Deliberative Water Governance: Theory and Practice in the Mekong Region

John Gregory DORE

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Statement of originality

This thesis is presented as a collection of linked chapters, already published as journal articles and book chapters, to inform the theory and practice of deliberative water governance in the Mekong Region and beyond. Five are published as articles in peer-reviewed journals, and five in peer-reviewed books.

Attribution statement for each publication

Chapter	
1	Introduction
2	Dore J (2003) 'The governance of increasing Mekong regionalism'. In: M Kaosa- ard and J Dore (eds.) Social Challenges for the Mekong Region. White Lotus, Bangkok, 405-440. The candidate instigated the work, undertook the research and analysis, and wrote the chapter. © White Lotus and Chiang Mai University's Social Research Institute 2003
3	Dore J, Yu X and Yuk-shing Li K (2007) 'China's energy reforms and hydropower expansion in Yunnan'. In: L Lebel, J Dore, R Daniel and Yang Saing Koma (eds.) <i>Democratizing Water Governance in the Mekong Region</i> . Mekong Press, Chiang Mai, 55-92.
	The candidate instigated the work, undertook almost all of the research and analysis, and wrote the chapter. Dr Yu enabled access to the Chinese system and provided valuable guidance. Mr Yuk-shing Li translated material and provided his insights on the role of media and civil society organisations. © Mekong Press and Chiang Mai University's Unit for Social and Environmental Research 2007
4	Grumbine RE, Dore J and Xu J (2012) 'Mekong hydropower: drivers of change and governance challenges', <i>Frontiers in Ecology and the Environment</i> 10:2, 91- 98. Dr Grumbine instigated this paper. Grumbine and Dr Xu led the section on regional macro-drivers. The candidate added to the section on drivers, extended the scope of the analysis and then wrote the majority of the paper that focuses on Mekong
	hydropower governance, using the research findings of the candidate. © The Ecological Society of America 2012
5	Dore J and Lazarus K (2009) 'Demarginalizing the Mekong River Commission'. In: F Molle, T Foran and M Kakonen (eds.) <i>Contested Waterscapes in the Mekong Region: Hydropower, Livelihoods and Governance</i> . Earthscan, London, 357-382.
	The candidate instigated the work and wrote the chapter in its entirety. However, the paper draws on shared experiences of the lead author and Ms Lazarus exploring regional water governance. © Earthscan 2009
6	Moore D, Dore J and Gyawali D (2010) 'The World Commission on Dams + 10: Revisiting the large dam controversy', <i>Water Alternatives</i> 3:2, 3-13.
	Ms Moore led the writing of this synthesis paper. The paper distils the shared analysis of the three authors following co-production of a special issue of <i>Water Alternatives</i> journal, which examined the legacy of the World Commission on Dams and comprised twenty papers and six shorter viewpoints. © Water Alternatives 2010

	Chapter
7	Dore J and Lebel L (2010) 'Gaining public acceptance: A critical strategic priority of the World Commission on Dams', <i>Water Alternatives</i> 3:2, 124-141.
	The candidate instigated the work at the request of United Nations Environment Program's Dams and Development Project that followed the World Commission on Dams. The candidate undertook the majority of the research, analysis and writing. Dr Lebel expanded the justice principles for gaining public acceptance, bringing in distributional justice, made significant contributions to the conceptual Figures 1-3, and provided additional reflections and comments. © Water Alternatives 2010
8	Dore J (2010) 'Multi-Stakeholder Platforms'. In: J Dore, J Robinson and M Smith (eds.) <i>Negotiate: Reaching Agreements Over Water</i> . IUCN, Gland, 37-58.
	The candidate instigated the work, and undertook the research, analysis and writing. Four of the ten cases were provided by others in response to a global search for multi- stakeholder platform experiences as part of the process to produce the Negotiate book, specifically: 3.2 Cape York by Mobbs and Woodhill, 3.3 Fraser Basin by Failing and Long, 3.6 India river-linking by Gujja, and 3.7 companion modelling by Jones.
	© International Union for Conservation of Nature 2010
9	 Dore J (2007) 'Mekong Region water-related MSPs: Unfulfilled potential'. In: J Warner (ed.) <i>Multi-Stakeholder Platforms for Integrated Water Management</i>. Ashgate, Aldershot, 205-234. The candidate instigated the work, led the research and analysis, and wrote the chapter. © Ashgate 2007
10	Dore J and Lebel L (2010) 'Deliberation and scale in Mekong Region water governance', <i>Environmental Management</i> 46:1, 60-80.
	Dr Lebel instigated this paper building on his prior writings exploring issues of scale in Mekong water governance. The candidate is the lead author; adding expertise in deliberative theory and in case study experiences. Lebel providing advice on all sections, and contributed Figure 1 and inputs to Figure 3. © Springer Science+Business Media 2010
11	Dore J, Lebel L and Molle F (2012) 'A framework for analysing transboundary water governance complexes, illustrated in the Mekong Region', <i>Journal of Hydrology</i> 466-467, 23-36.
	The candidate instigated and led the research project upon which this journal article is based, that involved fifty-two researchers from eleven countries. The candidate wrote the extensive final report out of which this paper emerged. Dr Lebel assisted in focusing the paper, including input to the key conceptual diagram (Figure 1). Dr Molle provided initial impetus for the explanatory framework and project synthesis. © Elsevier 2012
12	Conclusions
L	

Declaration

I declare that this thesis, of which the published journal articles and book chapters are

the key part, is my own original work, except where referenced and stated otherwise.

John Gregory DORE

22 December 2012

filter

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iv

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Preface

Writing a PhD thesis is necessarily the documentation of a personal journey. I wish to explain the journey which led me to the Mekong Region as it provides the context for my subsequent, evolving research and action agenda, one product of which is this thesis.

I had a fortunate upbringing in rural south-east Australia which provided me with many opportunities. However, reflecting back on the initial formal education system which processed me, triggers mixed emotions. I was marched through high school, and for no particular reason other than that I could cope with it, was expected to persist with the standard fare of chemistry, physics, pure and applied mathematics, with a dash of English studies, and perhaps an over-emphasis on sport. From such a base, the tertiary pathways which were then most obvious were in the natural sciences domain.

I then enrolled in an undergraduate degree in agricultural sciences at University of Melbourne during the 1980s, absorbing and reproducing scientific facts and methodologies, at a time when molecular biology was in its infancy and agricultural economics was somewhat surreally detached from anything other than its rationalist foundations.

Subsequently a career unfolded in agribusiness, commencing in the second half of the 1980s, which required an enhanced understanding of technical options, risk, finance and *people*. My work involved property operation, enterprise selections, pursuing decent returns on invested capital, boosting net worth, land purchasing, succession planning and facilitating discussion groups for collective learning.

During the 1990s this evolved into a specialisation in public policy attempts to 'manage' Australia's natural resources where old paradigms of industry support and laments about the fickleness of unlevel export market playing fields, were being added to by new paradigms of community-based Landcare and environmental sustainability. This was a part of the elusive quest by natural resources users and managers for profitability, satisfaction and protection of wider public interests. Increasingly I became involved as an analyst and actor in the politics of natural resources management.

During this time I was also becoming increasingly interested in the progress and challenges confronting Australia's East Asia neighbours and was travelling in countries such as China and Cambodia. In the mid 1990s I was fortunate to find my way to The Australian National University (ANU) in Canberra to complete Masters studies in environmental management and development with an always remembered, diverse group of multi-national scholars. The return to ANU was in part driven by the inspiration gained from participation in 1995 at a Coffs Harbour meeting of 'ecological economists'. This eclectic gathering provided me with a renewed surge of interest in the prospects of interdisciplinary approaches in helping societies deal with many of the intractable problems of our times. The subsequent return to reflective study was my first exposure to experiential learning approaches within a formal university setting.

At this time I was also fortunate to begin an association with the Cranlana Programme, an initiative committed to the development of leadership and an active citizenry, closely associated with the Melbourne-based philanthropic organisation, The Myer Foundation. Participation in several of their activities profoundly affected my approach to learning. The Cranlana Colloquium processes provide a skilfully moderated opportunity for learning and reflection on selected writings of great philosophers from all periods and from Western and Eastern traditions. As one alumni noted: *"The Colloquium combines the familiar rational and analytical processes of judgement with artistic, emotional and social processes that also form, conform and sometimes reform our views"*. The interaction with Cranlana was serendipitous. I was ready to explore new areas and approaches to governance. It gave impetus to my subsequent work, and further opened my mind to the lessons from history.

The last years of the 1990s saw me working in an interactive study of sub-national regionalisms working with people around Australia who are attempting to improve the community, economy and environment of 'their region' – employing processes which we referred to as Sustainable Regional Development (SRD) initiatives. The research included analysis of global and Australian trends influencing the institutional landscape, and context-setting examination of Australia's systems of governance.

We examined SRD in thirty sub-national regions to see what could be learnt about the persistence of government support, or lack of it, which had characterised many regional efforts. We also observed the varying degree to which regional efforts had a clear purpose, entrenched by mandate, or, on the contrary, whether they had been quick fixes to political problems, or ways for the various spheres of government to perpetuate a regular joust. It was also clear there was vastly different levels, and types (social, economic, biophysical, 'scientific', cultural, 'local', indigenous, national, global) of underpinning information which had been available to inform regional communities participating in various initiatives.

We documented rich experiences of the ways in which different social groups had been enabled (or not) to participate in regional organisations and processes. And, we noted the ways in which regional initiatives had been able to evolve (or not), expanding or limiting their mandate, changing their focus as deemed necessary after learning and adapting processes. The final phase of this research distilled an analysis of themes central to the success or failure of regional initiatives – governance, power, process, time.

The SRD process in Australia was instructive, but I now wanted to use a PhD opportunity to investigate similar issues, at depth, in what I knew were the vastly different supra-national regional contexts of East Asia.

Abstract

This thesis explores the research question: *How can water governance be fairer and more effective in Mekong Region and beyond?* In doing so, it examines the theory and practice of deliberative water governance, informed and illustrated in a region that comprises Cambodia, Laos, Myanmar, Thailand, Vietnam and China's Yunnan Province.

Water governance can be understood along a spectrum, from a means to achieve predetermined objectives to a social process of dialogue, negotiation and decision-making. This thesis is most interested in the latter conception, in the context of 'the Mekong', where choices are being made about using and sharing transboundary waters. These choices might produce more energy; both increase and decrease food production; sustain or threaten livelihoods; and, maintain or degrade vital ecosystems and their services, upon which societies depend.

An introductory chapter (Part A, Chapter 1) contextualises and explains the logic of the research. I next explore contested waterscapes (Part B, Chapters 2-5) focusing on the complex tapestry of Mekong regionalisms and governance, hydropower expansion, and a marginalised Mekong River Commission. The analysis confirmed that significant scope exists for improving water governance, and that deliberation – debate and discussion aimed at producing reasonable, well-informed opinions – has been in short supply.

Deliberation deficits observed and reported in Part B provoked exploration of deliberative processes (Part C, Chapters 6-11) as a potential pathway to improving water governance. I examine firstly international practice, including still-topical issues from the World Commission on Dams, and the potential of multi-stakeholder platforms. I then examine Mekong practice and the efficacy of multi-stakeholder platforms as a governance tool; and the politics of deliberation, scales and levels. The final chapter of this section introduces a framework for analysing transboundary water governance complexes and distils suggestions for making water governance more deliberative and as a consequence, fairer and more effective.

Part C analyses a range of governance challenges, and provides evidence that deliberative processes, where inserted into political arenas, are making water governance fairer and more effective, by reducing power imbalances among stakeholders and assisting negotiations to be more transparent and informed.

In the final section and chapter (Part D, Chapter 12), I summarise and reflect on my practice and exploration of the topics. Drawing together the lessons from my research, I present my aspirational vision of **Deliberative Water Governance** – a new frontier in the field of deliberative governance: **Constructive engagement that enables fairer and more effective water governance through inclusive, deliberative processes that emphasise different perspectives, learning, analysis and institution-building.**

The vision is inspired by promising examples, from the Mekong Region and elsewhere, examined in the thesis chapters, which demonstrate the need for and added-value provided by deliberation when it is information-rich, flexibly facilitated and actively promotes analysis of different views. In conclusion, I contend that, via its action research and publishing orientation, this thesis has contributed uniquely to both the theory and practice of Deliberative Water Governance in the dynamic Mekong Region and more widely.

Contents

STATE	MENT OF ORIGINALITYI
ACKNO	WLEDGEMENTSIII
PREFAC	CEVI
ABSTR	ACTIX
CONTE	NTSXI
1. IN	ITRODUCTION
1.1	Principal research question
1.2	RESEARCH APPROACH
1.3	RESEARCH METHODS
1.4	MATERIAL
1.4	ORGANISATION AND OVERVIEW
1.5	REFERENCES (FOR CHAPTER 1 ONLY)
-	THE GOVERNANCE OF INCREASING MEKONG REGIONALISM
	HINA'S ENERGY REFORMS AND HYDROPOWER EXPANSION IN YUNNAN
	IEKONG HYDROPOWER: DRIVERS OF CHANGE AND GOVERNANCE CHALLENGES 105
5. D	EMARGINALIZING THE MEKONG RIVER COMMISSION 113
6. TI	HE WORLD COMMISSION ON DAMS+10: REVISITING THE LARGE DAM CONTROVERSY 139
	AINING PUBLIC ACCEPTANCE: A CRITICAL STRATEGIC PRIORITY OF THE WORLD
8. N	IULTI-STAKEHOLDER PLATFORMS
9. N	IEKONG REGION WATER-RELATED MSPS: UNFULFILLED POTENTIAL
10.	DELIBERATION AND SCALE IN MEKONG REGION WATER GOVERNANCE
11.	A FRAMEWORK FOR ANALYSING TRANSBOUNDARY WATER GOVERNANCE COMPLEXES,
ILLUSTRAT	ED IN THE MEKONG REGION
12.	CONCLUSIONS
12.1	Synopsis of Part B Contested Waterscapes
12.2	SYNOPSIS OF PART C DELIBERATION DEFICIT
12.3	VISION FOR DELIBERATIVE WATER GOVERNANCE
12.4	FINAL REFLECTIONS
12.5	
CONSO	LIDATED REFERENCES LIST FOR CHAPTERS 1-12
Figure 1 Figure 2	Map of Mekong Region
FIGURE 2	THESIS LOGIC: PRINCIPAL RESEARCH QUESTION AND SUB-QUESTIONS.
FIGUKE 3	THESIS LUGIC. PRINCIPAL RESEARCH QUESTION AND SUB-QUESTIONS.

TABLE 1	THESIS ORGANISATION AND OVERVIEW: QUESTIONS, PRACTICE, THEORY.	18
TABLE 2	Annexes	22

1. Introduction

This chapter introduces the principal research question, the research approach, the research methods, the connecting logic and organisation of the thesis.

1.1 Principal research question

This thesis explores the research question: *How can water governance be fairer and more effective in Mekong Region and beyond?* Each part of the question is defined so that my interpretation of each term is clear from the outset. This section introduces Mekong Region, water governance, fairness and effectiveness.

Mekong Region

To a certain extent, all regions are imagined, however, the Mekong 'region' is increasingly becoming a reality. In this thesis the Mekong Region is taken to encompass the territory, ecosystems, people, economies and politics of Cambodia, Laos, Myanmar, Thailand, Vietnam and China's Yunnan Province (Figure 1). The research for this thesis has been undertaken throughout the Mekong Region.

There are many Mekongs. The Mekong Region is more than Mekong River, and more than Mekong River Basin. It is a social and political construct with wider scope and implications. The river flows for approximately 4800 km, drawing waters from its basin of 795000 km² and is home to about 70 million people (MRC, 2010). The Mekong River Basin is a geographic subset of the Mekong Region. The Mekong Region covers 2.3 million km² and is home to more than 240 million people (ADB and UNEP, 2004).

There is a view that the Mekong Region's abundant natural resources, such as water, forest, fisheries, biodiversity, minerals and energy (in the form of coal, petroleum, gas and hydropower), provide enormous wealth creation opportunities. Those who hold this view see alluring economic benefits from the continued exploitation of these resources. However, the appropriateness of different development pathways is vigorously contested by others who argue that current modes of development, risk-bearing and benefit-sharing are inequitable and unsustainable.



Figure 1 Map of Mekong Region

Mekong Region is taken to encompass the territory, ecosystems, people, economies and politics of Cambodia, Laos, Myanmar, Thailand, Vietnam and China's Yunnan Province.

SOURCE: Based on Map No. 4112, Rev. 2. January 2004. UN Cartographic Section, New York.

Early in the research for this thesis I participated in extensive collaborative social research (Kaosa-ard and Dore, 2003) and examined social challenges for the region, including: increasing regionalism, multi-faceted globalisation, improving relationships between Mekong states and people, supporting the disadvantaged and less-empowered, harnessing business, using natural resources more equitably and sustainably, and, enhancing regional governance.

In this thesis I use regional in an encompassing way meaning region-wide and/or transboundary and/or transborder and/or crossborder and/or of particular significance to various parts of the region (but not necessarily all the region). The regional context is being shaped by a wide range of historical and contemporary forces. Partly as a consequence of relative peace, there is increasing regionalism propelled by quests for greater investment, employment, trade, business profits and general economic growth.

The surge in regional connections is led either by the state, business or civil society. State elites desiring political solidarity are driving regional forums focused on economic development, such as the Greater Mekong Subregion economic cooperation initiative (ADB, 2011). Ecosystem concerns drive regional conservation initiatives, for example, highlighting Indo-Burma as a biodiversity hotspot (Tordoff et al., 2007). There is evidence of increased ethnic solidarity and cultural appreciation transcending borders (Xu and Mikesell, 2003), but discrimination against minorities and migrants also remains (Harima et al., 2003). There are also regional connections between those focused on local livelihoods and local rights-based approaches to development. Advocacy campaigns, such as Save The Mekong (discussed in Chapter 11), also cross borders and influence regional water resources development debates (Yong and Grundy-Warr, 2012). Chapter 2 of this thesis further examines the theory and practice of regionalism in the Mekong Region (Dore, 2003a).

This thesis focuses on the present and potential role of deliberation – debate and discussion aimed at producing reasonable, well-informed opinions – as a part of Mekong Region water governance. The key examples I use have regional dimensions to their politics and governance processes, but also local dimensions to which I have given less attention.

The choice to focus on regional governance reflected a need to keep a manageable scope to the writing, and also my comparative advantage in being able to travel freely, and access information in all six Mekong countries. This privilege is not available to many researchers, including many of my colleagues. Notwithstanding these points, it must be made clear, as the chapters show, that the regional space is critical, and impacts on the national and local options set available in all countries. Therefore, I hold that it is an important level, which also has many cross-level nuances, not all of which have been possible for me to explore.

Other levels are also important and are worthy topics of research. For example, Miller may be quite right when she suggests, in a Mekong context, that "*cumulative, iterative changes in the natural environment which lead to more subtle forms of conflict between neighbours, communities and countries*" (2003:4) – at the local level – may be just as important an aspect of Mekong Region water politics. I acknowledge that different scales and levels are important, as are the relationships between them. That said, my focus has been regional.

Water governance

Water governance can be understood along a spectrum, from a means to achieve predetermined objectives to a social process of dialogue, negotiation and decision-making. This thesis is most interested in the latter conception, in 'the Mekong', where choices are being made about using and sharing regional waters. These choices might: produce more energy; both increase and decrease food production; sustain or threaten livelihoods; and, maintain or degrade vital ecosystems upon which societies depend.

For the Global Water Partnership:

Governance is about effectively implementing socially acceptable allocation and regulation and is thus intensely political. Governance is a more inclusive concept than government per se; it embraces the relationship between a society and its government. Governance generally involves mediating behaviour via values, norms, and, where possible, through laws (Rogers and Hall, 2003:4)

and

Water governance refers to the range of political, social, economic and administrative systems that are in place to develop and manage water resources, and the delivery of water services, at different levels of society (from GWP, cited by Rogers and Hall, 2003:7).

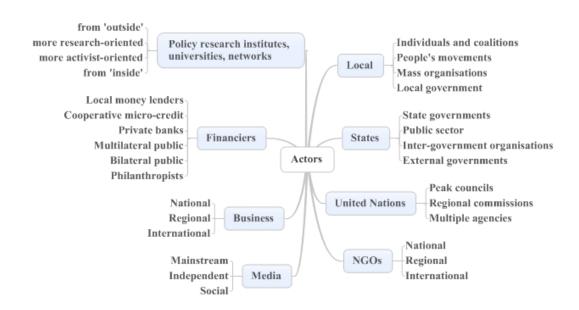
My own working definition of governance, including but also beyond water, attempts to better capture the inherent dynamism that I have observed and the importance of prevailing norms and the institutional context:

Governance refers to the multi-layered interplay of water-related negotiations, agenda-setting, preference-shaping, decision-making, management and administration between many actors (including organisations) in the State-society complex, at and between different levels and scales, vying for authority or influence, and constrained or enabled by evolving norms and institutions.

[My definition].

This definition recognises the many water governance actors of the Mekong Region (Figure 2), including: political leaders, water and energy planners, the people in river basin organisations and community-based water user associations, storage and delivery authorities, military, agricultural irrigators, energy generators, fishers, navigators, ecologists, urban and rural dwellers, non-government organisations, financiers, the media, policy research institutes, universities and networks.

Figure 2 Water governance actors in the Mekong Region



SOURCE: Actors map in Chapter 11 (Dore et al., 2012:6)

Fairer and more effective

By fair I mean just or appropriate in the circumstances. Fairness encompasses notions of equitableness, fair dealing, honesty and impartiality. While nothing may ever be entirely fair from the perspective of some, the pursuit of fair outcomes and fairness is nevertheless a worthy, explicit, guiding principle for governance. Elster (2006:365) suggests that the concept is used in two main ways: fair division, and fair response to the behaviour of others. Both resonate in water governance.

Fair division does not necessarily mean equal division. People have different perceptions of what constitutes fair division, prioritisation and distribution. For Elster, this is due to people subscribing to different norms that guide their allocation preferences and behaviour (2006:365). For example, Karl Marx is remembered for popularising the slogan 'from each according to his ability, to each according to his needs' (Marx, 1875) which is anathema to others who might favour alternatives such as 'return should equate to effort' or 'return should equate to value-created' (Rand, 1957). These different perspectives resonate with debates surrounding water allocation with different arguments observable that prioritise either need, equality of opportunity, or economic efficiency that flows into different policies about preferred uses, users and pricing.

Elster's examination of fair behaviour is noteworthy as we are setting the scene for an examination of water governance. He argues that there is a need for catalytic, unconditional cooperators who act 'fairly' according to their dominant moral norms in particular circumstances, as this then draws in others. These 'others' may be motivated to also act 'fairly', but for different reasons. For example, by a desire to appear fair, or by a subscription to quasi-moral norms of conditional cooperation or reciprocity, each of which require some demonstration of 'fair behaviour' to be kick-started. In short, there are nuances to fairness, and fairness behaviour, which need to be considered in strategising any shift toward fair governance.

By effective I mean producing a desired or intended result. Global Water Partnership authors suggest principles of effective water governance (Rogers and Hall, 2003:27-29). They suggest that approaches should be: open and transparent, inclusive and communicative, coherent and integrative, equitable and ethical. Moreover, that performance and operation should be: accountable, efficient, responsive and sustainable. It is impossible to judge as effective, governance arrangements that treat hydrometeorological data as secret, restrict access to and evaluation of social and environmental impact assessment documentation, and declare as off-limits public enquiry into financial, economic and contracting arrangements that relate to use of public assets. These types of flaws, that result in ineffective governance, have been constantly encountered in this Mekong Region research.

6

I have no quarrel with the principles of Rogers and Hall, however, I choose to use 'fair and effective water governance' rather than 'effective water governance'. Regardless of the dictionary definition, 'effective' is usually construed as a very rational word, as with efficiency and coherence. By explicitly adding 'fair' I am highlighting the importance of moral norms. These are included in the Rogers and Hall list of principles – for example: equitable and ethical – but my intention is to explicitly elevate their profile.

1.2 Research approach

If you know exactly what you are going to do, what is the point of doing it? – Pablo Picasso

Soon after embarking on this research, "*the point of doing it*" became very clear, but knowing exactly what to do, and how to do it, was a reflexive process which took much longer to crystallise. Decisions have had to be taken about the research place, subject, analytical approach, appropriate research methods and source material. True to the desirable sentiment expressed so well by Picasso, the approach has evolved.

Place and subject

An early decision was to focus in the Mekong Region examining natural resources or environmental governance, in which I had already accumulated experience in Australia (Dore, 1999; Dore and Woodhill, 1999; Dore et al., 2003). This was based on an assumption, later proven correct, that the region would provide under-researched arenas within a fertile, political dynamic. It was a deliberate choice to focus on the region, rather than on one or other country. Primarily, this was to ensure full opportunity to explore transboundary dimensions and associated international relations. This was also to ensure important issues were not unnecessarily and undesirably omitted from scrutiny and debate. I focused subsequently on water governance and later still on deliberative processes, as a pathway to fairer and more effective water governance, initially inspired by Dryzek (1990; 2000; 2006) and Mekong field evidence.

Key ideas that underpinned my analytical approach for my research and this thesis are Hay's critical political analysis (2002), and Layders' adaptive theory (1998). As the research progressed I gravitated towards Deliberative Water Governance, introduced briefly in this section and elaborated in Chapter 12.

Critical political analysis

This thesis is a critical political analysis of some of the politics and governance of water in the Mekong Region. This perspective, outlined and defended by Hay (2002), is situated within the international relations school(s) of 'constructivism', and the political science school of 'new institutionalism'. This is in the middle of the spectrum of logics that fall between the extremes of deductive rationalism and inductive behaviouralism. This approach accepts that some complex theory, or at least ideas, may be needed to guide empirical exploration and that analysis should proceed as an interplay between theory and evidence, studying the real-life interplay between actors, ideas and institutions.

Hay's political analysis is critical insofar as it is scrutinising and driven by a desire for enhancing change. This type of analysis is interested in "*progressive social and political change and in holding actors accountable for the consequences of their actions*" (Hay, 2002:254). I too, through this thesis and other endeavours, am motivated to undertake research which has a constructive impact, expressed by Hay as follows:

For any normative and critical political analyst, the question of change is far from a complicating distraction – it is, in essence, the very *raison d'étre* of political inquiry. Stated bluntly, critical political analysis is motivated by the desire for change. Its aim is to expose existing institutions, relations and practices to critical scrutiny as a means of promoting alternatives and bringing those alternatives to fruition (Hay, 2002:138).

Hay's political analysis seeks to be empirical but not empiricist. Description is seen as the starting point "*from which interpretation and explanation must build*" (2002:252). Having said that, this thesis has sought to avoid the trap of being highly descriptive, rich in detail, but low in explanation.

Bowing to its constructivist heritage, critical political analysis is "sensitive to the potential causal and constitutive role of ideas in social, political and economic dynamics" (Hay, 2002:251) which are shaped by, but in turn may shape the context. In the political analysis in this thesis I examine the interplay between actors/agents and the institutional framework/structure, the latter being simply the sum of all institutions. I see as plausible the structuration and reflexivity theory of Giddens (1979; 1984) in which both individual agency and social forces are accorded respect. Hay's critical political analysis is compatible with these ideas, presuming neither structural determinism nor agential voluntarism. Most chapters in this thesis examine the role of actors and structure, and their influence in the situations being studied.

Undertaking critical political analysis in the Mekong Region, as elsewhere, is itself a political act:

Social and political analysts may come to play an active role in the reproduction and transformation of the very conduct that forms the focus of their attentions (Hay, 2002:79)

Thus, as soon as we move from the realm of mere description to that of explanation we move from the realm of science to that of interpretation. In this realm there are no privileged vantage-points, merely the conflict between alternative and competing narratives premised on different ontological, ethical and normative assumptions (Hay, 2002:88).

My position has been, and remains, that I must be explicit about articulating my own beliefs and biases, prior assumptions, and the normative and ethical bases that motivate my work. An example is my commitment to neither over- nor under- privilege state representatives in multi-stakeholder processes.

Adaptive theory

I have found the adaptive theory of Layder (1998) to be equally compelling in its logic, and liberating in the subsequent freedom it has permitted my research enquiry. Compatible with the ontological assumptions of critical political analysis, the adaptive theory approach explicitly permits the use, modification, discarding or production of theory in tandem with empirical research.

In essence:

The word 'adaptive' is meant to convey that the theory both adapts to, or is shaped by, incoming evidence while the data itself is simultaneously filtered through, and is thus adapted by, the prior theoretical materials (frameworks, concepts, ideas) that are relevant to their analysis (Layder, 1998:5).

...adaptive theory encourages, and as far as possible ensures, the continual checking and revising of emergent theory as the research progresses. In this sense the validity of theory so generated is not divorced from empirical evidence but is rather inherently bound up with it (Layder, 1998:176).

Following Layder (1998) and Bawden (2002) I have adopted an adaptive/reflexive approach to theory and practice. Put simply, this committed me to continue exploring potentially helpful theory, in combination with extensive field research. In that way, I was also committing to empirical research, that is, informed by experiences and 'evidence' from the real world. This does not mean I am a strict empiricist. I am not. More accurate, would be to say that I am committed to better understanding how we might use theories to better inform our practice, and how our everyday experience might better inform our theory-making. For Bawden this reflects a commitment to praxis – "*a human 'property' which 'emerges' through the constant everyday interplay between theory (or understanding) and practice (or action)*" (2002:3). Throughout this thesis I have used theory that seemed to have explanatory or normative potential.

Deliberative Water Governance

Throughout the research for this thesis I have investigated and analysed water governance practice, and have interrogated normative and explanatory theory to develop my understanding, and to seek pathways to fairness and effectiveness. Eventually I have concluded that more Deliberative Water Governance would be beneficial, by which I mean:

Constructive engagement that enables fairer and more effective water governance through inclusive, deliberative processes that emphasise different perspectives, learning, analysis and institution-building.

[My definition: elaborated in Chapter 12].

Deliberative processes are explored in Part C of the thesis and Deliberative Water Governance is elaborated in Chapter 12.

1.3 Research methods

A range of research methods have been used, which are in harmony with the chosen analytical approach. As Layder noted:

Social research should operate on the basis of a methodological pluralism and not in terms of a rigid adherence to a single or limited set of techniques and protocols (Layder, 1998:178)

...the adaptive theory approach "encourages a multi-pronged strategy" to research methods and techniques in order to "maximise the potential for theory-generation" (Layder, 1998:42).

The main methods used have been: orienting concepts, participatory action research, documentary analysis, and active interviewing.

Orienting concepts

As an initial step in theory making, or ideas formation, I found it useful to follow Layder's approach and identify key orienting concepts:

As an initial stimulus for theoretical rumination, the use of orienting concepts helps general conceptual thinking about the data that is being, or has been, collected and the empirical area from which it develops (Layder, 1998:129).

The search for ideas to help in understanding the politics of water in the Mekong Region revealed many different orienting concepts. With this in mind, material was found and examined in the light of ongoing learning. For example, at an early stage I became interested in the questions and research agenda of a new regionalisms school of enquiry, in which Goteborg University was very active (Hettne and Soderbaum, 1998; Hettne et al., 1998-2001; Schulz et al., 2001). These scholars were asking pertinent questions about the multi-dimensional phenomena since the 1980s of action at the regional (supranational) and transnational scales. This gave me an analytical departure point for subsequent Mekong-centred inquiry. As my research continued, deliberation, and deliberative water governance, emerged as the more compelling umbrella concept.

Participatory action research

I have engaged in a lengthy period of action research between 2000-2012, punctuated by periods of full-time employment during which research writing was not possible, although reflective contemplation of ideas continued.

Action research acknowledges the researcher has a normative purpose and a commitment to an adaptive, learning-based approach. In the words of McNiff:

The elegance of action research is that it possesses within itself the ability to incorporate previous approaches, simply because its focus rests on the enquirer rather than his methodology (McNiff, 1988:8).

For Carr and Kemmis (1986), action research is a form of self-reflective enquiry undertaken by the researcher in order to improve the rationality and justice of their own practices, their understanding of these practices, and the situations in which these practices are carried out. Concerned that "the term 'action research' is used to describe almost every research effort and method under the sun that attempts to inform action in some way" (McTaggart, 1997a:1) has led to increasing use of the term 'participatory action research'. I concur with McTaggart's view that:

Participatory action research is systematically evolving, a living process changing both the researcher and the situations in which he or she acts; neither the natural sciences nor the historical sciences have this double aim (the living dialectic of researcher and researched).

Participatory action researchers all seek understanding of people's subjective experience of their institutional situation and at the same time try to give working accounts of the contexts in which meanings are constituted. They also use the views of others to engage their own experience and to discipline their own subjective interpretations.

Information is collected in the usual naturalistic research ways, for example, participant observation, interview, the compilation of field notes, logs, document analysis, and the like. Validation is achieved by a variety of methods, including triangulation of observations and interpretations, participant confirmation, and testing the coherence of arguments being presented. (McTaggart, 1997b:37, 40)

My research process has changed me. In turn, I have influenced the water governance practitioners and research community I have joined, and the Mekong water governance context. Moreover, understanding and validation has been sought in a variety of ways, and my analysis and arguments have been tested with many actors.

Documentary analysis

My research has required constant searching for relevant literature related to orienting concepts and various Mekong Region policies, practices and commentaries. The literature includes a wide mix, from the formally refereed and published, to the more prolific grey literature, and relevant contributions found in the mass media. Legal documents, government policy statements, proceedings of negotiations, reports from multilateral organisations and transnational companies have all contributed to my analysis. My EndNote library as I conclude this thesis contains more than 3,700 references.

Active interviewing

Active interviewing has played a key part in my research. Saying this implies an acceptance by the researcher that interviews involves a construction of understanding or knowledge between the interviewer and the interviewee. More colourfully, Holstein and Gubruim (1995:4) say "respondents are not so much repositories of knowledge – treasuries of information awaiting excavation – as they are constructors of knowledge in collaboration with interviewers" and quote Pool (1957:192) "every interview [besides being an information-gathering occasion] is an interpersonal drama with a developing plot" (1995:14).

Conca (2006) might simply call these 'conversations'. In the acknowledgements of his recent book on water governance, he thanks the many people willing to discuss the relevant issues with him, in an unstructured – which is not to say unfocused – way, devoid of questionnaires and formality. In effect, these were active interviews that formed the "*soul*" of his learning and analysis:

I think of the various documents, statistics, and scholarly works in the pages that follow as the supportive skeleton and tissue of the argument presented here, and of these conversations as its soul (Conca, 2006:xvi).

Much of my learning has also been through active interviewing, as a purposeful process of discussing issues with people prepared, and often enthusiastic, to actively engage in an exchange of information and views.

From analysis to prescription

'Where should the analyst start and stop?' is a question that logically arises in the process of conducting participatory action research:

It is of course possible to delimit an analysis of social relations to how things are and why. But the real challenge lies in going a few steps further and trying to analyse how things 'ought' be, explain how this can be justified, and finally sketch out how it can be achieved – to prescribe change! This is possible if social constructivism is accepted (Baaz, 1999:469).

In Baaz's view, an analysis of social relations, such as Mekong Region water politics, should "*combine normative and empirical analysis in a constructive way*" (Baaz, 1999:469). I concur with this view and, as such, I outline a practical agenda for change in several chapters.

1.4 Material

The empirical substance has been drawn from my exposure in a series of rich experiences between 2000 and 2012 which have provided the opportunity to interact and learn from and with a wide range of people. I have had multiple roles ranging from full-time student, project manager, specialist engaged to deal with particular issues, appointed research fellow, contracted researcher/facilitator/co-ordinator, program manager, program director, and program advisor. Each of these roles has impacted on the final shape of this thesis.

Mekong Regional Environmental Governance project

In mid 1999 I came into contact with the Resource Policy Support Initiative (REPSI) which was co-managed by the World Resources Institute (WRI) and the Stockholm Environment Institute. By the end of 1999 I had accepted an invitation to collaborate with REPSI, via the WRI Institutions and Governance Program. In early 2000 I relocated from Australia to Chiang Mai in northern Thailand to work as a Research Fellow with a REPSI component, the Mekong Regional Environmental Governance project.

The project provided resources and a space for a series of dialogues and peer-supported research. My initial reflections on useful theory to better understand my observations of environmental governance practice in the region was published (Dore, 2001) as part of the project outputs. This engagement provided me with detailed understanding of the regional environmental governance context, and initial network building opportunity, particularly with actors in regional organisations.

Strategic Environment Framework for the Greater Mekong Subregion

During 2000/2001 I also accepted an invitation to assist Stockholm Environment Institute with the development of a Strategic Environmental Framework for the water resources and transport sectors in the Mekong Region (SEI et al., 2002). I contributed critiques of the institutional arrangements for environmental management in each of the six Mekong Region countries. I also contributed a case study from Cambodia focusing on the national and regional threats to the Tonle Sap Lake ecosystem, problems with institutional arrangements and an assessment of current plans for changes (Dore, 2002). This engagement provided me with detailed understanding of national contexts in the fields of environment and development, the inner workings of the Asian Development Bank, and an expanded set of working relationships with state officials.

Social Challenges for the Mekong Region

From mid-2001 until mid-2003 I relocated to join Chiang Mai University's Social Research Institute as a new base for my field research, and to further build an understanding of the regional context. I was soon designing, managing and editing a research and writing effort involving scholars from all countries of the Mekong Region. The issues researched, within a Mekong Region context, included: international economic integration, the rise of transnational civil society, the relationships between Mekong states and external powers, changing geopolitics, poverty, government policies affecting ethnic minorities, gender inequity, industrialisation, labour migration, human rights, HIV/AIDS and drug use, biotechnology impacts on agriculture, uplands land use, fisheries disputes, access to natural resources, state approaches to sustainable development, and the governance of Mekong River and regional infrastructure 'development' projects. This engagement substantially deepened my understanding of the region, and many transnational social challenges, in addition to expanding my network with regional academia. **Chapter 2** (Dore, 2003a) is a product of that period, as is **Annex A** (Dore, 2003b).

Another focus of early research was Yunnan hydropower. I was supported in this work by Green Watershed. **Chapter 3** (Dore et al., 2007) was a result of this partnership. The commitment of Yu Xioagang – the leader of Green Watershed – to deliberative water governance has been recognised in various ways, most notably in the awarding of the 2006 Goldman Environment Prize for Asia.

M-POWER regional research network

I had become increasingly convinced of the need for collaborations between independent researchers. This has led me to invest much time and energy into codeveloping the M-POWER (Mekong Program on Water Environment and Resilience) regional research network from an intellectually challenging and supportive base at Chiang Mai University's Unit for Social and Environmental Research. Researchers from more than thirty partner organisations with bases in the six countries of the Mekong Region have committed to spend part of their time 'working together' under the umbrella of the M-POWER network. Much experience has been gained from the lessons learned with M-POWER colleagues. **Chapters 4, 5, 10 and 11** (Dore and Lazarus, 2009; Dore and Lebel, 2010a; Grumbine et al., 2012; Dore et al., 2012) have all been M-POWER collaborations. **Annex B** (M-POWER, 2011) is a succinct statement of the network's agenda.

Interest in multi stakeholder platforms (MSPs) led to an involvement with the Dams and Development Project, an initiative based at the United Nations Environment Program head office in Nairobi, charged with advancing the efforts of the World Commission on Dams (WCD) – perhaps the most internationally renowned, recent example of such a platform. This research focus was extended by work for the *Water Alternatives* journal in producing a special issue on the WCD legacy. **Chapters 6 and 7** (Dore and Lebel, 2010b; Moore et al., 2010) resulted from this engagement.

Interest in the possibilities provided by social learning approaches to governance took me to Wageningen University in the latter part of 2003, and led to an increasing involvement in formal Dialogues and other forms of MSPs. This led to links with the Dialogue on Water for Food and Environment, manifest in both Mekong Region and Indonesia, and associated writing. I have become extensively involved in dialogues research, design, convening and support. **Chapters 8 and 9** (Dore, 2007; 2010) and **Annex C** (Dore et al., 2010) **and Annex D** (IUCN et al., 2007) are part of the result.

IUCN Asia Water Program

Joining the International Union for Conservation of Nature (IUCN) also had a substantial influence on this thesis. In a world where governance is no longer a purely state-centric construct, the Union's structure is well positioned to have more impact, now and in the future, giving extra space for both state and non-state actors to engage in political processes. In 2004 I accepted an invitation to lead the IUCN's Asia water work. IUCN is a competent water actor in many different domains, such as: water infrastructure decision making, flow regime negotiations, wetlands conservation, wetlands livelihoods, hydropower, irrigated agriculture, groundwater, and in supporting local adaptation to the impact of climate change and climate variability. In Asia, the regional and national water team members have extensive working relationships with state water-related players, civil society organisations, and other international actors. My IUCN engagements influenced many of the chapters in this thesis.

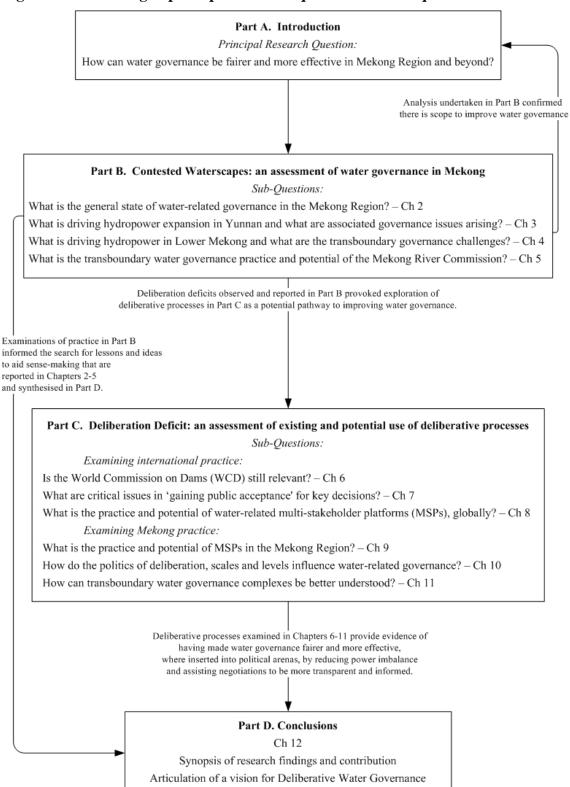
AusAID Mekong Water Resources Program

Since 2008 I have been working with the Australian Agency for International Development (AusAID), as senior advisor to the Australian Mekong Water Resources Program. This program has an emphasis on contributing to fairer and more effective water governance. The approach is to support activities that strengthen institutions, increase the availability of reliable knowledge, and assist in the making of more informed decisions. My core responsibilities include identifying and undertaking governance research for development, and engaging in policy dialogue with a wide range of water governance actors.

