condition outcomes means that unintended consequences are often produced. These unintended consequences are not authored by any actor. As detailed above, the development banks are representing NT2 as a 'model' hydropower project

that can be replicated elsewhere in response to changing regional dynamics and changes in the global water discourse. The Government of Lao PDR accepted the standards and commitments outlined by the development banks for NT2 in order to gain development bank funding (Lawrence 2009). However, it is unclear whether NT2 will be replicated. The support of the development banks was necessary to facilitate NT2 due to concerns of other financiers about operating in Lao PDR, and the development banks argue that the project has buoyed the hydropower sector in the region (Lawrence 2009; ADB and World Bank 2006). As described above, the emergence of new actors means that the Government of Lao PDR has access to alternative sources of hydropower financing, and as such it may choose not to replicate NT2. State officials, in forums such as the 2008 Regional Multi-Stakeholder Consultation on the MRC's Hydropower Programme, argued that whilst NT2 has good standards, these standards may not necessarily be suitable for use in other projects (State official, observation notes, MRC meeting, 09/08). To a certain extent the development banks may have facilitated an outcome opposite to what they intended.

Scale is also politically contested and is extremely important to actors' strategies as they contest scalar configurations and project into the geographies of others (Brenner 2001). The ways in which actors use scale to frame interventions or 'jump scales' to project themselves into the geographies of others, impacts which actors are included or excluded from debates and decision-making. This has implications for access to water resources and their governance. For example, the ADB and the World Bank's has scaled its *Mekong Water Resources Assistance Strategy* at the transboundary scale at the same time as actors are debating the role and relevance of the MRC. This strategy framed the problem as one of a high development and transboundary cooperation potentials, which could be squandered due to the weakness of the MRC (ADB and World Bank 2006). As such, the strategy positioned the banks as able to help and pointed towards the types of solutions which they could offer: capacity building and technical assistance through the MRC.

Examining the ways in which actors scale development interventions, contest scalar configurations and 'jump scale' to access debates reveals the complexity of hydropolitics in the lower Mekong basin. Hydropower development in Lao PDR is largely premised on electricity demand in Thailand (*e.g.* MRC 2009a). Thai state agencies such as EGAT are responsible for determining electricity demand and how to meet it: hydropower development in Lao PDR is a key mechanism to meet this demand (Middleton *et al.* 2009). Thai civil society actors have successfully organised campaigns

against domestic dam development, such as the grassroots movement which continues to contest the Pak Mun dam. State agencies have responded by rescaling their development strategies to the regional level and situating development in Lao PDR where there is limited space for opposition to hydropower dams (Lebel *et al.* 2005). The Thai-Lao hydropower relationship has its roots in the Mekong Committee when it was argued that planned dams in Lao PDR would only be viable if there was demand in Thailand for the electricity (Mekong Secretariat 1988). The interactions between Thai civil society, Thai state agencies, and hydropower development in a particular place in Lao PDR illustrate both the scalar strategies that actors engage in, and how outcomes and interactions do not necessarily conform to a particular scalar level of analysis.

Scalar strategies are extremely important to civil society actors in the lower Mekong as limited political space exists nationally for contesting hydropower dams. Civil society actors, including global and regional NGOs as well as Thai NGOs such as TERRA have ‘scaled up’ their concerns and opposition to mainstream hydropower to the transboundary water cooperation scale. Space exists at the MRC level for different representations, development visions, and stories of hydropower development to be heard. MRC forums offer a space for civil society actors to access decision-makers and debates over hydropower development. Civil society actors have generated socio-political resonance at the transboundary scale in a number of ways. Thai NGO TERRA has sent a number of public letters to the MRC, which accuse it of “abdicating responsibility” for the lower Mekong mainstream and challenging its water governance role (TERRA 2007). These letters have been accompanied by press releases and press conferences, which have generated attention amongst both the traditional donors to the MRC and their domestic constituencies through internet coverage and civil society linkages. Traditional donors to the MRC have raised these letters in MRC meetings with Member State representatives (*e.g.* Development Partners 2007).