1.5 Organisation and overview

The thesis is presented as a series of ten published works – five peer-reviewed journal articles, and five peer-reviewed book chapters – together with this introduction and conclusions. An overview of the thesis is shown in Figure 3. The connections between and contributions of each thesis chapter are shown in Table 1. Four additional documents, referred to earlier in this chapter, are included as annexes (see Table 2) to provide further illustration of the candidate's analysis and engagement in water governance practice.

Figure 3 Thesis logic: principal research question and sub-questions.



Part A. Introduction		
Chapter 1	Introduction	
Question	How can water governance be fairer and more effective in Mekong Region and beyond?	
Part B. Contes	sted Waterscapes: an assessment of water governance in Mekong	
Chapter 2	The governance of increasing Mekong regionalism	
Sub-Question	What is the general state of water-related governance in the Mekong Region?	
Theory	Use of new regionalisms and governance theory, to explore different regional governance tracks and their dominant logics. Also, a set of questions are presented as a means to assess governance.	
Practice	Detailed analysis of Mekong Region governance processes, including: Mekong River water use negotiations, the Mekong River 'channel improvement' project, and an initial exploration of the Lancang (Upper Mekong) hydroelectric dams in China.	
	This chapter is an early example of joint writing and publishing with local Mekong researchers. It was published in a multi-authored book, co-edited by the candidate (Annex A).	
Citation	Dore J (2003) 'The governance of increasing Mekong regionalism'. In: M Kaosa-ard and J Dore (eds.) <i>Social Challenges for the Mekong Region</i> . White Lotus, Bangkok, 405-440.	
Chapter 3	China's energy reforms and hydropower expansion in Yunnan	
Sub-Question	What is driving hydropower expansion in Yunnan and what are associated governance issues arising?	
Theory	Exploration of links between economic globalisation and the creation of quasi-public entities with state rights but lacking state accountabilities.	
Practice	Detailed analysis of Yunnan hydropower expansion – to that point, opaque to China outsiders – on the Salween (Nu), Mekong (Lancang) and Yangtze (Jinsha) rivers.	
	This chapter is another example of joint writing and publishing with Mekong researchers, and the first major publication from the M-POWER regional research network (Annex B). It was published in a multi-authored book, co-edited by the candidate.	
Citation	Dore J, Yu X and Yuk-shing Li K (2007) 'China's energy reforms and hydropower expansion in Yunnan'. In: L Lebel, J Dore, R Daniel and Yang Saing Koma (eds.) <i>Democratizing Water Governance in the Mekong Region</i> . Mekong Press, Chiang Mai, 55-92.	

Table 1Thesis organisation and overview: questions, practice, theory.

Chapter 4	Mekong hydropower: drivers of change and governance challenges
Sub-Question	What is driving hydropower in Lower Mekong and what are associated transboundary governance challenges?
Theory	Exploration of hydropower expansion, impact assessment and transboundary water governance.
Practice	Quantifying large-scale drivers – demography, human development, food security, economic investment and trade, climate change – in the Lower Mekong context, and providing a concise update on the Xayaburi Dam in Laos, based on the candidate's participation in the debate surrounding the project, and his interviews with key actors in government, banking, the hydropower industry, and oppositional civil society.
Citation	Grumbine RE, Dore J and Xu J (2012) 'Mekong hydropower: drivers of change and governance challenges', <i>Frontiers in Ecology and the Environment</i> 10:2, 91-98.
Chapter 5	Demarginalizing the Mekong River Commission
Sub-Question	What is the transboundary water governance practice and potential of the Mekong River Commission (MRC)?
Theory	An early signalling of the candidate's vision for more deliberative water politics and governance. The identification of the tensions facing the MRC are of interest to transboundary water governance scholars and practitioners from other regions. Reference to a vision for more deliberative water politics. Identification of tensions within the MRC, including: whole-of- basin or mainstream-focused; serving governments or wider society; knowledge broker or investment promoter.
Practice	Framing and analysis of existing MRC challenges within the context of its recent history. The candidate commences by reflecting on a series of major transboundary water governance controversies where the MRC has been underutilised. Also discussed is the MRC's ambiguous role in a proposed hydropower project at Don Sahong in southern Laos.
Citation	Dore J and Lazarus K (2009) 'Demarginalizing the Mekong River Commission'. In: F Molle, T Foran and M Kakonen (eds.) <i>Contested</i> <i>Waterscapes in the Mekong Region: Hydropower, Livelihoods and</i> <i>Governance</i> . Earthscan, London, 357-382.
Part C. Delibe processes	eration Deficit: an assessment of existing and potential use of deliberative
Chapter 6	The World Commission on Dams + 10: Revisiting the large dam controversy
Sub-Question	Is the World Commission on Dams (WCD) still relevant?
Theory	The ideas clustered in this guest editors' paper, included: diverse perspectives about water and energy futures; new drivers of dam development, including climate change and new financiers; the continued pursuit of environmental and social justice; new assessment tools; advances in participation and accountability; negotiation, and the role of multi-stakeholder platforms for informing and shaping agreements.
Practice	A reflection on the legacy of the WCD, an experiment in multi-stakeholder dialogue and global governance concerned with a subject area – large dams – that was fraught with conflict and controversy.
Citation	Moore D, Dore J and Gyawali D (2010) 'The World Commission on Dams + 10: Revisiting the large dam controversy', <i>Water Alternatives</i> 3:2, 3-13.

Chapter 7	Gaining public acceptance: A critical strategic priority of the World Commission on Dams
Sub-Question	What are critical issues in 'gaining public acceptance' for key decisions?
Theory	Expanding the justice principles that underpin 'gaining public acceptance', by emphasising distributional principles, in addition to the WCD focus on procedural justice. Presentation of ideal state-society elements conducive to the gaining of public acceptance.
Practice	Unraveling of many thorny issues that were prominent in the WCD about meaningful public participation. Lesson-drawing from past initiatives to gain public acceptance through participatory exercises.
Citation	Dore J and Lebel L (2010) 'Gaining public acceptance: A critical strategic priority of the World Commission on Dams', <i>Water Alternatives</i> 3:2, 124-141.
Chapter 8	Multi-Stakeholder Platforms
Sub-Question	What is the practice and potential of water-related multi-stakeholder platforms, globally?
Theory	Elaboration by the candidate of his conceptual framework for MSPs which emphasises context, process, content and outcomes. Introduction of the 4Rs (rewards, risks, rights, responsibilities) – building on the 'rights and risks' approach developed by WCD.
Practice	Ten cases from around the world are presented in the published chapter. A total of twenty-four cases were contributed or prepared and loaded onto the IUCN website to provide a resource for MSP practitioners. All part of a larger book, edited by the candidate, on water-related negotiation (Annex C).
Citation	Dore J (2010) 'Multi-Stakeholder Platforms'. In: J Dore, J Robinson and M Smith (eds.) <i>Negotiate: Reaching Agreements Over Water</i> . IUCN, Gland, 37-58.
Chapter 9	Mekong Region water-related MSPs: Unfulfilled potential
Sub-Question	What is the practice and potential of multi-stakeholder platforms (MSPs) in the Mekong Region?
Theory	Defining MSPs and articulating their desirable characteristics to best contribute to water negotiations.
Practice	Examination of Mekong MSPs, including new experiments with transboundary Mekong dialogues (Annex D).
Citation	Dore J (2007) 'Mekong Region water-related MSPs: Unfulfilled potential'. In: J Warner (ed.) <i>Multi-Stakeholder Platforms for Integrated Water</i> <i>Management.</i> Ashgate, Aldershot, 205-234.
Chapter 10	Deliberation and scale in Mekong Region water governance
Sub-Question	How do the politics of deliberation, scales and levels influence water-related governance?
Theory	The candidate uses the context-content-process-outcomes framework introduced in chapter 8 to explore how a set of Mekong engagements have been affected by, and responded to, the politics of scales and levels.
Practice	Cases examined are: creation of the MRC, basin-based water resources planning, basin-based banking, regionalised energy planning and power trading, multi-level water dialogues, and Tonle Sap in Cambodia.
Citation	Dore J and Lebel L (2010) 'Deliberation and scale in Mekong Region water governance', <i>Environmental Management</i> 46:1, 60-80.

Chapter 11	A framework for analysing transboundary water governance complexes, illustrated in the Mekong Region
Sub-Question	How can transboundary water governance complexes be better understood?
Theory	The chapter presents a heuristic framework for analysing transboundary water governance complexes, that portrays the importance of, and connections between: context, drivers, arenas, tools, decisions and impacts. Key drivers discussed are interests, discourses and institutions. Tools are defined broadly as being predominantly for deliberation, technical support, or advocacy.
Practice	Drawing on the findings of extensive research and active engagement with policymakers, the chapter introduces the wide range of Mekong water governance actors and explores the role of decision tools in allocation decision-making. Normative governance improvements are suggested.
Citation	Dore J, Lebel L and Molle F (2012) 'A framework for analysing transboundary water governance complexes, illustrated in the Mekong Region', <i>Journal of Hydrology</i> 466-467, 23-36.
Part D: Conclusions	
Chapter 12	Conclusions
Contributions	Synopsis of the research findings and contributions from Parts B and C.
Vision	Articulating a vision for Deliberative Water Governance, a new frontier in the field of deliberative governance.
Reflections	Final reflections from the candidate.

Tab	Table 2 Annexes	
А	Kaosa-ard M and Dore J (eds.) (2003) <i>Social Challenges for the Mekong Region</i> . White Lotus, Bangkok, 448. Introduction, 1-12.	
	This book was an output of collaboration with Professor Mingsarn Kaosa-ard at Chiang Mai University's Social Research Institute, to pursue a deeper understanding of transboundary Mekong Region social issues and associated politics. The candidate managed this multi-disciplinary study that examined many topics, including: HIV- AIDS, migrant workers, gender, agricultural biotechnology, ethnic minorities, economic globalisation etc. Most authors wrote in their non-native language, with some requiring extensive conceptual and writing support. The candidate wrote this Introduction that framed and synthesised the research, and contributed his own chapter on 'The governance of increasing Mekong regionalism' (Thesis Chapter 2). © White Lotus and Chiang Mai University's Social Research Institute 2003	
В	M-POWER (2011) 'M-POWER Strategic Guide 2011: Action-researchers,	
Б	dialogue facilitators, knowledge brokers'. Mekong Program on Water Environment and Resilience, Vientiane, 15. <u>www.mpowernetwork.org</u>	
	This strategy document articulates the purpose and modus operandi of the M-POWER network, a collaboration between Mekong researchers with an interest in transnational and transboundary water-food-energy-environment governance. The candidate served as Program Director from 2004-2009, and Steering Committee Chair until 2012. © M-POWER 2011	
С	Dore J, Robinson J and Smith M (eds.) (2010) <i>Negotiate: Reaching Agreements</i> <i>Over Water</i> . IUCN, Gland, Switzerland, 120. <u>http://www.iucn/org/water</u>	
	A book that emphasises constructive engagement and encouraging space in negotiations for deliberation, hearing multiple perspectives and consensus-building – translated into Khmer, Vietnamese, Lao, Chinese, Spanish. The candidate inherited the idea for the book from IUCN colleague Ger Bergkamp, and then worked with Julia Robinson and Mark Smith to make it happen. The candidate is co-author of Negotiate Chapters 1 and 2, and sole author of a core chapter 'Multi-Stakeholder Platforms' (Thesis Chapter 8). The book is being translated into Spanish, Lao, Vietnamese, Cambodian and Chinese language. © IUCN 2010	
D	IUCN, TEI, IWMI and M-POWER (2007) Exploring Water Futures Together: Mekong Region Waters Dialogue. Report from regional Dialogue, Vientiane, Lao PDR, The World Conservation Union, Thailand Environment Institute, International Water Management Institute, M-POWER (Mekong Program on Water Environment and Resilience), 75.	
	Report from a Mekong transboundary water governance experiment aiming to demonstrate high-quality, multi-stakeholder deliberation. The candidate was the co- convenor of the dialogue whilst leading the IUCN Asia Water Program, and co-author of the report. © IUCN 2007	

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The governance of increasing Mekong regionalism John Dore

Recent years have seen an upsurge in regional interaction between the governments and civil societies of the Mekong Region. In the era of contemporary globalisation – post-Asian crisis – there are powerful inter-related forces driving freer trade, infrastructure installation and new uses for the Mekong River. These projects are regional¹ in nature. As I shall discuss, there is also an active, critical resistance to each of these linked projects. As such, the regional governance of these projects is crucial.

In this chapter² my aim is to describe the changing nature of regional governance, the enhancement of which is a major social challenge for the Mekong Region. The chapter focuses on how states and critical civil society interact under the deceptively narrow-sounding banner of environmental governance, taking four case studies as examples:

- 1. Wide-ranging economic cooperation by governments of the six Mekong Region countries Cambodia, China, Lao PDR, Myanmar, Thailand and Vietnam.
- 2. Negotiations over Mekong River water use by the four governments of the Lower Mekong countries Cambodia, Lao PDR, Thailand and Vietnam.
- 3. Mekong River 'channel improvement' by the governments of the four most upstream countries China, Myanmar, Lao PDR and Thailand.
- 4. Unilateral decision making by China's government to proceed with extensive dam-building on the Upper Mekong River in Yunnan Province

A synthesis of challenges emerge from this empirical analysis, central to which is Mekong Region *realpolitik;* the associated restrictions on civil society's 'political activity' enforced by various states; and the corresponding, generally exclusive, nature of national and regional decision making.

The chapter presents the following arguments. First, to fully understand the relatively recent changes requires new conceptual frameworks for governance and regionalism which recognise that social geography is changing, and that

¹ In this chapter I use regional in an encompassing way meaning region-wide and/or transboundary and/or transborder and/or crossborder and/or of particular significance to various parts of the region (but not necessarily all of the region).

² I wish to acknowledge the support of colleagues at the Australian National University's School of Resources Environment and Society and Chiang Mai University's Social Research Institute, plus two research organisations: Land and Water Australia, and the National Research Council of Thailand.

state-centric modes of analysis no longer suffice, if they ever did. Second, the regional governance landscape is being substantially reshaped by the efforts of many different actors, including an emerging critical civil society. Despite this emergence, in the Mekong Region states still dominate, but some states more than others. Third, regional governance in the Mekong – if 'environment and development' governance is any indication – in many ways is lagging, unable to approach governance ideals, and inadequate to equitably or sensibly govern farreaching regional change. Greater political support from Mekong country state leaders is required for practical enhancement of environmental governance. Misplaced and ultimately problematic interpretations of 'authority to rule' and sovereignty are hindering what many see as a required transformation. Fourth, enhanced regional governance is possible and essential for there to be more equitable and ecologically sustainable development in this extraordinary and diverse part of the world. This is critical, as to reiterate, the overall standard of regional governance currently falls short of what could reasonably be expected by the peoples of the region.

Governance

What do I mean by governance? Governance "has become something of a catch-all to describe the ways in which the activities of a multitude of actors, including governments, non-government organisations (NGOs) and international organisations, increasingly overlap. It describes a complex tapestry of competing authority claims" (Mehta et al. 1999:18). Beneath this catch-all view there are various other concepts, focusing on administrative management, corporate activity or the processes of government.

In this chapter I use the term to mean the structures and processes chosen or imposed on society to debate and create policy directions and manage its affairs. This includes the wide realm of multi-layered negotiation and decision making processes, involving interplay between many individuals and institutions.³

People usually attempt to distinguish between local, national, regional and global politics and governance. However, this does not match the reality of the aforementioned 'tapestry'. Domains of authority are not always clear-cut; rather they regularly overlap and are contested. This is certainly true of regional governance in the Mekong Region where many issues seem to be somewhere in the *"messy middle"* (Mehta et al. 1999:18).

There is increasing growth in or about the Mekong Region of what Scholte (2000) has called supraterritorial relationships between people. A dimension of this transformative globalisation is an empowering form of new connectedness between critical civil society groups – located both within and outside the region

³ By institutions I mean "persistent, reasonably predictable, arrangements, laws, processes, customs or organisations structuring aspects of the political, social, cultural, or economic transactions and relationships in a society; although by definition persistent, institutions constantly evolve" (Dovers 2001).

- wishing to have more say in Mekong decision making. A changing social geography, evident in a more critical, relatively more deterritorialised, civil society contributes to this 'messiness' and in doing so challenges current state notions of 'appropriate' political space, sovereignty and citizenship.

The emerging theory of nodal governance (Shearing and Wood 2002) helps to explain the regional situation in the Mekong Region. Rather than institutions and frameworks, which imply a certain amount of order, this theory speaks of nodes within a loose (or tight) governance web where "*no set of nodes is given conceptual priority*" (2002). These can be formal and relatively easily discernible, for example: states, critical civil society, militaries, and the corporate or business sector.⁴ There are also other, less formal, groups influencing various governance processes, such as unrepresented civil society and organised crime:

The relationship between nodes range from active cooperation, through indifference, to strenuous opposition. These relationships change and shift over time, space and across arenas of governance. Nodes that cooperate at one point in time and space in relation to one governance concern might be indifferent to or actively resist each other's agendas at another (Courville and Shearing forthcoming).

Whilst fully acknowledging the presence and importance in the Mekong Region of the wide range of different 'nodes', the environmental governance examples discussed later in the chapter focus on state and critical civil society. Even though states in the Mekong Region are dominant, the concept of nodal governance reflects the increased empowerment of non-state groups and the possibilities for governance created by the increased globalisation and regionalism of critical civil society.

⁴ Whilst nodes are able to be differentiated at the conceptual level, it is acknowledged that in practice individuals and groups often have multiple affiliations (eg. business and military, state functionary and member of civil society etc.).

Regionalism

Whilst there have been previous waves of regionalism⁵ – in the Mekong Region and elsewhere – the subject has again become prominent since the 1990s. There is now a plethora of regionalisms around the world with multiple-motivations and forms. Examples include: government regionalism embodied in the European Union; trading bloc regionalism embodied in Mercosur⁶ and its equivalents; and civil society regionalism apparent in various 'new social movements' such as the Third World Network. Much effort is being put into characterising and understanding the many facets of contemporary regionalism (Gamble and Payne 1996, Hettne and Soderbaum 1998, Boas et al. 1999, Breslin and Higgott 2000, Hveem 2000, Mittelman 2000, Soderbaum 2002) which is an important element of the changing world order.

Some regionalism is 'old' style. Such activities are usually state-centric and grounded in state interventions in trade-related economic activity (see Table 1). However, other regionalisms appear to be qualitatively different and 'new'. These include some being led by disparate civil society organisations forcing changes to the previously state-ordained regional governance script.

The point has been made elsewhere that, as both 'old' and 'new' regional forms may be present in any particular part of the world, it makes "the identification of new patterns (co-existing with older forms) more relevant than identifying a new era" (Hettne 1999:8). In the Mekong Region this is particularly salient. Actors in old and new regionalisms are learning how to co-exist, compete or combat with each other. Regional forums and processes have been growing in the Mekong Region for a number of reasons. These include: maintaining or obtaining peace; a desire for economic growth and East Asian elites' political solidarity; infrastructure installation; wealth seeking; a desire to take an ecosystem approach to development and governance; and civil society responding to the new importance of the regional scale, and/or seeking political space.

I will now briefly describe each of these.

⁵ Increasing region-ness can be considered conceptually (following Schulz et al. 2001) as an upsurge in both regionalism *and* regionalisation. Schulz and his colleagues think of regionalism as being the *"urge to merge"* (2001:6) or operate at a regional scale, whether by state or non-state actors. This drives corresponding empirical processes of regionalisation. There is some conceptual difference between the three terms – region-ness, regionalism and regionalisation – but to avoid confusion, in this chapter I will conflate them and use regionalism to refer to the overall phenomenon.

⁶ The Spanish acronym Mercosur is derived from the Mercado Comun del Sur – the Southern Common Market, formed in 1991, including Argentina, Brazil, Paraguay and Uruguay. Since that time Bolivia and Chile have joined. A recent estimate of the combined Gross National Product was US\$750 billion, making it the fourth largest economic bloc in the world.

Peace

Some regionalisms are focused on peace between states and reaping whatever benefits can be gained. Maintaining the peace is presumably high on the agenda of the militarily oriented Regional Security Forum of the Association of South East Asian Nations (ASEAN), which involves many Mekong Region analysts and state representatives. To a large extent 'peace benefits' are constructed, at least by government and business leaders, as opportunities for increased 'economic development' which has become embodied in freer trade agendas.

Economic growth

The ASEAN and China-ASEAN free trade areas are notable Mekong Region examples indicative of, and fostering, increasing economic regional activity. They openly embrace economic globalisation and its perceived opportunities. Elsewhere, various economic regional formations have been more resistant, portrayed critically as more 'closed' or 'protectionist', reducing the perceived risks to national economies from an unfettered economic integration between states and business actors with different 'agency' or power. The increased impetus of ASEAN, evidenced in particular by the ASEAN+3 and ASEAN-China dialogues, was initially cast in such a negative light by primarily American critics. The critics missed the point that anxieties about US domination and 'globalisation', the latter catapulted to prominence by the East Asian crisis, has reinvigorated Dr Mahathir's previously floated idea of an East Asian Economic Caucus. Increased willingness by European leaders to respect the decisions of Asian leaders to come together without US etc. membership has also ensured that these new forums, including Dr Thaksin's Asian Cooperation Dialogue, are being given an opportunity to prove their worth. For the most part these new forums' are being pushed by East Asian elites riding and exploring new waves of political solidarity.

Infrastructure installation

Freer trade requires increased infrastructure to facilitate the transfer of people, goods and services, provide energy and communication tools etc. Installing this infrastructure has been the regional focus of the Greater Mekong Subregion (GMS) economic cooperation initiative, chaperoned by the Asian Development Bank (ADB). Of course, it must be remembered that the Manila-based ADB is only one actor amongst many in the 'aid' and 'development' game.⁸

⁷ The development of ASEAN-China dialogue, whether in or outside of ASEAN+3, is perhaps the most important recent development. Although Dr Mahathir wants it institutionalised, many of the ASEAN members prefer to maintain it as a dialogue in which they can use their newfound solidarity to offset the power of China.

⁸ There are substantial investment flows between countries in the region, such as between China and southern neighbours to enhance transport links. Regional infrastructure is also being funded by funds originating from outside the region.

Wealth seeking

Wealth seeking opportunism is another force for regionalism in the Mekong Region. Increasingly regional business interests – legal and illegal, obvious or obscured – are also apparent. These include the 'post-peace' activities of resource extractors operating as part of, or in partnership with governments, business elites and militaries. An obvious example is logging bans in China and Thailand which have created enormous financial wealth for a few and destructive spillover effects for many in the neighbouring Mekong countries of Cambodia, Lao PDR and Myanmar (Hirsch 1995).

Ecosystem approach

An ecosystem reasoning drives other regionalisms. For example, the river basin unit is often seen as 'obvious' by advocates of integrated land and water management. Wildlife managers may favour transboundary protected areas systems etc. In theory the Mekong River Commission (MRC) is born out of an ecosystem perspective focused on the Mekong River Basin; however, international politics pre- and post- various wars have been the greater driver.

Strengthening civil society

Finally, there is an abundance of civil society activities at the regional scale. Some of these are opposing the 'development' directions evident in various country and regional development plans. Other critical civil society regionalisms offer more direct challenge to existing state-dominated political systems, and in so doing of course find themselves in very sensitive relationships with state actors. Others are grounded in re-emerging crossborder ethnic solidarity of particular 'nationalities'. Different again are coalitions around particular issues, such as Mekong Region mountain peoples' networks advocating new approaches to public policy affecting upland livelihoods. Due to suppression of 'domestic' critical civil society in most Mekong Region countries, many find more space for expression at the regional scale than at national or subnational levels.

Regional governance

At the risk of oversimplifying, in the following paragraphs I make some observations about the evolving situation regarding regional governance, using the terminology of Tracks 1-4. Several of the governance forums mentioned are discussed in more detail later in the chapter. A brief overview of what this typology means for the Mekong Region is presented in Table 1.

Track 1

Track 1 refers to the state-centric official inter-government forums such as, in the Mekong Region, ASEAN⁹, the GMS economic cooperation initiative and the MRC. For the most part, these are guided by rationalist theories of international relations – realism and institutionalism.

The realism philosophy underpinning these 'old' regionalisms holds that states are the key political actors, states are uni-viewed, states are rational and focus on balances of power and security (Katzenstein et al. 1998:658). State authority is considered paramount and governance is largely restricted to interest-based bargaining between states. The influence of institutionalism is seen in the emphasis given to norms and rules, embodied in formal institutions or 'regimes' (Haggard and Simmons 1987). Governance becomes structured and to an extent depoliticised (ignoring for now the politics inherent in rules construction).

Not surprisingly, given their theoretical underpinnings, discussions between states in the Mekong Region at the regional scale have thus far shown themselves to be unwilling or unable to deal adequately with many of the social challenges treated in this book. States have regularly shown themselves to be hypersensitive about difficult issues, retreating behind veneers of sovereignty and falling back on an elitist consensus of non-interference. This has often stifled necessary debate and action on regional social issues.

Track 1 inter-government Mekong regionalism is being largely driven by increased Asian solidarity, particularly in the aftermath of the East Asian crisis; continued faith in economic growth via various East Asian development models; and conviction that a regional approach and presumed economies of scale are more likely to attract foreign investment. Most of the state-led examples of regionalism show ongoing commitment to outward-oriented neoliberalism.

⁹ The most important changes in the 1990s for ASEAN in relation to the Mekong Region were, of course, its acceptance of Vietnam (1995), Lao PDR (1997), Myanmar (1997) and finally Cambodia (1998) as full members. The new post-Cold War geopolitics had led all to seek membership in the regional organisation.

	Track 1 'old'	Track 2 'new'	Track 3 'new'	Track 4 'new'	
Players State-centric, inter- government forums		State-civil society interactive forums aiming to enhance the effectiveness of states	Civil society leading, less impeded by and less subordinate to states	Civil society supporting local communities, low expectations of states	
In eyes of states	Official	Semi-official	Unofficial	Unofficial	
Dominant logic	Realist, institutionalist: for the most part implicitly accepting of rationalist theories of international relations	Constructivist: emphasising the value of new ideas and learning	Constructivist, activist, optimistic about the power of multi-stakeholder dialogues and other discursive forums.	Constructivist and realist, activist, localist, sceptical of dialogues; concerns about domination, co-option	
Examples	Formal inter- government processes of Association of Southeast Asian Nations (ASEAN), ASEAN+3 (South Korea, China and Japan), ASEAN-China, Economic & Social Commission for Asia and the Pacific (ESCAP), Mekong River Commission (MRC) and Asian Development Bank (ADB) which attempt to control negotiations over: • Free trade areas • Water use including for dams, hydropower, transport and irrigation • Greater Mekong Subregion (GMS) economic cooperation (Boxes 3 & 4) • Crossborder environment assessment (EA) protocols • Crossborder movement of people, goods & services • Commercial navigation agreement	Institutions and processes with semi- formal links to governments such as: • ASEAN Human Rights Working Groups • ESCAP-coordinated GMS Business Forum • Asia-Europe Meeting (ASEM) Social Forum • Fledgling ADB NGO Network (ADB-led) • ESCAP/ADB/UN Environment Programme coordination of civil society inputs to World Summit on Sustainable Development 2002 • Southeast Asia Regional Dialogue on Water Governance, Bangkok, November 2002 • Asia Pacific Taskforce on Forest Law Enforcement & Governance (involving 5 of the Mekong countries), Jakarta, February 2003	Activism associated with the different issues on the agenda of: Focus on the Global South, Asian Migrant Centre, Asia Pacific Forum for Women Law & Development, ADB NGO Forum, Global Witness, and activities of various international NGOs and philanthropists. Specific dialogue examples include: • World Commission on Dams • Regional university and policy research institute coalitions hosting policy debates eg. Resource Policy Support Initiative (REPSI), Regional Environment Forum (Box 7) • Mooted Mekong forestry governance forum	Much of the substantive work of regional, or regionally-linked local organisations and initiatives such as: • Towards Ecological Recovery and Regional Alliance (TERRA) (Box 1) • Dialogue on River Basin Development and Civil Society in the Mekong (coalition of Oxfam Mekong Initiative, TERRA, PER and Australian Mekong Resource Centre) (Box 6)	

Table 1 Mekong regional governance forums

It is acknowledged that some Track 1 processes now have more involvement by civil society and other non-state groups. However, this inclusiveness is certainly a 'new' feature. Whilst too early to be sure of their merits, examples from 2002 onwards might include the ADB's implementation of its GMS Strategic Environment Framework (SEF) and the MRC's basin development planning process. Each of these is supposed to ensure or proactively take a more participatory approach.

Track 2

Track 2 regionalism refers to state-civil society interactive forums. It is evident in the emergence of complementary/parallel forums which generally aim to enhance the effectiveness of state processes. There is an increasing number of 'semi-official' Track 2 forums involving the Mekong Region in which states interact with business actors and 'social and environmental' civil society organisations. Examples include: the GMS Business Forum coordinated by Economic and Social Commission for Asia and the Pacific (ESCAP); and recent efforts by ADB, ESCAP and United Nations Environment Programme (UNEP) to coordinate regional inputs to the World Summit on Sustainable Development.

At least in theory, these give greater emphasis to the value of new ideas and learning. This implies a belief in constructivism, deliberative/discursive processes where actors are given an equal opportunity to participate in effective debate to learn about matters of common interest.¹⁰ Not all Track 2 forums approach the ideal. Often Track 2 debates have focused on regional issues to better inform state policy makers about a wide range of issues such as military security, promotion of business links etc. For the most part the state has remained a privileged actor.

Track 3

Loss of faith in Tracks 1 and 2 has led to the emergence of Tracks 3 and 4, neither of which privilege state involvement and both may proceed without it. Track 3 is characterised by civil society leading, less impeded by and less subordinate to states. Track 3 governance forums includes multi-stakeholder dialogues and epistemic communities, (which should be) firmly rooted in constructivism. Multistakeholder dialogues include the World Commission on Dams (WCD) and the Dialogue on Water Food and Environment (DWFE); each have included the Mekong Region (or parts thereof) in their associated activities. They are intended to be inclusive, information-rich and flexible processes which actively promote presentation and analysis of different views. Dialogues have been defined as "a contrived situation in which a set of more less interdependent stakeholders in some resource are identified, and invited to meet and interact in

¹⁰ In an ideal deliberative process, participants are open to changing their opinions through persuasion, rather than by bargaining, coercion, manipulation, manufactured consent or deception. Such processes are also characterised by respect, sharing of information and allowing all actors to be freely able to participate and capably communicate their views (Dryzek 2000:1).

a forum for conflict resolution, negotiation, social learning and collective decision making towards concerted action" (Roling and Woodhill 2001:iii).

Epistemic communities refer to "*network(s) of professionals with recognised expertise and competence in a particular domain and an authoritative claim to policy-relevant knowledge within that domain or issue-area*" (Haas 1992:3). There are epistemic communities functioning in the Mekong Region providing policy researchers and advocacy groups some 'thinking space' to share and expand the regional knowledge base, and refine opinions. Examples of relevance to 'environment and development' have been the Resource Policy Support Initiative (REPSI) (Box 7) and various other issue-based network initiatives.

Track 4

Track 4 refers here to the emerging regionalism of localists, increasingly prominent in Mekong Region 'environment and development' governance. Whether by choice or not, Track 3 and 4 processes are currently marginal to the dominant state political decision making in the Mekong Region.

In general, localists assert the significance of the rural community as an opposition to discourses propounding economic growth, urbanisation and industrialism (Hewison 2001:22). Localists have a greater emphasis on self sufficiency and lower expectations of government intent or capacity, given historical performance of urban-based technocratic, political or military elites. Localists often believe that states and dominant elites are neither sufficiently legitimate, competent or inclined to adequately represent local community interests. Grassroots resistance is an option, much discussed by people such as James Scott who writes of 'arts of resistance', 'infra-politics', 'seeing like a state' and 'hidden transcripts' (Scott 1976, 1985, 1990, 1998).

Localists only support activity at the regional scale in the following instances: solidarity lobbying to support other local groups who may have restricted national space; or to deal with genuine transboundary or region-wide issues where solidarity or a 'whole of region' perspective could help; or to take advantage of regional platforms, or to counter what are seen as illegitimate and inappropriate regional agendas.

Localist leaders in the Mekong Region, such as Towards Ecological Recovery and Regional Alliance (TERRA) (Box 1), and elsewhere, are concerned that some external actors (eg. co-opted NGOs) unwisely and unjustly support tradeoffs which ignore the rights of local people already being trampled by authoritarian elites pursuing a conventional 'development' paradigm. Nevertheless, to have their agendas heard, localists have also had to scale up from grounded local action to regional and global arenas.

Box 1 Towards Ecological Recovery and Regional Alliance (Track 4 actor)

Towards Ecological Recovery and Regional Alliance (TERRA) describes itself as "the sister organisation of Project for Ecological Recovery (PER), registered together as the Foundation for Ecological Recovery. PER established in 1986, works to support the local communities in Thailand in protecting rivers, forests, land and livelihoods. In 1991, TERRA was established to focus on issues concerning the natural environment and local communities throughout the Mekong Region." The Bangkok-based group "works to support the network of NGOs and people's organisations in Burma, Cambodia, Laos, Thailand and Vietnam, encouraging exchange and alliance-building, and drawing on the experience of development and environment issues in Thailand" (TERRA 2001).

TERRA's environmental agenda is inseparable from its views on social justice, rights, development, sustainability and the role of civil society in the debate about these issues. It has critically analysed the discourses surrounding many subjects including civil society, public participation and sustainable development. It explicitly criticises neoliberal dominance and associated conceptions of what is good or bad economic development. They are publicly critical of any development paradigm which accepts winners, losers and compromises as an inevitable outcome of economic pursuits. TERRA literature consistently promotes approaches to environment and development decision making which are grounded in a respect for indigenous rights and knowledge.

The organisation is also very actively engaged in political awareness training and developing activists and strategic activism throughout the region. Reservations about wasting effort or of being co-opted limit the extent to which it actively seeks a direct dialogue with others, such as regional inter-government organisations, the private sector, or multilateral banks. Regional NGOs such as TERRA have worked hard to create a political space in which to operate, at times providing/finding a regional opportunity for activism which does not exist within most of the Mekong countries. The formation of the regional NGOs has undeniably led to more inclusive deliberative¹¹ regional debates. For environmental governance this has been aided by the inherent regional nature of many issues, coupled with international support.

Fears of co-option are real and each non-government organisation (NGO) has the right to choose how it can most strategically engage. NGOs foregoing independence in order to cooperate with other actors may be making a bad trade-off by *"depleting oppositional civil society"* (Dryzek 2000:137). The trade-off can be particularly poor if the concession is made to a regional inter-government organisation which may be relatively weak anyway, and basically under the control of member states. World-wide many strong NGOs choose to remain *"passively exclusive"* (Dryzek 2000:138) which helps to retain more robust democratic debate in various political arenas.

¹¹ Dryzek, an advocate of critical debate, praises NGOs for contributing to more 'unruly and discursive' policy making processes, challenging various development paradigms and agendas.

Environmental governance of the Mekong Region

To examine an aspect of regional governance in more detail, I wish to narrow the scope to environmental governance. This refers to the management of a wide realm of matters such as water use, flooding, pollution, land use, forest use, timber trade, non-timber forest products trade, fisheries, biodiversity conservation, ecosystem health, infrastructure development, impact assessment, access to natural resources and access to information. Of course, in the Mekong Region as elsewhere, the governance of these issues is politically charged

Box 2 Environmental governance questions

Power ¹²
What power relationships and interests contextualise the governance process?
<i>Sustainability</i> ¹³
What sustainability perspective and values underpin the positions of actors?
Holism
Are social, cultural, economic, ecological and transboundary issues considered?
Participation
Does the governance process demonstrate a high level of diverse stakeholder representation and involvement via genuine participatory process that are safe, non-threatening, culturally appropriate, non-coercive, predictable and maintained over time?
Transparency
Is the governance process open, informed and informing; gathering, using and sharing the best available information; and building the knowledge and research base?
<i>Equity</i> Are ethical and rights dimensions central to decision making, eg. How are the rights of
individuals and communities considered vis a vis governments and business interests?
Accountability

How are different actors and institutions in the governance process held accountable; to whom are they responsible?

¹² A political ecology perspective aims to "*think in terms of the role of various actors in relation to a politicised environment characterised by unequal power relations*" (Bryant and Bailey 1997:188). There is widespread recognition of complex power inequalities in the politics of environment, globally (Mehta et al. 1999), in the Third World (Bryant and Bailey 1997), or in Southeast Asia (Hirsch 1995; Parnwell and Bryant 1996; Rigg 1997; Hirsch and Warren 1998).

¹³ There is a vast array of perspectives on sustainability, underpinned by different values. Suffice to say here that opinions differ markedly on issues such as: the extent of threats to ecosystems and the invocation of the 'precautionary principle'; substitutability of natural capital; the primacy given to economic growth (and its measurement) versus the conservation of biological diversity and ecological integrity; faith in ecological modernisation to yield cleaner industries; relationships between human wealth, human well-being and ecosystem impacts; intrinsic rights of nature; the importance of aesthetics; and, the importance and validity of entrenched cultural practices (see Woodhill 1999). It is beyond the scope of this chapter to explore each of these points.

Commonly mentioned principles relevant to environmental governance include sustainability, holism, participation, transparency, equity and accountability. Each of these, along with inquiry about the powers and interests at play, can be framed as questions (Box 2). In the following pages I peer through the empirical window of several major Mekong Region environmental governance *processes*, providing background and reflections on how they measure up against some, but not all, of these questions.

The first process is the GMS economic cooperation initiative. The next three processes relate directly to 'water resources development': Mekong river water use negotiations, Mekong river 'channel improvement' project; and the regional governance surrounding the Upper Mekong hydroelectric dams in China. All four are related. The discussions focus on the role of state actors and critical civil society. State actors have thus far dominated the governance surrounding each of these actual or proposed interventions. However, the role of critical civil society regionalism is significant and increasing.

Greater Mekong Subregion economic cooperation

Background

The GMS economic cooperation initiative, embodied in the ADB GMS programme, started in 1992. It brought together the six countries to focus on the coordinated development of infrastructure. Many 'master plans' have been completed which are either unrealistic dreams or visionary guides – or somewhere in between, depending upon your point of view. The 10th GMS Ministerial Conference, held in Yangon in November 2001, endorsed a new strategy, since adjusted and released in 2002. The state-state negotiated agreements embedded in the strategy are supposed to guide GMS cooperation as the GMS programme enters its second decade. The newly endorsed goal statement is as follows:

GMS countries envision a Mekong subregion that is more integrated, prosperous and equitable....The GMS programme will contribute to realising the potential of the subregion through (i) an enabling policy environment and effective infrastructure linkages that will facilitate crossborder trade, investment, tourism and other forms of economic cooperation; and (ii) developing human resources and skills competencies.....To ensure that this development process is equitable and sustainable, environment and social interests will be fully respected in the formulation and implementation of the GMS programme (ADB 2001a).

417

Box 3 GMS summit declaration 2002 (Track 1 outcome)

The first summit of the Heads of State of the six countries of the Mekong Region occurred in Phnom Penh, Cambodia on 3 November 2002. Following are excerpts from the Joint Statement issued by the leaders (Heads of Mekong Region governments 2002):

... we will integrate GMS development programs in our respective national agenda.

...we will complete the infrastructure investments needed to strengthen productivity and competitiveness in the GMS.

...we will complete the transport corridors critical to linking the subregion and promoting trade and investment.

...we will coordinate our strategies to ensure that transport corridors evolve into economic corridors, enabling agricultural diversification, industrialisation and the creation of employment opportunities.

...we will expedite the full implementation of the Framework Agreement for the Facilitation of Crossborder Movement of Goods and People.

...we will facilitate pilot-testing of single-stop customs inspection with a view to implementing this procedure at our shared borders.

...we will accelerate energy development through mutually beneficial initiatives, including implementation of the Intergovernmental Agreement on Regional Power Trade in the GMS.

...we will develop basic telecommunications infrastructure linking the subregion, in accordance with respective national circumstances, together with the formulation of policy and regulatory frameworks conducive to information and communications technology.

...we view the private sector as the engine of growth for the GMS. We will continue to create a favourable trade and investment climate to foster private sector initiative and participation, especially for small and medium enterprises.

...we will pursue initiatives to further enhance trade and investment. An action plan on trade and investment facilitation should be formulated including information sharing and capacity building. This will also support the ASEAN-China Free Trade Area and the process of trade liberalisation and economic integration of ASEAN.

...we will strive to meet the millennium goal of halving the incidence of poverty by 2015. We will take joint action to address other areas in developing human potential, including the protection from trafficking of women and children, and combating the spread of HIV/AIDS and illegal drug production and trade.

...we must and will better protect our environment.

...we will take responsibility and leadership for the sustainable management of our national and shared resources.

...we strongly endorse the Ten Year Strategic Framework for the GMS programme, and the Eleven Flagship programmes, the key means through which closer economic cooperation and prosperity will be achieved.