The MRC’s commitment to sustainable development includes public participation procedures. Traditional donors to the MRC have encouraged MRC programmes to include public participation components as part of their funding agreements and this has seen an increase in forums and consultations convened by the MRC, which include NGOs and civil society representatives from both lower Mekong and global NGOs (see Chapter Five). As such, a platform has been created for civil society actors to contest dominant actors’ hydropower development plans, ask questions, and highlight the potential negative impacts of mainstream hydropower. However, asymmetric power relationships and representations are extremely important

within this. Only certain NGOs are continually invited to participate in MRC forums. Other NGOs are either not invited or excluded because they are conceived of as “bad” NGOs who “want to criticise” (State official, observation notes, MRC meeting, 02/08).

2.3 Discourse

Hydropolitical constellations are constituted in discourse: the lower Mekong has a material existence but it only has meaning through discourse, which is produced and reproduced through practices. Discourse delineates the terms of reality whereby a particular “reality” can be known (Doty 1996). The dominant interpretive grid through which the lower Mekong is constituted and understood is that of its hydropower potential. This meaning through which the “reality” of the lower Mekong was produced and understood by planners, water engineers, and agencies such as ECAFE in the early 1950s provided the initial impetus for the formation of the Mekong Committee in 1957. Representations of the lower Mekong as unutilised and an object for development underpinned a development narrative, which linked hydropower and poverty reduction. This dominant regional discursive formation framed hydropolitics at the inter-state level: water resources are national resources, whose development will lead to poverty reduction; due to their interconnected nature, there needs to be joint development (see Chapter Three). The actors visible within this constitution of transboundary hydropolitics are limited to lower Mekong states, donor states, and planners/engineers.

Regional discursive formations contain certain modes of thought, themes, styles of expression, metaphors and logics (Peet and Watts 1996). The lower Mekong’s dominant regional discursive formation contains representations of the lower Mekong as unutilised. In this context unutilised signifies a lack of water resources infrastructure. This obscures other uses of the river such as fishing, domestic uses, and subsistence agricultural production. These do not appear as utilisations because they do not fit into the framing of utilisations. These ways of representing the lower Mekong support a development narrative which links hydropower development and poverty reduction. This narrative argues that the people of the Mekong are poor and that the hydropower potential of the Mekong is huge, therefore developing the Mekong’s hydropower potential will solve the problem of poverty. This regional discursive formation has been reproduced through the work of the Mekong Committee, which devised ‘grand plans’ for Mekong development. It also continues to frame the thinking of powerful actors, such as state officials, and the development banks who promote water resources

development and hydropower as poverty reduction strategies (*e.g.* ADB and World Bank 2006).

The dominant regional discursive formation in the lower Mekong framed hydropolitics, water development, and water governance at the transboundary level. This initial framing in the 1950s was similar to framings in other river basins and in the global water discourse. As water development and management paradigms changed at the global scale, framings of water development also changed. Paradigms such as IWRM framed development in terms of economic efficiency, social equity and environmental sustainability. Lower Mekong water cooperation was re-orientated in 1995 with the goal of sustainable development of water resources. This re-orientation combined with studies that had shown the potential negative impacts of mainstream and widespread hydropower development meant that civil society actors, as mentioned above, assumed mainstream hydropower was no longer planned. However, Peet and Watts (1996) argue that regional discursive formations appear in a variety of forms and may appear to disappear at times, but they reappear later with even greater intensity. This is the case in the hydropolitical constellation of the lower Mekong.

Re-orientations in the global water discourse have been transmitted to transboundary water cooperation in the lower Mekong, partially through the actions of donor states, and have re-scaled hydropolitics to include sustainable development, environmental and social concerns, and public participation and stakeholder engagement. However, at the national scale hydropolitics is still conceptualised in terms of utilising water resources for hydropower development, rationalised in terms of national poverty levels. Additional forms have been added to the regional discursive formation. Growing electricity demands now forms part of the problem definition and justification for hydropower development. State officials argue that in order to continue economic growth, more electricity is needed: to meet this demand hydropower is needed (*e.g.* King *et al.* 2007). Civil society actors contest the electricity demand projections of actors such as EGAT (Middleton 2008a). With the resurrection of plans for mainstream dams, the dominant regional discursive formation linking hydropower and development has resurfaced with greater intensity. As such, international hydropolitics as conducted through the MRC is now operating at the intersection of two competing discursive formations. This illustrates how the international relations of hydropolitical constellations are embedded in discourses that operate over various scalar levels.

The dominant development narrative in the lower Mekong has partially endured because of the important stabilising role it plays in policy-making. Narratives reduce uncertainty and help to define both problems and solutions (Leach and Mearns 1996). The representation of the lower Mekong is extremely important in this context, as are representations of the lower Mekong's populations are poor and undeveloped. Representations frame thinking, underlie the production of knowledge and make certain practices possible (Doty 1996). In the case of lower Mekong hydropolitics state officials argue that hydropower is needed because of the "need" of the "poor" population: "you have seen the people in the North, they need development" (State official, interview, 06/08a). These representations justify particular types of water resources development. However, this does not mean that alternative representations or narratives do not exist, but that they have been marginalised. As shown throughout this thesis civil society actors are contesting dominant representations, and have formed a loose discourse coalition which are telling stories about negative impacts, the flow of the Mekong, local livelihoods, alternative development visions and the importance of fisheries (see Chapter Seven).

As detailed above, civil society actors have rescaled their opposition to hydropower to the transboundary scale where hydropolitics is framed in ways that allow space for stakeholder engagement and the expression of alternative narratives and representations. Civil society actors also represent water governance in particular ways, arguing that the existence and mandate of the MRC mean that it should play a regulatory role in the water resources development of the lower Mekong (see Chapter Five). In contrast state officials frame the role of transboundary water cooperation in development terms: "we share the need of development, we must not have paperwork, but action, that is the role of our cooperation" (State official, interview, 06/08a).

Observation of the interactions between dominant and alternative representations and narratives of hydropower, development, and governance at the transboundary hydropolitics scale revealed how powerful actors frame development at the state and regional levels. This framing technologises development and has depoliticisation effects in two important and interconnected ways: one, development is represented as a technical or scientific process; and two, it depoliticises the impacts of hydropower development, representing them in ways which allow them to be traded-off for state-level benefits.

Development is not a neutral category: it is highly normative and contested. This thesis challenges the representation of development at the transboundary hydropolitical

scale as natural, neutral and pre-given, by analysing the development representations of less powerful actors. It has also highlighted how this discourse coalition has contested mainstream hydropower development plans using a number of strategies: producing their own research, scientific briefs and reports; targeting the MRC as a way to access development debates; conveying their own meetings; and, forming coalitions such as *Save the Mekong* as alternative platforms (see Chapter Four). As such, this thesis has opened up the category of development to reveal its contested nature, its various representations, and how particular representations and meanings came to dominate in transboundary hydropolitics.

The ways in which powerful actors define the problem, solution and the debate determine who is included and excluded from debates and decision-making. These are socio-political decisions which powerful actors try to render natural, inevitable and acceptable. Denying politics masks the political effects of those decisions (Ferguson 1994a). The development interventions and strategies of state actors in the lower Mekong are derived from particular types of analyses, which look for causes for problems that the state can solve. Edkins (2008) has shown how famines are framed and analysed as technical problems which have technical or scientific solutions. This is also true of development in the lower Mekong. The problem, poverty, is framed, measured, and analysed in terms of indicators such as Gross National Income, and access to electricity. The solution, hydropower development, is framed and analysed in terms of its megawatts and its potential US\$ revenues. Within this framing hydropower becomes an obvious or natural solution to the problem of poverty. This framing appears technical and neutral, but it is in fact highly political. Development interventions involve winners and losers: certain actors gain benefits from development, others do not. Certain actors also have more power than others in deciding which types of development interventions are undertaken, where they are located, and how they are represented and framed.