The GMS programme was thoroughly endorsed at the November 2002 summit meeting of the political leaders from each of the Mekong Region countries (ADB

2002c) (Box 3). The forward workplan outlines 'flagship projects' requiring more than \$900 million in investment financing and almost \$30 million in technical assistance,¹⁴ which are intended by ADB to be "*multi-disciplinary, large-scale interventions with high visibility and significant economic impact on the GMS economies*" (ADB 2001b:15). There are 11 projects relating to: north-south, east-west and southern economic corridors (roads plus associated infrastructure); completion of a regional telecommunications 'back bone'; regional power grid completion plus power trading arrangements; private sector 'participation and competitiveness' boosting; cross border trade and investments support; implementing a region-wide Strategic Environmental Framework (SEF) (discussed later, also see Box 4); and supporting country efforts to control floods and 'manage' water resources; and tourism.

Environmental governance of the ADB-GMS processes

The ADB has had to review its approach to 'environment' – ecological and social dimensions – in response to a sharpened social and environmental ethic, criticisms of past Bank approaches, the demands of shareholders and research advocating alternatives. A number of the technical assistance (TA) projects in the Mekong Region have had a specific social and environment focus. Social TAs have related to cooperation in employment promotion and training; prevention and control of HIV/AIDS; health and education needs of ethnic minorities; malaria control; and drug trafficking. Environment TAs include that which led to the development of the Strategic Environment Framework (SEF) (Box 4) which has an initial focus on the transport and water resources sectors (SEI et al. 2002).

Expectations are now increasing amongst GMS Ministers that environmental problems – particularly those of a transboundary nature – can be at least partly resolved via the regional TAs, in combination with national efforts and other regional initiatives by actors such as MRC. The GMS summit declaration (Box 3) included commitment by state leaders to "better protect the environment" and "take responsibility and leadership for the sustainable management of our national and shared resources" (Heads of Mekong Region governments 2002) and a pledge to implement international agreements, including those from the Johannesburg 2002 World Summit on Sustainable Development. That sounds fine, but how does the ADB specifically intend to play its part? What tools and processes does it have to support its stated intentions?

¹⁴ As at 30 June 2002, the ADB had assisted GMS loan projects for roads (especially in Yunnan, but also from Phnom Penh to Ho Chi Minh etc.), hydropower (Theun Hinboun in Lao PDR) and the Siem Reap airport in Cambodia. The total cost of the projects classified as being either 'national projects with subregional dimensions' or 'purely subregional projects' is listed as almost US\$2 billion. Of this amount, 10 ADB loans tallied US\$772 million. In addition, in the 10 years to 2002 ADB has coordinated 56 Technical Assistance projects costing \$58 million, mostly paid for by US\$32 million from the ADB's Japan Special Fund. Supporters of the GMS programme expect it to now shift from the initial planning to a substantial implementation phase, under the slogan 'Building on Success' (ADB 2002a).

The ADB adopted a new Environment Policy in November 2002. Several features of this are potentially quite significant for the GMS programme and general operations by the Bank in each Mekong Region country. Critical and detailed evaluation of environmental issues is now required before country strategy and associated programmes are finalised (ADB 2002b:6). The screening process in the Bank previously categorised loan projects into three groups, each requiring a different level of environmental review: category A (potentially serious environmental impacts) which require environmental impact assessment (EIA); category B (potentially significant environmental impacts) which require an Initial Environmental Examination (IEE) analysis but not an EIA; and category C (unlikely to have significant environmental impacts) which do not require any type of environment assessment (EA).¹⁵ The recent creation of category FI also ensures EA of projects which indirectly involve the Bank, such as those that the Bank may be planning, but which are being implemented using non-Bank finance.

The GMS programme must now adhere to the new policy and be guided by its own Strategic Environment Framework (SEF). The first phase of the SEF was optimistically expected to resolve methodological and political dilemmas concerning "cumulative environmental and social effects of hydropower projects and the implications of economic corridors". More realistically, it was asked to "outline practical steps for addressing key transborder environmental issues" (ADB 2000b:7), which are considered by the Bank (ADB 2000a:22) to be deforestation; downstream hydropower development impact; biodiversity losses and trade in wildlife; encroachment on protected areas due to transport projects; and pollution of waterways.

Advocacy (discussed below) has sensitised at least some Bank governors and staff to the concerns of critics There has been progress made towards more holistic thinking and improving internal systems. The GMS initiative has acknowledged the deficiency of transboundary impact assessment arrangements. And, there is increased transparency relative to earlier years.

¹⁵ There are many forms of assessment which are often collectively called EA. These include Environmental Impact Assessment (EIA), Social Impact Assessment (SIA), Cumulative Effects Assessment (CEA), Multi-Criteria Analysis (MCA) and Strategic Environment Assessment (SEA).

Box 4 Strategic Environmental Framework for ADB (Track 2 outcome)

The ADB-specific guidelines accepted by Mekong Region governments as part of their endorsement of the first SEF for the transport and water resources sector projects of the GMS economic cooperation initiative and the directly linked Bank GMS programme, are as follows:

- 1. ADB-supported projects will consider the Pareto+ principle; not only will no one be made worse off by dam/hydropower and roads programmes and projects but design and implementation will ensure that all potentially disadvantaged peoples are made absolutely better off.
- 2. All GMS dam/hydropower and roads programmes and projects supported by the ADB should have a valid public involvement process involving active information exchange and learning between stakeholders, from the beginning of the planning process.
- 3. Informed decision making should lead to improved decision making, so the ADB should make a major investment in improving the baseline data and information available to all levels of GMS decision makers.
- 4. Information disclosure and transparency of decision making will be fundamental characteristics of ADB activity.
- 5. The ADB should only consider financing hydropower development projects if compatible with an endorsed river basin management plan.
- 6. The ADB should only consider financing road projects when proposals contain an acceptable justification and adequate plan for enhancing access to social services by people in the impact area.
- 7. Dam/hydropower and road projects in the Mekong Region, if they are to be supported by the ADB, should contain a strategy for ensuring that local affected peoples share substantially in project benefits, with particular attention paid specifically to the poor, ethnic minorities and women (SEI et al. 2002).

The acceptance by the ADB of this framework indicates a significant step forward in ADB commitment to environmental governance, and provides a leverage point for groups monitoring ADB activity. The ADB should now expect to be held accountable to the framework.

ADB is one of a range of influential regional actors¹⁶ lending in the order of US\$5 billion per annum.¹⁷ These monies are keenly borrowed by developing

¹⁶ Discussion of the Asian Development Bank and Mekong River Commission is not meant to imply they are particularly powerful regional actors. Other actors such as the World Bank, International Monetary Fund and Japan Bank of International Cooperation are all the subject of useful scrutiny.

¹⁷ This figure is for all countries in the Bank's sphere of operations. A total lending in 1999 of US\$4,979 million included US\$88 million for Cambodia, US\$195 million for Vietnam, <US\$50 million for Lao PDR, and US\$363 million for Thailand. China is the major client for the ADB.

country members¹⁸as they represent relatively cheap finance; hence the ADB's general leverage opportunities, especially via credit conditions, are very significant. Many question the general validity of this level of influence of international financial institutions and donors (Stokke 1995, Crawford 1997). The dangers of over-influence and coercion are much discussed by lender critics, but also by lenders themselves (World Bank 1998). Notwithstanding these comments, credit conditions are an entrenched part of global financing and there are well-argued views that environmental governance can be enhanced by nuanced pressure from lenders (Hyden 1999).

Critical civil society

The approach of the ADB and its shareholders has been the subject of increased scrutiny by Mekong Region civil society actors (see Cornford and Simon 2001). Research prepared for and presented at conferences in Chiang Mai 2000, Sydney 2000, Tokyo 2000, Shanghai 2002 and Phnom Penh 2002 has analysed and challenged the performance of the ADB. Civil society organisations have criticised what they have seen as non-participatory Bank processes which have led to non-transparent, inequitable decision making. Particular projects have been targeted for advocacy, for example, the Samut Prakarn waste water treatment plant in Thailand. The environment policy and the acceptance of the SEF are positive improvements, for which civil society can claim much catalytic credit. Nevertheless, trust between many elements of critical civil society and the Bank remains low.

Lower Mekong water use negotiations

Background

The MRC facilitates water use negotiations between the four governments of the Lower Mekong River: Cambodia, Lao PDR, Thailand and Vietnam (Box 5). Disputes exist, and others are looming, over extractions, diversions, pollution, changes in flow regime and consequent impacts on hydrology, ecology, economies and societies. The Water Utilisation Programme (WUP) being undertaken between 1999–2005 by the MRC is intended to provide a framework for dealing with these issues. The MRC member governments agreed on data sharing protocols in 2001. Note that this has taken more than 40 years to achieve. Since then MRC has also succeeded in arranging for basic river data to be regularly provided by, and shared with, China.¹⁹

¹⁸ The monies are also 'keenly loaned' as internal ADB processes do keep pressure on staff to keep loan funds moving out in synchrony with the way they arrive at the Bank – as of course, the Bank itself borrows the funds from the global money market.

¹⁹ China is now providing information during high flow periods as a contribution to 'flood control'. However, dry season flow information – which is of critical importance to downstream countries – remains unavailable and outside the terms of the present agreement. It is the changes to dry season flow, and consequent ecological and livelihood impacts, caused by Yunnan dam building which are of most concern to dam sceptics.

The WUP process is being forced along by the principal suppliers of the US\$16.3 million operating funds,²⁰ the Global Environment Facility, and their insistent agents the World Bank. The first major outcome demanded by the World Bank oversight team was for the MRC member countries to agree on data and information exchange and sharing 'rules'.

Box 5 The Mekong River

The Mekong River runs for about 4,800 kilometres, and is the 8th largest (in terms of amount of water) and 12th longest river in the world. It begins in mountains on the northeastern rim of the Tibetan Plateau at approximately 5,500 metres above sea level. It flows for 2,161 km through the Chinese territory of Qinghai, Tibet and Yunnan. It travels for another 2,719 km through Myanmar, Lao PDR, Thailand, Cambodia and Vietnam, ending at the South China Sea. The river basin has an area of 795,000 km², representing a very small percentage of China's territory, 4% of Myanmar, 97% of Lao PDR, 36% of Thailand, 86% of Cambodia and 20% of Vietnam. The Upper Mekong countries contribute (on average) 18% of the total flow: 16% from China and 2% from Myanmar. The remaining 82% comes from the Lower Mekong countries: Lao PDR 35%, Thailand 11%, Cambodia 18% and Vietnam 11%. There is significant contrast between the 'wet' and the 'dry' season. Highest flows are usually from September-November, lowest flows are usually February-April. The flood 'season' may account for 85-90% of the total flow, of which the peak month (on average September) may account for 20-30%. There are about 70 million people living in the basin.

The 1995 Mekong River Agreement – parties to which are the governments of Thailand, Vietnam, Lao PDR and Cambodia – created a Track 1 governance forum by committing signatories to cooperate in all fields of sustainable development, utilisation, management and conservation of the water and water-related resources of the Mekong River Basin, including but not limited to irrigation, hydropower, navigation, flood control, fisheries, timber floating, recreation and tourism. Article 5 commits members to reasonable and equitable utilisation of the waters of the Mekong River system. Article 6 commits members to maintenance of flows on the mainstream.

The specific challenge for the WUP is to put the principles of Articles 5 and 6 into practice. Article 26 requires MRC to prepare water utilisation rules to enforce Articles 5 and 6. However, as has been pointed out by senior MRC personnel, these articles are *"interlinked with the totality of the 1995 Agreement, especially Article 2 'Projects programmes and Planning', Article 3 'Protection of the Environment and Ecological Balance', and Article 7 'Prevention and Cessation of Harmful Effects'"* (Pech Sokhem 2002).

²⁰ Of the total budget, almost US\$11 million is from the Global Environment Facility, US\$2.8 million from co-donors (Japan, Finland and France), US\$1.24 million from national Mekong Committees and US\$1.25 million from the Mekong River Commission secretariat.

It is the challenge of the WUP team to facilitate negotiations which move beyond 'interest based bargaining'. It has never been expected that this would be easy as it is recognised that "...international water management is a long-term, dynamic and often contentious process. The objective of the WUP and the process of river basin management will be evolutionary and may take a long time to mature" (WB 2000). No doubt the MRC is pleased that the World Bank clearly understands the WUP challenge.

Environmental governance of the WUP processes

A recent change in direction by MRC from executing projects to more holistic river basin management is significant. This refocus is enabling MRC to build some credibility with the wider basin community, many of whom have seen the organisation in the past as uncritically wedded to the large dam development paradigms embodied in what became known as 'the Mekong Project' (Huddle 1972, Jacobs 1998, Mitchell 1998, Ojendal 2000). The new commitment is to being a "learning organisation and a centre of knowledge and information exchange...(with a) strong commitment to improving the livelihoods of the people in the Mekong region" (MRC 2001b).

The MRC recognises they need to bring other actors and subject matter into the mainstream of their processes and provide a mechanism for the expression and exchange of what may be widely and fundamentally differing views about upstream and tributary development, inter-basin diversions etc. The Annual Report 2000 acknowledges it is *"important that decisions on development include a 'bottom-up' process and are not confined to a 'top-down' approach. The voice of the people directly affected, and of other stakeholders such as community groups or NGOs, must be heard"*. Moreover, it admits that *it "has virtually no experience in this vital field"* and that it must *"drastically accelerate activities to promote public participation"* (MRC 2001a:23).

MRC's lack of achievement thus far in genuine public participation is complex. The youth of the new version of the organisation, the sustainability orientation and mindset of some of the agencies which dominate the national Mekong Committees, the politics between the member states, stinging criticisms by NGOs, realisation of limited successes to this point and operating rules which limit engagement with the wider basin community are all relevant. Collectively this has resulted in the MRC lacking confidence and being constrained in the extent to which it has proactively engaged with the large range of Mekong Region actors outside of the MRC family. In relation to hydropower and the WUP, there has been a hyper-sensitive wariness of member country intergovernmental politics. There is also some resistance to being 'lectured' at by NGOs and past and present Mekong country experiences of being 'directed by donors'.

To be legitimate in the eyes of civil society the WUP needed to bring other actors and subject matter into the process at an early stage and consider fundamentally differing views of upstream and tributary development and other sensitive issues such as the rationale and justification for inter-basin diversions. Other MRC programmes will, and should, be more heavily scrutinised. For example, the basin development planning process, launched in 2002, can be conceptualised in at least two ways: a plan to identify possible 'development' projects for each member country (with minimal public debate), negotiated as priorities, packaged and presented to potential financiers – investors or donors; or a planning process to explore the basin development options by the basin community, allowing debate which acknowledges different points of view. Many state actors want it to be the former, a simple uneventful process which enables all countries to have a 'collect' from external donors, whilst leaving their own national development planning independent of regional scrutiny.

The new management regime and organisational structure at MRC provide an opportunity for enhanced transborder/regional governance – in at least the Mekong River Basin part of the larger Mekong Region. Despite its imperfections, the MRC framework remains an excellent opportunity for peaceful learning and cooperation between all six Mekong riparian countries. However, to a large extent the MRC itself remains marginalised from the national decision making processes of its members.

Critical civil society

Civil society is not waiting for MRC to decide what it wants to do about participation in the WUP or any of its other programmes. Between September and November 2002 MRC was the specific focus of a Track 4 initiative, the *Dialogue on River Basin Development and Civil Society in the Mekong*, organised by a coalition of NGOs and universities (Box 6). Increased scrutiny of MRC by critical civil society is forcing it to refine and articulate its stance on many issues, including whether or not it is in the business of conflict resolution, or whether it is focused on providing 'impartial' advice to policy makers in national governments, whilst taking fewer policy positions of its own.

Mekong River 'channel improvement'

Background

In 2001 an Agreement on Commercial Navigation on the Lancang-Mekong River between Simao (Yunnan) and Luang Prabang (Lao PDR) was signed by transport officials from China, Lao PDR, Thailand and Myanmar. River trade between Thailand and China is already reported to have increased, with about 2000 vessels calling at the Chiang Saen port in 2001, double the number from the previous year (Woranuj Maneerungsee and Saritdet Marukatat 2002).

China is funding river dredging to allow the passage of larger vessels. There are also associated plans to remove islets by blasting with explosives. The aim is to facilitate easier river transport for trade and, later, tourism. The plans have evolved over several years of discussions in various forums in China, and also the GMS economic cooperation initiative. Phase 1 of the project plans to remove 11 major rapids and shoals, plus 10 reefs along a 331 km stretch of the river. Navigation markers and winches will ensure that the river is navigable for vessels of 100-150 dwt (dead weight tonnage) for about 95% of the year. Phase 2 plans to remove a further 51 rapids and shoals to allow 300 dwt vessels to traverse the river 95% of the year. Phase 3 plans to deepen the channel to allow 500 dwt vessels to traverse 95% of the year (SEARIN et al. 2002).

Box 6 Declaration by local communities in Thailand 2002 (Track 4 outcome)

Representatives of 'local communities of the river basins in Thailand' gathered near the Mun River in Thailand's Ubon Ratchathani province between 9-12 November 2002 for the 'Dialogue on River Basin Development and Civil Society in the Mekong Region'. Following the meeting, a declaration was publicly released which claims that the practical implementation, thus far, of inter-government cooperation via the Mekong River Agreement limits 'civil society' involvement in decision making, to "the groups that provide monetary assistance to support the expansion of economic growth in the Mekong River Basin".

The declaration asserts that the Mekong River agreement has "excluded local communities from making decisions about the Mekong River Basin and development". The declaration questions "the very nature of this 'development' that has emerged from this 'cooperation' as well as the 'development assistance' that is being provided by 'civil society'". It further asserts that "local communities are being sacrificed in the name of 'development'...(which) is destroying the lives, livelihoods, cultures and natural ecosystems of the local communities of the Mekong Region"; marginalising, dispossessing and disempowering local people.

The declaration concludes with a call for advocacy which ensures that "*community rights* over natural resources becomes the guiding principle for development in the Mekong Region" (Local people 2002).

This is an extremely significant intervention in the natural system of the Mekong River which will obviously have an impact on river ecology and local communities. Local organisations along the river are being supported by the Southeast Asian Rivers Network (SEARIN) in a struggle to stop what they see as unnecessary and short-sighted ecological destruction (SEARIN et al. 2002).

Environmental governance of the channel improvement project

Any discussion of environment governance can be relatively brief. In short, there has been very little. It is remarkable how such scant attention can be paid by governments to potentially very significant negative impacts. All emphasis is on the positive benefits expected to be gained – doubtless there will be some beneficiaries – with minimal investigation of potential problems. In situations where political momentum is behind a project, participatory EA processes become problematic navigation obstacles themselves.

Associated with the signing in 2001 of the inter-government agreement on commercial navigation, a feasibility study was completed in late 2000 which supported, in principle, the proposed alterations to the river, including rapids and reef removal. By September 2001 an EIA, coordinated by the Chinese, had been prepared and sent to each of the other three government signatories to the Agreement. Thailand's government approved the EIA in January 2002, and Lao PDR in April 2002 (SEARIN et al. 2002). Their own river basin management organisation, the MRC, was not used by either Thailand or Lao PDR to inform or actively participate in the initial agreement negotiations. It has become involved 'after the event' in offering to conduct an independent EIA of the project (an offer not taken up) and in commissioning evaluations which have been extremely critical of the existing EIA (Cocklin and Hain 2001, Finlayson 2002, McDowall 2002). Each of the evaluations noted the inadequacy of the information base upon which decisions of 'no impact' or 'acceptable impact' had been made; one succinctly concluded that the EIA was "substantively inadequate and in many places fundamentally flawed" (Cocklin and Hain 2001:2), another that consideration of the river's biological values was "seriously deficient" (Finlayson 2002:9).²¹ And yet, this EIA was initially deemed adequate by all governments to approve the project. In fact, the 'impediments' inside China's borders have already been removed. In 2002 work started along the part of the river bordered by Myanmar and Lao PDR.

The environmental governance of this process compares poorly against the comparative principles summarised earlier. The 'channel improvement' project – if the EIA is the benchmark indicator – has given scant consideration to the ecological risks of the project, and the likely impact on the livelihoods of riverusing communities. Governance to this point has been characterised by an absence of any holistic approach to analysis. Formal participation by local communities, or others likely to have an alternative view, has been deemed unnecessary. The eventual public availability of the EIA has provided a base of information for initial analysis. But once again, project opponents find themselves in reactionary mode having been largely excluded from presenting their arguments at earlier stages of the decision making process.

Critical civil society

The environmental governance channel improvement debate has undoubtedly been opened up by the activities of the NGO SEARIN, which includes highprofile Thai academics on its board of management, and employs keen activist researchers to pursue and piece together information that is otherwise slow to find its way into the media. SEARIN supports concerned Thai people's organisations who provide much of the river-specific local knowledge essential for an advocacy campaign. In turn they are supported by regional NGOs such as

²¹ After many months of being largely unknown, excerpts from the reports were distilled for media distribution and advocacy by Towards Ecological Recovery and Regional Alliance (TERRA 2002).

TERRA, and international NGOs such as Oxfam and the International Rivers Network. Other activists are passing SEARIN information on the progress of the project and concerns from people in Myanmar, Lao PDR and Yunnan. A debate which has previously been restricted to pro-project inter-government and ADB discussions has now spilled out into the larger civic domain.

Local people are having to scale up their advocacy to the regional scale in order to challenge increasing regionalism driven primarily by trade liberalisation between China and Thailand. Local Thai NGOs and villagers made a submission to the Thai Environmental Senate Committee in May 2002 calling for a halt to the project, at least until an 'opposing case' can be heard. This lobbying may yet prove to be decisive. All governments of the region were petitioned in July 2002 by a coalition of "76 organisations along with 16 individual academics from 25 countries" (SEARIN et al. 2002:22). At the time of writing, the entry of civil society, supported by the work commissioned by MRC, is changing the political momentum of what would otherwise be a *fait accompli*. The wisdom of the project is being reconsidered by elements of government in both Thailand and Lao PDR.

Upper Mekong hydroelectric dams in China

Background

Dam construction for hydroelecticity production is a super-sensitive issue in the Mekong Region. A long list of projects has become the subject of national, and in some cases regional and international, controversies. Examples include Vietnam's Se San, Sre Pok and Son La dams; Lao PDR's Theun Hinboun and Nam Theun 2 dams; Thailand's Pak Mun dam; and Myanmar's water resources development projects on the Salween River. The driving paradigms and extremely political governance processes of each are the subject of intensive debate. The construction, operation and associated impacts of dams in China's Yunnan Province are also, rightly, the subject of intense interest.

The dams are being built by the Chinese government in the upper reaches of the Mekong River – known in China as the Lancang (Table 2). Mostly referred to as the Upper Mekong (Lancang) dam cascade, this super-project has been conceived to take advantage of an 800 metre drop over a 750 kilometre river section by building eight dams (Plinston and He Daming 2000, McCormack 2001, Moreau and Ernsberger 2001).

The cascade offers an alternative source of energy to coal, via its unquestioned hydroelectric power generating potential, calculated as being up to 25,500

megawatts.²² The electricity produced will be able to enter the Mekong Region electricity grid which governments of the region have formally agreed to establish via their signing, at the 2002 GMS leaders' summit, of an intergovernment agreement on regional power trade.

It also has the potential to offer limited flood control, more assured dry-season flows, increased navigation options, reduced saline intrusion and create extra irrigation opportunities for downstream countries like Thailand. Moreover, it has been argued that it could facilitate a "*reprieve for the forests, fields and villages that would otherwise be submerged under dams in the (other) Mekong riparian countries*" (McCormack 2001:17).

Dam name	<i>Elev'n</i> metres asl	Active storage million m ³	Power capacity megawatts	Annual power output 10 ⁸ kwh	Height of dam wall metres	Status
Gonguoqiao	1,319	510	710	41	130	Design
Xiaowan	1,240	151	4,200	189	292	2002-12
Manwan	994	11	1,500	78	126	1986-96
Dachaoshan	899	9	1,350	67	110	1996-03
Nuozhadu	812	223	5,500	238	254	Prefeasibility
Jinghong	602	12	1,500	81	118	Feasibility
Ganlanba	533	?	150	8	?	Design
Mengsong	519	?	600	34	?	Design

 Table 2
 Upper Mekong (Lancang) Dam Cascade

Source: (Plinston and He Daming 2000, McCormack 2001)

On the other hand, there is huge concern in the regional and international community about the impacts of the dams on riverine ecosystems and local livelihoods (Roberts 2001, IRN 2002). There are major worries about the impacts of altering the natural flow regime of the river in a way which will increase the downstream dry-season flows and decrease the normal flow downstream of nutritious sediments. Negative impacts may also include increased downstream erosion, serious disturbance to fisheries ecology²³ and devastation of annual river bank gardening enterprises. These concerns do not appear to have been addressed. Those who stand to lose out include millions of

²² The hydroenergy potential of the Mekong River in Yunnan is estimated at 25,500 megawatts, with an exploitable hydropower capacity of 23,480 megawatts. This data is taken from a report on the website of the International Commission on Large Dams. The report concentrates on the Dachaoshan dam, but in general terms speaks of the Yunnan stretch of the Mekong River as being a "*rich, rare hydropower mine for its prominent natural advantages in abundant and well-distributed runoff, large drops and less flooding losses of the reservoirs*" (ICOLD 2001).

 $^{^{23}}$ Fisheries production in the Mekong is fundamental to local livelihoods. Current estimates are that almost 2 million tonnes are harvested each year from the Mekong fishery – 1.75 million tonnes from the 'capture fisheries' valued at US\$ 1.45 billion, plus another 250,000 tonnes from aquaculture (MRC 2002).

people downstream – mostly beyond the Chinese border – reliant on fishing and river bank farming.

Manwan dam has comprehensively solved Yunnan's short term electricity crisis. However, the overall economic benefits to China may have been substantially over-estimated by information presumably used as a basis for decision-making. The useful life of the dams may be much less than has been (presumably) expected and factored into economic calculations. Whilst estimated construction and operating costs per unit of power produced may be attractive, sedimentation inflows into the first-completed Manwan dam are much higher than anticipated (Plinston and He Daming 2000). There are now concerns that it may only be able to function as a power-producer for less than 20 years (Roberts 2001:150). Construction of the further upstream Xiaowan now seems 'necessary' to avoid Manwan having an almost absurdly brief useful life.

The Upper Mekong (Lancang) dam construction has presumably been driven by immediate pressures of domestic energy shortages; long term estimates of domestic and regional needs; and an ongoing commitment to a water resources development paradigm which sees large dams as integral (McCormack 2001). Elsewhere in the world this approach is being seriously challenged, most publicly in the outputs of the World Commission on Dams (WCD 2000). However, this paradigm is obviously still thriving in 21st century China where about 280 large dams were under construction in the late 1990s (WCD 2000:10), against a national backdrop of about 80,000 large and medium dams, most of which have been built since the success of the Mao-led revolutionaries in 1949 (Kattoulas 2001). Energy production has been prioritised.

Environmental governance of Yunnan dam construction

So how then does this example measure up against the previously mentioned governance ideals? In relation to sustainability, it seems that regional ecological and social sustainability is being traded off for national economic development. There are clear threats of serious or irreversible damage; the precautionary principle has certainly not been invoked. Environmental degradation has long been associated with China's economic development (He Baochuan 1991, Smil 1993, Marks 1996). The cascade will probably continue the trend, but in this case, most of the negative impacts fall to other people in other countries. Amongst other deficiencies, many possible transboundary impacts have been 'externalised' from consideration.

The ecology of the system will alter, with biodiversity losses inevitable. The value of the resources to many users, for example fish, sediment and variability in seasonal flows, has either been ignored or outweighed. Regional holism has been redefined and scoped down to national energy needs. The decision making process, prior to committing to at least the first three dams in the cascade, has excluded any meaningful participation by downstream, presumably affected parties. The project has lacked transparency. Publicly available data to inform

debate remain relatively scarce. What information there is has emerged in a piecemeal fashion from various sources – academic foraging, ADB-funded studies and quietly undertaken local research.

Thus, the cascade, so far, is a textbook case of bad environmental governance. It has epitomised non-transparency, non-provision of information and non-involvement of the public in learning about and influencing decision making. It also exemplifies disinterest in international or regional principles of cooperation, agreements, or rules. It represents a complete failure of international civil society and downstream nations to engage with China in any meaningful way prior to plans becoming fixed in internal domestic political agendas. At this point the governance process regarding the Upper Mekong dams appears to breach each of the aforementioned environmental governance principles. If we agree those features are desirable, then we must conclude that this is a clear case of institutional failure.

The Upper Mekong (Lancang) dam cascade is a classic project, the most significant human intervention ever made in the natural order of the Mekong river ecosystem, with substantial and undoubtedly complex transboundary ecological, social, cultural, economic and political impacts. The regional/transborder nature of ecosystems requires regional/transborder political cooperation. China's non-membership of the MRC has precluded discussion in that forum. Other tools, such as transboundary Environment Assessment (EA) protocols, and UN Convention on the Law of the Non-Navigational Uses of International Watercourses have also been ineffective in either fostering or forcing more extensive 'cooperation' or 'dialogue'. Article 8 of the 1997 UN Convention lays down a general obligation for riparian states to cooperate "in order to attain optimal utilisation and adequate protection of an international watercourse" (cited and discussed by McCaffrey 2001).

A few final remarks seem appropriate. The economic growth imperatives of the Chinese *Develop the West* and *Gateway to Southeast Asia* policies obviously require energy and understandably, the engineers and policy decision makers are drawn to the mathematical possibilities presented by the Lancang. However, the lack of dialogue with neighbours typifies the unequal relationship between China and the downstream states. If negative transboundary impacts have been considered, they have been dismissed, without discussion, as undesirable but necessary consequences of essential, national economic development. If there are positive impacts for downstream nations, they are being undersold. But of course, this is speculation as there remains a relative paucity of information on the Chinese position. Clearly, there is acceptance by several states that the cascade will be built. Downstream countries also have their own dam-building agendas and/or energy demand projections. For example, Thailand has already signed a Memorandum of Understanding to purchase up to 3,000 megawatts

from the Jinghong component of the Yunnan cascade²⁴ from about 2015, indicating *de facto* acceptance, if not support for the project. Support for the project has also been voiced by a part of the Thai bureaucracy which shares the dominant Chinese dam-building paradigm.²⁵

The failure of Lower Mekong countries to engage with China on this issue is indicative of the geo-*realpolitik*. China is independent and is seeking to retain that independence partly via water resources development and new energy production from hydropower. The concerns of downstream nations do not appear to have registered on Beijing's political Richter scale. But this is no surprise given the reticence of any of the downstream government elites to make any serious representations to their more powerful upstream neighbour, and in several cases, increasingly important patron.

Critical civil society

In relation to the Upper Mekong dams cascade, state actors of many different types have been unable to ensure anything approaching a thorough discussion of the project alternatives and likely impacts. It was linkages between Chinese and international academics, particularly from the mid 1990s (Chapman and He Daming 1996), which first brought project information into the wider public arena, although the rosiness of the possible scenarios they presented were greeted with wry suspicion by some (Hinton 2000). An International Rivers Symposium in Kunming in 1999 also aided outsiders to gain some insights into the Chinese perspective (He Daming et al. 2001). This is not to say that there haven't been many people and organisations who tried either before or since. The Economic and Social Commission for Asia and the Pacific (ESCAP) has attempted to facilitate more informed debate about this particular project. In its post-1999 phase, the MRC has also called for more public debate (Kristensen 2001). An ADB project on the sustainable development of the Yunnan part of the Lancang-Mekong Basin was also provocative and intensified the debate (Landcare Research New Zealand 2000).

²⁴ Memorandum of Understanding on Purchasing Electric Power from the People's Republic of China for the Kingdom of Thailand between Thailand's Prime Minister's Office and PRC's Economic and Trade Commission, signed 12 November 1998 (cited by Xiao Peng n.d).

²⁵ The Director-General of Thailand's Department of Energy Promotion and Development, Pradesh Subatr saw the cascade as a boon to Thailand providing extra justification for completion of the extensive Khong-Chi-Mun irrigation and Mekong river water diversion project in Isaan (Kanittha Inchukul 1997).

Box 7 Regional Environment Forum statement 2002 (Track 3 outcome)

On 14-15 November 2002, a group of 35 independent researchers and civil society advocates from Cambodia, Vietnam, Laos, Thailand, Myanmar and China met in Phnom Penh at the First Annual Regional Environmental Forum.²⁶ The purpose of the Forum, organised by the Cambodian Institute for Cooperation and Peace, the Thailand Environment Institute and the World Resources Institute, was to discuss environmental governance challenges in the Mekong Region. Specific recommendations from participants in the REF were directed to governments, multilateral institutions, private corporations, and civil society groups with the objective of strengthening environmental governance in the Mekong Region. The recommendations related to:

- enhancing regional environmental governance;
- □ increasing public access to environmental information;
- □ improving environmental impact assessment; and
- enhancing enforcement of environmental regulations.

It was acknowledged by the REF participants that "action on these recommendations will require significant political will, strengthened capacity, as well as financial resources, and increased collaboration across national and sectoral boundaries" (REF participants 2002).

The Oxfam organisation, amongst others, has since supported the work of independent Chinese researchers to analyse the details of the project. More recently, hard-hitting advocacy groups such as the International Rivers Network have also become involved. The efforts by the more critical civil society groups are extremely valuable, but the providers of the information have to be quite careful, for fears of being charged with acting against the 'national interest'. In these circumstances, a news-seeking at least semi-independent international media has become vital. There is now a steady stream of reports on the Mekong River development (for example, see: Moreau and Ernsberger 2001, Kazmin and McGregor 2002), essential in maintaining pressure for more explanation and examination of a controversial project with far-reaching impacts.

Synthesis of regional environmental governance challenges

It was uncontroversially suggested earlier that ideal environmental governance processes would demonstrate a serious commitment to sustainability, holism, participation, transparency and equity. More contestable is the assertion that regional environmental governance in the Mekong Region is, in general, inching towards, but still far from regularly applying these principles in practice. Despite the changes wrought by globalisation and regionalism, the examples point to a range of governance challenges for the Mekong Region related to the principles and other associated issues.

²⁶ The REF was a follow up to the Resource Policy Support Initiative (REPSI) environmental governance work coordinated by World Resources Institute (see Badenoch 2001)

Dominance of national interest

Some degree of regional environmental governance is vital because many issues have region-wide and/or transborder dimensions which are best managed via regional protocols and rules. However, at present national interests are considered far more important than regional interests. For example, national representatives in processes like the Mekong River water use negotiations are guided by their perception or instructions concerning national interests. The much vaunted Mekong 'spirit of cooperation' often seems optimistically overstated. Unless some flexibility and a regional ecosystem perspective can be fostered, such exchanges are really vested interest negotiations rather than regional cooperation.

Reticence by states to 'cede' any sovereignty

The region's countries have relatively young political regimes. Taking even a 'short' 50 year view back through Mekong history is a reminder of the struggles to obtain and retain sovereignty. Given this recent history it is understandable that states are reluctant to do anything which could be seen as ceding any sovereignty to the regional level. Existing regional 'cooperation' between states usually enshrines sovereign rights and non-interference; ASEAN is an obvious case. The GMS-ADB economic cooperation initiative, particularly whilst focusing on planning, has also not posed great threats to sovereignty. However, more substantial implementation of the infrastructure plans would be quite different and require agreements to be finalised which safeguard investments.

Absence of holistic approaches

In 'environment and development' governance processes there must be thorough assessment of expected impacts of proposals and alternative options. At present this does not happen. Ministers participating at the annual GMS-ADB economic cooperation meeting in 2000 agreed to the need for transboundary EA procedures. The MRC has since been working on these. However, the process is extremely slow and at the time of writing in late 2002, formal transboundary EA in the Mekong Region was still practically non-existent. Much higher quality EA is needed which takes account of monetary and non-monetary costs, benefits and risks of the options – and specifically who is likely to win or lose.

Restricted access to information

There remains a significant gap between the rhetoric and reality of Mekong Region cooperation when it comes to data sharing and general access to information. This subject is at the core of Principle 10 of Agenda 21 to which Mekong Region countries are signatories. In other parts of the world environmental accountability is being embodied in regional agreements. Two European protocols are being examined by both Mekong Region governments and civil society groups as potentially useful models for adaptation. The first of these is the Convention on Environmental Impact Assessment in a Transboundary Context, commonly known as the Espoo Convention (UNECE 1991, Tesli and Husby 1999). The general Espoo objective is to prevent or reduce adverse transboundary impacts of proposed activities. The second is the Convention on Access to Information, Public Participation in Decision-Making, and Access to Justice in Environmental Matters, commonly known as the Aarhus Convention (Petkova and Veit 2000) on environmental accountability.

Creating space for civil society to participate in decision making

Universal rhetoric in governance discourse, often embodied in the operating rules of states (via their constitutions) and other organisations (by their respective governance charters) is to encourage 'participation'. But of course this means different things to different people. A serious commitment to participation seeks and achieves diverse stakeholder representation and involvement via genuine participatory processes that are safe, non-threatening, non-coercive, predictable and maintained over time. This principle is particularly problematic for Mekong country governments, and their regional organisations, who have fundamentally different conceptions of what constitutes genuine public participation.

Concluding remarks

Enhancing governance is a key social challenge for the Mekong Region. Many of the other social challenges discussed in this book would be greatly assisted by improved governance processes.

There is increasing regionalism in the Mekong Region, but it would be a mistake to construe all of this as 'cooperative' and 'good'. Much of the state-led cooperative regionalism is focused on economic growth, freeing up trade and installing infrastructure to facilitate increased interaction and economic activity. The ADB GMS economic cooperation and surrounding processes are the most obvious embodiment of this claimed 'unity'. However, the other examples are a reminder of the limits of inter-government regional cooperation. It is within this context that Track 3 and 4 regional governance becomes so important.

Within an often oppressive context, finding mechanisms in each country to allow civil society to genuinely participate in decision making remains a significant challenge. Whilst slow change is evident, states still prefer top-down approaches which are often formal and intimidating to all but the most self assured. Nevertheless, as a tribute to persistence, and aided by some aspects of globalisation, there has been an emergence of a critical civil society in the Mekong Region. It is playing an important role in challenging and contesting governments of the region to improve and more robustly scrutinise each others' performance and approaches. Much of this is being done under the cloak of environmental governance but it should be seen as a direct challenge to the development paradigms and decision making processes of the ruling elites in each state.

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CHINA'S ENERGY REFORMS AND HYDROPOWER EXPANSION IN YUNNAN

John Dore, Yu Xiaogang, Kevin Yuk-shing Li

Introduction

Energy sector reforms in China have unleashed an explosion in power industry development proposals across the country. Nationwide there is an intention to almost double hydropower capacity by 2010. The reforms have led to a national surge in competition between corporate generators to secure actual and potential power-producing "assets." Nowhere are dam builders aspirations' greater than in the south-west, especially Yunnan Province.

In the past Yunnan has been seen as a peripheral province—both geographically and sociopolitically. However, in terms of both the Mekong region and China, Yunnan is an increasingly important part of the water governance story.

The purpose of this chapter is to provide a brief update on what is happening in Yunnan—looking at the Nu, Lancang and Jinsha rivers—and then situate this within the wider context of China's changing political economy.

Yunnan Province

Yunnan has a population of approximately 43 million people (2,000 population census). It is one of three Chinese provinces with an ethnic minority population of over 10 million people. In 1990, of China's officially recognized fifty-five ethnic groups, fifty-one were living in Yunnan, accounting for a third of the province's population. Of these, twenty-five ethnic groups were living in "compact communities" with a population of less than five thousand. It is China's most culturally diverse province, with fifteen of the ethnic groups being indigenous to Yunnan—the Bai, Hani, Dai, Lisu, Wa, Lahu, Naxi, Jingpo, Bulang, Pumi, Nu, Deang, Dulong and Jinuo. It is the eighth largest province in China, covering an area of 394,100 km² that is 4.1 percent of the country's mainland area. Yunnan shares 4,060 km of border with Myanmar [Burma], Lao PDR and Vietnam. It is divided administratively into sixteen prefectures and 126 counties. Eight of the prefectures have the status of ethnic minority autonomous prefectures—including the Nujiang Lisu Nationality Autonomous Prefecture.

In recent years Yunnan has rapidly industrialized, with the formal economy increasing markedly during the 1990s. Core industries are tobacco, machinery, metallurgy, agricultural products, chemicals and building materials. The main border trade partner is Myanmar—recently estimated as accounting for 80 percent of cross border trade. In 2002 cross border trade was valued at USD 371 million. However, overall imports and exports were USD 2.23 billion, 80 percent of which was with ASEAN economies (Rungfapaisarn 2003).

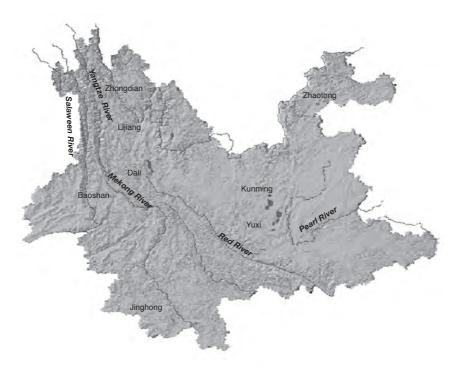
Agricultural production, whether for trade or subsistence, is still dominates the provincial economy. While the economy is growing fast, in 1997, 36 percent of the population was still classified by China's government as living in poverty (annual income less than usp 77). Despite the recent transformation in Yunnan, the economic gap between China's eastern and coastal regions and the western parts of the country has increased. This is for many reasons, including the coast's more attractive geographic location for investors and the willingness of the state to cede some control and encourage private sector-led economic development in eastern and coastal provinces.

As part of a general effort to reduce this gap, the national government is promoting the Western Region Development Strategy (ADB 2002), which includes Yunnan. The provincial government is promoting its cultural diversity, biodiversity, mineral endowments and strategic location as a "gateway to South East Asia." Boosting production of "clean green" hydropower is seen as a strategically vital sunrise industry to aid development of the province and country.

Hydropower and World Natural Heritage and local livelihoods

Yunnan has over six hundred rivers forming six major river basin systems: Dulong (Irrawaddy), Nu (Salween), Lancang (Mekong), Jinsha (Yangtze), Zhu (Pearl), Honghe/Lixian Jiang (flows into the Red in Vietnam). Rivers have multiple uses and are valued for many different reasons. In this section we wish to introduce the Yunnan hydropower context, but also make mention of World Natural Heritage sites and local livelihoods.





SOURCE: World Agroforestry Centre (ICRAF) & Centre for Biodiversity & Indigenous Knowledge (CBIK), Kunming

By one method of calculation, Yunnan is seen as having 24 percent of China's hydropower potential for medium- and large-sized projects. In terms of pure hydropower potential, Yunnan has more than any of the other five countries of the Mekong region. Each of the Nu, Lancang and Jinsha are in China's "top six hydropower rivers" (tables 4.1, 4.2, and 4.3).

Substantial hydropower expansion is part of national planning and Yunnan's role is a key one. One industry source claims that "China has planned to construct over 50 large and super large hydropower stations in the next 20 years" (Alexanders Oil and Gas Connections 2003). A deputy-director of the State Power Corporation, Chen Dongping, is reported as saving that China intends to spend nearly USD 40 billion by 2010 to double its hydroelectric capacity (China Economic Review 2002). This would involve increasing capacity to 150,000 MW by constructing the equivalent of another four dams the size of the Three Gorges dam. Chen Dongping assumes this is necessary to reduce current dependence on coal and to thereby "improve the environment." This remark is, to some extent, understandable given that one-third of China's territory is reported as being affected by sulphur dioxide (so₂) related "acid rain" and about 40 percent of the contributing so2 emissions comes from coal-fired power plants (He Jing 2002). The seriousness of the acid rain problem was acknowledged in 1994 when the central government launched a seven-year spending initiative aimed at keeping so_2 emissions at or below 15 million tonnes per annum. It was recognized that up to three thousand highly polluting plants would need to be closed, with their output replaced by more efficient generation units (World Bank 1998).

River	Potential installed capacity (мw)	Percent of the "top 18" Chinese rivers
Jinsha/Yangtze	210,810	49
Yalung Zangbo	54,960	13
Yellow	35,770	8
Lancang (Mekong)	28,930	7
Zhu (Pearl)	25,760	6
Nu (Salween)	30,410	7
Heilong (in China)	11,530	3
Subtotal	398,170	
Rivers 8-18	30,440	7
Rivers 1-18	428,610	100
Yunnan	103,130	24

Table 4.1 Hydropower potential of major rivers in China

SOURCE: State Power Corporation data for "medium- and large-sized hydropower projects" (He Jing 2002)

Territory	Actual (Twh)	Potential (Twh)	Exploitable (GW)
China	73	1,923.3	378.5
Western Region	38.4	1,567.8	290.9
Yunnan	6.9	394.5	71.2
Western Region (as percent of China)	52.6	81.5	76.9
Yunnan (as percent of Western Region)	18.0	25.2	24.5
Yunnan (as percent of China)	9.5	20.5	18.8

Table 4.2 Hydropower production versus potential—
China, Western Region, Yunnan

SOURCE: Data for 1999 from ADB report analyzing Western Region Development Strategy (ADB 2002: table 7-4)

Country/region	Developed (тwн/year)	Potential (тwн/year)	Percent of potential already developed
Yunnan	7.9	450	1.8
Cambodia	0	41	0.0
Lao pdr	1.1	102	1.1
Myanmar	1.1	366	0.3
Thailand	4.6	49	9.4
Vietnam	5.8	82	7.1
Total	20.5	1,090	

Table 4.3 Mekong region hydropower potential

NOTES: The figure for Yunnan is higher than the figure in table 5.2. The data set used in table 5.3 is older and from an ADB GMS energy sector study published in 1995. It refers to what is theoretically possible and is indicative only. What is practically and economically feasible is somewhat less.

SOURCE: Plinston and He Daming (1999, 26)

Although there has been an upsurge of plans for national and Yunnan hydropower-related dam building, there was already ample demonstration of China's commitment to a water resources development paradigm which sees large dams as integral (McCormack 2001). Elsewhere in the world this approach is being seriously challenged, most publicly in the outputs of the World Commission on Dams (wcD 2000). However, this paradigm is still thriving in twenty-first century China where about 280 large dams were under construction in the late 1990s (wcD 2000, 10), against a national backdrop of about eighty thousand large and medium dams, most of which were built since the success of the Mao-led revolutionaries in 1949 (Kattoulas 2001). Hydropower has long been a component of China's energy strategy and the new surge should be seen as an upscaling rather than as a new policy emphasis.

	2000	2005	2010	2015	2020
Total (Mt, coal equivalent)	1092.7	1277.6	1481.1	1727.9	2016.4
Hydropower & nuclear (тwн)	227.8	320.2	435.1	544.1	682.0
Hydropower & nuclear (percentage)	20.8	25.1	29.4	31.5	33.8
Growth from 2000 levels (percentage)		16.9	35.5	58.1	84.5
Growth in hydropower & nuclear (percentage)		40.6	91.0	138.8	199.4

Table 4.4 China's projected supply of primary energy 2000–2020

NOTE: He Jing (2002) notes the share of hydropower in 2000 had reached 24.8 percent. SOURCE: 1) Data from 1999 in Asian Development Bank (ADB) report analyzing the Western Region Development Strategy (ADB 2002: Extract from tables 7-7, 7-8, 7-9).

However, rivers are more than just flows of water with hydropower generation potential. For example, the San Jiang or Three Rivers region is part of the upper watersheds of the Nu, Lancang and Jinsha. In July 2003 it was declared a World Natural Heritage site of the United Nations Economic, Social and Cultural Organization (UNESCO) in recognition of its rarity, beauty and ecological importance. Of course, rivers are also resources for local communities, dependent upon them—to a greater and lesser extent—to meet their livelihood and other needs. Conceivably, both hydropower development and UNESCO listing could provide a boost for local livelihoods but it does not automatically follow in either instance, unless priority is attached to local rights and development aspirations. Yunnan's hydropower development could provide increased local opportunities and prosperity; however, the threat to the livelihoods of millions in river dependent communities, mostly downstream, is also real. Recognition of opportunities and threats, and a more cautious approach, is required.

Driving forces for hydropower expansion

Key drivers for Yunnan hydropower expansion include the push for, and direction of, economic growth, China's associated energy security concerns, the Western Region Development Strategy and a political environment in which energy entrepreneurs have strong incentives to push ahead with expansion plans.

Globalization

The extensive medium and large dam building throughout China, especially in the past fifty years, and the new surge in Yunnan dam building

can be seen as a by-product of the globalization¹ context in which it has and is taking place. Jan Aart Scholte (2000) argues that full-scale globalization from 1960s to the present has been grounded in four interdependent causes. First, the ascendancy of rationalism as the dominant form of knowledge that has privileged people over nature, science and solutionseeking. Second, capitalism: Scholte agrees with the Marxist analysis that capitalism, defined as structures of production focused on surplus accumulation, is the basic engine of globalization. As capitalist impulses have been given more freedoms, so the rate of globalization has increased. Third, technological advances: undeniably, there have been continued extraordinary improvements in engineering, transport, communications and data processing which have provided the infrastructure, or the "hardware," for globalization. Fourth, specific policy and regulation choices by which the dominance of arguments for removing business restraints, encouraging trade, and focusing on exports has shaped globalization. To a significant extent, these have been due to decisions taken by states, often willingly, but sometimes because they have perceived there were no plausible policy alternatives. Each of these causes also applies to China and has impacted on the focus and directions of development.

International economic integration and investors looking to China

International economic integration—just one part of globalization—is a highly significant factor, particularly in relation to providing the capital necessary for expensive hydropower development. A report publicized in August 2003 by the United Nations Committee on the Development of Trade noted that between 1980 and 2002 the world "stock" of Foreign Direct Investment (FDI)² increased more than tenfold to USD 7.1 trillion. Of this amount, in 2002 the Chinese mainland share was reported as being USD 448 billion (*Beijing Review* 2003b). This places China fourth worldwide in terms of receiving external investment, whether it is relatively fixed direct investment, or relatively mobile portfolio investment. In 2002 it absorbed USD 52.7 billion in FDI (Beijing Review 2003c). Chinese capital appears to have funded most of the large dams around the country. However, domestic and foreign investors are now more easily found to finance large hydropower. This is an important trend because by some predictions China will need to invest USD 800 billion for new power generating capacity over the next thirty years (IEA 2002b).

More than a shift to a market economy

The most recent wave of international economic integration wave, from 1980 to the present, has been an era dominated by neoliberalism, and Beijing's policies are no exception. Two significant elements include:

- Corporatization/privatization of public utilities implemented vigorously wherever possible due to a fundamental belief in greater business efficiency of the private sector. A first step of corporatizing public utilities would almost invariably proceed to partial or full privatization of ownership and management. Many countries that have embraced the neoliberal agenda—either willingly or reluctantly due to a shortage of other options—have proceeded rapidly to privatize many public utilities.
- Deregulation in the sense of removing impediments to business. Neoliberal regimes around the world have implemented competition policies which have invariably focused on economic issues such as: limiting anti-competitive conduct of firms, reforming monopolies to facilitate competition (for example, by restructuring energy utilities), compulsory competitive tendering of government contracts, etc.

This type of agenda has rapidly lead to the emergence of very new types of public-private partnerships being shaped, at least in part, by the activities of agents such as the World Bank's Public-Private Infrastructure Advisory Facility (PPIAF). In recent times PPIAF activities in China have focused on telecommunications reform, natural gas reforms and electricity generation. In each instance, the focus is on exploring ways in which the role of the private sector can be significantly expanded.³ Chinese public policy-makers remain wary of unbridled privatization, and hence the efforts to retain state ownership and regulatory control. However, traditional ideas about what constitutes "public" and "private" are blurring and it is no easy matter for the state to find efficient and effective mechanisms for regulatory control.

Energy demand, trade and security

A key driver of Chinese government energy policy is the domestic demand estimates of key organizations such as the State Reform and Development Commission (srdc). The srdc's Energy Research Institute (srdc-eri) has released analysis in 2003 of three different scenarios. Coal demand is forecast to rise to somewhere between 2.1 to 2.9 billion tonnes per annum with the upper limit almost twice the current production capacity.⁴ Oil demand is predicted to rise to 450 million tonnes of oil equivalent. Natural gas consumption is forecast to increase five-fold current levels, rising to 160 billion m³ (*People's Daily* Online 2003b). Domestic energy demand is entwined with energy imports and exports. Imports are mostly oil, and more recently gas. Exports are mostly coal, but have an increasing hydropower component.

Earlier SRDC-ERI data published by the Asian Development Bank (ADB) presented a less nuanced picture portraying only one scenario. Domestic energy supply was projected to increase by 85 percent by 2020 (ADB

2002). Even if such massive increases in production were achieved, further imports would be necessary.

The International Energy Agency (IEA), working in cooperation with SRDC, expects that China will become an even greater importer of oil and gas: "By 2030 Chinese oil imports will equal the imports of the United States today, while imports will meet 30 percent of the country's gas demands" (IEA 2002b). China is already a major actor in the global energy market as the largest oil importer outside the OECD. After the United States and Japan, it is the third largest consumer of oil (IEA 2002a). On the other hand, some parts of the country will continue and expand their international energy exports. It should be remembered that China is now the second largest coal exporter in the world, whereas only ten years ago it was primarily focused on supplying its domestic market (Ball et al. 2003).⁵ And, as the plans for Yunnan's energy development come to fruition, the province will become a significant exporter of hydropower to other parts of China, Southeast Asia, and possibly South Asia. Entrepreneurs producing energy will sell to purchasers either inside or outside the country.

In addition, energy security for China, as for all other countries, remains an important influence on national policy (for still-relevant discussions see Medlock and Soligo 1999, Gao Shixian 2000, Stares 2000). The point being made is that not all of the planned increases in energy production are to meet domestic demand.

Box 4.1 Energy demand management options for China⁶

- 1. Imposing environmental taxes on dirty fuels
- 2. Further promoting electricity time-of-use tariffs
- 3. Reforming two-tiered pricing system for natural gas
- 4. Further regulation, upgrading and/or closure of inefficient power plants and coal mines
- 5. Promotion of clean coal technologies
- 6. Using advanced, combined-cycle technology in power generation
- 7. Promoting co-generation
- 8. Promoting renewable energy resources and technologies (including wind, geothermal and solar)
- 9. Promoting energy conservation
- 10. Encouraging more research and development in the energy industry
- 11. Phasing out hidden subsidies

Given its significance as a policy driver to those concerned about energy security and continued economic growth, it is important that the demand projections data, and their assumptions, are thoroughly analyzed. For example, does the data reflect the successful implementation of any demand management policy measures, or the development or wider adoption of new technologies?⁷ It is important to clarify whether demand estimates are unnecessarily high and being used as justification to permit headlong expansion of energy production, perhaps with an over-emphasis on obsolescent technology.

China has rich potential in renewable energy sources, such as wind, solar, biomass (bio-gas and bio-fuel), geothermal, wave and tidal and etc. The Renewable Energy Promotion Law was approved in 2005 and enacted in March 2006, in order to respond to the increasing energy demand, diversify the energy sources and ensure energy security. However, the major power companies monopolize the renewable energy potential and the rights to develop. At present this is hindering investment and technology transfer from European countries with more experience in this area. For example, Guangdong Province alone could exploit as much as 20,000 MW of wind power potential by the year 2020. For the Eleventh Five-Year Plan period (2006–2010), the official government target is 6,000 MW.

However, even with this huge wind potential and the state's new law and policy, at present there is insufficient incentive to localize the technology and commence extensive production of wind turbines. The potential of wind energy will not be realized until there are more people in China familiar with the technology, and more local manufacturers engaged in turbine production. For renewables, including wind, it will be necessary for the same focused training and exchanges between countries which occurred in the past, for example with large hydropower production, from the 1950s between engineers of the former Soviet Union and China. Energy policy needs to have many elements, and all the options mentioned in box 4.1 have a role to play.

Western Region seen as key to increased energy production

Most evident to this proposed rapid and vast expansion of China's energy production is the importance of the Western Region. In short, "Rising demand for energy is a very significant factor in the economic development of the PRC, especially the Western Region" (ADB 2002, 147). The Western Region is intended to become an increasingly significant energy supplier.

The Western Region comprises the provinces of Sichuan, Guizhou, Yunnan, Shaanxi, Qinghai and Gansu; the autonomous regions of Tibet, Ningxia, Inner Mongolia, Guangxi and Xinjiang; the municipality of Chongqing. In 1999 the Western Region contained 28.8 percent of China's population, 61.9 percent of total land area, but accounted for only 15.8 percent of gross domestic product (ADB 2002).

The Western Region Development Strategy 2000–2020 was adopted by the national government in February 2000 and was a key component of the Tenth Five-Year Plan (2001–2005). Its stated aims are to combat poverty, industrialize the western provinces, including all mountain areas, and promote the transfer of science and technology from the centre to the periphery (ADB 2002). It is focused on conventional economic development. The strategy stresses the need for infrastructure investment in the middle and western provinces of China with special emphasis on transport, telecommunications, pipelines, electricity and the national power grid and water conservation. In particular, transport investment is expected to focus on better economic integration between western, central and eastern China, and also on improving economic linkages with Southeast Asia.

Energy exports from the Western Region to the Eastern Region are projected to quadruple between 2000–2020, with coal accounting for 91 percent of the increase. Electricity will be a much smaller, but still significant, component of the exports. After allowing for more than a doubling of electricity demand within the Western Region from 394 to 878 TWH, it is still projected that exportable electricity supply would increase from 102 to 365 TWH (ADB 2002,155).

The dual objectives of the Western Region Development Strategy are "development" (of the West) and "transfer" (to the East). An example of what is proposed is that authorities intend to be transmitting 8 gw of power per annum from Yunnan to Guangdong by 2015, derived from both coal-fired plants and hydropower from various sites.

As the data being produced by **SRDC-ERI** shows, the planned energy production and transfer from West to East is significant. Already onequarter of China's energy derived from coal and half from natural gas comes from the Western Region. These proportions are to be increased as policy-makers search for the energy believed required to sustain China's (primarily eastern and coastal) economic growth.

It is within this context that Yunnan hydropower production is being pushed along by national policy makers, local authorities, designers, construction groups, lenders and business entrepreneurs. The province already provides about 10 percent of China's hydropower but exploitable reserves are considered to be ten times larger than current generation. If this potential is exploited, Yunnan could eventually supply closer to 20 percent of national hydropower production, to be fed into national or regional grids. For example, Guangdong Province is now assigned to purchase power, mostly hydropower, from western provinces, namely Yunnan, Guizhou and Guangxi. Power purchase agreements have been signed to ensure power transfers during the implementation of the Eleventh Five-Year Plan (2006–2010).

In summary, China's economic reforms, coupled with the development/ transfer priority being attached to the Western Region, have catalyzed a substantial increase in the dam building aspirations of developers in southwest China. This is being enabled by wide-ranging reforms to the power industry, to which we now turn.

	2000	2005	2010	2015	2020
China					
Total (Mt, coal equivalent)	1092.7	1277.6	1481.1	1727.9	2016.4
Hydropower & nuclear power (тwн)	227.8	320.2	435.1	544.1	682.0
Hydropower & nuclear ⁸ (percentage)	20.8	25.1	29.4	31.5	33.8
Total production growth from 2000 (percentage)		16.9	35.5	58.1	84.5
Hydropower & nuclear growth from 2000 (percentage)		40.6	91.0	138.8	199.4
Western Region					
Western Region (Mt, coal equivalent)	286.4	392.7	539.0	696.0	889.7
Western Region hydro &- nuclear (Twh)	104.0	165.0	260.0	342.0	446.0
Hydropower & nuclear (percentage)	36.3	42.0	48.2	49.1	50.1
Total production growth from 2000 (percentage)		37.1	88.2	143.0	210.6
Hydropower & nuclear growth from 2000 (percentage)		58.7	150.0	228.8	328.8
Shares of primary energy sup	ply from	Western	Region		
Coal (percentage)	66.6	59.4	55.3	52.7	49.4
Oil (percentage)	13.8	12.7	11.8	11.9	12.
Gas (percentage)	6.2	12.1	14.0	14.0	12.
Hydro & nuclear (percentage)	13.3	15.3	17.9	17.9	18.
Renewable (percentage)	0.1	0.4	1.4	3.5	7.
	100	100	100	100	10
Projected electricity supply					
PRC	1233.1	1729.3	2292.4	2995.5	3822.
Western Region	281.1	495	693	956.3	1242.
Western Region (as percentage of PRC)	22.8	28.6	30.2	31.9	32.

Table 4.5 Projected supply of primary energy 2000–2020

SOURCE: Energy Research Institute data published by Asian Development Bank (2002 Extract from tables 7-7, 7-8, 7-9, 7-11).

	Coal (мt)	Oil (мt)	Gas (gl)	Hydro (тwн)	Total Power (тwн)
China	1.045	160	25.2	106.6	× /
China	1,045	160	23.2	196.6	1,239.3
Western Region	267	27.7	13.4	103.6	278.6
Yunnan	26.6	0	0.1	18.5	29.8
Western Region as percentage of China	25.6	17.3	53.2	52.7	22.5
Yunnan (as percentage of Western Region)	10.0	0.0	0.7	17.9	10.7
Yunnan (as percentage of China)	2.5	0.0	0.4	9.4	2.4

Table 4.6 Energy production 1999

SOURCE: Data in Asian Development Bank report analyzing the Western Region Development Strategy (ADB 2002: Extract from table 7-2).

China's energy industry reforms

China's energy industry reforms are the result of the government policy put in place to foster competition and marketization, via corporatization that, especially for the power generation companies, is almost indistinguishable from privatization. The formation of the State Power Corporation (spc) was the first main step. With registered capital of usD 20 billion, it was a giant monopoly, one of the hundred largest businesses in the world. By 2000 it was working as a consulting company in more than forty countries. At the time its break-up was announced in late 2002, spc had in the vicinity of 2 million employees, and owned 46 percent of the nation's electricity generation and 90 percent of the electricity supply assets (Alexanders Oil and Gas Connections 2003).

The start of the spc reorganization has involved separation of spc's actual and potential (such as the Nu River) generation and distribution assets and designation of eleven enterprises to "acquire" these assets (box 4.2). The next step involved creating a competitive market, which includes pooling and pricing reforms, plus grid creation. To keep oversight of the reform process, the State Electricity Regulation Commission (SERC) has been formed, responsible for making proposals on power pricing and issuing and managing power service licenses.

Business competition

Prior to the current reforms, large-scale hydropower development had already become characterized by complex ownership and financing arrangements. Examples from Huaneng and Three Gorges illustrate the scale of the business operations, diversity of funding sources and aspirations of their corporate leaders.

Since the major energy industry reforms were announced in late 2002 there has been a stampede by the big groups including the Three Gorges Development Group—to secure their assets, principally coal-related, and move to develop their new assets, including "rivers for hydro" in various types of partnership with local authorities. In the words of *Business Week*, "newly established power conglomerates are scrambling to construct generating plants across China" (2003). Enterpreneurial dam developers are in hot competition: for example, Huadian, Guodian, Datang and China Power Investment Company have, in partnership with Hong Kong's CLP Power Asia Limited, announced new investment of USD 4.89 billion to build thermal and hydropower plants in the southern region of Guangxi (*China Daily* 2003b).

Why the current scramble? The past increases in energy demand and projections for further huge requirements are acknowledged. State policy support and sector reform has also been mentioned. But the rush into hydropower is also being fuelled by the relative ease with which many social and environmental costs can be externalized from "return on investment" equations, and the competitive need for companies-in the new business operating environment-to retain market share and steadily expand generating capacity.9 While some in government, such as the chairman of the State Electricity Regulation Commission (SERC) are reported as having "hinted that the government is considering slowing down the building boom in power plants" and noting that government should have a clearer overall plan for power plant construction (People's Daily Online 2003d), thus far there is no evidence of either. The authority of the SERC is limited to promoting market competition, endeavouring to ensure transparency and supervising service licences. Decision-making about electricity prices and approving construction and expansion of power plants remains with the State Reform and Development Commission (SRDC).

Box 4.2 China energy industry reforms: Critical steps between 1996–2003

1996		Electric Power Law passed which required reforms, including the creation of separated power producers and retailers in a competitive market. The law also stipulated that power prices should reflect all production costs, profit, tax and contribute to transmission costs and situations where some subsidy may be necessary to ensure supply. Part of the rationale was to ensure that the industry would become attractive to non-state investors.
1997	Jan 16	Establishment of State Power Corporation (SPC) to represent the state as owner of government-owned assets. This occurred around the same time as the passage of the Electricity Law and the abolition of the Ministry of Electric Power, dividing its functions between existing agencies.
2002	Apr 11	Announcement by what is now the State Reform and Development Commission (SRDC) of next phase of energy industry reforms.
2002	Dec 29	End of spc monopoly with announcement that spc assets are to be acquired/transferred to five independent electricity generating, two transmission and four consultant/construction companies. The impending creation of an industry regulator was also signalled. Not all energy assets were included in this restructure. <i>Power generation companies</i>
		Huaneng, Datang, Huadian, Guodian, China Power
		Investment Company
		Distribution (grid) companies
		State Power Grid Company that controls the operation of five regional power grid companies in the North, Northeast, East, Central and Northwest.
		State Power Grid Company was also authorized to oversee the orderly transfer of five hundred power plants under the management of provincial power corporations as part of the reform commitment to separate generation from distribution (see below).
		Southern Power Grid Company which controls the operation of the Southern Power Grid formerly controlled by spc, plus the formerly Province-controlled Guangxi, Guizhou, Yunnan, Hainan and Guangdong grids.

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2003 Jul 31	Between 2011 and 2030, Southern Power Grid is priori- tizing hydropower development on the Nu, Lancang, Jinsha,Wu; and aiming to expand connections with sur- rounding grids (e.g. China's central and north, also the proposed Mekong region grid). <i>Consultant/construction companies</i> Hydraulic Power Designing Institute Electric Power Designing Institute China Water Conservancy and Hydropower Construction Group China Gezhouba Group <i>Regulator</i> State Electricity Regulatory Commission (SERC). SERC announces its intention to create six competitive
	regional power markets across China within three years in the East, North, Northeast, Central, Northwest and South.
Sep 3	<i>Example:</i> Signing of MoU to transfer power plants in Jiangsu Province to Guodian.
Sep 19	<i>Example:</i> Connection of the north and central China power grids (now world's largest). The grid spans 4,600 km across fourteen provinces and municipalities, with a combined installed capacity of 140 million kilowatts.
Sep 23	<i>Example:</i> Signing of MOU to transfer to state shares to Huaneng in thirteen power plants (total capacity 4,640 MW). Huaneng becomes major shareholder in twelve of them.
	y 2002, Alexanders Oil and Gas Connections 2003, <i>China Daily</i> online 2003c, 2003d, 2003e, Freshfields Bruckhaus Deringer 2003, 2003.

	Elevation (meters above mean sea level)	Elevation Watershed Average (meters area inflow above mean sea level)	Average inflow	Average inflow	Total storage	Installed capacity	Annual energy	Annual Inun-dated energy area	Locally displaced	Wall height	Status
Nu	E	km²	m³/sec- ond	mcm	mcm	MM	HMĐ	ha	No. of people	н	
Song Ta	1,950	103,500	1,200	I	6,312	6,200	17,870	312	3,633	307	Designed
Bin Zhong Luo 1,690	1,690	103,700	1,200	I	14	1,600	8,340	0	na	55	Designed
Ma Ji	1,570	106,100	1,270	I	4,696	4,200	18,970	1,654	19,830	300	Designed
Lu Ma Deng	1,325	107,200	1,330	ı	664	2,000	10,080	441	6,092	165	Designed
Fu Gong	1,200	107,500	1,340	ı	18	400	19,800	59	682	60	Designed
Bi Jiang	1,155	108,400	1,390	I	280	1,500	7,140	322	5,186	118	Designed
Ya Bi Luo	1,060	109,300	1,430	ı	344	1,800	9,060	178	3,982	133	Designed
Lu Shui	955	110,400	1,500	ı	1,288	2,400	13,740	395	6,190	175	Designed
Liu Ku	818	112,500	1,610	I	8	180	760	11	411	36	Site preparat-ion in 2003
Shi Tou Zhai	780	112,000	1,580	I	700	440	2,290	66	687	59	Designed
Sai Ge	730	114,000	1,700	ı	270	1,000	5,360	207	1,882	79	Designed
Yan Sang Shu	666	116,500	1,770	ı	391	1,000	6,200	286	2,470	84	Designed
Guang Po	609	124,400	1,890	ı	124	600	3,160	4	34	58	Designed
						23,320	122,770	3,934	51,079		

Table 4.7 Hydropower dam plans—Nu, Lancang and Jinsha rivers

71 ANU page 79

CHINA'S ENERGY REFORMS AND HYDROPOWER EXPANSION IN YUNNAN

"Downstream of China-Nu/Salween"	hina—Nu	//Salween"									
Ta Sarng	na	207,000	na	na	36,100	3,600	23,006	na	na	188	Building 2004+
Upper Salween	na	293,200	ı	118,600	21,000	4,540	29,271	na	na	168	Building 2007–12
Lower Salween	na	294,500	ı	119,200	245	792	5,422	na	na	49	Building 2007–12
Lancang											
Gonguoqiao	1,319	97,200	ı	31,060	510	750	4,060	343	4,596	130	Designed
Xiaowan	1,236	113,300	I	38,470	14,560	4,200	18,990	3,712	32,737	300	Building 2001–10
Manwan	994	114,500	I	38,790	920	1,500	7,805	415	3,513	126	Built 1986–96
Dachaoshan	895	121,000	I	42,260	890	1,350	7,021	826	6,100	118	Built 1996–2003
Nuozhadu	807	144,700	I	55,190	22,400	5,500	23,777	4,508	23,826	254	Designed
Jinghong	602	149,100	I	58,030	1,233	1,500	8,059	510	2,264	118	Building 2003–10
Ganlanba	533	151,800	ı	59,290	na	250	780	12	58	na	Designed
Mengsong	519	160,000	I	63,700	na	600	3,380	58	230	na	Designed
						15,650	73,872	10,384	73,324		
Jinsha											
Upper Hu Tiao Xia	1,950	na	na	na	18,345	2,800	10,523	10,413	100,000	216	Designed
Liang Jia Ren	1,810	na	na	na	43	4,000	16,314	2	10	99.5	Designed
Li Yuan	1,620	na	na	na	891	2,280	10,292	190	1,300	155	Designed
A hai	1,504	na	na	na	840	2,100	9,371	333	2,400	139	Designed
Jing An Qiao	1,410	na	na	na	663	2,500	11,411	140	2,000	156	Designed
Long Kai Kou	1,297	па	na	na	657	1,800	7,893	293	2,000	113	Designed

72 ANU page 80

Chin Ving Van			na	па	110,1		000%			140	120 Designed
Cuall Ling Lan	1,132	na	na	na	1,973	3,000	13,138	940	8,810	183	Designed
Wu Dong De	na	na	na	na	na	7,400	33,900	na	na	na	na
Bai He Tan	na	na	na	na	na	12,500	55,000	na	na	na	na
Xi Luo Du	610	454,000	na	na	12,960	12,600	57,600	8,933	50,000	na	Building 2004+
Xiang Jia Ba	380	458,000	na	na	5,060	6,000	29,300	na	118,000	na	Designed
						59,080	264,092	23,331	301,420		
NOTES: 1) Details of energy and displace installed capacity fi documents and me and McCormack (2 potential as part of Not all of the Jinsh Not all of the Jinsh are international riv (Choolit Vatcharasi on the Melvoror (1 a	of dams rer cd people; l om 1,500 A lia reports. 001); for Jir casc he full casc res flowing ers flowing thu and B ncoro) hut	nain subject t out also for ds ww to 2,000 w The foundau rsha, the Thre ade eg. Dacha in Yunnan" dh in other Mƙ abel 1999, an	o negotiati um height, a tw. The inft ons are: for ons are: for e. Gorges ar otoshan's out on the toorder skong regiot d two on th	on, redesit area to be ormation] Nu data, nd Huaner put can riss put can riss r sharing, i r sharing, i t chuirti	gn and vari inundated, has been pi the Huadia ug developn g developn and for a pc and for a pc s. Some dat	iation. Diff etc. For ex- leced toged in proposal ment compa ment compa and traver a for three (and or three seding 4) r	erent figure: cample, the (her from mu ; for Lancan my documer myyear to 7,(sing entirely salween (Nu al 2003). TH	s are used 1 developer o g, the publi tas. 2) Total 121 GWH/ye 321 GWH/ye 321 GWH/ye 321 GWH/ye 1 dams dow 1 dams dow	y sources for f Jinghong is es, including (shed work of energy data is energy data is energy data is energy data is energy data is energy data is energy data is for the source of the source of the source is for the source of the source is for the source of the source is for the source of the source of the source of the source of the plans by other	many vai seeking aj developer 2linston a intended aowan res ce. 4) Bot uded: Ta (uded: Ta (rentrie	NOTES: 1) Details of dams remain subject to negotiation, redesign and variation. Different figures are used by sources for many variables, especially total energy and displaced people; but also for dam height, area to be inundated, etc. For example, the developer of Jinghong is seeking approval to increase the installed capacity from 1,500 ww to 2,000 ww. The information has been pieced together from multiple sources, including developer proposals, researchers documents and media reports. The foundations are: for Nu data, the Huadian proposal; for Lancang, the published work of Plinston and He Daming (1999) and McCornneck (2001); for Jinsha, the Three Gorges and Huaneng development company documents. 2) Total energy data is intended to refer to hydropower potential as part of the full cascade eg. Dachaoshan's output can rise from about 5,900 ewH/year to 7,021 ewH/year once the Xiaowan reservoir is completed. 3) Not all of the Jinsha figure is "in Yunnan" due to border sharing, and for a period traversing entirely through Sichuan Province. 4) Both the Nu and Lancang are international rivers flowing into other Mekong region countries. Some data for three Solween (Nu) dams downstream is included: Ta Sarng within Myanmar Conolit Vatcharasinty and burst of another countries for mainstream dams on the Michaen on the Thai/Myanmar border (Daoilt Vatcharasinty and so plans by other countries for mainstream dams on the Michaen on the Hubbard for an environe of the are no plans by other countries for mainstream dams on the Michaen on the Hubbard for an environe of the are no plans by other countries for mainstream dams on the Michaen of a period traversing entirely 1003). There are no plans by other countries for mainstream dams on the Michaen of a period traversing entirely 2003).

Hydropower status of the "Three Rivers"

It is the Nu River dams that, at time of writing, are the most controversial both within and outside of China. Decisions about the future of the Nu are taking place now; the Lancang dams are being built; the planned Jinsha dams are extra dams on an already significantly modified Chinese river. Our scope is restricted to the Nu, Lancang and Jinsha rivers. These are only a part of the Yunnan transformation, and we stress that Yunnan needs to be seen as part of the larger Chinese picture.

Nu River

The future of the Nu River remains in the balance. In the last months of 2003 and early 2004 much information filtered into the public domain outlining the extensive hydropower development proposed for the Chinese section of this river which-upper, lower and middle-extends for 2,018 km. There are advanced plans for a cascade of up to 13 dams¹⁰ on the middle and lower Chinese reaches which, if built, would profoundly alter this presently undammed, almost pristine river. Some supporters of the dams are focused on local development needs, which they hope the dams will assist. Others are focused more on the energy production and income potential for other people and places. Opponents of the dam are doubtful about the need for such radical development and fear the irreversible changes that a cascade will have on the current, mostly undeveloped area. There are many different positions in the debate. The total installed capacity of these dams would be 23,320 мw. By 2004 a site office was operating, and road building had commenced to facilitate the construction of the Liu Ku dam.

There are also three dams being promoted for the lower section of the river downstream of China. The Ta Sarng site is within Myanmar and the other two are planned for further downstream where the Nu/Salween forms the border between Myanmar and Thailand (For a review featuring concerns, see Daniel 2003).¹¹

The chief promoter of the proposed Nu River development in Yunnan is the China Huadian Corporation, a wholly state-owned enterprise, and the controlling shareholder of the Hong Kong-listed Huadian Power International Corporation Limited. It is one of the "big five" power generation companies receiving assets from 2003 onwards, which were previously owned by the State Power Corporation (SPC). The right to develop the Nu River is seen by Huadian as one of the transferred assets now in their "portfolio."

Pre-2003 the Chinese central government had funded preparatory planning and design work by the Kunming Hydropower Design and Planning Institute. But the real action took place after the major energy industry reforms were announced in December 2002. By mid June 2003, Huadian was able to announce the formation of the construction entity, Yunnan Huadian Hydropower Development Company, with registered start-up capital of 200 million yuan (approx. USD 24 million). At this time, the shares were split between China Huadian Corporation (51 percent), Yunnan Development Investment Co (20 percent), Yunnan Electricity Group's Hydropower Construction Co (19 percent) and the Yunnan Nu River Electricity Group (10 percent).

A development proposal was submitted to the State Reform and Development Commission (srdc) in Beijing. srdc convened a meeting, attended by about 140 people from various ministries and elsewhere, which reviewed the proposal and approved it, in principle, in mid August 2003. This was just prior to the new Chinese Environment Impact Assessment (EIA) law taking effect on September 1. Since then, the proponents have been vigorously promoting the proposal.

The Beijing-based State Environment Protection Administration (SEPA) convened an expert panel, reviewed the proposal in more detail, and in early September 2003 announced that it had serious reservations related to: the world class canyon which would be irreversibly altered, threats to the largely unexplored rich biodiversity, the loss of an extremely valuable wild rice gene pool, and geological instability which raised serious safety concerns. More general concerns related to the expected cultural disruption, a lack of faith that promised poverty alleviation would necessarily result from dam construction, and disappointment that alternatives to hydropower, such as ecotourism, are not being genuinely considered. Nevertheless, the Yunnan and prefecture governments were keen to proceed and attempted to counter the SEPA opposition via a provincially convened "Yunnan experts" meeting in September 2003. Given the pre-meeting attendee selection process and the general pressure being brought to bear, it was unsurprising when this group found that concerns were manageable and damming should proceed. SEPA then had further field visits While being courted by Yunnan provincial and prefecture officials. Further expert meetings took place in Beijing and Yunnan, prior to a joint meeting held in Kunming, October 20–21, 2003. In the week before this meeting, Yunnan newspapers were used to actively promote the scheme, putting additional pressure on the SEPA opposers.

As the plans entered the public domain, broader civil society—beyond the usual, officials, business operatives and experts—became very involved. For example, in Beijing, a public petition calling for the protection of the Nu was organized in October 2003 by the China Environmental Culture Association. This was signed by sixty-two people—including prominent artists, journalists, environmentalists and well-known public figures —and widely circulated. This was a small, early sign of a resistance that has since grown. In November 2003 in Kunming, the nongovernmental organization (NGO) Green Watershed¹² used their regular Environment Dialogue forum to share information and stimulate wider public awareness and debate. Discussions of alternative development pathways are also being held within the Nujiang Lisu Nationality Autonomous Prefecture. In December 2003 a forty-five-minute television documentary was prepared by Central China Television (CCTV) which presented both sides of the debate. This documentary was shown nationally three times, including on Saturday and Sunday morning prime time in early March 2004. Universities in Chongqing and Kunming also became involved in "Save the Nu" campaigning. In sum, the case attracted significant media attention, fostering a much wider public debate than the proponents had ever envisaged.

Meanwhile in Bangkok, the Chinese Ambassador was petitioned on December 16, 2003 by more than eighty environmental, human rights and ethnic groups from Thailand and Myanmar voicing their concerns and calling for the inclusion of downstream country perspectives in the decision-making process. This effort was coordinated by the South East Asia Rivers Network (SEARIN), a regional NGO based in Chiang Mai. A wider international petition was organized in January 2004, coordinated by the International Rivers Network (IRN), an international NGO based in California. Learning exchanges between Thai, Burmese and Chinese NGOS have also taken place.

The various spheres of Chinese government—with the exception of some of the perspectives convened by SEPA—and the developers remain firmly committed to the cascade, with only peripheral changes to the July 2003 plan being countenanced. However, it is now clear to the developer that more detailed impact assessment work will need to be done, and resettlement plans prepared and made public. This already represents a considerable achievement by SEPA and others who are yet to be convinced of the wisdom of the proposal. Resistance to the plan, the decision-making rationale and the original governance process has been surprisingly strong and has rapidly gained momentum.

In April 2004, the Premier Wen Jiabao chose to intervene and suspend the plans for the Nu development until such time as a proper impact assessment process was undertaken. This was a remarkable intervention, and was claimed as a great victory by those committed to more informed and transparent governance. Since then, the optimism of opponents has been dampened by the impossibility of obtaining access to the impact assessment documentation. This is considered top secret and is unavailable for public scrutiny, even to an official UNESCO World Heritage site inspection team that went to the province in early 2006. At the time of writing, the development of hydropower in the Nu remains the dominant scenario, but there may be substantial changes made to the original development plan. The governance process remains unclear, with many actors—including various Chinese government ministries—unclear of their role, and Chinese civil society actors frustrated by the unwillingness of authorities to share information in the public domain.

Lancang River

The Lancang River flows for nearly 800 km in Tibet before entering Yunnan where it flows for another 1,247 km. The Lancang cascade is a huge project designed to take advantage of an 800 m drop over a 750 km river section in the middle and lower sections of the Yunnan stretch (Plinston and He Daming 1999). For dam builders this part of the river has been described as a "rich, rare hydropower mine for its prominent natural advantages in abundant and well-distributed runoff, large drops and less flooding losses of the reservoirs" (ICOLD 2001). The cascade is no longer speculation, but rather a fact. Regardless of whether all eight proposed dams are built, Manwan and Dachoashan are already constructed, Xiaowan is under construction and Jinghong is soon to commence.

Proponents argue that the dams have the potential to offer flood control, more assured dry-season flows, increased navigation options, reduced saline intrusion and create extra irrigation opportunities for downstream countries like Thailand. In addition to the rapidly expanding grid system within China, the electricity produced will be able to enter the Mekong region electricity grid.¹³ A particularly sanguine view is that "upstream development of hydropower will not sharpen the conflict of multi-objective competitive uses and will give benefits to downstream for the development of irrigation, navigation, and hydropower, and for flooding control" (Plinston and He Daming 1999). However, the conclusion that the cascade will not "sharpen the conflict" between upstream and downstream users is wrong. For example, there was significant tension in the first months of 2004 in northern Thailand's river-dependent communities who are concerned at the very low flows in the river, and apparent fluctuations. At that time, there was a drought and so natural flows were already low, but the Thais were also unsure as to what effect the river flow is being altered by China's upstream dam managers. More information exchange is essential if cross border understanding and trust is to be built.

The first dam constructed on the Lancang mainstream was Manwan, finished in 1996. As of October 2003, the second dam, Dachaoshan, is in full operation, with each of its six 225 MW generators now installed. The third dam being constructed is Xiaowan, seen as an iconic project for the Western Region Development Strategy. The power production from Xiaowan is considered an essential element of the West to East energy transfer. It is the second largest dam in China after Three Gorges. When completed and filled, scheduled for 2013, its reservoir will stretch back 169 km from its 292 m high wall.

Huaneng is the dominant actor, having been granted the majority of the development rights on the Lancang, and the upper and middle reaches of the Jinsha. Huaneng is already operating Manwan and Dachoashan; Xiaowan will also be under Huaneng's management.