Poverty and development could be conceptualised and analysed in other ways, and other solutions suggested. What counts as evidence is determined by political processes, not technical ones. In the current hydropower debate, state officials are calling for more studies into fisheries impacts. This is partially because state officials believe that technological mitigation of fisheries impacts should be possible. A wealth of evidence was presented at MRC meetings such as the 2008 Regional Multi-stakeholder Consultation on the MRC Hydropower Programme suggesting that mainstream hydropower would be disastrous for fisheries and by extension the local communities who depend on them for food security (see Chapter Seven). The results of an

Independent Expert Fisheries Group convened by the MRC, was presented and in the discussions that followed civil society representatives supported these results through their comments and own evidence (Observation notes, MRC meeting, 09/08). However, state officials paid more heed to presentations from the Columbia River basin about their experiences of fisheries mitigation, using it as an example to argue that technological mitigation should be possible in the Mekong as other river basins have mitigation measures (Observation notes, MRC meeting 09/08). This suggests not only a belief in technical solutions being found for all problems, but that the fisheries evidence presented at these meetings is not ‘conclusive’ evidence. Roe (1991) argues that counter-evidence is troublesome for policy makers as it generates uncertainty. This is the case in the lower Mekong, where a range of research about potential negative fisheries impacts undermines the assumptions which frame the thinking of decision-makers about hydropower and development. As such, state officials respond by calling for more studies. Counter-evidence is not enough to displace dominant development narratives linking hydropower and development as it does not provide the stabilising assumptions that are useful in policy-making, increases uncertainty instead of reducing it, and does not suggest potential solutions.

Framing development at the national and regional scales depoliticises the impacts of hydropower development. Actors try to influence the definition of a problem and exercise power by imposing a particular frame onto a discussion (Hajer and Versteeg 2005). Powerful actors in the lower Mekong are shifting the terrain to the discussion of trade-offs in hydropower development (*e.g.* ADB and World Bank 2006). Discussing trade-offs suggests that hydropower is the chosen development strategy and that this is uncontroversial. In this context, it is not a question of whether hydropower dams are needed or are an appropriate solution for the lower Mekong region, but a question of how to proceed. The key trade-off which has been identified by a wide diversity of actors including the development banks, the MRC and some civil society actors, is between hydropower and fisheries resources (*e.g.* 2009b). Hydropower dams on the Mekong mainstream will act as barriers to fisheries migration. As such, discussions at the MRC level of analysis between 2008 and 2010 emphasised issues surrounding fisheries migration and mitigation. These discussions situate debates about hydropower development as technical and scientific processes. This obscures the ways in which hydropower development will affect different actors in different ways as costs and benefits are not distributed equally.

The discussion of trade-offs removes fisheries impacts from their geographic and social locations, and obfuscates impacts by locating the discussion at the state or regional level. Reports such as the Draft Impact Assessment of the *MRC's SEA For Hydropower Development on the Mekong Mainstream* quantify fisheries in terms of tonnes and US\$ per tonne value (ICEM 2010). This allows state actors and planners to make comparisons between fisheries and the possibilities for mitigation, such as aquaculture, and a comparison with the economic benefits from hydropower. However, representing fisheries impacts in aggregate and economic terms disguises the importance of fisheries to livelihoods and the distribution of costs and benefits. Hydropower, conceptualised as a national poverty reduction strategy accrues benefits at the state level, which proponents argue will be utilised for poverty reduction programmes (see Chapter Seven). In contrast fisheries' costs are located at the livelihoods and local scalar levels. Benefits and costs are located over different scales which makes direct comparison difficult. However, discussions of trade-offs mask this reality and cast the trade-off in particular ways which represent the choice of hydropower over fisheries as acceptable and inevitable.