Box 4.3 Huaneng Power International (HPI)

In November 2001, Huaneng Power International (HPI)—at the time China's largest independent power generator—announced it intended to list on China's domestic sharemarket. The parent Huaneng International Power Development Company had already been incorporated as a Sinoforeign joint venture in 1985. After incorporation, the HPI offspring had been listed on the New York exchange in 1994, followed by a listing on the Hong Kong exchange in 1998. In July 2003, the parent HIPDC held 43 percent of the shares. As of September 12, 2003, the share price had increased to 115 percent from the previous year. A valuation (02/01/2004) listed HPI as the thirty-eighth largest company on the Hong Kong exchange, with its H-class shares being valued at HKD 20 billion. Li Xioapeng, chairman of the Huaneng Group, wants Huaneng to be the world's leading electricity producer, aiming to double its generating capacity by 2010 to 60,000 megawatts, and make it into the Fortune 500 list of the world's largest companies (*China Daily* 2003c).

The dominant developing entity for the remainder of the construction is the Yunnan Huaneng Lancangjiang Hydropower Company (YHLHC) Limited. In February 2003, the shareholders were Huaneng (56 percent), Yunnan Development Investment Company (31.4 percent) and Yunnan Hongta Investment (12.4 percent).¹⁴ The predecessor to YHLHC was Yunnan Lancang River Hydropower Development Company Limited, created in February 2001. The original shareholders were State Power Corporation (27 percent),¹⁵ Yunnan Electric Power Group Company Limited (29 percent), Yunnan Provincial Development & Investment Company Limited (24 percent) and Yunnan Hongta Investment 20 percent. As the numbers show, the shareholding has changed, with Huaneng now the major player.

To fund Xiaowan's construction, in February 2003 YHLHC borrowed 25 billion yuan (USD 3 billion) from several banks: China Development Bank 15 billion yuan (USD 1.8 billion) (CDB 2003), Construction Bank of China six billion yuan (USD 725.5 million), and Industrial & Commercial Bank of China four billion yuan (USD 483.6 million). Effectively this fully funds Xiaowan as the total investment is expected to be 27.7 billion yuan (USD 3.3 billion) (*China West News* 2003b).

The next dam is Jinghong, which commenced construction in 2003, albeit without yet having been fully approved by state authorities. Both Chinese and Thai officials and experts have been involved in all stages of planning since the early 1990s. It is expected to be built by YHLHC at a cost of about USD 1.2 billion and be fully operational within seven years. The Electricity Generating Authority of Thailand (EGAT) has already entered into agreements to purchase power from the station. The Jinghong dam is

yet to receive official approval to do anything more than site preparation (road building, communications establishment, water and electricity supply), but regardless it has already commenced dam construction earthworks.

Gonguoqiao, Nuozhadu, Ganlanba and Mengsong are designed but yet to commence—the last three would also be Huaneng-built dams. The Gonguoqiao, or Dali, dam is particularly interesting. As the most upstream dam in the cascade, its synchronous operation with those downstream is obviously important. A private company believed it had already negotiated prior development rights that were contested by Huaneng. The dispute highlights the problems that could arise on any river if there are different ownership/operation regimes in place, each seeking to maximize their revenue in the new competitive era.

While the hydropower potential is unquestioned, there also huge concerns about the impacts of the dams on riverine ecosystems and local livelihoods (Roberts 2001, IRN 2002). There are major worries about altering the natural regime of the river in a way which will increase flow fluctuations, increase average downstream dry-season flows and decrease the normal flow downstream of nutritious sediments crucial for fisheries and agriculture production. When the cascade is completed, it has been suggested that dry season flows may increase downstream by up to 90 percent at Chiang Saen, 80 percent in Luang Prabang, 70 percent in Vientiane and more than 1,600 km from the cascade, 40 percent at Mukdahan. Predicting impacts in a complex system is difficult, but obviously this will flood large reaches of river rapids, integral to fisheries and radically alter the normal regime of seasonally flooded forests (Blake 2001, TERRA 2002). Large amounts of sediment will be trapped by the new dams, depriving the lower Mekong of its normal load. Negative impacts may also include increased downstream erosion, serious disturbance to fisheries ecology and the devastation of annual riverbank gardening enterprises. Those who stand to lose out include millions of people downstream— mostly beyond the Chinese border—reliant on fishing and riverbank farming (box 4.4).

While an international river, inter-state actors of many different types were unable to ensure anything approaching a thorough discussion of the project alternatives and likely impacts. It was linkages between Chinese and international academics, particularly from the mid 1990s (Chapman and He Daming 1996), which first brought project information into the wider public arena, although the rosiness of the possible scenarios they presented were greeted with wry suspicion by some (Hinton 2000). An International Rivers Symposium in Kunming in 1999 also aided an exchange of perspectives (He Daming et al. 2001). An ADB project on the sustainable development of the Yunnan part of the Lancang-Mekong Basin was also provocative and put new information into the public domain (Landcare Research New Zealand 2000).

Transboundary Environment Assessment (EA) protocols, and the UN Convention on the Law of the Non-Navigational Uses of International Watercourses have been ineffective in either fostering or forcing more extensive cooperation or dialogue. Thus far, other intergovernment forums such as the ASEAN-China dialogues have also ignored the issue. The concerns of downstream nations do not seem to have been taken into account but "this is no surprise given the reticence of any of the downstream government elites to make any serious representations to their more powerful upstream neighbour, and in several cases, increasingly important patron" (Dore 2003). Moreover, in the case of Thailand, EGAT and government officials have been participating in at least a part of the cascade development for about a decade, signing various Memorandums of Understanding (Mous).

For related reasons, the regional member states have rendered the Mekong River Commission (MRC) relatively impotent as an intergovernment forum for addressing cross border disputes. However, it should be acknowledged that in the Kristensen era of 1999–2003 when he was head of the MRC, the secretariat tried harder than previously, for example via carefully worded indirect appeals through the international and regional media. Since 2004 there is no criticism of China permitted to emerge from the MRC secretariat, with the strategy shifted towards more constructive engagement, and downplaying of development risks. Others have also noted the general silence of the neighbouring state leaders in raising any objections to China's Lancang dam building program. In the case of Cambodia, with China now the major financial patron of the country, Prime Minister Hun Sen has specifically banned any criticism or public deliberation about the risks to the Great Lake (Tonle Sap).

Challenging the rationale and speculating about the possible negative consequences have been left to Thai, Cambodian and international NGOS and policy research groups. This has greatly enhanced knowledge and awareness, but has had no substantive impact on the implementation of the scheme.

The spokesperson from China's Ministry of Foreign Affairs, Liu Lichao, and the Deputy Governor of Yunnan Province, Bai Enpei, have both made public statements in response to the downstream concerns. They have reiterated China's position is to avoid harm to downstream countries in front of the friendship tie with neighbouring Southeast Asian countries. However, the statements have as yet not been followed by mechanisms to ensure full information exchange, and joint analysis of how the dams might best be managed so as to avoid harmful impacts. China does continue to engage as a dialogue partner with MRC and the annual meeting agenda is becoming increasingly substantive, after many years of discussing only peripheral issues.

Box 4.4 Fish and Cambodia's Tonle Sap Lake

There is a rich diversity of fish in the Mekong system. While the taxonomy is still being sorted out, most experts agree that there are more than a thousand freshwater species. Fisheries are vital to the livelihoods of most of the 12 million rural households in the lower Mekong (MRC 2003). Current estimates are that almost two million tonnes are harvested each year from the Lancang/Mekong fishery-1.75 million tonnes from the capture fisheries valued at USD 1.45 billion, plus another 250,000 tonnes from aquaculture (MRC 2002). It is assumed the dam cascade will harm the fishery due to the new flow regime, migration disruption, and temperature and sediment load changes. The Tonle Sap Lake (TSL) area includes the largest freshwater lake in Southeast Asia. The functioning of this unique hydrological and ecological system is critical to the fisheries and rice fields production-and therefore the livelihoods and economy-of Cambodia and southern Vietnam. The area also has other ecological values that are deemed to be of national, regional and international importance. The depth varies from 1 to 2 meters in the dry season to 9 to 11 meters in the flood and its surface area varies from 250,000 to 300,000 hectares in the dry to 900,000 to 1,600,000 hectares depending on the extent of the wet season. At high water level the TSL covers up to about seven percent of the area of Cambodia. The lake is connected to the Mekong River at Phnom Penh by the Tonle Sap River. In the dry season the Tonle Sap River empties into the Mekong River, whereas in the wet season the river reverses direction and flows back towards the lake. More than 60 percent of the floodwater of the TSL comes from the Mekong River, the remainder from the catchment areas of the lake. At full flood the TSL temporarily stores about 72 billion m³ of water, which equates to 16 percent of the average annual discharge of the Mekong River (MRC et al. 1998). The present annual fish catch from TSL is estimated at 235,000 tonnes, depending on the season (van Zalinge et al. 2001).

The Lancang/Mekong provides 70 percent of the sediment load received by the TSL. The closure of the Manwan dam in 1993 halved the sediment load in the Mekong River water at Chiang Saen in northern Thailand. It is uncertain as to the extent to which sediment loads will be further reduced when Xiaowan and others in the cascade are completed, and how far downstream these effects will be measured. The relationship between source of sediment and nutrient availability is also unclear. However, the researchers producing this data are convinced of the threat. They summarize: "regional developments utilising the Mekong water, such as extensive damming of tributaries and the main river (in China), as well as irrigation, may lead to lower downstream flood levels and extensive trapping of sediments, and thereby have a negative effect on the fertility of the Tonle Sap system, which appears to depend on high flood levels with a high sediment load" (Sarkkula et al. 2003, 45).

Jinsha River

The Jinsha is the largest river in Yunnan and refers to a stretch of about 2,300 km from Yushu in Qinghai Province to Yibing in Sichuan Province. More loosely, it refers to the Yangtze upstream of the Three Gorges Dam project. The upper Jinsha refers to the 994 km reach from Yushu down to Shigu in Yunnan's Lijiang Prefecture. The last 360 km are within Yunnan. Before the famous first bend of the Yangtze¹⁶ at Shigu the river heads south in parallel with the Nu and the Lancang, thereafter it winds its way generally eastwards, splitting China in two between "the wheat-growing North and the rice-growing South" (Winchester 1996). There are no serious plans for hydropower in the upper Jinsha but plans for the middle and lower reaches have been worked up over the past ten years.

Box 4.5 Financing the Three Gorges project

The Three Gorges project is a flagship, national project costing USD 22 billion. The China Yangtze Three Gorges Project Development Corporation (CYTGPDC) is responsible for the construction phase, which began in 1994 and is scheduled for completion in 2021. Finance has been found from a range of sources. In 1992 the Beijing government imposed a levy on power producers across the country of between 0.004-0.007 yuan per kwh. The project was also granted the revenues from the Gezhouba power plant. Over an extended period, China Development Bank has thus far contributed USD 3.6 billion. With rising confidence in the project over time, the managers have been able to raise USD 2.3 billion from bond issues on the domestic market for periods of fifteen, twenty and thirty years. A further USD 1.3 billion has been borrowed from commercial banks including the China Construction Bank, the Industrial and Commercial Bank of China, and the Bank of Communications (Beijing Review 2003a). The managers are confident that future funds will be found as required, with all options-domestic or international-open to consideration.

Not content with waiting to finish this gigantic project before starting any other, CTGPC has already announced plans to build four new hydropower plants further upstream on the Jinsha that will provide twice as much generating capacity as the existing Three Gorges. To manage power generation, sales and management, the China Yangtze Electric Power Corporation (CYEPC) has been created. This entity was gifted assets of the aforementioned Gezhouba to aid in its start-up. It obtained permission from the government's corporate regulator to list on the domestic stock market in November 2003. 29.6 percent of the company was sold with the share price rising 44 percent on the first day from the initial offering price. The offering was heavily oversubscribed and raised USD 1.2 billion. From Shigu to the junction with the Yalong River is the 563 km middle Jinsha, most of which runs through northwestern Yunnan Province. There are major development plans for this stretch, with eight dams proposed. Huaneng is the main player, having effectively been allocated the concession for this section of the river, which is considered ideal for hydropower development. They are intending to develop seven of the proposed dams. An eighth is planned by the private company Huari, which had commenced negotiating with Lijiang prefecture and Yunnan provincial governments prior to the sPC break-up and asset distribution.

The lower Jinsha runs for 768 km to Yibing. Most of this section forms the border between Sichuan Province and Yunnan Province. A further four dams are planned for the lower Jinsha by the China Yangtze Three Gorges Project Development Corporation (CYTGPDC). These huge stations are reportedly planned to have an installed capacity 38,500 Mw, which would be twice as much as the existing Three Gorges project (China West News 2003a). So, it would seem that there will be one river with three different owners, potentially making flow management more complex.

Issues

Particular dam projects in Yunnan appear to have taken on a life of their own, well beyond the visions/strategies emanating directly from the Beijing or Yunnan governments. The momentum now acquired makes it difficult to modify the development agenda, partly because government is now "less empowered" and/or compromised by its linkages with private investment. The lines between public and private have become extremely blurred, whether via formal or informal public-private partnerships. New forces for development are pushing projects, such as: international financiers and the increasingly empowered natural-assets rich state-controlled power companies. The political economy has shifted. Formal state policy and planning may no longer be the key driver as capitalist forces have been substantially unleashed. In such a situation, the regulatory role played by state and civil society becomes critical.

Consider the following statement: "In the view of some experts, repetitive construction is a natural problem occurring in the development of a market economy, so it should be dealt with by the market itself, rather than through administrative interference such as loan suspensions and banning projects" (Feng 2003). While made with particular reference to the electrolytic aluminium and iron and steel industries, reflect for a moment on its relevance to the hydropower industry. Imagine the consequences of unrestrained, over-zealous "repetitive construction" in the hydropower industry. Imperfect markets can be wasteful and destructive.

Investment driven by competition, supported by easily accessible finance and almost free access to public land and water assets may not yield net public benefit (regardless of how it is defined). It would seem that there is a dangerous brew of unrestrained competition policy, confusion about the regulatory role of the state, freely available investment funds and easy access to rivers that could lead to unnecessary and irreversible damage to ecosystems, natural and cultural heritage and local livelihoods. Many within China are concerned about this current headlong pursuit of hydropower development. Other values are being discussed, other decision-making processes suggested, and the sensibility of intense competition between energy business giants is being challenged.

Several key questions require revisiting:17

- What type of development is preferred? This strikes at the heart of development directions—the "conventional" economic development of modernity, or more sustainability-oriented conceptions where different values are prized? While pursuing economic growth for job creation and poverty reduction is still paramount, the "New and Scientific Concept of Development" being actively promoted by President Hu Jintao explicitly acknowledges other goals—human development, more efficient resource use and less pollution (*China Daily* 2004a). Within this new context a review of national energy policy, including the hydropower component, would be appropriate.
- How are development goals to be achieved? This is essentially about modalities and roles that should be taken by the state, business and general citizens. The current phenomenon where capitalist entities are assuming monopoly control over state-owned natural resources requires rapid review and adjustment. More detailed analysis is required of the impacts of China's energy reform policies and the related surge for substantial Yunnan hydropower expansion. There seem to be many risks associated with these recent policy changes. There are serious concerns about the impact of the policies that have led to the current competition between the large energy consortiums. It is not simply a case of healthy competition between business competitors within a framework which guarantees overall public benefit. Water resources are being monopolized by the large companies via the partnerships being negotiated with various national and local authorities. The wisdom of policy that permits this degree of control and exploitation by profit-driven entities is now being challenged.
- How are decisions about setting and striving for these goals to be made? This is about the concept of governance which "encompasses the complex and open network of authorities by which the life

of society—its institutions, bodies, souls, canons, knowledge, news—is monitored and managed"¹⁸ (Lambropoulos, 1996). When thinking about the directions taken by society, the governance processes by which we deal with conflict are what really matter. Are they adequate?

Hydropower development is a sensitive issue, not just in China, but also throughout the Mekong region. Numerous projects have become the subject of national, and in some cases regional and international controversies. Examples include: Vietnam's Se San, Sre Pok and Son La dams; Lao PDR's Theun Hinboun and Nam Theun 2 dams; Thailand's Pak Mun Dam; the Yunnan dams, and those further downstream on the Nu/Salween into Myanmar. In the Mekong region, as elsewhere, it seems that many costs of hydropower development are ignored or excluded from analysis and debate.

Advocates of hydropower tout its positive features: renewable energy, pollution-free, relatively low generating cost, flood reducing, navigation improving and increased irrigation opportunities. However, an assessment of large dams by the World Commission on Dams found that performance is very variable, with many dams falling short of economic expectations and most having large impacts, more negative than positive, on rivers, watersheds and aquatic ecosystems. They also found that resettlement and compensation schemes had often been inadequate, impoverishing millions of people. Moreover, they noted that "Since the environmental and social costs of large dams have been poorly accounted for in economic terms, the true profitability of these schemes remains elusive" (wcd 2000, xxxi).

In China and the other Mekong countries, the large dam paradigm remains a respected pillar of the energy industry and key offices within government. New construction is deemed essential to meet national and regional energy demands. Nevertheless, there is a series of key issues that have emerged around the world, which should also be considered by Mekong region decision-makers (box 4.6). There was an initial expectation world wide that Impact Assessment (IA) would be a key mechanism to solve development project problems and address many of these issues. However, as practiced, it has not met expectations.

Hydropower governance should be inherently inter-disciplinary and perspectives from the social and physical sciences, government and civil societies should all have a place. China's highest political leadership has endorsed more participatory forms of governance (*China Daily* 2004b). Therefore it would seem that a necessary national review of hydropower governance, presently rooted in a closed rather than open network, while difficult, is politically possible.

Box 4.6 Central issues in the dams debate: Past and present

- *Performance: costs and benefits*—much depends on how completely costs are internalized, and who bears particular costs compared to how the benefits are shared.
- *Environmental impacts and sustainability*—fundamental controversy centers on how environmental considerations are valued against immediate human development needs.
- *Social impacts and equity*—much concern about the basis on which trade-offs, such as potential benefits to many at the cost of hardship for a few, are invoked and decided.
- *Economics and finance*—controversy also surrounds the limits and the ability of methods for economic assessment to fully capture and reflect the various social and environmental impacts and values.
- *Governance and participation*—at the heart of debate is the degree of involvement of affected people and wider groups of stakeholders in needs assessment and project-level decision-making.
- *Wider development impact of dams*—controversial issues go beyond the impact of the project itself and touch upon wider regional or national development choices.
- *Alternatives to dams*—are alternatives to large dams genuinely considered?
- *Cross-cutting issues*—which actors are the most powerful and most influential in decision-making processes? What and whose rights are prioritized?

SOURCE: Dams and Development (wcd 2000)

Environmental Impact Assessment (EIA) is only one component of governance, but due to the attention it receives, for good reasons, some comment is required here. There are standard issues raised in criticism of EIA, as it is usually undertaken. Most EIA tends to focus on individual projects and is therefore relatively narrow in its scope. Impact zone analyses often stop at national borders.¹⁹ EIA often occurs at a relatively late stage in the decision-making process, when choice of alternatives has already been limited and significant project investment has taken place. EIA often occurs when there have already been significant positions taken in terms of project advocacy or opposition. EIA often occurs after political decisions have already been taken to proceed. The project-EIA then becomes an exercise in ameliorating negative impacts rather than an exploration of possibly more suitable alternatives. Moreover, "environment" is used in a more and less encompassing way in different countries—sometimes excluding social and economic issues, sometimes including one or other of these realms. These standard criticisms resonate when reflecting on the current EIA process for the Nu River development. There have been Chinese regulations about environmental protection since the late 1970s. A framework has evolved, the latest step being the law on EIA, which came into effect on September 1, 2003. Effort has also been put into Environmental Impact Assessment (EIA) by other Mekong region countries, with the exception of Myanmar.

The overarching term of Impact Assessment (IA) is conceptually preferable, as it reduces the likelihood of externalising important factors. IA may involve evaluation of economic, social, cultural, political, environmental/biophysical/ecological, transboundary and cumulative impacts. But key to being truly useful is that IA occurs before final decision-making, and at a time when alternative options can be genuinely considered.

A suggestion voiced by experts attending the ground-breaking January 2004 Beijing hydropower forum was that "like everything else, hydroelectric plants and dams have their pros and cons...only when the comprehensive impact in economic, social and cultural terms is calculated objectively can assessment be made" (Chen Hong 2004). This ideal has not yet been evident in Yunnan's massive hydropower expansion push. Neither has it been common in other parts of the Mekong region. A few examples will suffice to show that IA needs to be more rigorous.

Economic impacts of Yunnan's hydropower development are unclear and may have been substantially overestimated by information used in decision-making. The useful life of the dams may be much less than has been (presumably) expected and factored into economic calculations. While estimated construction and operating costs per unit of power produced may be attractive, sedimentation inflows into the first-completed Manwan dam are much higher than anticipated (Plinston and He Daming 2000). There are now concerns that without drastic corrective landcare measures, it may only be able to function as a power-producer for less than twenty years (Roberts 2001,150). Without the upstream construction of the sediment-trapping Xiaowan, the Manwan dam would have a very brief working life. The economics of the Yunnan dams need to be properly evaluated, and that evaluation widely shared.

Cross border social and environmental impacts in downstream Myanmar, Lao PDR, Thailand, Cambodia and Vietnam have yet to be factored into China's plans. Cross border cooperation protocols for dam operation will be necessary for ecological damage to be minimized. Almost inevitably this would require energy production to be less than the pure economic optimum. How will this be negotiated?

One new approach has been presented in the report by the Commissioners of the World Commission on Dams (wcD) which they released at the end of the process (wcD 2000, Dubash et al. 2001). The wcD was a multi-stakeholder dialogue process that heard many different opinions. Ultimately, the Commissioners wrote their own opinion and have offered it as their contribution to the large dams debate and to those with responsibility for influencing or making large dam decisions (box 4.7).

Box 4.7 A new framework for decision-making on large dams

The World Commission on Dams (wcD) process and the report are continuing to make a significant contribution to worldwide large dams debates. A key conclusion of the Commissioners was that it is imperative "to bring new voices, perspectives and criteria into decision-making" (wcD 2000,197), hence their advocacy for a process which "gives all key stakeholders a voice and a full opportunity to participate in decision-making, seeks the broadest reasonable consensus, and is transparent in the criteria used for reaching a decision" (ibid., 209).

The Commissioners advocated, as a starting point, clarifying the rights context by undertaking a transparent assessment of the constitutional, customary, international, human, ecological, etc. rights held by interested and affected parties. They pointed out that this is best undertaken in tandem with a substantial assessment of the risks borne voluntarily by "risk takers" and involuntarily by "risk bearers." They proposed a decision-making framework which pays close attention to the following priority areas:

- *Gaining public acceptance* which advocates genuinely participatory decision-making processes
- *Comprehensive options assessment* which advocates genuine consideration of alternatives, rather than just focusing on impact assessment and amelioration/mitigation of negatives
- *Addressing existing dams* acknowledging that there are many decisions which have to be made about managing existing dams
- *Sustaining rivers and livelihoods* is primarily concerned with protecting ecosystems
- *Recognizing entitlements and sharing benefits* is primarily concerned with human justice
- *Ensuring compliance* concentrates on checking that all commitments made in negotiations are subsequently adhered to
- *Sharing rivers for peace, development and security* is endeavoring to see that transboundary, crossborder or "between country" issues are acknowledged, recognising that all riparian states and their peoples may be stakeholders.

SOURCE: Dams and Development (wcd 2000)

The wcD framework is a useful guide increasingly being considered by different groups within China. Translation and dissemination of the wcD report is ensuring that the issues raised in the wcD process are being more widely discussed. This is a positive step forward, and could greatly aid any review of existing Chinese dam decision-making processes.

The rapid Yunnan hydropower expansion is already having a major impact on the national and provincial economy, the finance sector, the rivers and the people of the province. A detailed review and debate is urgently needed of the rationale, the processes, the options and the implications for the entire Mekong region.

Recommendations

First order—China Energy Policy and Energy Development Governance

There are two key messages this chapter seeks to deliver. First, there is a need for China to revisit the energy policy, including the hydropower component, in the light of the new direction signalled in the New and Scientific Development Concept announced in 2003 by China's political leadership, and reinforced by President Hu Jintao at the Tenth National People's Congress (NPC) meeting in March 2004. Second, there is a need to overhaul energy development governance processes including: option formulation, debate, evaluation, negotiation and monitoring. The approvals and impact assessment processes are key areas requiring strengthening.

Second order—Yunnan Hydropower Governance

Current controversy over proposed Nu River development provides opportunity to enhance the quality of Yunnan hydropower governance. The following Nu assessments would, if undertaken and widely shared, contribute sorely needed new elements to China and Mekong region governance forums. Similar analyses on the Lancang and Jinsha would also be beneficial.

Decision-making process assessment

It is nothing new to note that IA processes should contribute to decisionmaking and approvals processes, rather than follow afterwards as a "rubber stamp" to legitimize a decision already taken, perhaps making minor changes to implementation plans. The influence exerted when selecting and using "expert panels" also needs examination. Possibilities for more participatory, informed and informing processes should also be explored. Closed processes that have to be painstakingly prised open are surely not the best way to go. Detailed analysis of the current Nu development decision-making process would be instructive.

Political economy assessment

Further clarification of the substantial shift in the political economy of Yunnan hydropower is required. Research should particularly focus on the relative power relationships between and within states; and between states, business and civil society. Production and public debate of this analysis is necessary for more informed and equitable and decision-making.

Economic assessment

The economics of Yunnan dams need proper evaluation from different perspectives, but in a way which takes account of the reality of the new and fierce competition between developers, and improves upon past analytical approaches which have regularly externalized many costs and benefits, and hidden or ignored particular winners and losers.

Social/cultural impact assessment

Social and cultural impact assessment is not common in China or the rest of the Mekong region, but has been done recently (albeit only retrospectively) for Manwan dam. Entrenching this type of analysis before committing to particular development pathways would be a step forward.

Ecological/natural heritage risk assessment

There are conflicting arguments presented by Yunnan dam proponents and critics about the risks to ecosystems and the natural heritage of affected areas. Clarification of the risks is required.

Transboundary, cumulative and multiplier effects assessment

More consideration needs to be given to transboundary effects. Impact assessment should not stop at national borders. Consideration should also be given to cumulative and multiplier effects.

Notes

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The opinions expressed in this report are those of the authors who alone are responsible for errors that remain. The chapter does not necessarily represent the views of SIDA OF SENSA. Our purpose is to provide a brief update on happenings in Yunnan, within the wider context of China's energy policy, energy industry reforms and changing political economy.

1 Globalization is used here in the sense of a compression of space and time in a new era of interconnectedness, where there is less local control (Giddens 1992).

2 The method of reporting foreign direct investment (FDI) still differs between countries and organizations. According to Dunning (1988) FDI comprises activities controlled or organized by firms (or groups of firms) outside of the nation in which they are headquartered and the principal decision-makers are located. When reporting foreign investment, Asian Development Bank (ADB) datasets separate direct investment (what Dunning calls FDI) and portfolio investment. This is not and has not always been done at the country level. To an extent direct investment is fixed, and hence considered more likely to be productive capital investment. Portfolio investment refers to supplying capital and/or taking a shareholding, but with debatably less control/fixed stake and more investment mobility. Portfolio investment can be seen as potentially more speculative. The FDI figures quoted here for China represent direct investment plus portfolio investment in China-based, exchange-listed companies, such as Huaneng and Huadian.

3 In November 2003, there was a workshop held in Kunming on Private Sector Participation (PSP) Options in Water and Electricity. The workshop was jointly organized by the World Bank and the Yunnan Provincial Government and paid for with a USD 120,650 grant from the Bank's Public-Private Infrastructure Advisory Facility (PPIAF).

4 About 80 percent of China's known coal reserves are buried in the north and northwest region (Jia Mulan 2003).

5 China both imports and exports coal. In 2002, China imported 10.8 million tonnes, nearly 1.0 percent of its total consumption. In the same year it exported 84 million tonnes, mainly to Korea, Japan and Taiwan (Ball et al. 2003, 42–43).

6 The demand management suggestions for China policy makers (box 4.1) are taken from an ADB report which overviews the Western Region Development Strategy (ADB 2002).

7 The evocatively named "Power to the People" (Vaitheeswaran 2003) provides an inspiring analysis of the impending "energy revolution." The author argues that promising new technologies, such as fuel cells and micro turbines, will lead the way to a revolution in micro power—putting small clean power plants close to homes and factories—which will displace grids which deliver power from big plants to often distant consumers. This recent addition to the literature builds on other work which reports on promising progress with new energy technologies for developing countries (for example, see Forsyth 1999).

8 China has been constructing nuclear power plants for more than twenty years. The China Atomic Energy Agency plans that by 2005, with capacity set to increase to 8.7 million kilowatts, nuclear plants will be providing 3 percent of the total national energy output (*People's Daily* Online 2003a).

9 The economic argument of analysts Guotai Junan Securities Co (discussed in *Business Weekly* 2003), and others, is that as electricity price drops generating capacity must increase if company profits are to remain stable. In an example they worked through, for a 3.55 percent price drop, based on an average national tariff of 3.4 us cents per kilowatt-hour, generating capacity needs to increase five percent to maintain profit-levels.

10 The Bing Zhong Luo component of the cascade does not actually involve a "dam," rather being designed as "run-of-river," hence there is no "inundation area."

11 During October 2003, the Electricity Generating Authority of Thailand (EGAT) was told by the Thai Ministry of Energy to suspend talks on this delicate

subject until after the APEC show had exited Bangkok (Watcharapong Thongrung 2003). However, EGAT confirmed in November 2003 that it is prepared to finance the entire project, although it would prefer to explore some form of partnership with the Myanmar military junta and Chinese government (Nareerat Wiriyapong 2003).

12 Green Watershed has contributed to lifting the standard and inclusiveness of the Nu River debate in several ways, via its own hosting of public meetings and discussion with officials in Kunming and Nujiang Prefecture, support to the TV documentary makers, radio spots, and co-organising with the Centre for Environment and Development and others, under the China Academy of Social Sciences (cASS), a Beijing symposium January 8–9, 2004 focused on reconsidering the place of dams in national development. The authors have also jointly presented the substance of this research paper in Kunming, and in November 2003 to the Southeast Asia Water Forum held in Chiang Mai, and a meeting of development agencies in Bangkok.

13 At the Phnom Penh 2002 GMS leaders' summit, Mekong region governments signed an intergovernment agreement which paves the way for regional power trading. This should also be considered within the context of the so-called ASEAN grid being promoted by EGAT

14 The original Yuxi Tobacco Factory in Yunnan Province was established in 1956. A major reorganization in 1995 led to the creation of the Yuxi-Hongta Tobacco Group (Hongta), which is China's biggest tobacco grower and cigarette producer. As part of its wro obligations, from 2003 China has begun opening its tobacco market to foreign firms by abolishing special retail licences and reducing import taxes. Since its formation, Hongta has diversified into many different areas, including power production. Hence, it was no surprise to see it take an initial 20 percent stake in the original Yunnan Lancang Jiang hydropower development company when it formed in 2001. With the advent of Huaneng and the morphing into the Yunnan Huaneng Lancangjiang Hydropower Company Limited, Hongta reduced its share to 12.6 percent (as at February 18, 2003).

15 The assets transferred from the State Power Grid Company to Huaneng on September 23, 2003 include their 27 percent share in the Yunnan Huaneng Lancangjiang Hydropower Company Limited.

16 Winchester (1996) provides a brief account of the significance and mythology of the rock barrier (Yun Ling or "Cloud Mountain") which changes the course of the river, at the beginning of his book *The River at the Centre of the World*.

17 These were triggered by and adapted from similar questions posed by a journalist (China Power News 2004).

18 A narrow conception may focus on: administration, business practice, legal formalities or government.

19 The four lower Mekong countries are slowly developing a transboundary EIA protocol, based on the European Espoo Convention. The process is being facilitated by the Mekong River Commission (MRC) secretariat.

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CHAPTER 4

China's energy reforms and hydropower expansion in Yunnan

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Mekong hydropower: drivers of change and governance challenges

R Edward Grumbine 1,2* , John Dore 3 , and Jianchu Xu 4,5

The Mekong River is the longest watercourse in Southeast Asia. Although China has an extensive hydropower program underway on the Upper Mekong, as yet there are no dams on the river's lower mainstream. However, as many as 12 additional projects, which would generate substantial energy and wealth especially for Cambodia and Laos, are currently in the proposal stage for the Lower Mekong (LM). The cumulative effects of the LM hydropower projects – if built, and together with existing Chinese dams – will transform the Mekong by altering natural flow patterns and disrupting fisheries and other ecosystem services, to the detriment of the millions of people who depend on the river for their livelihoods. Proposals for new dam construction are driven by several factors, including changing human demographics and development needs, energy and food security concerns, economic cooperation, and climate change. We link these social, ecological, economic, and political forces to ongoing regional governance issues and discuss how to improve the quality of Mekong hydropower decision making in a complex, transboundary setting.

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As it flows through Cambodia, the Lao People's Democratic Republic (hereafter Laos), Thailand, and Vietnam, the Lower Mekong (LM) River remains one of the world's last great stretches of undammed river. Since the 1990s, however, China has developed extensive hydropower infrastructure along the Upper Mekong (UM) River, with 17–19 projects in operation, under construction, or under consideration (Magee 2012). Downstream of China, much development is taking place along the

In a nutshell:

- The Mekong River is under intense development pressure, with multiple upstream dams under construction and downstream dam proposals that, in combination, would dramatically alter ecosystems and human livelihoods
- Major drivers (eg demographics, human development, water and food security, economic integration, climate change) and other factors (eg new dam financiers, inadequate governance, sectoral decision making) create momentum for new Mekong hydropower projects
- Impact assessments in the region are often focused solely on the country that carries them out, upstream and downstream impacts are not considered cumulatively, and ecological and social factors are often downplayed
- More deliberative water governance could improve decision making by contributing to more informed national and transboundary negotiations

¹Key Laboratory of Biodiversity and Biogeography, Kunming Institute of Botany, Chinese Academy of Sciences, Kunming 650201, China *(egrumbine@prescott.edu); ²Environmental Studies Program, Prescott College, Prescott, AZ; ³Australian Agency for International Development (AusAID), Mekong Region, Vientiane, Laos; ⁴World Agroforestry Centre, China and East Asia Node, Kunming, China; ⁵Centre for Mountain Ecosystem Studies, Kunming Institute of Botany, Kunming, China Mekong's tributaries but, as yet, there are no hydropower projects on the mainstream. However, these LM countries are now exploring their options, with up to 12 mainstream projects under consideration. These would generate substantial energy and wealth, especially for Cambodia and Laos, while also making dramatic changes to the river itself.

Proposals for LM mainstream hydropower projects have reemerged in the past decade, encouraged by rising regional power demand and enabled by the increasing number of existing and planned Chinese dams along the UM. These current and upcoming projects will change river flows at the same time as new sources of investment capital and associated prospects for substantial profits incentivize the dam-building industry that is already active on Mekong tributaries.

In September 2010, the Laotian government advised the Mekong River Commission (MRC) - an intergovernmental organization that was created to coordinate water resources development between LM countries - of its desire to build the Xayaburi Dam, the first of the proposed projects for the LM mainstream (Figure 1). A series of dams along the LM will exacerbate changes to natural flow patterns that already occur as a result of dam building in China. Substantial disruption to fisheries, as well as negative implications for the millions of people who depend on the Mekong River for their livelihoods, is likely. However, our understanding of the Mekong ecosystem is far from complete. For example, landings from the multispecies inland freshwater capture fishery are estimated at 2.2 million metric tons per year (Hortle 2009), but it is unclear to what extent the estimated catch is dependent on the LM mainstream channel remaining unobstructed (KG Hortle pers comm). Moreover, little is known about designing fish lifts and ladders that would be appropriate for the diversity and magnitude of the fishery (Dugan et al. 2010).

In this paper, we highlight the primary drivers of change

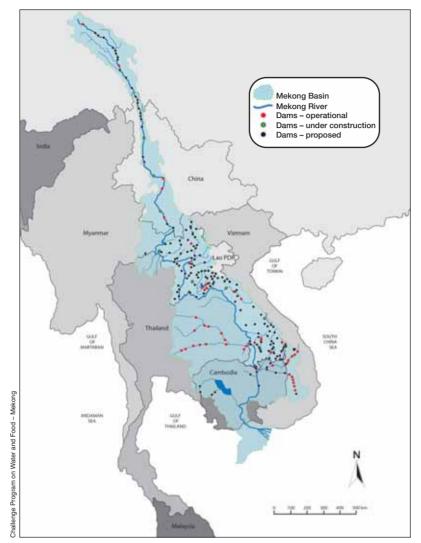


Figure 1. Map of hydropower projects in the Mekong Basin.

in the LM. Focusing on hydropower, we link these forces to a general assessment of basin governance. Finally, we discuss specific actions for improving the quality of hydropower decision making in both the upper and lower Mekong Basin. We wish to encourage more informed and collaborative water governance by Mekong countries, while they simultaneously pursue improvements in livelihoods, maintenance of ecological functions, food production, and energy supply.

Many Mekongs

The Mekong River – the eighth largest river in the world in terms of mean annual discharge (475 km³) – is at the heart of the debate over water resource development in Southeast Asia. The river begins on the Qinghai-Tibetan Plateau in China and flows almost 2200 km through Qinghai, Tibet, and Yunnan Provinces – where it is called *Lancangjiang* in Chinese. The river then winds for an additional 2700 km through Myanmar and the LM countries (Cambodia, Laos, Thailand, and Vietnam) before emptying into the South China Sea (Figure 1). On average, 18% of the river's mean annual water discharge originates in the UM countries

(China and Myanmar); the remaining 82% comes from the LM countries (MRC 2010). However, these summary data conceal important nuances. For example, 30% of dry season flows originate from the UM. Key features along the length of the Mekong include: numerous tributary rivers; Cambodia's Tonle Sap, the largest freshwater lake in Southeast Asia, which is critical to Cambodian food security; one of the major freshwater capture fisheries in the world; acclaimed biodiversity and cultural values; and the Mekong delta, the primary rice growing area of Vietnam, the world's second largest exporter of the grain. About 60 million people live within the Mekong River Basin (MRC 2011a) in LM countries, with about another 10 million residing in the UM, mostly in Yunnan Province.

While new scientific research can resolve many technical issues, there remain "many 'Mekongs' – river, basin, and various regional framings" (Dore and Lebel 2010). Likewise, the waters provide a range of vital benefits: drinking water, freshwater food supplies, biodiversity hotspots, agricultural irrigation, and industrial uses.

Interconnected drivers of change

Both the LM and the wider region are changing rapidly, and there is much uncertainty associated with the complex interplay of the major drivers along the entire Mekong, including demographic shifts, human development needs, energy and food security concerns, increasing investment and trade, and climate change.

Demography

Three demographic trends stand out in the LM countries: population growth, the large cohort of young people, and migration from rural to urban areas. Even though the population growth rate in the region is falling, the four countries are projected to increase cumulatively by 33 million people by 2025 (PRB 2010). This growth is set to continue well into the future, as about 30% of the population of LM countries are 15 years old or younger (PRB 2010). Furthermore, the ongoing movement – from rural to urban areas – of people seeking work means that an additional 17 million or so will likely be living in LM cities by 2025 (Figure 2; UNESCAP 2009). Taken together, these trends will increase pressure on states to provide assistance with employment, education, energy, and water resources.

Human development

The Mekong River flows through a region characterized by high poverty and limited development. Much pro-

gress has been made, as regional poverty levels (defined as earnings of less than US\$1.25 per day) fell from 48.4% in 1990 to today's average rate of about 19% (CIA 2010; PRB 2010). However, about 21% of LM residents do not have access to clean water. and over 30% do not use closed sanitation systems. The governments of the LM countries spend less on education than the average across other countries in Asia, while health care expenditures are even lower (UNDP 2010). Investment in upland areas is disproportionately lower than that in the lowlands. Combined expenditures to meet UN Millennium Development Goals, such as providing clean water and sanitation and improving education standards, have never been tallied in the wider Mekong region.



Figure 2. Bangkok, Thailand – the ultimate destination for much of the hydro-energy produced along the Mekong River.

Food security

Against this backdrop of population and development issues, regional food demand is expected to double by 2050 (FAO 2010). Three factors bear on this projection. First, there is decreasing investment in traditional agriculture, as well as a substantial reduction in agricultural lands under irrigation, mainly as a result of the catastrophic impacts of the 2010 drought (Qiu 2010; FAO 2011). Second, farmers across the wider Mekong region are moving, or are being directed by governments, away from subsistence farming and toward plantation agriculture (rubber, biofuels, and other cash crops). Incomes are rising, but these changes have ecological implications; monocultures threaten biodiversity, reduce total carbon biomass, and deplete groundwater (Ziegler et al. 2009). Farmers are increasingly subject to fluctuations in global commodity prices, and this leads to a third factor: market volatility. In 2010, food-price inflation prevented some 20 million people in the Asia Pacific region from escaping poverty (UNESCAP 2011).

Economic investment and trade

Since 1992, the main strategy adopted by governments in the Mekong region in reaction to the issues outlined above has been to pursue economic linkages, connect infrastructure, and promote cross-border trade and collaborative responses to social and environmental problems. Up to early 2010, the Asian Development Bank and its partners had allocated US\$11 billion for investment in roads, rail, shipping ports, hydropower, and transmission lines, with a focus on three cross-border economic corridors. Consequently, from 1999–2008, regional economic growth was twice that of the world's average (CIE 2010). However, governments and multilateral development banks must now focus not just on increasing the flow of goods but also on the types of goods that are produced and how they are produced, as well as on who benefits and who is vulnerable. There are also questions about the extent to which new economic development, including additional hydropower projects, may further impair the provision of ecosystem services, upon which other measures of prosperity depend.