2.4 Contributions to knowledge

The above sections outline a number of ways in which this thesis has contributed to both theoretical and substantive knowledge of transboundary hydropolitical constellations in three key areas. This thesis also contributes to theoretical debates about approaches to transboundary hydropolitics. Concerns have been expressed about the suitability of utilising conventional IR approaches to analyse hydropolitical constellations as they focus on unified state actors, the transboundary scale and conflict and cooperation (*e.g.* Furlong 2006). As described throughout this thesis a focus on the state and inter-state scales and unified state actors obscures important scalar and discursive dynamics, which are integral to analysing and understanding transboundary hydropolitics. These include the multiple actors operating over various scales who condition water resources outcomes, the ways in which hydropolitical constellations are embedded in wider socio-political contexts, and how hydropolitics is constituted discursively. Transboundary hydropolitics largely centres on issues of governance and development. The arguments outlined in this thesis have illustrated how these two categories are contested and highly political. This is in direct contrast to conventional

approaches, which conceptualise development and water governance as technical and scientific processes.

Political ecology has been identified by a number of commentators as a suitable approach for studying hydropolitical constellations (Furlong 2006; Stott and Sullivan 2000). Sneddon and Fox (2006) have called for a critical hydropolitics which goes beyond a state-centric focus, explores how river basins are represented, actors' discursive strategies, and the complex interactions among different scales. This thesis complements this call for a critical hydropolitics and explores the ways in which political ecology can be utilised to explore hydropolitical constellations and reveals a number of important dynamics. As such, it also contributes to a growing body of work on water resources development and hydropolitics in the political ecology tradition (*e.g.* Baghel and Nusser 2010; Swyngedouw 1999). Political ecology has largely been applied to the local or sub-state levels (*e.g.* Tans-Mullins 2007). This thesis has illustrated how political ecology can be applied to transboundary hydropolitics as its theoretical concerns with scale, discourse, and multiple actors are highly pertinent to the case of the lower Mekong's hydropolitical constellation.

New approaches to transboundary hydropolitics, such as the Framework for hydro-hegemony, utilise critical IR approaches to explore new avenues including the co-existence of conflict and cooperation, and the various strategies which actors utilise to contest water resources managements. This thesis has chosen to use political ecology because it allows a greater sensitivity to both the processes and politics of scale than the Framework for hydro-hegemony, but it complements this new approach by utilising insights from critical IR approaches. These insights are extremely useful in analysing hydropolitical constellations. For example, critical IR theorists such as Doty (1996) and Edkins (2008) have explored discursive practices, representation and depoliticisation. These dynamics are key to understanding hydropolitical constellations. Critical IR theorists' focus on discursive practices, such as representation and interpretation complement the work of political ecologists who have explored processes of narrative construction and the role that narratives play in legitimising development interventions (*e.g.* Swift 1996; Bassett and Zueli 2003). Both political ecology and critical IR theorists offer post-structural conceptions of power, which focus on power-knowledge relations. The work of Foucault has been influential in both fields, particularly conceptions of governmentality and bio-power (*e.g.* Goldman 2004; Campbell 2005). These conceptions of power have allowed this thesis to illustrate the ways in which hydropolitical constellations are constituted by discourse; to trace practices of

representation and interpretation and the ways in which actors contest and promote dominate and alternative representations and narratives; and, to explore how the Mekong and its people have been measured and studied in order to be ‘developed’.

As well as contributing to the growth of theoretical knowledge on transboundary hydropolitical constellations, this thesis has made a number of substantive contributions to the knowledge of the lower Mekong’s hydropolitical constellation. The multiple actors who condition water resources outcomes at the transboundary scale have been identified and analysed. By embedding the MRC in its wider socio-political contexts the actor relationships and dynamics that are located outside the MRC sphere, but nonetheless impact transboundary hydropolitics in important ways were revealed. This is an important substantive contribution, as usually hydropower actors and water actors are considered separately, and not integrated into studies (*e.g.* Middleton *et al.* 2009). Water resources development and governance are intricately connected and therefore need to be integrated in studies of transboundary hydropolitics. The ways in which actors scale interventions and processes, as well as deploy scalar strategies are extremely important both theoretically and substantively in the lower Mekong and other transboundary river basins. This thesis has examined how powerful actors scale development at the national scale and depoliticise the costs and impacts of hydropower development when making direct comparisons between fisheries and hydropower.