Climate change

While degrees of uncertainty characterize all of the forces for change discussed above, climate change is the "wildcard" driver in the LM. By 2050, projected regional impacts of climate change include decreasing overall water availability, increasing temperatures and flood likelihood, decreasing food production capacity, and rising sea level in the Mekong delta (Cruz et al. 2007; Mainuddin et al. 2010). Specific impacts will vary by location (Kingston et al. 2011). Extreme events such as droughts - together with impacts resulting from land-use change (eg rubber plantations) – are already contributing to cumulative effects on watershed streamflow (Guardiola-Claramonte et al. 2010; Qiu 2010). Regional rice production may decline sharply (Rerkasem 2011), and sea-level rise could submerge 19–38% of Vietnam's Mekong delta, which currently produces 25% of the country's gross domestic product or GDP (Thuan 2011). Climate change may also trigger technological innovation in the hydropower sector; for example, there is potential in pumped storage hydropower to better manage increased climatic variability (Pittock 2010). Until recently, however, LM dams have been planned under the assumption that baseline water flows will remain unchanged, with limited consideration of models that combine hydropower impacts with future climate projections.





G Horle

Figure 3. Jullien's barb (Probarbus jullieni), one of several migratory fish species common near the proposed Xayaburi Dam.

Taken together, these large-scale drivers certainly influence development (including hydropower) in the Mekong region, though there may be few precise causal connections to any specific project. If regional population growth were flat, human development levels average, food and water needs stable, economic growth static, and climate impacts projected to be beneficial, then there would be less pressure to build dams to solve some aspects of these problems. However, none of these are true for the Mekong region.

Hydropower expansion and the Xayaburi Dam

The scale of Mekong hydropower expansion makes it a critical driver of change in the LM in its own right, whereas the proposed Xayaburi Dam project highlights several more specific drivers of change in action. First, the governments of LM countries are recognizing increased opportunities to proceed with large-scale development because of their decreasing dependence on multilateral funding provided by international institutions, such as the World Bank and the Asian Development Bank. This is due to a combination of factors, including greater national creditworthiness, improved regional relations, and an associated willingness among private financiers to supply capital (Middleton et al. 2009). So far, most private hydropower investors have demonstrated limited commitment to environmental review, mitigation, or human livelihood safeguards, though this is slowly changing. Second, although there are considerable differences between individual countries, in general, all LM countries have substantial room for improvement in filling knowledge gaps and in implementing legal regimes and other public policies. Compliance with national environmental regulations is not always enforced, and current transnational private-sector protocols are mostly advisory, non-binding, and experimental (Foran

2010). Finally, there is little deliberative governance in the region, where various stakeholders come together to discuss issues and debate competing claims. Instead, public policy decisions are often taken that serve narrow economic interests without seeking substantive input from those segments of society that will be most affected. As a result, high-quality, integrated assessments and associated deliberative processes involving stakeholders are still the exception rather than the norm (Grumbine and Xu 2011).

However, in response to the 12 proposed LM mainstream projects, the MRC commissioned a Strategic Environmental Assessment (SEA) to assess their associated cumulative impacts, costs, and benefits (ICEM 2010). The SEA portrays the projects

as having major benefits but also substantial costs. If all LM projects were to proceed, they could generate 6-8% (~65 terawatt-hours [TWh] per year) of the projected power demand (~325 TWh per year) in LM countries by 2025. Gross income from hydropower generation could total US\$3.7 billion per year. Operators and investors (including governments) would garner most of this income during the first 25 years of dam operations. Laos and Cambodia, two of the poorest countries in the Mekong region, could gain annual income equivalent to some 18% and 4% of their 2009 GDP, respectively.

The risks to livelihoods and food security posed by these 12 hydropower projects would also be very high. More than 100 000 people would need to be resettled, and a further 2.1 million would be at high risk of indirect, negative impacts, such as diminished river-bank agricultural and fishing opportunities (Barlow et al. 2008). Dams would turn more than half of the length of the main river channel into reservoirs characterized by slow-moving water conditions, thereby increasing the risk of water-borne diseases like schistosomiasis and opisthorchiasis (Andrews and Sithithaworn 2011). Despite the migratory nature of many Mekong fish species (Figure 3), only three of the proposed dams currently incorporate fish ladders, none of which, according to fisheries experts, are likely to be adequate for local species (Dugan et al. 2010). In addition, existing and planned mainstream dams in China would have the largest impact in terms of decreasing sediment, given that more than 60% of the Mekong's suspended sediment load originates from this part of the river. Models project that at least 50% of total basin sediment load will be trapped annually by the Chinese dams (Figure 4; Kummu et al. 2010). Proposed dams in the LM would trap even more sediment, with substantial negative impacts expected in Cambodia (including within the entire Tonle Sap system) and parts of the Mekong delta in Vietnam.

Thus, the SEA team concluded that the immensity of risks was beyond the current capacities of regional governments to address, and recommended deferring all LM mainstream dam building for at least 10 years (ICEM 2010). However, the SEA is for informational purposes only and is not binding on decision makers.

Transboundary water governance in the Mekong

The MRC acts on behalf of LM governments through the 1995 Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin to "cooperate...in the

sustainable development of the Mekong River basin...in a manner to optimize...benefits...and to minimize harmful effects" (MRC 1995). The Agreement was an important milestone in LM water governance and, since the 1990s, the MRC has negotiated other integrated river basin management policies to guide its operations.

China.

Yet, for much of its existence, the MRC has been marginalized by its member states from major basin development decision making. At the same time, it is often criticized by non-governmental organizations and civil society for not being responsive to human livelihood concerns, nor to demands for a more transparent and participatory decision-making process (Dore and Lazarus 2009). Much of this criticism is due to negotiated elements of the 1995 Mekong Agreement and subsequent Procedures and Guidelines for action. Member states have, until now, been able to discount the work of the MRC when it served their interests to do so. This, in combination with the major and more specific change drivers discussed above, has resulted in underdevelopment in the Mekong region of well-known elements for effective transboundary cooperation - trust, converging interests, strong regional identity, government institutions, and a vibrant civil society (Hirsch and Jensen 2006; Sneddon and Fox 2007; Molle et al. 2009b).

Nevertheless, there are prospects for improvement in transboundary water governance in the LM, as much recent effort has been put into allowing the MRC to play a more prominent role in decision making. Three actions have been particularly noteworthy. First, in April 2010, the inaugural MRC Summit was convened, which brought together the Prime Ministers of Cambodia, Laos, Thailand, and Vietnam with high-level representatives from China and Myanmar. This Summit succeeded in giving the MRC greater legitimacy. Second, the SEA raised the MRC's profile in terms of information production and debate facilitation. Subsequently, the organization gained the necessary political traction to complete this work, a signal achievement in a region where data

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are rarely released for public scrutiny. Finally, the MRC facilitated discussions between LM countries about Laos' proposed Xayaburi Dam. External pressure for disclosure was very high, and by the end of the designated period, sufficient information had been shared for the MRC to release a high-quality advisory report (MRC 2011b).

Consequently, the MRC's Joint Committee of agency leaders decided, in April 2011, to send Laos' proposal to the ministerial level. This decision was no surprise, because there had already been numerous bilateral meetings between the countries, during which the Xayaburi project had been discussed. Nevertheless, "preparatory" work has continued, with at least the dam developer gambling that permission to proceed will eventually be given.

An MRC Xayaburi working group has been convened under the auspices of the Procedure for Notification, Prior Consultation and Agreement (PNPCA), which is designed to ensure that MRC countries engage in informed "prior consultation" about any proposed water use that may have major impacts on water quality or flow regimes along the Mekong (MRC 2003). Neither the 1995 Mekong Agreement nor the subsequently negotiated PNPCA provides a right to veto or a unilateral right to "use"– in this case, to build and operate a hydropower project that will likely have transboundary impacts. However, signatories are bound to consult with each other and take into account each others' interests in the pursuit of equitable and reasonable utilization of the Mekong's water resources.

If Laos is unable to reach agreement with its neighbors, the country may yet choose to go ahead with the Xayaburi project (and other, similar developments; Figure 5). The decision regarding the Xayaburi Dam will either represent the initiation of high-impact LM mainstream hydropower development or lead to a postponement of such development, as recommended by the SEA. Either way, further studies that will contribute to more integrated transboundary river basin understanding and management will be performed.

The SEA for all mainstream dams and the first implementation of the PNPCA for Laos' Xayaburi proposal are





Figure 5. Site of the proposed Xayaburi Dam on the Mekong mainstream, Laos.

important steps. The next step will be to build on these processes, to better ensure that high-quality impact assessments are implemented for such projects in the future. To that end, the MRC has drafted a transboundary environmental impact assessment framework that may become a backbone of regional cooperation in the LM. However, this new framework has yet to be approved. Despite its absence, in December 2011, ministers from LM countries agreed that further studies would be undertaken to clarify the potential transboundary impacts of the Xayaburi Dam and other LM projects.

Improving transboundary governance

There are inextricable links between water, food, energy, and all the drivers of change in the countries that share the Mekong River. Connections exist across different scales and sovereign state boundaries, and efforts to nurture trust-building between and within LM countries, as well as between LM and UM countries, could turn environmental and social risks into development and security opportunities. There are many specific transboundary water governance actions that could further improve cooperative relations across the entire basin; here, we highlight just a few.

The MRC must persist with efforts to help nations negotiate water resource issues through joint exploration of specific development scenarios to quantify uncertainties. In addition to the PNPCA, there are other procedures that focus on data information and exchange, water-use monitoring, real-time flood forecasting, maintenance of flows along the river, and water quality. Some of this important work is hampered by ambiguity in the 1995 Mekong Agreement, where several terms – such as "significant tributaries" and "acceptable minimum flow" – are poorly defined (MRC 1995). This ambiguity is due, at least in part, to the fact that both the Agreement and the subsequent negotiated Procedures and Guidelines were the best outcomes that could be agreed upon at the time (Browder 2000; Radosevich 2010).

In the near term, as negotiations continue, further data sharing and a culture of pilot program experimentation employing more stakeholder dialogue need to be encouraged throughout the Mekong region. This could include wider use of: the sub-basinfocused Rapid Basin-wide Hydropower Sustainability Assessment Tool, which supports river basin management by providing a structured set of questions to aid planning (MRC et al. 2010); a new, multifaceted Sustainability Protocol from the International Hydropower Association, which assesses project performance in planning, con-

struction, and operation phases (IHA 2010); and environmental flow assessments (Dyson *et al.* 2003) that provide opportunities for interdisciplinary, multi-stakeholder engagement (Lazarus *et al.* 2012). These will all require more deliberative approaches to negotiation, given that stakeholders still have few opportunities to participate in decision making in the region (Dore and Lebel 2010).

To support this process, we argue that it will be necessary to strengthen Mekong governance and knowledge networks across borders. Numerous opportunities for collaboration exist, including risk management, benefit-sharing, alternative energy futures, power trading, quality aspects of production and trade, improving livelihoods of people affected by the project, multipurpose management of dams, and nuanced adaptation to climate change. Formal intergovernmental cooperation is complemented by the emergence of transboundary knowledge networks, such as the Mekong Program on Water, Environment and Resilience (M-POWER), which focuses on improving water governance through published research (Lebel et al. 2007; Molle et al. 2009a; Lazarus et al. 2011), encouraging dialogue between stakeholders and governments (IUCN et al. 2007; Dore et al. 2010), and assembling independent panels of experts (Sokhem et al. 2010). Experience from other transboundary river basins has shown that national policy makers need to improve their capacity to better engage in transboundary/transnational policy analysis and integrated problem-solving (Howlett and Joshi-Koop 2011); this is also true for the Mekong region.

There is also an essential need to establish or strengthen genuine local engagement in "higher" level public policy making and monitoring. When transboundary decisions impact water supply, food security, and other critical social goods and services that are difficult to replace, affected citizens should be given the opportunity to participate directly in decision-making processes (Folke *et al.* 2005; Arthur *et al.* 2011). This is necessary for Mekong decision making to advance toward a transboundary framework capable of addressing multiple ecological functions entwined with human livelihood goals (Lemos and Agrawal 2006).

Progress is being made on many fronts – poverty reduction, power provision, food security, cross-border trade, biodiversity protection, and climate-change adaptation – in the Mekong region. Yet in an era of rising uncertainty and declining resilience, each Mekong country must understand that sovereign security increasingly depends on cooperative environmental decision making. Hope for the future of the Mekong lies with new definitions of what constitutes "reasonable and equitable" utilization, crafted within a context of informed regional diplomacy.

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De-marginalizing the Mekong River Commission

John Dore and Kate Lazarus

INTRODUCTION

A new water governance paradigm is needed in the Mekong region to assist societies in making better choices about how to share and manage water for the production of food and energy. On mainstreams and tributaries, disputes exist, resulting from interventions to natural flow regimes and overt or default management decisions. These interventions are justified on the grounds of flood control, more irrigation for food or fibre production, urban or industrial supply, improving ease of navigation, or boosting energy production via hydropower. There are associated disputes about altered sediment and nutrient loads, groundwater use, water reuse and diversions (inter-state, intra-state, inter-basin and intra-basin). New regional water governance is vital because these issues have territorial, ecological and political dimensions that need to be managed via regional protocols, rules or benefit-sharing processes.

Numerous dams and water diversions are on the agendas of mobile private and quasi-public-sector developers, transnational capital providers, and the six governments of the region: Cambodia, China, Laos, Myanmar/Burma, Thailand and Vietnam. A recent count found 82 existing and 179 potential hydropower projects in the wider region (King et al, 2007) (see Chapters 1 and 2), many on Mekong River tributaries.¹ Planned dams and diversions will transform the waterscapes of the region.

Our vision is for a more deliberative water politics in the Mekong region. To be clear, when speaking of deliberation, we mean:

Deliberation is debate and discussion aimed at producing reasonable, well-informed opinions in which participants are willing to revise preferences in light of discussion, new information, and claims made by fellow participants. Although consensus need not be the ultimate aim of deliberation, and participants are expected to pursue their interests, an overarching interest in the legitimacy of outcomes (understood as justification to all affected) ideally characterizes deliberation. (Chambers, 2003, p309)

Thus far, deliberation has been in short supply. This is partly because proponents of deliberation meet resistance from actors who prefer to reinforce contexts that are unfriendly to deliberation and favourable to pursuance of their vested interests. Many actors still believe, or at least rhetorically pretend or are instructed, that domestic criticism of public policy is unpatriotic. There is often an unhelpful conflation where dissent is mistakenly seen as synonymous with disloyalty. Enquiry or criticism of water resources development plans, which impact across state borders, is seen by many as encroachment on hard-won state sovereignty and legitimate national security concerns. Hence, the resistance to transnational deliberative politics should not be underestimated.

The Mekong River Commission (MRC) is mandated to engage in water resources development in the so-called 'Lower' Mekong part of the region – the Mekong River Basin in Cambodia, Laos, Thailand and Vietnam. Different people call on the MRC to be a social and environmental guardian of the basin; a platform for information exchange; a knowledge producer, synthesizer and broker; an investment facilitator; and convenor of multi-stakeholder processes demonstrating high-quality deliberative practice. Can it play all these roles simultaneously?

Since 1995, the MRC (and its predecessors since the 1950s) has been and remains the focus of substantial organization-building efforts. During recent years, the MRC has received much attention from people intent on using, improving, empowering or criticizing it. This chapter reflects on the practice and potential of the MRC at a time when all Mekong region governments need to make informed decisions about whether, or how, to proceed with major projects that will have dramatic, transformative, national and transboundary impacts.

UNDERUTILIZED

The Mekong River Commission has a contested governance mandate – embodied in the 1995 Mekong River Agreement – for the mainstream, tributaries and the lands of the basin within the territories of the Lower Mekong countries (Governments of Cambodia–Laos–Vietnam–Thailand, 1995; Browder, 2000; Öjendal, 2000). It is often referred to as a 'regional' initiative and endeavours to include China and Myanmar in some of its activities and outreach. This Mekong cooperation was originally catalysed via the United Nations and has a 50-year history (Bui Kim Chi, 1997; ESCAP, 1997).

Article 1 of the agreement commits the four member countries to cooperate in all fields of sustainable development, utilization, management and conservation of the water and water-related resources of the Mekong River Basin in fields such as irrigation, hydropower, navigation, flood control and fisheries.

The implementing organization for the agreement is the MRC, led by a governing Council at ministerial level, which meets once per year, and a Joint Committee (JC) of senior government officials, which meets formally twice per year, but increasingly now meets informally as the need arises (see Figure 14.1). The Council and JC are serviced by the *MRC Secretariat (MRCS)*, which is responsible for implementing Council and JC decisions, advising and providing technical and administrative support. The MRCS is currently located in Vientiane, Laos.

Although not specifically mentioned in the agreement, there are also National Mekong Committees (NMCs) established in each member country, set up differently in each country depending upon national government preferences. The heads of the NMCs represent their countries on the Joint Committee. NMCs are serviced by NMC Secretariats (NMCSs). It is important to note that there is a political dynamic between each of these five parts – that is, there is no homogeneous single 'MRC'. Any joint position needs to be collectively negotiated between the Council and JC members. Moreover, the MRCS must also manage its working relationships with the NMCSs, who are quick to object if they feel left out of MRCS activities, or if they perceive the MRCS to encroach into their national space. In turn, the NMCSs also have to establish their own role and working space within their national polities, with their functional power much less than key water-related ministries and agencies in each country.

The MRC also recognizes 'development partners' that include international lenders and donors – who at this stage still provide most of the finance for the MRC to function – international financial institutions (IFIs) such as the World Bank and the Asian Development Bank (ADB), and other 'internationals' such as the World Wide Fund for Nature (WWF), the International Union for Conservation of Nature (IUCN) and the International Water Management Institute (IWMI). More recently, knowledge networks involving various regional universities, policy research institutes and civil society organizations, such as the coalition implementing the Mekong Programme on Water, Environment and Resilience (M-POWER), are also increasing their engagement with the MRCS. At the national level, the NMCs and NMCSs have historically had less engagement with non-state actors or civil society organizations, particularly if these articulate alternative development narratives.

As in any large family, it is not possible for all the interaction to be smooth. The vaunted 'Mekong spirit' of cooperation often seems optimistically overstated;

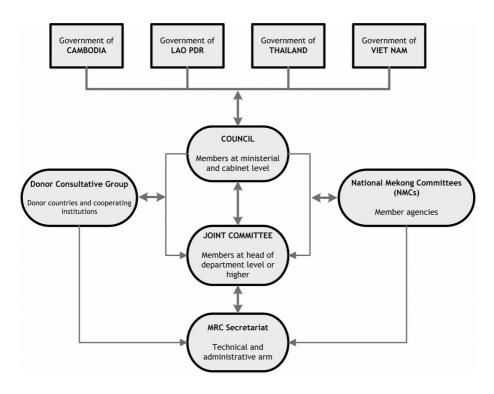


Figure 14.1 Mekong River Commission structure

Source: www.mrcmekong.org

but that is not to deny the importance of doing everything possible to encourage a constructive spirit between the countries.

It is apparent that for much of its brief history, the MRC has been underutilized. In reflecting on this, it is important to look at all members of 'the family', rather than just using the blanket term of MRC. Which parts of the MRC have been excluded or marginalized, why and by whom? Why have member governments chosen not to use their own river basin organization to engage in many of the major river basin development issues of this era? At present, individual national interests dominate over regional interests (Hirsch and Mørck-Jensen, 2006). Supporters of the MRC hope that it can become more a part of the solution to problems such as those illustrated in the following examples.

Sesan

On 4 March 2000, the water level in the Sesan River (a transboundary river flowing through Vietnam and Cambodia) rose suddenly, causing deaths and *ANU page 116*

loss of livelihoods of fishers and farmers in north-eastern Cambodia's Ratanakiri Province. The unexpected surge was caused by a release of water from the Yali Falls Dam in Vietnam. Cambodian non-governmental organizations (NGOs) and local communities brought forward details of the damage and encouraged the national and international public to consider the implications of this transboundary incident. During the incident, the flow of information between Cambodian and Vietnamese officials was minimal, and there was virtually no communication between the provincial governments on either side of the border (Badenoch, 2001, p1). The MRC did not become involved before or in the tense immediate aftermath, despite having a mandate to do so.

Five years on, the topic of development on the Sesan, Sekong and Srepok rivers (often collectively referred to as the 3S) was still considered so sensitive that it was removed from the agenda of an MRC-convened conference on integrated water resources management (IWRM) that was held in tandem with the tenth anniversary of the signing of the 1995 Mekong Agreement. Eventually, the MRC has engaged in the process, principally via the NMCSs of Cambodia and Vietnam. More recently, the two countries are trying to better manage the hydropower operations on the Sesan in order to minimize the downstream impact upon local communities; but this has taken extensive advocacy by affected local communities and their supporters. There is now even an effort, facilitated by the ADB, to establish a new transboundary, sub-basin organization to 'manage development'. For a long time MRCS had been an onlooker, but it is now engaging more with ADB in this new initiative.

Commercial navigation

A commercial navigation agreement was signed by transport officials from China, Laos, Thailand and Myanmar in 2001 for the stretch of the Mekong River between Simao (China's Yunnan) and Luang Prabang (Laos). River trade between Thailand and China has since rapidly increased. Associated with the signing, a feasibility study was completed in late 2000, which supported, in principle, proposed alterations to the river, including rapids and reef removal. By September 2001, an environmental impact assessment (EIA), coordinated by the Government of China, had been prepared and sent to each of the other three governments. Thailand's government approved the EIA in January 2002 and it was subsequently approved in Laos in April 2002 (SEARIN et al, 2002). The MRCS was not used by either Thailand or Laos to inform or actively participate in the initial agreement negotiations. The secretariat became involved afterwards in offering to conduct an independent EIA of the project (an offer not taken up) and in commissioning evaluations that were extremely critical of the substandard EIA (Cocklin and Hain, 2001; Finlayson, 2002; McDowall, 2002). The intervention by the MRC was ineffective and extensive modification, via blasting, of the Mekong mainstream has since taken place in the northern reaches. The MRCS has played no substantive role

in this 'Upper' Mekong navigation; however, at the time of writing, it is becoming more involved, and so this could change.

Thailand Water Grid

In 2003, then Prime Minister Thaksin Shinawatra relaunched the idea of a Thailand water grid, which would triple the area of irrigation in the country and require diversion of water from the Mekong River, and possibly other rivers in Laos and Cambodia, into northeast Thailand. For a time, the whole process was treated as a national secret by the Government of Thailand, with senior water academics fearful of the consequences to their funding and employment of criticizing or sharing any information about the scheme. There was no public deliberation within Thailand, and the MRCS was conspicuously silent, having been excluded from the process. Molle and Floch (2007) have observed that Thaksin's 'war on poverty' was presented as an unquestionable meta-justification used to silence opposition despite the fact that most water experts, commenting off the record, thought the rationale dubious and the scale of the scheme completely unrealistic. At the time of writing, the MRC (all parts) remains publicly silent about the merits or failings of touted water diversions by Thailand from the Mekong River, siphoning under the Mekong River from Laos, or, as some pundits remark, 'siphoning under the 1995 Mekong Agreement'. The grid, as well as every other Thailand water resources development scheme on the shelf, was relaunched in 2008 by the government of Prime Minister Samak Sundaravej (see Chapter 10 for more details). To our knowledge, no substantive information about this has been shared with the MRCS.

Mainstream dams

Construction since the mid 1990s of the Upper Mekong (Lancang) Dam cascade in Yunnan is so far the most significant human intervention ever made in the natural order of the Mekong River ecosystem, with substantial and undoubtedly complex transboundary ecological, social, cultural, economic and political impacts (Dore, 2003, p431). The regional/transborder nature of ecosystems requires regional/ transborder political cooperation. China has plans to build up to 15 mainstream dams. Despite the MRC having an annual consultation with Chinese water officials, the MRCS has not noticeably affected China's construction agenda. Realtime flood data is now provided by China, and future consultations could fruitfully examine hydropower operation regimes in order to minimize negative downstream impacts – negotiations to do just that were propelled in 2008 by serious floods along the Mekong River, with the flood level reaching a height not seen since 1966. The impact of the Chinese dams is now included in MRC cumulative impact assessments and scenarios work; but dialogue by the MRC with Chinese officials has, to this point, been very limited. At least until 2008, exchanges have been

more substantial beyond the MRC. Outside the MRC processes there has been increasingly substantive cooperation between Chinese colleagues and southern neighbours discussing many aspects of the Chinese mainstream development. This has included visits to Cambodia by Chinese water scientists, hosted by Cambodian non-state organizations. Increasing the depths of these types of dialogues and exchanges may be of critical importance in demonstrating the constructive possibilities of greater international understanding and perspective-sharing.

China's unwillingness to seriously engage with MRC has been problematic enough; but what is worse is when member country governments also choose not to use the MRC to share their own national water resources development intentions. More recently, there is renewed interest by all of the MRC member countries in building or investing in dams on, or diversions from, the Mekong River mainstream (see Chapter 2). At the time of writing, the only government to formally submit information to the MRCS about mainstream developments has been the Government of Laos, which in June 2008 advised that it is investigating eight dams on the mainstream. Despite the MRC Joint Committee having formally approved the Procedures for Notification, Prior Consultation and Agreement (PNPCA) in November 2003, there has thus far been only very modest compliance by member countries. The MRCS is hopeful that this action by Laos signals a new openness to sharing information about possible projects, and that the other member countries choose to take similar steps.

TENSIONS

The most recent strategic overview of the MRC that took place in 2006 involved much rewriting and negotiation before being finally endorsed by the JC and accepted by the Council. By this time there was something in the strategy for everyone, and the organization was assigning itself multiple, sometimes conflicting, roles. At the aspirational level of the text, there was little disagreement between stakeholders. It is hard to find anyone who disagrees with the stated goals and 'strategic IWRM' directions which frame the plan, although Molle would remind us to be wary of a 'nirvana concept', such as IWRM, which can 'obscure the political nature of natural resources management', and the fact that some of the goals may be 'frequently, if not always, antagonistic' (hence, the conflicts and the fact that 'trade-offs are necessary and hard to achieve') (Molle, 2008).

The differences that emerged were in the details and the intended emphases. The strategic plan preparatory process highlighted some of the tensions evident within the MRC and its wider constituencies, to which we now turn.

Box 14.1 Goals and strategic directions of the Mekong River Commission Strategic Plan (2006 to 2010)

The goals of the Mekong River Commission Strategic Plan are stated as follows:

- Promote and support coordinated, sustainable and pro-poor development.
- Enhance effective regional cooperation.
- Strengthen basin-wide environmental monitoring and impact assessment.
- Strengthen the integrated water resources management (IWRM) capacity and knowledge base of the Mekong River Commission (MRC) bodies, the National Mekong Committees (NMCs), line agencies and other stakeholders.

The 'strategic IWRM' directions of the plan are summarized as:

- *Economic development and poverty alleviation:* promote economic growth through the use and development of joint water resources in a manner that significantly alleviates poverty.
- Integration through basin planning: implement a participatory multi-sectoral basin planning process that integrates economic, social and environmental concerns across the Lower Mekong Basin (LMB).
- Social development and equity: ensure equity in the allocation of water resources and services across different economic and social groups; reduce conflict and promote socially sustainable development.
- *Regional cooperation:* integrate and coordinate water resource development and management between countries to optimize benefits from the joint resource and to minimize the risk of water-related conflicts.
- *Governance:* further and implement open, transparent and accountable institutions and regulatory frameworks that will promote IWRM at all levels.
- *Environmental protection:* protect the environment, natural resources, aquatic life and conditions, and the ecological balance of the Mekong River Basin from harmful effects of development.
- *Climate variability:* prevent, mitigate or minimize people's suffering and economic loss due to climate variability.
- Information-based management: ensure that water resource management decisions are based on best available information.

Source: MRC (2006)

Territorial domain: Mainstream only, or including the tributaries, basin wide?

Article 1 of the Mekong Agreement is clear that the territorial domain of the MRC is the entire Mekong River Basin. Acting in the China and Myanmar parts of the basin is difficult as these countries are not members, but multi-country overview *ANU page 120*

of development in the LMB has also proved to be very difficult. At the time of the strategic planning process, many were disappointed that the MRCS had not been more involved in analysing and contributing to decision-making about development in the tributaries. The political role of the MRC had seemed reduced to mostly research and discussions about mainstream cooperation, with speculative emphasis on the impacts of Chinese mainstream developments, but with tributary development mysteriously scoped out of formal Council and JC discussions. Now mainstream projects are back on the agenda, and the MRC cannot again be silent. The MRCS recognizes this.

The Precautionary Principle: To apply or not?

Article 3 relates to the protection of the environment and ecological balance. It is of concern to many that the MRC has been too often subdued about the risks associated with many development projects – risks often borne involuntarily by those not clearly benefiting (or potentially benefiting) from project X, Y or Z. This silence has extended to the non-mention of the Precautionary Principle.² Instead, the mantra from the secretariat has been 'meeting the needs, keeping the balance' and acceptance of an ever-changing baseline. It is important to ask: whose needs, and what risks or trade-offs are considered acceptable in the quest for balance?

Constituency: Governments or wider society?

There was much discussion of the MRC mandate and expectations during the 2006 to 2010 strategic planning process. It was clear that the MRC did need to clarify its constituency and decide how much scope to give the MRCS to engage with a wider constituency than just the parts of the member state governments that have been tasked with MRC representation.

The final plan reflects the dominant attitude of the MRC towards engagement with non-state actors, suggesting that 'improved stakeholder participation can be accomplished by working through the NMCs who are best able to implement improved participation, including civil society and NGOs (MRC, 2006, p43). Many civil society organizations beg to differ as engagement between them and the state-centric NMCs has been at a very basic level, although this is now being stepped up. Many donors and consultants have had far easier access to the MRC than local civil society and Mekong academia.

Many people who have been involved in the MRC over the past decade have recognized that they need to bring other actors and subject matter into the mainstream of their processes and provide a mechanism for the expression and exchange of what may be widely and fundamentally differing views about upstream and tributary development, inter-basin diversions, etc. The 2000 annual report acknowledged that it is 'important that decisions on development include a

"bottom-up" process and are not confined to a "top-down" approach. The voice of the people directly affected, and of other stakeholders such as community groups or NGOs, must be heard.' Moreover, it admitted that it 'has virtually no experience in this vital field' and that it must 'drastically accelerate activities to promote public participation' (MRC, 2001).

Soon afterwards, one of the authors of this chapter wrote that the MRC's lack of achievement thus far in genuine public participation is complex. The youth of the new version of the organization, the sustainability orientation and mindset of some of the agencies which dominate the National Mekong Committees, the politics between the member states, stinging criticisms by NGOs, realization of limited successes to this point, and operating rules that limit engagement with the wider basin community are all relevant. Collectively, this has resulted in the MRC lacking confidence and being constrained in the extent to which it has proactively engaged with the large range of Mekong region actors outside of the MRC family. In relation to hydropower and the Water Utilization Programme (WUP), there has been a hypersensitive wariness of member country intergovernmental politics. There is also some resistance to being 'lectured' at by NGOs and past and present Mekong country experiences of being 'directed by donors' (Dore, 2003, p424).

The drastic acceleration did not eventuate. At least until 2008, progress in this area has been slow. For example, the consultants who undertook an organizational review (discussed below), several years later, noted:

The Strategic Plan describes the importance of public involvement, public opinion, the civil society and NGOs in ensuring the success of integrated water resources management of the Mekong River Basin. However, it is the impression of the Review Team that the present attitudes and practices in MRC regard the member governments as the primary, if not the only, stakeholders that should be involved with MRC. A clear commitment and strategy for involving the civil society is lacking. (Hawkesworth et al, 2007, p16)

Knowledge broker or investment promoter?

The approach to knowledge-sharing or knowledge-broking has varied during the first 13 years of the MRC. During this period the organization has had four chief executive officers (CEOs), punctuated by caretaker leadership.

During the Matoba-era of 1995 to 1998, the MRCS was a closed, statecentric organization, lacking in confidence and capacity, and with its potential constrained by the management style. It gave the impression of being a house for often independently operating donor projects.

Under the subsequent leadership of Joern Kristensen during 2000 to 2003, there was a clear shift towards being a 'knowledge broker', which implies enabling the

constituency to both contribute to and receive knowledge. The new commitment was to being a 'learning organization' and a centre of knowledge and information exchange with a strong commitment to improving the livelihoods of the people of the basin. There continued an understandable privileging of state members – after all, it is an intergovernmental organization; but there was also a new openness to knowledge contributions from a wider set of actors beyond states. Kristensen restructured the operations of the secretariat into programmes and insisted that all those working in the secretariat building were accountable to him. These were all positive changes. Morale within the secretariat noticeably improved.

After a lengthy caretaker period during which the secretariat transferred from Phnom Penh to Vientiane, Olivier Cogels took up the CEO position for 2004 to 2007. The new leader was convinced that he would be the one to build the working relationship with China which had eluded his predecessors. Soon into his tenure he denounced any role of the MRCS being a 'watchdog' and launched a new push for the MRCS to be an investment promoter or facilitator. Both of these moves brought him into conflict with the knowledge-brokering role, as the promoter/ facilitator was uninterested in any bad news about possible negative impacts of upstream, downstream or tributary development. Information exchanges, peer reviews and contestation, and characteristics of knowledge-building became more constrained. Morale within the MRCS staff dissolved as much analysis or commentary deemed counter-productive to the new mission – smooth sailing with the China relationship or investment promotion – was restricted. This tension was palpable during the strategic planning process. The authors' own observation of this situation was similarly detected by the organizational Review Team, who noted:

MRCS is starting to become known (among civil society organizations, scientific organizations) as an institution that will not release information that may illustrate negative environmental and social consequences of development projects. This is a threat to the credibility of the organization. (Hawkesworth et al, 2007, p20)³

Preparing projects for investment or assisting societies to evaluate proposals?

MRCS engagement in project preparation was assumed during the drafting process for the strategic plan to be part of the new development promotion role. An alternative perspective was that a better role for the MRCS would be for it to support national actors (state and civil society) in order to examine development projects, their likely impacts, and their claimed merits and costs. It is this latter role that the MRCS has attempted to play with the Don Sahong Dam discussed below. In any event, most perspectives about what the MRC should be doing ended up being included in the strategic plan, which in due course was adopted and quickly overtaken by the transformation in the region, part of which was the new avalanche of potential projects. A mid-term review of the MRC *Strategic Plan* 2006–2010 is scheduled for late 2008. To the extent that it is possible, it is hoped this will remove some of the current ambiguities and, perhaps, make the roles of the various parts of the MRC a little clearer.

CASE STUDY: LAOS HYDROPOWER, DON SAHONG AND THE MEKONG RIVER COMMISSION (MRC)

No current development project better encapsulates the challenges facing the MRC than the present controversy over the Don Sahong Dam in southern Laos. If built, it would be the first dam on the mainstream in the LMB.

Hydropower

Laos is at the centre of the current hydropower surge in the Mekong region. According to the *Power Development Plan* in Laos (as of May 2008), there are 77 live hydropower projects: 10 are operational, 7 are under construction, 16 are under research and the remaining 44 have memoranda of understanding (MoUs) signed to move forward (see Chapter 2). There is a complex set of reasons driving the current surge. For the MRC, the explosion is a response to market demand: the increasing importance of regional trade and investment flows, rapidly growing energy demands (particularly in China, Thailand and Vietnam) and opportunities of an emerging regional power market have stimulated a new era of hydropower development in the basin, now mainly driven by private-sector actors (MRC, 2008, p37).

Soaring (albeit fluctuating) global energy prices and national commitments to energy security are also important drivers. Others include the ready availability of capital, at least until the advent of the global financial crisis; a new boldness by Mekong governments to move ahead; and very attractive concession terms for developers. Another driver that is now taking effect is the recognition of the changes that large new storage dams in China will have on the flow regime of the Mekong mainstream. When the Xiaowan and the Nuozhadu dams are completed in Yunnan, the dry season river flow will increase significantly and this will also make the LMB mainstream 'run of river' financially more attractive.

Fish

The Don Sahong story (see below) is not all about fish, but they are central; so before proceeding it is worth ensuring that the reader is familiar with the scale of the Mekong fishery (see also Chapters 9 and 12).

Recent MRCS research has estimated the LMB annual consumption of inland fish to be about 2 million tonnes by a population of 56 million people. About 90 per cent of the fish consumed in the LMB is from the wild-capture fishery. In addition, about 0.5 million tonnes of other aquatic animals (OAA) are consumed. Collectively, the inland fish and OAA are estimated to provide 47 to 80 per cent (country range) of the animal protein of the people of the basin (Hortle, 2007). This equates to about 17 per cent of the total global freshwater fishing catch and is worth in the order of US\$2 billion. Other work by the MRC Fisheries Programme is showing that the bigger the flood (both in height and duration), the more fish you catch (in tonnes); and related to the previous point, the bigger the flood, the bigger the fish.⁴

These are extraordinary figures, showing massive reliance on a huge fishery. However, this data and information about threats to the fisheries seem to be having little impact upon river development policy-making (see Chapter 12). Bringing in fisheries is proving to be a challenge for local livelihood champions, economists, fisheries scientists and concerned political operators at all levels of decision-making. If it cannot be done at Don Sahong, it will be extraordinarily difficult anywhere else.

Don Sahong

In March 2006, the Government of Laos signed an MoU with a Malaysian engineering company, Mega First Corporation Berhad, to carry out a feasibility study for the run-of-river Don Sahong Hydro Energy Project (DSHEP) in the Khone Falls area, just north and upstream of the border between southern Laos and Cambodia.

In May 2007, a public letter from concerned scientists to governments and agencies responsible for managing and developing the Mekong River drew attention to and summarized 'grave environmental impacts, particularly on fish and fisheries but also on tourism and other significant aspects of economy and livelihood, causing damage that will far exceed the net returns from the project'. In their view:

While a degree of mitigation is sometimes feasible for some dams, the fisheries impacts of the Don Sahong Dam simply cannot be mitigated.... There is no prospect that a fish pass could make a significant difference to the blocking effects of this dam. (Baird et al, 2007)

In June 2007, the concern about DHSEP was again summarized in a WorldFish Centre science briefing paper:

Khone Falls is a key site for all Mekong fish resources. At the falls, the Mekong drops some 20m to 30m from the Khorat Plateau to the Mekong Plain. Here the river forms a complex network of narrow braided channels, named hoo in Lao.... Of special significance are the 28 scientific studies that show how it serves as a bottleneck for fish migration in the basin. Hoo Sahong, the site of the proposed dam, is especially important as it plays a unique role in Mekong fish migration.... A dam on the Hoo Sahong would block the only deep channel that allows fish to migrate through the falls year round. This could effectively block dry season fish movements between the Lower Mekong plains and the Mekong basin upstream.... Data on the economic value of the Mekong fisheries, and on the impact of dams on fish migration, suggests that the economic costs from lost fisheries production could outweigh the expected economic benefits of the dam. This analysis suggests that if the proposed dam is to be considered further, a comprehensive scientific assessment would be required to evaluate the costs and benefits in the larger context of Mekong fisheries. (Baran and Ratner, 2007)

In July 2007, a 'final draft' EIA report for DHSEP was completed and soon after submitted for evaluation by Lao authorities.⁵

The MRCS challenge

In September 2007, the MRCS was formally invited by the Government of Laos to contribute to its review of the EIA. This was a big step for Laos to include the MRCS in its internal processes. The staff within the MRCS supplied their best advice to Laos about the 'completeness, accuracy and adequacy' of the Mega First's consultants report, finding it deficient in many areas. Their report, prepared in November 2007, provides a clear critique of the EIA and offers objective advice to Laos. Included in their response, the MRCS pointed out the following:

- The geographic and economic extent of the impact on fisheries of the DHSEP has been underestimated.
- The proposed mitigation to allow upstream movement of fish cannot be proven to be effective prior to the DHSEP being built; and moreover the outflow from the turbines will attract fish to the blocked Hoo Sahong channel.
- The mortality of fish (all life history stages) that will be entrained through the turbines has been overlooked (MRC Secretariat, 2007, point 69).

The JC has encouraged the MRCS to be responsive to governmental requests for technical advice. In this Don Sahong case, the MRCS has responded to an inconfidence request from the Government of Laos. The MRCS analysis has not been released to the public, nor even shared with all member States. This is quite different to how the MRCS should be expected to act, as a transparent servant to all member countries.

In November 2007, the representatives from the Government of Cambodia pointed out their concerns about a Khone Falls Dam at the annual meetings of the full MRC, held that year in Siem Reap. Just prior to the MRC meetings, 201 citizens' groups and individuals from 30 countries wrote to the MRC demanding that it uphold the 1995 Mekong Agreement and that it protect the river and its people from the resurgent threats posed by the proposed mainstream dams. Also released at this time was a statement by MRC donors calling on the MRC to 'fully utilize its capacities, tools and mandate to assess hydropower development plans, with a view to transboundary environmental, economic and social impacts' (MRC Donors, 2007). The donors followed up with another letter in December, signed by the MRC procedures for 'timely notification, prior consultation and agreement' are being applied (Mann, 2007). The MRC Procedures for Notification, Prior Consultation and Agreement (PNPCA) were adopted by the MRC Council in November 2003 (and are discussed below).

In February 2008, Mega First signed a project development agreement with the Government of Laos and announced that its studies show the project to be viable. None of these studies have yet been publicly released.

In March 2008, 51 citizens' groups and individuals from the Mekong region wrote to the MRC asking it to engage more substantively and publicly in decisionmaking about development of the Mekong River. Premrudee Daoroung, director of the regional NGO Towards Ecological Recovery and Regional Alliance (TERRA), had this to say:

The new CEO must clearly state what steps the MRC will take in response to widespread concerns over the proposed mainstream dams. It can start by immediately releasing to the public all analyses relating to the Don Sahong Dam undertaken by the MRC. (TERRA, 2008)

The new CEO responded in April 2008 that the MRCS would continue to work to develop a multifaceted understanding of the existing river system, prepare objective analysis of future development scenarios, provide advice on individual project proposals when requested by the member countries, and administer the procedures developed and negotiated (mostly during the Water Utilization Programme between 2000 and 2007) (Bird, 2008b). In a recent interview, reflecting on the hydropower explosion, an analyst and campaigner for International Rivers acknowledged there is a 'catch-22' and that pleasing everyone is just not possible:

If the MRC provides advice to government agencies that is perceived as critical of proposed hydropower projects, this advice could be unwelcome, ignored, and then no longer sought, undermining the MRC's relevance in the eyes of the government agencies it considers itself primarily answerable to. Yet, by not providing this objective analysis and releasing it into the public domain, as it should do, the MRC faces a crisis of legitimacy in the eyes of the wider public that it is also intended to serve. (Nette, 2008, interviewing Carl Middleton)

The analyst says 'as it should do', and we would agree; but under the current norms of MRC behaviour, without the permission of the Government of Laos, the MRCS could not publicly release its Don Sahong analysis and advice without being seen as having betrayed the trust of its member state. The MRCS technical staff would be delighted if their analysis and advice were put in the public domain, but would prefer that it was done by the Government of Laos. Many Lao officials would also be more comfortable if the Don Sahong decision-making process was more transparent and deliberative.