The thesis also contributes to current debates about the MRC and hydropower development in the lower Mekong. These important debates can only be adequately analysed and understood if they are situated within their wider socio-political contexts, the relations between multiple actors and scales are explored, and the discourse coalitions which are contesting and promoting hydropower development are analysed. Analysing the MRC in isolation from its wider socio-political contexts constructs particular representations of the organisation and framings of the spaces and possibilities for water governance. For example, civil society actors, who frame the MRC purely in terms of the 1995 Mekong Agreement and do not locate it within its relationships to a wide range of actors, are calling on the MRC to announce a moratorium on mainstream dams. This is outside the mandate or scope of the MRC.

The MRC is lauded both as a resilient example of transboundary water resources cooperation, and critiqued in terms of its role and relevancy in hydropower development debates in the lower Mekong (Wolf 1998; Hirsch and Jensen 2006; Dore and Lazarus 2009). An awareness of the multi-actor, multi-scalar nature of hydropolitics in the lower Mekong, and the interactions between different actors that condition outcomes at the

MRC level suggests a number of ways in which the MRC could strengthen its position or increase its impact in development debates. Awareness of the separation of water and energy actors at the state level and the effects of this, demonstrates that the MRC needs to strengthen its links with energy actors and develop strategies for integrating them into debates at the transboundary level. As an institution that operates at the intersection of actors and discourses the MRC can provide a space for debate and negotiation about water resources development and also disseminate information between different stakeholders. Civil society actors already ‘scale up’ concerns to the transboundary level and utilise MRC participation as a mechanism to access debates. By improving participation processes and developing strategies to access local communities the MRC can provide a space for multiple perspectives to be heard.

Debates over hydropower development in the lower Mekong are a site of struggle to define the development direction of the region. Examining the socio-political origins of dominant development narratives and representations of the lower Mekong opens up previously black-boxed areas for debate. Development narratives and representations shape the thinking of development planners and state actors. Illustrating their socio-political framings and origins questions their technical and neutral nature and creates spaces for debate that may allow alternative ideas about development to become visible.

3. Future Research

Future research needs to be extended to the lower Mekong’s local communities because they will be the most adversely affected by hydropower development. The ‘undeveloped’ status of the basin’s local communities is also one of the main justifications offered by powerful actors for hydropower development: “you have seen the people in the North, they need development” (State official, interview, 06/08a). Local communities are denied agency as they are conceptualised and represented as an undifferentiated mass or object waiting to be developed. This thesis has taken the first steps towards ascribing agency to local community actors when analysing international hydropolitics, by opening up the category of development to reveal its political and contested nature, the potential fisheries and livelihoods impacts of hydropower, and some of the spaces available for contesting hydropower development.

In order to fully ascribe agency to local communities, their heterogeneity needs to be analysed and conceptualised. Local communities in the lower Mekong are extremely diverse. There are over 70 main ethnic groups in the lower Mekong who speak a