The Don Sahong is not yet built, and there may yet be more twists in the tale; but it is salutary to reflect on just how decisions actually get made about such projects. An actor in the Don Sahong case, who should not be identified because it is not possible to speak openly about matters like this, is concerned:

Development decisions in this region are almost entirely political. Technical matters play very little and sometimes no role in them. Water developments enable transfer of a dispersed, generalized wealth with no title - or, more correctly, traditional public title - into a focused economic resource with private title. This is a very attractive proposition for people in positions of power.

A fisheries scientist searching to be effective suggested:

The real nature of politics and governance in the region is, indeed, one of the reasons why fisheries are not on the agenda, and that can be depressing to the citizens we are; however, that should not spare us from a critical analysis of our contribution, as scientists, to the development process. Another colleague very familiar with the interdependencies between ecosystems and local livelihoods reflected and recognized the need for more open deliberation:

Decision-making processes on dams are not based on rational assessments, and certainly not influenced by sound science regarding fisheries and their values. The irony is that we have had ten years of excellent research that has highlighted the importance of fisheries – and that this evidence (much of which comes from MRCS) is widely accepted. So we have had a great research success – but a failure in terms of influencing policy. I do not think science alone will have much influence – although good research, evidence and arguments are necessary. What is clearly lacking is an open discussion of the options and implications – and a process that draws on case study experience in this region (plenty to draw from) and opens up the debate to include people who are directly impacted.

The Don Sahong example forces one to ask the question: how is it possible to have constructive, well-informed, deliberative processes before critical decisions are taken about water resources development? Thus far, the MRC has not been able to provide such a service to Mekong region societies. But things can change.

DE-MARGINALIZING

In early 2008, the MRC Joint Committee recommended, and the MRC Council subsequently appointed, new Chief Executive Officer Jeremy Bird, whose regional experience and existing working relationships ensure that he comes to the job with a solid grasp of the water politics of the place. He has previously worked in the Mekong region, including supervising cumulative impact assessment work in the Lao Nam Ngum River Basin (a sub-basin of the Mekong), and researching environmental considerations for sustainable hydropower development. The new CEO has laid out his vision for the period of 2008 to 2011 by proposing four areas of focus (Bird, 2008a) – regional and riparian; relevance; responsibility; risk reduction – which we use as departure points for the possible de-marginalization of the MRC.

Regional and riparian

The highest priority is for the MRC to become more regional, which is to us, in some ways, transnational. By this we mean addressing issues of joint concern to all the countries which share the land and waters of the basin, and to the extent possible, transcending solely national perspectives. Connected to regionalization is MRCS 'riparianization', which refers to the transition of the secretariat to an

organization clearly led and directed by citizens of the MRC member countries. Given the commitment of the MRC to riparianization of all key MRCS positions by 2011, including the CEO position, it is understood by all that Bird will be a single-term CEO with only three years in which to make his contribution. All positions in the Council, JC and NMCs have always been taken by citizens of the member countries. However, the MRCS has been increasingly criticized for having too many 'international' (i.e. from beyond the Mekong region) staff in key positions such as the CEO, chief financial officer, chief of international cooperation, and programme managers.

Triggered by dissatisfaction with the overall performance, an independent review was commissioned in 2006 of the MRCS and the NMCSs. The consultants repeatedly encountered concerns about the staffing of the MRCS. They concluded that the overuse of internationals by the secretariat and the inadequate selection and retention procedures for riparians were preventing the MRCS from getting and keeping the best people from the member countries. Gate-keeping and control by the NMCs/NMCSs was identified as part of the problem. The recommendation was clear:

If there is going to be a successful professionalization and riparianization of MRCS, then it will be necessary to attract and secure the best qualified candidates, not just from government but from the civil society as a whole. The process should be managed on a strictly competitive basis and administered by MRCS itself. (Hawkesworth et al, 2007, p37– 38)

The key MRC donors agreed:

We strongly support the process towards riparianization. Riparian leadership, management and technical expertise in the MRC is critical to its long-term success and sustainability. To develop as a world class river basin management organization, the MRC employment procedures need to attract, appoint and retain the best and brightest from the Mekong member countries. (MRC Donors, 2008)

MRC officials also agree with phasing down the role of internationals, but are finding it more problematic to make the riparian selection and retention systems more transparent and merit based. In early 2008, the JC rejected the recommendation, reducing the role of the NMCs. Donors are unlikely to accept anything less. So, it appears that all key positions in the secretariat will be 'riparianized' by 2011; but the processes for modernizing riparian recruitment and retention are still being negotiated.

Relevant and engaged

The MRC must demonstrate that it is relevant by actively engaging in development decisions taken in the basin. The MRC has too often been absent from, or silent about, substantial decisions being taken on water resources development in the basin. As pointed out earlier, the MRCS has had little involvement and usually very limited information about the hydropower development on the Mekong River mainstream in China, and on tributaries in Laos and Vietnam. It was excluded from the decision-making about 'channel improvement for navigation and trade' and the associated mainstream river blasting in the Upper Mekong above Chiang Saen in northern Thailand. In the past, it has also been excluded from speculations about possible Lao-Thai water transfers, and diversions from the Mekong to irrigate more of northeast Thailand. Moreover, in recent years, it does not seem to have been trying to engage in these important issues. In the absence of deliberative action by the MRC, other actors have sought to open up regional water resources development debates via multi-stakeholder dialogues (Dore, 2007; IUCN et al, 2007a, 2007b) and the establishment of transnational knowledge networks. That said, these previous exclusions or inactivity would look minor if the MRC cannot now contribute to decision-making about LMB mainstream dams and diversions, which is now publicly (since 2007) firmly back on the agendas of all four member countries. In the latter half of 2008, the MRC, via the MRCS, scaled up its engagement.

Responsible and accountable

More than ever before, the MRC is being called to account and to act on the mandate articulated in the 1995 Mekong Agreement: under the agreement, the MRC is to conduct 'assessment for the protection of the environment and the maintenance of the ecological balance of the Mekong River Basin' (Article 24) and should 'make every effort to avoid, minimize and mitigate harmful effects that might occur to the environment ... from the development and use of the Mekong River Basin water resources' (Article 7) (Rivers Coalition in Cambodia, 2007)

The MRC should clearly define its own responsibilities (i.e. roles, duties and obligations), and also understand those of other Mekong region water actors. In doing so, constituencies and accountabilities are clarified. Key questions include: what are the responsibilities of all stakeholders in a particular matter? Who is accountable to whom and for what? Are these responsibilities contested (Petkova and Veit, 2000; UN, 2006)?

Risk-reducing

The new CEO has expressed his desire for MRC to be risk-reducing, while the member countries are capitalizing on development opportunities. For these authors, *ANU page 131*

risk assessment and risk management are an important element of water use and related development. In the past, most attention was usually given to investment risk by either public or private investors. There is now often a much stronger focus on the risks of all actors affected by a decision. Distinguishing between different types of risk is a good way to start.

Voluntary risk-taking includes risks taken in the normal course of business – for example, when a private company invests in a hydropower dam, or a public company invests in a water supply systems – or business partnerships between the public and private sectors. Involuntary risk-bearing is quite different. For example, people displaced by a new reservoir, or those whose water entitlement is reduced as the result of a reallocation, are involuntary risk bearers.

Risk analysis should not ignore voluntary risk-taking, but should also focus on involuntary risk-bearing (WCD, 2000, p207; Dore et al, 2004), whether it is fair and effective, and, if not, how can it be made so. Key questions include: for different options, what are the possible risks? Who are the voluntary risk takers? Who are the involuntary risk bearers? How might risk be equitably shared and, especially, how might involuntary risk be reduced?

The new CEO takes the view that:

The Secretariat has at least three roles in assessing and advising on opportunities and risks. One relates to the analysis of implications of projects, including the cumulative effects of national projects. This draws on work under a range of our programmes and, as I mentioned earlier, is being brought together by assessing various development scenarios under the Basin Development Plan. Another is to provide advice on specific projects where requested, including through our forthcoming Hydropower Programme. The third relates to administering the formal notification and consultation procedures under the 1995 Agreement, and, where required, providing technical advice under such procedures and facilitating negotiation of agreements. (Bird, 2008a)

In comparison to his predecessors, these are extremely progressive statements embracing the tools of cumulative impact assessment and scenario-building, providing specific advice on projects and commitment to using the formal notification and consultation procedures.

Examining rewards and respecting rights

There are two other 'Rs' worthy of further attention by MRC. Thus far, there has been very little examination of rewards (winners and losers) and their distribution; and there has been an aversion to tread on the sensitive topic of often overlapping claims and rights.

The MRC could also emphasize the importance of identifying and unpacking rewards. This is not just the realm of economics, but rigorous economic assessment would be a good start. For different options, what are the possible multifaceted rewards or benefits (Sadoff and Grey, 2002, 2005)? Who stands to win? Who stands to lose? How might rewards be shared? Are there 'net' benefits? What is fair? What might be more ecologically, socially and economically sustainable?

The MRC could also display its concerns for the development of rights over and above territoriality and the sovereign rights of states. At various scales, watersharing rights, or entitlements, may be assumed, negotiated, bestowed, contested, bought, sold, rented, traded, perhaps agreed upon, and sometimes ignored (UN, 2003; Scanlon et al, 2004). Rights analysis needs to be cognizant of a wide range of water-sharing regimes and the likely impacts of different options. An important departure point can be seeking answers to questions such as what is the history of water-sharing/management and use in a particular place or system? What are the entitlement claims of all stakeholders? Are these entitlements contested and, if so, on what grounds? Whose rights are affected by water resources development and allocation? How can these sometimes overlapping entitlement rights/claims be respected while searching for fair and effective workable agreements?

CONCLUSIONS

Governments need to make more informed decisions about whether to proceed with water resources development projects, taking into account comprehensive options assessment examining political, social, economic and ecological impacts – and drawing upon scientific evidence, situated local knowledge, and appreciating complexity and uncertainty. There has been an absence of informed discussion in the public space about the pros and cons of dams and diversions in Lower Mekong countries that have re-emerged on the agendas of national governments and transnational capital providers and developers. There is a need for transnational, transboundary public examination via high-quality, well-informed deliberative processes. This requires competent design, convening, facilitation, knowledge inputs and wise use of the media.

New flow regimes will have to be negotiated on Mekong River tributaries and, perhaps, the mainstream. Relatively little attention is being paid to how river flows will be 'managed' post-construction. There are many different possible scenarios. State and non-state actors need to become more familiar with flow negotiation tools and approaches that have the potential to ensure that all relevant issues and perspectives are taken into account in the inevitable negotiations ahead.

The MRC must increase its engagement in these issues. This will require applying existing and new research to discover methods appropriate for the Mekong region. Other essential ingredients are great diplomatic skill and social capital to allow equitable and informed negotiations to proceed. The MRC has

ANU page 133

deservedly received criticism for its performance thus far; but there remain many optimistic, latent supporters of the MRC initiative, hoping 'the family' will be enabled to capably respond to the current challenges. This will require the member governments, at the highest level, to 'de-marginalize' the MRC and its implementing parts, allowing them to make their best contributions.

A worthy goal is to make it normal practice in the Mekong region for important national and transboundary water-related options and decisions to be examined in the public sphere from a range of perspectives. Openness and deliberation are still far from being normal practice. The MRC, as mandated, has the opportunity and responsibility to play an important role in creating new, deliberative political space for learning and negotiating.

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NOTES

- 1 King and his co-authors acknowledge that their data-compiling projects across the GMS is 'sufficient only for scoping purposes' as the data were 'compiled from a variety of sources and is unverified'. Existing projects are defined as: existing + those with financial closure + those under construction. Potential projects are defined as: committed + proposed + identified to any level of study. It is not implied that all 179 potential projects are necessarily going ahead. The figures used by King et al (2007) for Laos (11 existing, 32 potential) were assembled in 2006, and differ from the 2008 data quoted in the case study later in the chapter, which reported 77 projects at various stages from conceptualization/design through to operation.
- 2 The Precautionary Principle states that if a public action or policy may cause severe or irreversible harm, it should not be carried out despite the absence of full scientific certainty that harm would ensue. The burden of proof thus falls on those who would advocate taking the action.
- 3 The Review Team also noted that there was 'some concern among the staff about the consequences for themselves if they are too open with ideas and constructive criticism' (Hawkesworth et al, 2007, p17).
- 4 Presentation given by Chris Barlow, MRC Fisheries Programme coordinator, Vientiane, 20 June 2008.
- 5 The EIA was light in some technical areas (e.g. transboundary impacts), but spent considerable space exploring whether or not the development was a mainstream development (it is), pursuing a bizarre line that perhaps as the river is braided at this

point, the development could be seen as on a tributary; and, hence, whether, when and how it was compulsory, or not, for the Government of Laos to notify the MRC.

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ANU page 136

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ANU page 138



The World Commission on Dams + 10: Revisiting the Large Dam Controversy

Deborah Moore

Former Commissioner, World Commission on Dams; Executive Director, Green Schools Initiative; Berkeley, California, USA; deborah@greenschools.net

John Dore

Water Resources Advisor, Australian Agency for International Development (AusAID), Mekong Region; john.dore@dfat.gov.au

Dipak Gyawali

Research Director, Nepal Water Conservation Foundation, Kathmandu, Nepal; dipakgyawali@ntc.net.np

ABSTRACT: The World Commission on Dams (WCD) was an experiment in multi-stakeholder dialogue and global governance concerned with a subject area – large dams – that was fraught with conflict and controversy. The WCD Report, Dams and Development: A New Framework for Decision-Making, was published in 2000 and accompanied by hopes that broad-based agreements would be forged on how to better manage water and energy development. Ten years later, this special issue of Water Alternatives revisits the WCD and its impacts, exploring the question: Is the WCD still relevant? The editorial team and the Guest Editors of this special issue of Water Alternatives have selected a range of 20 papers, 6 viewpoints, and 4 book reviews that help to illustrate the evolution in the dams debate. The goal of this special issue is to examine the influence and the impacts of the WCD on the dam enterprise, in general, and on the policies and practices of key stakeholders and institutions, and on the development outcomes for affected communities and environments, in particular. In this introduction, the Guest Editors provide an overview of the special issue, exploring the new drivers of dam development that have emerged during the last decade, including climate change and new financiers of dams, and describing the themes emerging from this diverse set of papers and viewpoints. This special issue demonstrates the need for a renewed multi-stakeholder dialogue at multiple levels. This would not be a redo of the WCD, but rather a rekindling and redesigning of processes and forums where mutual understanding, information-sharing, and norm-setting can occur. One of the most promising developments of the last decade is the further demonstration, in case studies described here, that true partnership amongst key stakeholders can produce transformative resource-sharing agreements, showing that many of the WCD recommendations around negotiated decision making are working in practice. We hope that this special issue sparks a dialogue to recommit ourselves to finding effective, just, and lasting solutions for water, energy and ecosystem management. It is a testament to the continued relevance of the WCD Report that ten years later it is still a topic of intense interest and debate, as illustrated by the papers presented in this special issue.

KEYWORDS: World Commission on Dams, dams and climate change, resettlement, development policy

WHY REVISIT THE WORLD COMMISSION ON DAMS?

Why revisit the World Commission on Dams? The answer, in one simple phrase: because the issues of contention around dams have not gone away!

When the World Commission on Dams (WCD) was established in 1998 and its Report was released in 2000, the hope (perhaps misplaced, but certainly overly optimistic, maybe even naive) was that

universally acceptable answers would be found to contentious issues and the warring parties would embrace each other while beating swords into ploughshares. Dam builders and dam critics are not anywhere near such a happy ending. At the same time, the terrain of the debate has shifted, as have the concerns and positions of the protagonists. The nature of the debate now is more than the simplistic 'small versus big' of the past. While the first set of problems focused on environment and resettlement impacts, there is now a set of second-generation problems that must be addressed, stemming from new drivers of dam development and changing political landscapes. The private sector and newly dominant economies like China are emerging as primary investors in dams that have different approaches to safeguard policies and public oversight than the traditional funders like the World Bank. The prospect of climate change, with promises of hydropower as the low-carbon panacea, or warnings that reservoirs emit substantial levels of greenhouse gases and that hydrology of the future will no longer be that of the past, is placing a formidable question mark on the design and economic evaluation methodology for future dams. And the information revolution in the Global South is bringing political awareness to even the most marginalized communities, empowering them to find new ways of engaging in decisions over dams.

Water Alternatives is an interdisciplinary journal addressing the full range of issues that water raises in contemporary societies. The ambition of the Journal is to provide space for creative, critical and free thinking on water, fostering debate, eliciting innovative alternatives, promoting original analyses and constructive critiques.

It is in this spirit that *Water Alternatives* decided to publish this special issue on the World Commission on Dams (WCD) recognizing the tenth anniversary of the publication of its Report, *Dams and Development: A New Framework for Decision-Making*. The WCD – an independent, international commission comprised of leaders from all sides of the debate surrounding big dams – issued its Report in 2000 with findings about the development effectiveness of large dams globally and proposed guidelines for improving dam performance and governance, including – among others – principles of participation, equity, transparency and comprehensive options assessment. As stated by the WCD ten years ago, "Dams have made an important and significant contribution to human development, and the benefits derived from them have been considerable. In too many cases an unacceptable and often unnecessary price has been paid to secure those benefits, especially in social and environmental terms, by people displaced, by communities downstream, by taxpayers and by the natural environment".

Despite the WCD process, the legacies and controversies of the world's 45,000 large dams¹ continue to cause conflict between providing hydropower, water supply, flood control, irrigation and other substantial benefits to many, while devastating the basic rights and livelihoods of others, and damaging shared rivers and ecosystems. Dams control floods and regulate irregular water regimes, generate hydropower, provide storage for domestic, industrial or agricultural use, and allow the development of recreation. But these benefits are not well distributed socially, often favouring urban dwellers, industries and certain types of farmers disproportionally; and they come with large social and environmental costs that for too long were overlooked. Few rivers remain that have been untouched by some type of dam. Displaced populations, estimated between 40-80 million, have frequently been resettled with minimal or no compensation, often in marginal lands, and in the majority of cases have become and remained poorer. Large-scale alteration of natural hydrologic regimes has had massive impacts on fisheries, water-based livelihoods, aquatic ecosystems and environmental services as a whole. Some scientists also believe that many reservoirs emit large amounts of greenhouse gases, up to 4% of all human-induced GHG emissions, as reviewed in this volume by Mäkinen and Khan.² Indeed, the first-ever global estimate of the number of river-dependent people potentially affected by dam-induced

¹ Large dams – over 15 m high or with a reservoir capacity more than 3 million m^3 – total roughly 45,000 worldwide, not considering millions of smaller dams and reservoirs (WCD, 2000; in November 2000). This definition must be adapted when considering dams in the Himalayan region, as discussed by Dixit and Gyawali in this volume.

² For this specific estimate, Lima et al., 2008.

changes in river flows and other ecosystem conditions is presented in this volume by Richter et al.: that 472 million river-dependent people have had their livelihoods negatively affected by dams.

What has happened in the decade since the WCD Report was published? The goal of this special issue is to examine the influence and the impacts of the WCD on the dam enterprise, in general, and on the policies and practices of key stakeholders and institutions, and on the development outcomes for affected communities and environments, in particular. While social and environmental costs and risks are better understood, several changes have recently emerged. Energy demand and the price of fossil fuel have prompted a renewed interest in hydropower; traditional development banks and developers have been increasingly challenged by competitors from emergent countries, often with access to public finance; while opponents have also become more sophisticated in their understanding of the issues and modes of action. An upsurge of dam projects has been witnessed during the past five years, but the recent global economic meltdown might temporarily slow this trend. Does the governance of these projects show substantial progress compared with earlier decades? Has the performance of dams improved? Did the WCD, or other subsequent initiatives, instil a new ethics and greater consideration of social and environmental impacts? Has the debate become more, or less, polarized? The overarching questions we explore in this issue are: What has changed in the dams and development arena in the last decade, and is the WCD still relevant?

The WCD was an experiment in multi-stakeholder dialogue and global governance concerned with a subject area that was fraught with conflict and controversy. Its intention was to facilitate creative and free thinking on the topic of large dams and move beyond the impasse and conflicts that were prevalent in the 1990s. The editorial team and the Guest Editors of this special issue of *Water Alternatives* have selected a range of viewpoints and papers that help to illustrate the evolution in this debate. It is a testament to the continued relevance of the WCD Report that ten years later it is still a topic of intense interest and debate, as illustrated by the papers presented in this special issue.

In creating this special issue, the Guest Editors placed a high value on the criteria of diversity and balance in selecting papers for publication. The process for soliciting papers included a broad call for submissions through a variety of networks, listservs, and web postings. To ensure a wide range – of topic, author, geography, perspective, and discipline – the Guest Editors also invited particular individuals to submit. Out of the 70 abstracts received and based on a rating system, we accepted 45 of these abstracts for submission of a full paper. Several people and organisations that had some direct involvement during the WCD process were invited to submit Viewpoints, usually briefer papers that present their opinions, based on their experiences in the WCD and beyond. Accounting for authors who did not send their full papers on time or gave up, and for papers discarded after the review process, we ended up with 20 scientific articles and 6 viewpoints, complemented with 4 book reviews related to dams. The editorial team contacted more than 200 peer reviewers – again emphasising diversity and balance of views amongst reviewers – to anonymously evaluate these papers, and the final selection was based on the ratings made by these reviewers and the Guest Editors.

Overall, the Guest Editors have strived to publish papers of high quality, innovative thinking, and new analyses that have a clear link to the WCD and span geographic diversity, varied opinions, and multiple disciplines.

BRIEF OVERVIEW OF THE WCD REPORT

"The WCD has undertaken a rigorous, independent and inclusive global review...", claimed Professor Kader Asmal, WCD Chairperson (WCD, 2000). In this section we briefly revisit the World Commission on Dams, introduce its follow-up effort, the Dams and Development Project, and discuss the initial responses to the WCD Report.

The WCD grew out of the growing controversy over the economic, social and environmental consequences of large dams built in the 20th century. It was established in February 1998 through a process of dialogue amongst all the major parties engaged in conflicts over dams: the private sector,

civil society, government, affected communities, scientists, and international financial institutions. The Chair, Professor Kader Asmal – then South Africa's Minister of Water Affairs and later its Minister of Education – was selected in May 1998. The WCD's 12 members were chosen to reflect regional diversity, expertise and stakeholder perspectives. Some aspects of past conflict stemmed from the lack of agreement on basic factual issues related to the consequences – good or bad – of large dams. Whenever one stakeholder group issued a report or research or evaluations, other stakeholders would perceive that the information presented was biased. Therefore, the WCD was created as an independent body, with each member serving in an individual capacity and none representing an institution or a country (WCD, 2000, p. xxx) To foster its independence, the WCD was supported by the WCD Forum (comprised of 68 institutions from 36 countries), through Partnerships and Cooperation with 14 organisations, and with financial donations from 53 contributors (including governments, international agencies, the private sector, NGOs and various charitable foundations)(ibid: p. xix- xxi).

The WCD had two primary objectives. It sought to undertake a global review of the development effectiveness of large dams, and assess alternatives for water resources and energy development. It was also charged with developing internationally acceptable criteria, guidelines and standards, where appropriate, for the planning, design, appraisal, construction, operation, monitoring and decommissioning of dams (ibid: p. xxx). The Commissioners produced a 'consensus' report, a negotiated opinion, which was launched in a blaze of publicity in 2000, and evoked a range of initial responses from celebration to rejection. The WCD Report was promoted to all interested stakeholders through a variety of channels and outlets, such as this excerpt from a promotional brochure:

Don't plan, build, protest, operate, decommission, propose, oppose or discuss a dam without it! By 2000, the world had built 45,000 large dams to irrigate a third of all crops, generate a fifth of all power, control floods in wet times and store water in dry times. Yet, in the last century, large dams also disrupted the ecology of over half the world's rivers, displaced over 40 million people from their homes and left nations burdened with debt.³

Since its formulation and release, the 'WCD framework' (figure 1) has been evaluated for use as both an implementation and advocacy tool. It is complex. The Report presents three grounding Global Norms, five Core Values, five key Decision Points, seven Strategic Priorities, 33 associated Policy Principles, and 26 Guidelines. The task of trying to determine how best to combine these recommendations into operational practices remains a challenge for post-WCD activity.

During the WCD process, it appeared that conflict was set aside; however, the Report itself stirred considerable debates and reignited controversy in some guarters. Most institutions and stakeholders broadly accepted the core principles and Strategic Priorities, but it was concerning the 26 Guidelines that agreement broke down. Some believed the guidelines were unrealistic, impractical, and would prevent future dam construction. Others believed the guidelines were not intended as strict regulatory standards, but rather recommendations for best practice, which - if adapted to specific national and river-basin contexts – would help avoid the problems of the past. The WCD Report was accepted by some countries and institutions, like the German aid agencies GTZ and BMZ (German Technical Cooperation and German Ministry for Economic Cooperation and Development) and the Japan International Cooperation Agency (JICA), as the needed basis for decision making. Some private companies, like Harza Engineering and HSBC Bank also supported the Report. Others, like the World Bank, considered its principles as useful, but not binding, and generally rejected the WCD Report in favour of developing its own strategies. Governments like South Africa, Vietnam, and Nepal joined multi-stakeholder dialogues at the national level to consider whether and how to adapt the Report's recommendations to their specific contexts. Still other countries, such as India and China, rejected the Report for fear that it could bring dam construction to a halt. Positions were not monolithic: within

³ Excerpt from promotional materials created to advertise the WCD Report by the publisher Earthscan, 2000, <u>www.earthscan.co.uk</u>.

governments and institutions a robust debate ensued. Divergent views within the World Bank, for example, are highlighted in two of the Viewpoints published here. And within governments like Brazil, different agencies took different positions on the Report – some of the energy agencies ignored it, while Brazil's National Water Agency participated in the WCD Forum and follow-on effort.

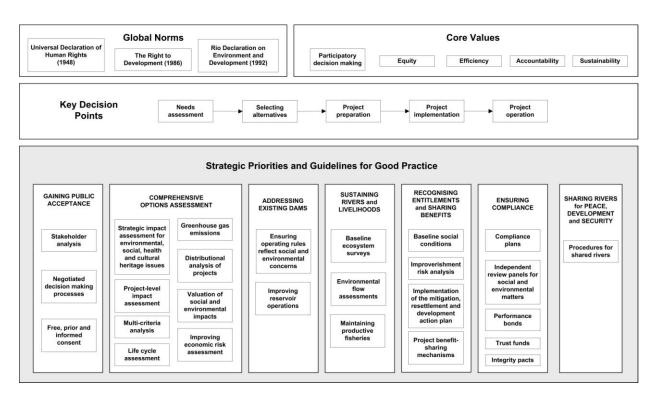


Figure 1. WCD framework for decision-making.

Source: Summary extract from WCD, 2000.

After the WCD Report was published in November 2000, the WCD Forum – an advisory body that had been part of the WCD process – agreed that a follow-on effort was needed to help translate and disseminate the Report and continue the dialogue at different levels. The Dams and Development Project (DDP) was hosted by the UN Environment Programme (UNEP) and continued with parts of the work commenced by the WCD, seeking ways forward through still difficult issues. The goal of the DDP was to promote a dialogue on improving decision-making, planning and management of dams and their alternatives based on the WCD Core Values and Strategic Priorities. To achieve its goal, the DDP focused on: promoting and facilitating dialogue on dams and related issues at national, regional and global levels; networking; translating and disseminating the WCD Report, related material and DDP publications; and facilitating the exchange of ideas on best practices.

There was action on many fronts, supported by the DDP Secretariat, a diverse 13 member Steering Committee (UNEP is a non-voting member of this committee), and an even more diverse Dams and Development Forum (DDF). There was not complete acceptance of all other parts of the WCD Report by the Steering Committee and the DDF, resulting in the negotiation and focusing of the DDP mandate. Moreover, in response to some specific WCD criticism, the DDP had a particular emphasis on "reaching out to governments" (Dubash et al., 2001).

While it would have been unreasonable to expect unanimity on all these issues, what was not unreasonable was to expect that the dialogue and the constructive engagement that the WCD represented would be taken forward. The editors of *Water Alternatives* felt that the tenth anniversary

of the WCD was an opportunity to review and reflect on progress, setbacks, unresolved issues, and new challenges in the dams and development field.

THEMES EMERGING FROM THE WATER ALTERNATIVES WCD + 10 SPECIAL ISSUE

We worked to select a set of papers for this special issue that covers a range of topics, geographic diversity, and perspectives surrounding dams. Having read through all the papers, we see several critical and relevant themes emerging.

THEME 1. Diverse perceptions: Perspectives differ on the impact of the WCD Report and process

Just as opinions differed at the time the WCD Report was published and the DDP follow-on process began, perspectives continue to differ ten years later on the lasting impacts of the Report and process. Most authors seem to agree that the Report was not as fully and broadly endorsed as was perhaps expected at the time of its publication. The papers cite and reference numerous scholarly articles published during the last decade that analyse the implementation of the WCD's policy and best practice recommendations. Some authors, such as Dubash in his Viewpoint, believe that the expectations on the WCD multi-stakeholder process to produce regulatory guidelines were perhaps misguided and that if judged against the expectation of a global norm-setting process to produce new ideas and encourage higher standards, the WCD Report and process were successful. Many authors describe how the WCD Report has been partially adopted by a diversity of institutions and state that the ideas continue to drive current policy debates. Others, such as Briscoe in his Viewpoint, argue that the WCD Report overreached and led to a new consensus among developing country governments that such policy decisions were more appropriately made at the institutional responses to the WCD were sabotaged by a relatively small but vocal set of critics.

Despite the WCD's efforts to find mutual agreement about the development effectiveness of dams and to assemble a comprehensive knowledge base that remains unrivalled in its scope ten years later, fundamental disagreements remain about the costs and benefits of large dams, and about who reaps the benefits and who suffers the burdens of the costs. The question remains: are dams a useful technology to advance sustainable development or a destructive technology that only in rare cases can be managed successfully to avoid social and environmental devastations and produce real economic benefits? Facts and values remain contested, which is not unexpected. The fact that the WCD Report is even a topic of interest ten years later is an indication that the ideas and recommendations are still relevant today, if for no other reason than that there is a healthy ongoing debate about whether and how to adapt the WCD's ideas into specific mechanisms for managing dams at the local, national, and international levels.

THEME 2. Changing drivers

Water and energy demands continue to rise and drive dam development

The context for most of the papers is that human demands for water and energy continue to grow and that large dams remain the solution of choice for many governments, private companies, and financial investors. John Briscoe's paper explores the evolution of the World Bank's positions and policies related to large dams that led to the Water Resources Management Sector Strategy (World Bank, 2003) to support 'high risk-high reward' projects like large dams, with a recent update on the Bank's position provided in *Directions in Hydropower* (World Bank Group, 2009).

Climate change is now a greater driver of hydropower expansion

Many papers acknowledge that in the last decade, the world has focused its attention on climate change and that hydropower dams have been promoted as a 'clean' and 'carbon neutral' energy strategy, helping to further stimulate investments in both dams and in carbon trading and offset schemes generated by potential credits associated with large dam projects. Debate remains about whether large dams should be considered part of a carbon-reduction strategy or not due to significant concerns regarding the net greenhouse gas emissions from reservoirs. The paper by Finley-Brook and Thomas examines the demand created for new dams in Panama associated, in part, with the value of selling carbon credits, and how this affects the local and national decision-making process. The value of possible carbon credits is also a factor considered in the economic risk analysis of the Belo Monte dam in Brazil, examined in the Sousa Júnior and Reid paper. The paper by Hirsch notes that environmental concerns are being touted both in favour of, and in opposition to dam construction, by opponents/proponents invoking climate change threats. Pittock argues there is a need for a greater focus on identifying and limiting the perverse incentives of climate change policies that are leading to negative impacts. Finally, the paper by Mäkinen and Khan explores the science of greenhouse gas emissions from reservoirs and the policy interventions that could reduce such emissions from reservoirs, suggesting that reservoir emissions should be treated like other anthropogenic greenhouse gases.

New financiers are changing the loci and framework for decision-making processes

In the last decade, many shifts in political power and financial muscle are changing the roles of national, international, and multilateral institutions. The private sector's role in financing dams has grown, as have the abilities of emerging economies like Brazil, China, and Turkey to self-finance dams from their own coffers. Indeed, China is now a major investor in dams beyond its own borders in Africa and elsewhere. The paper by Hirsch explores the shifting geopolitical and eco-political landscapes in the Mekong river region, noting that the growth of regional economic players is fundamentally altering the context for energy demand, planning and investment. The Viewpoint by Smith also highlights increased investments in dams and new global actors involved in promoting dams – many of whom were not active in the WCD process – heightening the need for transnational codes of conduct to ensure that environmental and social safeguards are applied so that the unsatisfactory development outcomes of past dams will be avoided.

Theme 3. *Environment and social justice*: Negative consequences of dams on the environment and livelihoods of dam-affected communities remain critical issues

The WCD amassed a wealth of evidence that large dams had created environmental and social impacts that could no longer be considered unforeseen or acceptable, and highlighted that the cost versus benefit trade-off approach to decision making was inadequate to be the sole or at least the dominant criterion to be used when evaluating and deciding on whether projects should proceed. Ten years later, millions of people continue to be negatively affected by existing dams and more will be affected by dams in the pipeline, while we continue to lose aquatic ecosystems and biodiversity at an alarming rate. Even if more people, in gross number terms, benefit directly or indirectly from such dams, the costs involuntarily borne by others are surely unacceptable and must be avoided or mitigated. Many of the papers in this volume further describe the ongoing and widespread impacts of large dams.

Richter et al. focus attention on previously neglected populations living downstream of dams whose livelihoods have been affected by dam-induced alterations of river flows. By substantially changing natural flow patterns and blocking movements of fish and other animals, large dams can severely disrupt natural riverine production systems – especially fisheries, flood-recession agriculture and dry-season grazing. The paper provides a conservative estimate of 472 million negatively affected river-

dependent people living downstream of large dams along impacted river reaches, lending urgency to the need for more comprehensive assessments of dam costs and benefits, as well as to the social inequities between dam beneficiaries and those potentially disadvantaged by dam projects.

Dam-induced displacement and resettlement remain primarily negative consequences of dams that still have not been satisfactorily addressed, and many of the papers in this volume focus on this topic. The paper by Nga Dao explores the evolution of resettlement policies in Vietnam through a comparison of Hoa Binh dam (constructed between 1979 and 1994) and Son La dam (formally under construction since 2005), indicating that improvements in policy may bring limited improvements in planning and practices of dam development at the community level. In the paper by McDonald-Wilmsen and Webber, the authors look to the experiences in other fields of resettlement, such as refugee studies and migration due to adaptation to environmental change, to learn from their practices and standards of how to effectively settle people in new communities.

One of the WCD's Strategic Priorities was Comprehensive Options Assessment, which recognised that alternatives to dams do often exist. More evidence is accumulating, showing that effective alternatives do, in fact, exist. The paper by Totten et al. presents evidence from the state of California that shifting from a conventional focus on supply expansion to one that concentrates on efficiently delivering services at and near the point of use could be accomplished with investments in the range of US\$10-25 billion annually, while obviating the need for spending hundreds of billions of dollars on more expensive hydropower and related infrastructural expansion projects. Such a shift to cost-effective end-use efficiency improvements in delivering water and energy services could eliminate the need for an estimated half of all proposed dams globally, thus allowing for the maintenance of other ecosystem service benefits and offering hope for meeting basic human needs for water and energy at a more achievable level of investment.

THEME 4. *New assessment tools*: The quest for new decision-making tools and approaches continues, from assessment protocols to economic analysis

One critique of the WCD Report is that it did not succeed in providing tools that could be readily implemented at the operational level for evaluating, managing, and building dams. During the last decade, an inspiring array of tools and approaches has continued to evolve and be tested at the community, the river basin, the country, and international levels. The paper by Locher et al. describes the Hydropower Sustainability Assessment Forum and its efforts at building on the WCD Report to create an operational tool for assessing large dams against an agreed-upon set of multiple criteria. In a contrasting view, a key message from the paper by Bosshard is that the hydropower industry would like to establish norms that can create greater predictability through the certification of dam projects using protocols like that in HSAF; yet industry is not prepared to accept binding minimum standards that would confer new obligations to the hydropower industry. Without agreed-upon minimum standards, the concern is that the worst consequences will not be avoided or mitigated.

Tullos et al. argue that many challenges remain in evaluating the biophysical, socio-economic and geopolitical impacts of dams, including the diversity of stakeholder perspectives on dam impacts. Given the complexity of data and perceptions around dam impacts, decision-support tools that integrate the objective magnitude and perceived salience of impacts are required urgently. This conclusion stems from the authors' own experimentation developing an Interdisciplinary Dam Assessment Model (IDAM) working with colleagues in southwest China.

The WCD Report documented numerous instances where the costs of large dam projects were underestimated. This problem continues to plague the evaluation process, as explored in two papers. The Sousa Júnior and Reid paper uses an economic-risk analysis to project that there is a 72% chance that the Net Present Value of the benefits of the Belo Monte dam in Brazil will be zero; and the Jeuland paper examines the influence of varying discount rates used in an economic analysis on the final analysis of a dam's overall economic value.

Going well beyond such technical tools as HSAF, IDAM, benefit-cost analyses, NPVs and discount rates, Baghel and Nüsser argue that analyses of large, complex dam projects – before, during and after key decisions – should use the lens of political ecology and explore the social and power relationships between actors, in what we know are highly politicised situations.

THEME 5. *Advances in participation and accountability*: How can participation, compliance, accountability, and performance be ensured?

A constant theme throughout the WCD Report was the need to improve the participation of affected communities in the decision-making process and to ensure compliance with policies and negotiated agreements so as to improve the development effectiveness of dam projects. It is the same in this volume, where many papers explore the roles of different stakeholders – the state, local NGOs, affected communities, the private sector, international NGOs, financial investors, and multilateral institutions – in promoting participation and accountability. The Dore and Lebel paper explores the WCD's Strategic Priority on Gaining Public Acceptance, which focused on issues of 'procedural justice', and suggests expanding the approach to include issues of 'distributional justice'. They also revisit issues of participation that were raised during the WCD, present their views on necessary state attributes for accountability, in order to earn legitimacy and public trust.

Embedded in the approach to gaining public acceptance and the 'rights and risks' framework put forward by the WCD was the key policy principle of 'free, prior and informed consent' (FPIC) for affected indigenous communities. This new framework included a recognition that indigenous communities – with recognized rights to self-determination – should give their free, prior and informed consent to development projects like dams that affect their livelihoods, culture, land and resource rights, and basic human rights. Many have questioned whether FPIC can be practically implemented or recognised. The Viewpoint by Cariño and Colchester, however, documents advances during the last decade in recognising this principle in important legal and policy arenas, including United Nations declarations and court decrees by the Inter-American Court of Human Rights in Latin America. McGee's paper explores the use of community referenda in Latin America as a democratic and legally recognizable means of a community's expression of its consent (or disapproval) for a proposed development project, such as a mine or a dam. Such mechanisms are showing promise for how elements of FPIC can be practically implemented.

Moving from principles to practices, several papers and Viewpoints explore the roles of different stakeholders in ensuring that policies and standards are followed. The Dubash and Briscoe Viewpoints offer differing perspectives on the roles of the state and NGOs in fostering safeguard norms, policies, and regulations. The Viewpoint by Goodland, a former World Bank senior environmental advisor, explores reasons why the World Bank has long resisted guidelines requiring large dam projects to internalise the social and environmental costs of dam construction and offers suggestions for more humane and economically responsible Bank policies. Differences between free, prior and informed 'consultation' versus 'consent' in Bank policies are also explored.

Several case studies explore the role of bilateral agencies in dam development. The paper by Eberlein et al. on the Ilisu dam in Turkey examines the roles of secondary stakeholders – the European Export Credit Agencies and European NGOs – in promoting international standards for best practice and accountability in decision making.

The paper by Seeger et al. describes Germany's engagement in the promotion of participatory processes on dam-related issues, building on the WCD and follow-up processes at both the international level, through Germany's participation in the Hydropower Sustainability Assessment Forum (HSAF), and at the national level, with the Ghana Dam Dialogue. Interestingly, it appears that smaller bilateral agencies have been better able to take up, or more interested in taking up, the WCD's framework and recommendations to assess their own water resources and dam development programmes than the larger multilateral institutions.

THEME 6. *Negotiation*: Multi-stakeholder platforms (MSPs) continue to show promise for informing and shaping negotiated agreements that result in better sharing of the resources, benefits, and costs associated with dams

The inherent complexity and diversity of interests in water resources development and energy production, of which dams and hydropower are a part, present considerable social and political challenges that must be negotiated. MSPs are an approach for constructive engagement and learning about complex problems where facts are disputed and values differ. Experiments with a variety of MSPs – some more inclusive, some less – have taken place around dams, and beyond to many other decision-making realms. Interestingly, multi-stakeholder approaches have been used to address the legacy impacts of existing dams in several regions. Gosnell and Kelly describe an innovative approach to negotiating difficult water-sharing and dam re-licensing agreements among indigenous tribes, farmers and hydropower interests in the Klamath river basin, which may lead to decommissioning of several dams as a means of restoring important salmon fisheries. And in the Barbara Rose Johnston paper a process in Guatemala is discussed, where communities who suffered violence associated with the Chixoy dam have spearheaded efforts to document their losses and advocate for reparations to remedy the legacy of loss.