number of different languages (MRC 2003a). For example, in Lao PDR ethnic groups include the Lao Loum (lowland peoples), the Tai, Mon-Khmer speaking ethnic groups such as the Khamu, and hill peoples such as the Hmong (Cranmer and Martin 2007). The Lao Loum are the dominant ethnic group and there are some reports which suggest that construction jobs on hydropower projects have gone to the Lao Loum and not local ethnic groups (Imhof 2008). The ethnic, discursive, ecological and socio-economic composition of local communities varies throughout the basin with livelihood practices being enacted differently in upland areas such as the Central Highlands of Vietnam, and the lowland areas of the Mekong Delta. Farming in the lowlands is largely sedentary, whilst in the uplands and highlands communities engage in shifting cultivation (MRC 2003a). Fishing practices vary throughout the basin and different gear is used to catch different fish (MRC 2010a). For example, in the Khone Falls area of Lao PDR local communities fish using traps, whilst in the Tonle Sap Lake in Cambodia boats and nets are more widely used. Local communities have adapted their settlements to their ecologies: in the Tonle Sap Lake local communities build their villages on stilts so that they do not flood in the wet season. In extending research to local communities this complexity would need to be analysed. There is already a wealth of data available which could facilitate this, including the MRC's (2010b) report on social impact and vulnerability, which surveyed 1360 villagers in a number of different communities in the basin.

This thesis has largely focused on civil society actors, such as local NGOs, as the agents challenging and contesting powerful actors' hydropower development plans. But, civil society actors cannot be taken as synonymous with local communities: NGOs have their own interests, goals, and development visions which are not necessarily representative of local communities in the basin. Civil society actors interviewed for this thesis assumed that local communities would be anti-hydropower development due to its negative impacts. However, this assumption homogenises local community actors and denies the possibility of a range of responses. Singh (2009) in his study of public participation in NT2 sketched the possibilities of how local community actors think strategically in response to hydropower projects and how concerns about negative impacts are not necessarily the same as opposition.

The methodological justification for extending research to local community actors centres on examining their agency, and the ways in which they represent and contest development. As such, the key is to capture the complexity of different development visions. How actors frame development and contest the development

narratives and representations of other actors is an extremely important aspect of transboundary hydropolitics. Within this thesis the development visions and story-lines of a number of different actor types have been considered. Consequently, this research can be enhanced by analysing local community actors' development visions, representations, and narratives. This would involve extending the use of semi-structured interviews to local community actors.

There are a number of methodological considerations in extending the research to local communities in this way. These include issues of language, translation and reliability of data collected. Local communities in the lower Mekong speak a range of languages and dialects. Consequently, in order to interview local community actors it would be necessary to utilise translators. This carries with it the risk of misunderstandings. Due to the politically sensitive nature of the topic and the context in which research in the lower Mekong takes place there are concerns about the reliability of data collected from local communities or project affected peoples. For example, participants may “tell you what they think you want to hear” or “what they think is the right answer” because they are concerned about potential repercussions. In order to overcome these considerations it would be necessary to locate the research within the local community setting and build rapport with local community actors, follow strict principles of confidentiality, and also ensure that the sample size is large enough to allow responses to be compared and filter out any responses that may have been motivated by “giving the right answer”.

Local communities are highly vulnerable to changes in the lower Mekong's water system due to the embeddedness of their livelihoods in access to water. As well as considering how local communities utilise the Mekong's water resources for livelihoods and how they will be impacted by hydropower development, future research needs to analyse the strategies or spaces that may be available to local community actors for accessing debates about water resources development as well as capturing the range of possible responses. Spaces for local communities to contest hydropower development or access debates include the public participation components of hydropower projects. For example, as part of the process of NT2 a series of local meetings were held. Observation of these types of meetings and the ways in which local community actors frame concerns and responses to hydropower in these forums is another way in which this research could be extended. This would also allow a more in-depth consideration of the asymmetric power relationships between local communities, state officials, and private sector companies.

The second way in which this thesis could be extended is through further research on the unfolding dynamics between the new private sector actors and state agencies. Further research is needed to map these new actors, and to consider, amongst other issues, their motivations for involvement in the lower Mekong's hydropower, and the hydropower standards that they adhere to. This thesis has located some of these new private sector actors, such as Sinohydro, a Chinese state agency operating within a wider Chinese government policy, which encourages companies to 'go out' from China as part of the government's strategy to secure access to natural resources. However, less is known about other private sector actors. Further research could sketch these new actors and also explore the unfolding dynamic of increasing Thai and Vietnamese private sector company involvement in development of lower Mekong mainstream hydropower dams.

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