MSPs can help deliberation to become routine, enabling complex water issues to be more rigorously examined in better, more informed negotiations, argue Dore and Lebel. A key message from Dixit and Gyawali, however, is that although dialogue about dams has continued over the past decade, there is no guarantee that this translates into improved decision making without commensurate political will. They discuss the case of Nepal where there was extensive, often feisty dialogue processes before and after WCD, and yet unsatisfactory conventional practice by the 'hydrocracy' continues to reign even after significant political changes that saw the rise to power of the political Left.

A NEW WAY FORWARD

The initiative by *Water Alternatives* has elicited a strong response illustrative of the widespread interest in the issues surrounding large dams and of the continued relevance of the WCD's analysis and recommendations.

Based on the diverse perspectives across a range of topics, the changing drivers of dam development, and the new financiers of dams emerging, the papers and viewpoints in this special issue demonstrate the need for a renewed multi-stakeholder dialogue at multiple levels. This would not be a redo of the WCD, but rather a rekindling and redesigning of processes and forums where mutual understanding, information-sharing, and norm-setting can occur. There would also be opportunities for renewed reflection – in light of the changing drivers of dam development, including climate change – on the whole approach to water storage and energy production that could include not just concrete dams but also other 'technologies' such as groundwater and wetlands management, water harvesting, conjunctive management of groundwater and surface water, renewable energies like solar, wind, and geothermal, decentralised and small-scale technologies, and intensive water and energy conservation, among others. Such dialogues would likely be necessary at local, national, and international levels.

While one of the key drivers of dam development remains the pressure to meet human needs for energy and water resources, there is a continued need to better explore, promote, develop, invest in, and replicate the variety of non-dam and less-destructive alternatives for providing water and energy development. In the ten years since the WCD, there has been inadequate investment in the kinds of non-dam and efficiency investments outlined in several papers in this volume.

One of the most promising developments of the last decade is the further demonstration that true partnership amongst key stakeholders can produce transformative results. Successes on the ground in Guatemala, the Klamath basin in the US, the Pangani river in Tanzania, and others described in this

Moore et al.: Revisiting the large dam controversy

volume demonstrate that many of the WCD recommendations around negotiated agreements are working in practice to foster resource-sharing agreements among the affected stakeholders.

What is crucial at all levels is compliance and accountability – true ten years ago and today. Many excellent projects exist from which we can learn, but there are others that continue to have serious negative impacts. Ignoring either does not serve anyone's interests – we must learn from all, make wiser choices and improve performance. We hope that this special issue sparks such dynamic learning and dialogue to recommit ourselves to finding effective, just, and lasting solutions for water, energy and ecosystem management. The world's impoverished and our suffering rivers and aquatic environments – upon which we all depend – deserve better!

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ANU page 150



Gaining Public Acceptance: A Critical Strategic Priority of the World Commission on Dams

John Dore

Water Resources Advisor, Australian Agency for International Development (AusAID), Mekong Region; john.dore@dfat.gov.au

Louis Lebel

Director, Unit for Social and Environmental Research, Faculty of Social Sciences, Chiang Mai University, Thailand; Ilebel@loxinfo.co.th

ABSTRACT: Gaining Public Acceptance (GPA) was a strategic priority recommended in the final report of the World Commission on Dams (WCD). GPA remains a central, thorny challenge for all parties interested in how society makes decisions about the development of water resources, the provision of energy, and the maintenance of ecosystems, whilst striving for social justice. The WCD's GPA is largely about issues of procedural justice (e.g. inclusion and access) and proposes process-related principles. Distributional justice is also important (e.g. equitable sharing of benefits; and, avoiding unfair and involuntary risk-bearing).

Several key lessons are emerging from past initiatives to gain public acceptance through participatory exercises. Differences in development and sustainability orientations are obvious in debates on dams and need to be explicitly considered and not glossed over. Politics and power imbalances pervade participatory processes, and require much more attention than they receive. Ultimately, the accountability and legitimacy of state and non-state actors are crucial but complex as there are many ways to build public trust.

To earn legitimacy and more likely acceptance of important public decisions we suggest a comprehensive set of 'gold standard' state-society attributes for improving governance. Multi-stakeholder platforms (MSPs) can help deliberation to become routine, enabling complex water issues to be more rigorously examined. The combination of increased public trust, earned by the state, and high-quality MSPs to assist more informed negotiations, we see as being key to the gaining of public acceptance.

KEYWORDS: World Commission on Dams, gaining public acceptance, public participation, procedural justice, distributional justice, multi-stakeholder platforms

INTRODUCTION

The World Commission on Dams (WCD) had several objectives. It sought to undertake a global review of the development effectiveness of large dams, and assessments of alternatives. It wanted to create a framework for assessment of options and decision-making processes. It also wanted to identify internationally acceptable criteria and guidelines for planning, designing, construction, operation, monitoring and decommissioning of dams. The commissioners produced a consensus report (WCD, 2000), a negotiated opinion, which was launched in a blaze of publicity in 2000 and has since been analysed by those exploring what can be learned from the process (e.g. Bradlow, 2001; McCully, 2001; Bandyophadhyay, 2002; Brinkerhoff, 2002; Fujikura and Nakayama, 2002; Fujikura and Nakayama, 2009).

The report articulated a decision-making framework for large dams, or large water projects and water-related energy projects. It was a guide, not a blueprint, offered by the commissioners as their contribution to the ongoing, worldwide debate over this type of development project. Of course, there

are other valuable viewpoints being expressed by governments, scholars, activists, developers and funders. Some of these have been used to strengthen and build upon the framework offered by the WCD.

This paper concentrates on gaining public acceptance (GPA), the first strategic priority recommended in the WCD's final report (WCD, 2000). The core idea is that "public acceptance of key decisions is essential for equitable and sustainable water and energy resource development". GPA remains a central, thorny challenge for all parties interested in how society makes decisions on the development of water resources and the provision of energy. The paper will remind readers of the WCD conceptualisation of GPA, and various critiques. It is meant to assist the debate on large dams move forward with the GPA concept by acknowledging and unpacking different points of view and suggesting other ways to pursue reasonable acceptance. The intention is to transcend differences, and see if substantial agreement can be forged. Where there is agreement, we aim for it to be genuine. Where differences will remain, we aim for these to be clearly identified and understood.

GAINING PUBLIC ACCEPTANCE

The WCD formulation of GPA

The WCD (2000) report argued that public acceptance of key decisions is essential for equitable and sustainable water and energy resources development. Acceptance emerges from recognising rights, addressing risks, and safeguarding the entitlements of all groups of affected peoples, particularly indigenous and tribal peoples, women and other vulnerable groups. Decision-making processes and mechanisms are used that enable informed participation by all groups of people, and result in the demonstrable acceptance of key decisions. Where projects affect indigenous and tribal peoples, such processes are guided by their free, 'prior and informed consent' (FPIC). The supporting policy principles and guidelines for GPA in the WCD Report are outlined in box 1.

In our view, the label 'gaining public acceptance' is, to some extent, unfortunate. In English, it can have the connotation of convincing the public to accept a predetermined option or selling an option or marketing a done deal. This was not, however, the intention of the WCD commissioners. The GPA strategic priority and the rest of the framework are intended to promote participatory and fair decision making throughout a typical planning and project cycle, including the early steps when choices are being made about development directions and the option set to be considered.

GPA has important relationships to other WCD Strategic Priorities (figure 1). Two examples serve to illustrate this point. First, how and when benefit-sharing mechanisms are debated, explored, negotiated and possibly agreed upon, is key to GPA. The importance of benefit-sharing is recognised by the WCD strategic priority 'recognising entitlements and sharing benefits'. What should be the relationship between how benefits are shared and the process by which public acceptance is gained?

Second, broadening the scope of risk assessment is also key to GPA. Risk assessment should not be seen as a purely technical exercise. The aggregation and high level of simplification needed for technical risk analysis necessarily leaves many factors out, opening the door for bias and vested interests. Hence, the need, as Rayner (2003) and others argue, for assessment through a political process, where risk is not permitted to be reduced to a set of formulae. Whilst risk assessment should be part of comprehensive options assessment it is also integral to GPA. Is risk analysis consistently factored into a transparent stakeholder analysis undertaken as a part of GPA? If not, why?

Box 1. GPA policy principles and guidelines.

Policy principles

Recognition of rights and assessment of risks are the basis for the identification and *inclusion of stakeholders in decision making* on energy and water resources development.

Access to information, legal and other support is available to all stakeholders, particularly indigenous and tribal peoples, women and other vulnerable groups, to enable their informed participation in decision-making processes.

Demonstrable public acceptance of all key decisions is achieved through agreements negotiated in an open and transparent process conducted in good faith and with the informed participation of all stakeholders.

Decisions on projects are guided by adherence to the principle of *free, prior and informed consent* (*FPIC*) of affected indigenous and tribal peoples achieved through formal and informal representative bodies.

Guidelines

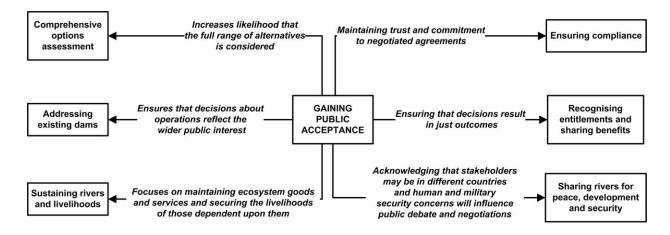
Stakeholder analysis explains that such an analysis should recognise existing rights and those who hold them, identify those at risk – distinguishing between voluntary risk takers and involuntary risk bearers – and identify constraints to establishing a level playing field for stakeholder involvement.

Negotiated decision-making processes articulate the attributes of a process which should enable stakeholders an equal opportunity to influence decisions, even if not actually making the decisions.

FPIC of indigenous and tribal peoples explains that this is conceived of as a continuous, iterative process of communication and negotiation spanning entire planning and project cycles.

Source: WCD, 2000.

Figure 1. Relationship of GPA to other WCD Strategic Priorities.



Dams and Development Project

Post-WCD GPA remained a contentious issue and the Dams and Development Project (DDP) sought to provide more clarification and ideas to move forward. This paper was originally drafted as a background paper to underpin an October 2005 multi-stakeholder GPA workshop in Nairobi (DDP, 2005) that eventually fed into the principal DDP output, a "compendium of relevant practices" that explored not

only GPA – re-labelled as stakeholder participation – but also options assessment, benefit-sharing, compensation, social and environmental assessment, compliance and international policy (DDP, 2007).

Despite the best efforts of the WCD and DDP, it seems to us that the WCD version of GPA requires further reflection and strengthening. To do just that, in the next sections we will unpack public participation, provide an expanded set of justice principles and see how these could improve GPA and governance more broadly.

MEANINGFUL PUBLIC PARTICIPATION

Integral to any analysis of GPA is the issue of public participation, one of the processes that can help attain public acceptance of a particular development proposal. Unpacking public participation is necessary if we are to better understand GPA. In this section, we address some of the key GPA issues that preceded WCD or have since emerged. In some places this draws on analysis submitted to the WCD that we consider deserved more attention and prominence in the final report produced by the Commissioners.

Which decisions are open to public participation?

Assuming a decision-making process permits public participation, many government agencies, privatesector stakeholders, civil society and analysts have focused on who participates and at what level. Less attention has been placed on what part of an agenda is voluntarily offered up for debate. For example, Petkova et al. (2002), in a nine-country review of environmental governance found that participation opportunities were usually "concentrated in the middle of the decision-making cycle... tended to occur too late to meaningfully affect the scope and nature of the decision, and did not continue through the implementation phase of the decision-making cycle". The WCD commissioners' conception of GPA suggests in different parts of their report (e.g. in the FPIC guideline) that communication and negotiation should span entire planning and project cycles.

Who is a stakeholder?

As already mentioned, the WCD Report recommended an approach based on recognition of rights and assessment of risks to identify stakeholders, and subsequently analysing and debating their interests. For large water and energy projects, many kinds of rights are likely to be relevant, from customary rights, to rights of developers and investors, through to property and constitutional rights (WCD, 2000). Assessment of rights, entitlements and claims that may be affected by a project or its alternatives should be an early key step and the basis for identifying and engaging with stakeholders.

Hemmati (2002) equates stakeholders with individuals or organisations: "who influence a decision, or can influence it, as well as those affected by it". This is a highly inclusive interpretation, with which we agree, provided that the different stakes of actors are clearly brought out in the open via some type of stakeholder analysis. The WCD Report clearly acknowledged that actors have different stakes:

Those whose rights are most affected, or whose entitlements are most threatened, have the greatest stake in the decisions that are taken. The same applies to risk: those groups facing the greatest risks from the development have the greatest stake in the decisions and, therefore, must have a corresponding place at the negotiating table (WCD, 2000).

It is important in a stakeholder analysis to clarify the many, often competing, interests of stakeholders. Care needs to be exercised in making simplistic categorisations. For example, gender, ethnic or spatial (upstream, downstream, dam area) groupings assume a relative homogeneity of interests within these categories. State procedures of measurement and assessment are invariably homogenised and simplified (Scott, 1998). Those left out of these simplified portrayals of reality may well be exactly those whose voices need to be heard.

Different degrees of participation

Participation in (dams and) development can be undertaken for quite different purposes and unfold in very different ways. There are several conceptualisations of what public participation constitutes. Central to them is the idea that people outside the bureaucratic structures of the state have a stake or mandate to get involved in governance processes. Participation is recognised as ranging in degree, typically reflecting the extent to which power over decisions, and responsibility for the management of development, are shared (Arnstein, 1969; Clayton et al., 1997; IAP2, 2000).

Arnstein's original ladder of participation (1969), described the climb from *manipulation* and *therapy* (non-participation) to *informing*, *consultation*, *placation* (degrees of tokenism) through to *partnership*, *delegated power* and *citizen control* (degrees of citizen power). Clayton et al. (1997), in work widely disseminated by the United Nations Development Programme, presented an expanded notion of the ladder. The base was again *manipulation*, where participation is seen as an opportunity to indoctrinate. One-way provision of *information* may then improve to *consultation*. Climbing higher, there may be interactive *consensus-building* approaches, possibly even *collective decision making*. Even higher, there may be *risk-sharing*, *partnerships*, and *self-management*. Another example, from the International Association for Public Participation is also useful (IAP2, 2000), and uses a spectrum instead of a ladder, but the key points remain the same. That is, there is a continuum from the nominal (token) to transformative (empowerment).

Why be participatory?

The rationale for using participatory approaches varies enormously (Leeuwis, 2000; Rowe and Frewer, 2000). Some arguments are primarily *instrumental*, for example, focused on securing information or solving a problem. Others promote participatory approaches on *normative* grounds, for example, due to the belief that actors have a right or duty to be actively engaged. A *political* rationale can also be invoked, for example, to (positively) empower disadvantaged actors, or (negatively) dis-empower oppositional actors, perhaps by diluting their voice or in other ways weakening them. Participatory efforts instigated by state actors often reflect an instrumental rationale. Arguments are made that public participation leads to efficiency, fewer conflicts, and more and perhaps better option formulation. Civil society voices, on the other hand, have often argued from a normative standpoint, demanding greater participation as a right of citizens or project-affected peoples.

Many participatory techniques originated as a response to inadequate research, planning and decision-making processes. Practice can be problematic, however, and threats of a 'tyranny of participation' (Cooke and Kothari, 2001) have been well documented, for example, by Hildyard et al. (2001) who argued that participatory development processes risk merely providing opportunities for the more powerful if they do not take into account relative bargaining powers.

When considering issues of GPA and public participation, it is a common failing to inadequately recognise the importance of the relationships between actors and institutions, which may empower some, and suppress or inhibit others. A draft of the WCD thematic review of participation, negotiation and conflict management was rightly criticised for the absence of this type of analysis. For example, Hildyard (2000) was concerned about "the structural, institutional and other barriers – such as the privileging of certain types of expertise over others – that curtail, restrict or deny a space to marginalised groups for negotiation". Hildyard also referred to institutionalised racism, the pressure to lend, career incentives, gender imbalances, lack of accountability of some decision makers, and the everyday hassles related to the language and tools of formal decision making, some combination of which can often diminish so-called participatory processes. The final thematic report still barely addressed these subjects, other than including the comments as appendices. Echoing these concerns, in the final WCD Report, one commissioner insisted on noting that "even with rights recognised, risks assessed and stakeholders identified, existing iniquitous power relations would too easily allow developers to dominate and distort" decision-making processes (Patkar, 2000). She went on to caution

against granting "undue legitimacy" to particular actors, rather than respecting the "sovereignty of both people and the nation-state". The types of structural barriers, raised by Hildyard, and the power imbalances cited by Patkar, often require an oppositional civil society to create more equitable negotiation spaces.

Seeking agreement or local empowerment?

Participatory techniques have often been employed in development projects as a way to persuade project-affected people to agree with plans. Guttal, in submissions to the WCD, described this as "solutions backward" – drawing upon the case of the Nam Theun 2 dam in Lao PDR – where, in her view, the state assumed at the outset that it had a robust solution, and hence, participation was then a troublesome but necessary step backwards in order to convince the citizenry, funders, etc. that the project was a good idea and that a credible process has been followed. She cautions that these types of participatory processes are likely to be devoid of "authentic debate" about future options as the objective – project implementation – is already largely fixed, at least in the eyes of the dominant decision makers (Guttal, 2000).

For others, the emphasis of public participation in development is enabling participants to have greater control and influence over their own present and future circumstances – an example of a normative rationale in action. In this view, participation has the goal of empowering people in terms of their acquiring the skills, knowledge and experience to take greater responsibility for their development (Clayton et al., 1997) and proactively influence decision making.

Development participation does not have to be one or the other. Parfitt (2004) argued that it is difficult for participatory processes not to have an emphasis on agreement-seeking about a particular option when there is a specific project proposal being considered. But, he noted the challenge is to ensure there is a countering emphasis on empowerment, to ensure more genuine deliberation about options.

Self-exclusion from public participation

Public participation is a part of democratic process, may be a part of negotiation, and can lead to the gaining and sharing of information, the building of understanding and trust, and wiser decisions. In order to prise or keep open some situations, however, it is often the case that some actors stay outside, or in Dryzek's (2000) words, choose to "remain passively exclusive and so off-limits to inclusion". This may be for any of the following reasons: not wishing to legitimise what they perceive as an inadequate or unjust process. For example, Rosien (2010) describes a consultation boycott by NGOs of a Safeguards Policy Review by the Asian Development Bank (ADB) driven by concerns about the review process. Disengagement registered the objection, led to significant change in process and content of the review and arguably contributed positively to the final policy rewrite. Alternatively, actors may have concerns that joining will deplete the ranks of oppositional civil society (Dryzek, 2000) and that by engaging in a process and accepting the responsibilities which follow, public awareness may be reduced and their own influence diminished. Or, actors may be concerned that the politics is such that participation will serve no useful purpose as deals are already done.

In many places, exclusion from public decision making – chosen or forced – has led to the creation of resistance movements which have been shaped by, and in turn, have often changed, political configurations of their place. This can be due, partly, to reconceptualising participation and moving explicitly towards negotiation (Leeuwis, 2000) of which resistance is a part. Positive forms of expressing resistance include peaceful protest, lobbying, selective and limited participation, parallel forums, engaging policy compliance and accountability mechanisms, invoking action from ombudsman offices, pursuit of mediation or taking a case to the courts for arbitration and judgement. More active dissent and suppression, regrettably sometimes aggressive or violent, are also part of a more complete ladder or spectrum. Understandably, resistance actors, operating in diverse circumstances, have diverse

operating strategies in order to influence – or at least navigate – safely through the politics of their situation. Withdrawing from negotiation can also be part of a strategy. All of this is GPA context.

LESSONS FROM PRACTICE

Several key lessons are emerging from past initiatives to gain public acceptance through participatory exercises. Differences in development and sustainability orientations are obvious in debates on dams and need to be explicitly considered and not glossed over. Politics and power are not eliminated by participation, and require much more attention than they receive. Ultimately, the accountability and legitimacy of state and non-state actors are crucial but complex as there are many sources from which to draw upon to build public trust.

Development and sustainability

The importance of differing beliefs and values about development and sustainability should not be underestimated. Understanding the range of views is critical to understanding the motivations of many actors in highly political decision making on dams and associated public/stakeholder participation. Major areas where differences are apparent include assessment of the merits of different energy options, the extent of perceived threats to ecosystems from dam development, attitudes to the substitutability of natural capital, the primacy given to coarsely measured economic growth, intergenerational equity, intrinsic rights of nature, aesthetics, and the rights to be afforded to entrenched cultural practices.

Actors in the politics of dams display a wide range of orientations. These include: where short-term financial reward is paramount in decision making; weak sustainability leanings where economic concerns still dominate, but with some priority given to ameliorating social and environmental impacts; and, where there is an acceptance of trade-offs with high priority given to each of economic, social and environmental issues and there is support for attempting a balanced approach. Some actors also prioritise ecosystems, arguing that it is essential to integrate ecological considerations into all social and economic planning. Others are more anthropocentric and privilege cultural values. The point is that these simplified orientation categories are substantively different and drive human behavior.

Politics and power

When reflecting on GPA it is also necessary to consider politics and power explicitly. Miller (1962) described politics as "a natural reflex of the divergences between members of a society... [where]... there is a variety of perpetual disagreements which arise from fundamental differences of condition, status, power, opinion, and aim". Given the just-discussed differences in development and sustainability orientations that dams are political is no surprise. What is important is how the politics plays out: fairly, unfairly, wisely or less so.

Power is an elusive concept but we favour the approach of Hay (1997) who thinks of power as being "about context-shaping, about the capacity of actors to redefine the parameters of what is socially, politically and economically possible for others". Having power is not the same as having legitimacy. Powerful vested interests often control states, agenda-setting, preference-shaping and decision making. Many decisions, which impact many publics, remain outside the sphere of public decision making.

There is a political and power context that pervades public participation and decision-making processes, which cannot be avoided and is integral to GPA. For example, the blurry nature of public-private partnerships in China's energy industry post-break up of the State Power Corporation (Dore et al., 2007), in the USA energy industry, and elsewhere with transnational water utilities – often make it difficult to discern whether public or private interests are receiving priority. Opaque hydropower concession and approval processes in many countries also come to mind. Critiques exploring such

sensitive issues are often unwelcome. Transparency and access to information are widely held as being desirable attributes of any good governance regime to ensure that politics and power are able to be scrutinised.

Accountability and legitimacy

The previous discussion on politics and power brings us to accountability. In the frame should be decision makers, decision funders, decision finders (advisers, facilitators and negotiators), decision influencers, decision recipients – whether governments, bureaucrats, project-affected people, NGOs, developers, builders, financiers or general citizens.

Accountability is a broad concept which refers to the extent to which people are answerable for their own behaviour and actions. All actors in the politics of dams have at one time or another had their accountability questioned. Many are taking steps to improve their accountability mechanisms. For example, the Asian Development Bank established a new system to replace its reactive inspection panel mechanism (ADB, 2003), found wanting in the case of Samut Prakarn, a waste water treatment plant scandal in Thailand. The panel mechanism was replaced by an Office of the Special Project Facilitator which equates to a relatively weak ombudsman's office and a Compliance Review Panel. The first real test for the new institutional arrangement was not directly related to water infrastructure but dealing with conflict surrounding a transport development project in Sri Lanka. A problem is that often by the time the ombudsman is activated a project is well and truly committed and so the GPA context is already very difficult. In any event, these mechanisms were created in response to various criticisms, such as the following:

Large-scale dams tend to be implemented over decades but, typically, staff in government institutions, private companies, consultancies and banks may only work on one project for a few years or even a few months. Yet the contents and consequences of their reports and decisions may not show up until months or years later (Colchester, 2000).

Legitimacy is hard won, by any actor. For governments and their public sector (ministries, departments, etc) to obtain and retain legitimacy, they need to demonstrate good governance practice by, for example, clearly explaining and seeking feedback on their government and development agenda, and disclosing complete information, and allowing it to be independently contested. For many commentators, actor legitimacy is closely linked to whether they are formally accountable to, and represent stakeholders. Agents of the state have a formal constituency which they can usually claim to represent. Similarly, company executives are, or should be, accountable to shareholders they are entrusted to represent. This framing is, however, often used to deny bestowing legitimacy on other actors who do not claim to represent others, whose status as a stakeholder may be contested, but who have much to offer in improving the quality of, and ownership in, public decisions. Civil society groups are often challenged in this way. The concept of responsibility offers a way forward through any impasse. In the context of advocacy-oriented transnational NGOs, it has been suggested that:

Political responsibility is a commitment to embrace not only goals in a campaign but to conduct the campaign with democratic principles foremost in the process. Political responsibility is a normative concept that differs slightly from accountability in that accountability has formal obligations embedded within its definition (Jordan and Van Tuijl, 2000).

The NGO Focus on the Global South (FOCUS) is an illustrative example. FOCUS is neither bound nor empowered by an external mandate. For that matter, neither was the WCD. In the absence of a formal legitimising mechanism such as membership endorsement, they have to be clear about the interests they support. FOCUS's commitment to addressing the marginalisation of large numbers of people throughout the South has defined their constituency; however, they do not claim to represent these

diverse peoples, as they recognise they have no such mandate. A formal accountability mechanism to a constituency, however, is not essential to legitimacy if the following argument is accepted:

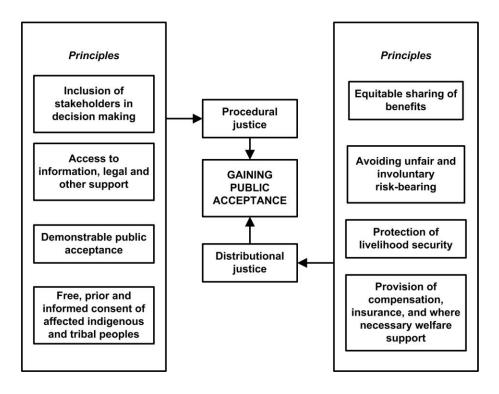
... the right to speak claimed by NGOs is not necessarily derived from a strict or formal notion of direct representation of particular group interests but rather from a commitment to a set of values and insights which form the basis for an analysis of particular situations and a strategy to act on that analysis... there would be no inherent contradiction for an NGO to make submissions and arguments relating to a proposed big dam even when no local group shares those views – the arguments should be taken up in public debate and dealt with on their own merits... (Greeff, 2000).

Ultimately, public legitimacy of the wide range of state or non-state actors is based on the establishment and maintenance of public trust via transparency, accountability, responsible behaviour and competence.

EXPANDED JUSTICE PRINCIPLES

The WCD's GPA is largely about issues of *procedural justice* and proposes process-related principles. But GPA should also encompass *distributional justice* and outcome-related principles. In figure 2 we put forward an expanded view of GPA.

Figure 2. Justice principles for gaining public acceptance.



Source: Procedural principles from WCD 2000, distributional principles proposed by authors.

Procedural justice

Inclusion of stakeholders in decision making

The principle of inclusion is intended to foster the protection of the rights of affected people and make them net beneficiaries rather than just bearers of social or environmental costs. Consistent with human rights norms established in existing international agreements, the WCD Report proposes an approach to GPA based on the recognition of *rights* and assessment of *risks*. Those with rights or bearing risks are considered stakeholders and should be included, or have their interests genuinely represented and considered, in decision making. These include rights to: self-determination; consultation in matters that affect their own or other peoples' lives; democratic representation of peoples' views on such matters; remedy or compensation; an adequate standard of living; freedom from arbitrary deprivation of property; freedom from violence; freedom of thought, conscience and religion; and freedom of opinion and expression (WCD, 2000).

Access to information, legal and other support

Access to information, legal and other support is crucial. It is recognised that affected groups have often been disadvantaged and unable to access relevant information or other support to enable informed participation and exercise their rights. For example, some groups have been unaware of the extent of their customary and constitutional rights (Goodland, 2004). Questions of credibility of information and knowledge also arise (Cash et al., 2003). For example, in the case of EIA, studies have been directly commissioned by project proponents without really engaging many other affected and interested parties. Moreover, there is a difference between making information accessible and then ensuring that this can become shared knowledge and understanding, even if not agreement. Those from different cultures, comfortable in different languages, have often been placed at a disadvantage.

The WCD was not alone in pushing for increased access. For example, this issue was prominent in the *Rio Declaration on Environment and Development*, emanating from the UN conference in Rio de Janeiro: "Principle 10. States shall facilitate and encourage public access to information, awareness of environment and development issues and participation in decision-making by making information widely available. Access to judicial redress and remedy shall also be provided (UN, 1993)".

There have been many countries that have embraced Principle 10, but many more that have not. The Aarhus Convention is a particularly notable, positive example which aims to implement access principles:

The Aarhus Convention is an environmental treaty that turns the 1992 Rio Declaration's vague commitments to the principles of access into specific legal obligations... The Convention not only recognizes the basic right of every person of present and future generations to a healthy environment but also specifies how the authorities at all levels will provide fair and transparent decision-making processes, access to information, and access to redress (UNDP et al., 2003).

Demonstrable public acceptance

The WCD (2000) argued that negotiations should result in "demonstrable public acceptance of binding formal agreements..." achieved via "an open and transparent process". For the WCD, a negotiated agreement presupposes a decision-making process that arrived at a consensus: "All stakeholder forum members should share a genuine desire to find an equitable solution and agree to be bound by the consensus reached".

The discourse surrounding WCD often conflates consensus and negotiated agreement. These are not the same. What matters is the outcome of negotiations, the details of any agreement and whether this agreement has sufficient or demonstrable public acceptance. The WCD sought consensus, at least between the commissioners, driven by a common view that "without consensus, a commission will be seen to have reproduced divisions among stakeholders, rather than transcending them" (Dubash et al., 2001). If it is accepted that consensus is by definition "unanimous agreement not just on a course of action, *but also on the reasons for it*" (Dryzek, 2000) then this is a misrepresentation of consensus. Dryzek (2000) contends that: "In a pluralistic world consensus is unattainable, unnecessary and undesirable. More feasible and attractive are workable agreements in which participants agree on a course of action, but for different reasons". Following this logic, failure to reach a consensus should not be seen as failure. Although the ideal of a consensus is sought, a negotiated outcome in a complex

situation implies compromise, and will not reflect total consensus. Too great a focus on consensusseeking can have undesirable effects, such as difficult issues being ignored in order to manufacture a pseudo-consensus.

Free, prior and informed consent by indigenous and tribal peoples

The principle of *free, prior and informed consent* (FPIC) is being increasingly reflected in contemporary international agreements, if not law, which explicitly recognises indigenous peoples' rights to participate in decision making and to give or withhold their consent to activities affecting their land, territories, resources or their bundle of general rights. The principle of FPIC holds that consent must be freely given, obtained prior to implementation of activities and be founded upon an understanding of the full range of issues implicated by the activity or decision in question (MacKay, 2004). In MacKay's view, articulated in a briefing note for the World Bank's extractive industries review, but applicable also to the water and energy resources development debate:

Decisions about when, where and how to exploit natural resources are normally justified in the national interest, which is generally interpreted as the interest of the majority. The result is that the rights and interests of unrepresented groups, such as indigenous peoples and others, will often be subordinated to the majority interest: conflict often ensues and the rights of indigenous peoples are often disregarded (MacKay, 2004).

While the measured support by WCD for FPIC was significant, it was also controversial:

WCD has restricted its attention only to the groups which are adversely affected by a dam. It has failed to appreciate that there are much larger sections of society for whom the dam and the water supply flowing from the dam are nothing short of a life line... WCD's obsessive concern for preserving the rights of affected local peoples makes it distrust the entire public set up, even the legal framework of the country to which these people belong (Mr Gopalakrishnan, from the Central Water Commission of the Government of India, WCD Forum member, February 2001, quoted in Dubash et al., 2001)

Bird (2002) – himself, a former member of the WCD secretariat – has commented that recognition of the special rights of indigenous peoples was not intended by the WCD commissioners to bestow a veto right to individuals or groups and that the WCD's position was that the state should still have the final say. This may have been the majority view of the WCD commissioners, but it is not the view of many FPIC supporters, who do not have confidence in either the willingness or ability of state representatives to take adequate account of indigenous peoples' priorities and concerns.

Use of the term GPA and its final drafting into the WCD Report represented a compromise by the commissioners and a restriction of the FPIC principle. There was extensive lobbying for FPIC to be even more concretely embedded (Dubash et al., 2001). Inevitably, differences of opinion remain about this and other elements of the GPA strategic priority. It is unlikely there will ever be consensus to operationalise FPIC across the board. It remains a controversial element of GPA, as it was during the WCD learning and report preparation period. Claims of *ancestral domain* (i.e. seeking to establish or privilege indigenous peoples' rights) continue to usually remain subordinate to government claims of *eminent domain* (i.e. the right of a government to appropriate private property for public use, usually with compensation to the owner). Understandably, governments invoke eminent domain to justify making decisions on behalf of their citizens. This is not incompatible with recognising indigenous rights, but it is incompatible with committing to always privilege the local or indigenous over the national.

Distributional justice

If a decision-making process is seen to be fair, then people may be willing to accept a future scenario that is sub-optimal to their own interests. Promises are, however, sometimes not kept and things do not always unfold as expected. In large and complex water infrastructure projects, impacts are often

not well understood or anticipated. With climate change, aggregate changes in land use in a basin, shifts in economic structures, and uncertainties with respect to benefits, risks and livelihood security may be increased further. Acceptance of decisions by the public can be lost without adherence to additional principles related to *actual outcomes* or distributive justice.

Equitable sharing of benefits

Large water infrastructure projects are built because they promise a stream of benefits, for example, securing water supply for rapidly growing industry and urban areas, helping store water for irrigating agriculture during seasonally dry periods, or diverting and controlling monsoonal flood waters, and producing electricity. Projects also provide employment opportunities during construction and, to a lesser extent, during operation. During construction, concessions for timber logging can be lucrative – who gets them? This principle argues that these benefits should be shared equitably rather than being captured by a small subset of stakeholders. If, for example, the water captured, and electricity produced, are for use in a distant location then these resources themselves or some of the taxes and fees should go to more local uses as well. The principle should apply both within and across borders (see Varghese, 1997).

Lack of perceived fairness in the distribution of benefits can make finding a procedural solution to conflicting interests and values over projects very difficult. Examples abound, such as that analysed by Muradian et al. (2003) who recount the case of an ecological distribution conflict between a Canadian transnational mining company and a rural population in Peru.

Although this principle of equitable sharing of benefits overlaps with the WCD strategic priority on recognising entitlements and sharing benefits, it should be considered a component of GPA. Successful implementation of benefit-sharing mechanisms, including innovations as revenue distribution oversight committees, is difficult but not impossible. Slack (2004) remains optimistic about the potential after reviewing experiences in Ecuador, Peru and Bolivia. In recent years benefit-sharing has become a prominent part of the dams' discourse, invoked by a range of actors, from multilateral development banks, governments, and local and international NGOs (for example, see: Sadoff and Grey, 2005; DDP, 2007).

Avoiding unfair and involuntary risk-bearing

Regarding risk, the WCD insisted on clearly distinguishing between voluntary risk-takers (e.g. private companies) and involuntary risk-bearers (e.g. displaced people) (WCD, 2000). The WCD noted that conventional practice has been to restrict risk assessment to that being borne by developers, investors and states in terms of threats to expected (or hoped for) returns on investments. Generally, these actors are voluntary risk-takers, although it is recognised that some states involuntarily shoulder more risk than they would prefer, as a forced condition of external financing. A significant step by WCD was to push for risk- assessment to be extended to include the wider involuntary risk-bearing group upon whom risks have been imposed. Risks for this latter group may include threats to livelihoods and well-being for myriad reasons.

The involuntary risks people are exposed to when a dam is constructed may be catastrophic, relating to dam failure and associated flooding, or operating errors as in the case of Vietnam's Yali Falls dam (Hirsch and Wyatt, 2004), none of which were foreseen or included in the planning, design and management regime established for that hydropower facility. For many communities and ecosystems downstream of dams, substantial flow fluctuations become normal as its generation is linked to delivery schedules that focus on supplying high-value power at times of peak demand. Also common are seasonal flow changes and reduced sediment delivery that affect flood-plain replenishment, wetland productivity, water-borne diseases, bank and bed erosion, flooding and nutrient supplies to ocean fisheries. Projects must make information on these risks available to all and do as much as possible to

ensure that they avoid unfair and involuntary risk-bearing with likely negative consequences, especially to the poor and vulnerable.

As noted above, risks may be transferred to ecosystems. Values attached to these vary greatly, depending on perspectives. There is no single set of universal green values (Hunold and Dryzek, 2002), however, where interests in conservation or recognition of livelihood dependence is high, even if the values attached are diverse, and ecosystem impact considerations also often become an important factor in gaining and maintaining public acceptance.

Protection of livelihood security

It is acknowledged that large infrastructure projects invariably, through changes in land use, water flows and the creation of new job opportunities, alter the context within which livelihoods are conducted, the entitlements on which the poor rely, and the diversity of livelihood options that they can take advantage of. The changes wrought by a project should not, however, be allowed to undermine livelihood security (for a discussion of the concept, see Chambers and Conway, 1991; Scoones, 1998). At a bare minimum, livelihood security implies that a population has secure and continuous access to the natural resources, ecosystem and other services required to maintain a living.

Those whose livelihood security is diminished as a consequence of a policy or project should be prioritised when it comes to taking advantage of the new opportunities emerging as a consequence of the project. Differences in culture, skills, capacities and social discrimination mean that protecting the livelihood security of project-affected people is far from straightforward and often requires substantial expenditure in education, training and enterprise development.

In cases where it is hard to uphold the previous three principles of distributive justice, there should be some kind of a safety net made available. Compensation for lost livelihoods, property and benefit streams may have to be transferred from the newly created winners to the losers. Insurances and welfare support may also be necessary, and just. The DDP follow-up to WCD did some work on this topic but more needs to be done.

ASPIRATIONS FOR IMPROVED GOVERNANCE AND GPA

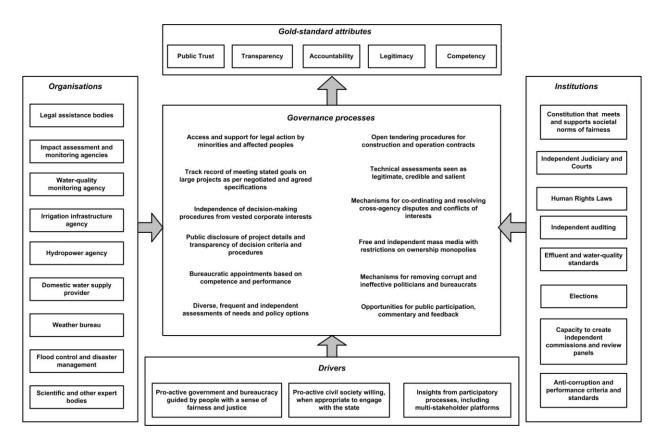
The previous examination of public participation, distillation of lessons and expansion of justice principles lead us to this section that focuses on aspirations for improved governance and GPA.

State actors, institutions and drivers

An ideal state-society complex is conducive to just and effective GPA (figure 3) where there is a high level of public trust between state authorities and the people they govern. Transparency, accountability and competency are all attributes which contribute to trust-building and enhance the legitimacy of authorities.

Institutions have a clear role to play. Critical rule-based foundations, relevant to GPA, are institutions such as constitutions, courts, and laws related to a huge range of issues from public safety through to media ownership and operation, international agreements, independent auditors, minimum standards, and so on. In all functioning states, there is a raft of government and bureaucratic organisations involved in policy creation, administration and implementation of the state-society agenda. The better this is functioning, the more likely that public acceptance will be gained for public decisions. For water and water-related energy projects, this invariably involves an array of state organisations with responsibilities for construction, operation, energy, irrigation, impact assessment, monitoring, etc.

Figure 3. Ideal state-society elements conducive to GPA.



It is important to acknowledge the driving forces behind the attainment of the 'gold standards'. Our argument, encapsulated in figure 3 is underpinned by the assumption that for governments and their associated bureaucracy to fulfil their potential requires them to be proactive, guided by leaders with a sense of justice and fairness. Linked and complementary to this is a proactive civil society that is willing to constructively engage and negotiate with state representatives. This complementarity can be further enhanced by insights that emerge from constructive engagement.

Multi-stakeholder platforms

The WCD was a Multi-Stakeholder Platform (MSP). MSPs are an approach for constructive engagement and learning about complex problems where facts and values may be in dispute. MSPs are just a part of governance in which different stakeholders are identified, and usually through representatives, invited and assisted to interact in a deliberative forum that focuses on sharing knowledge and perspectives, generating and examining options, and informing and shaping negotiations and decisions (Röling, 2002; Warner, 2007; Dore, 2010). In the decade since WCD, there have been many more creative MSPs not only in the water resources domain but also in other sectors. Examples are the Millennium Ecosystem Assessment and the Comprehensive Assessment of Water Management in Agriculture on the international level. At the national level, we have seen initiatives such as the civil-society-led dialogue on river-linking schemes in India, the WCD follow-up processes in Nepal and Africa, and the consensusbuilding process on the Everglades in South Florida. We can learn from the successes, difficulties and failures of such processes.

MSPs can add value by the quality of their deliberation and discursive processes if they are inclusive, information-rich and flexibly operated, and actively promoting analysis of different views. In this ideal type, participants are open to changing their opinions through persuasion, but are not pressured or

coerced into a manufactured consensus, manipulated or in various ways deceived. Such platforms would also be characterised by respect, sharing of information and allowing all actors the freedom to participate and capably communicate their views (Dryzek, 2000).

A recent study of water-related negotiation (Dore et al.; 2010) provided the following key messages:

- Setting up an MSP requires good design and process led by credible and competent convenors.
- High-quality process, enabling effective deliberation, increases the legitimacy of MSPs.
- Practical steps for organising an MSP must keep in mind the final goal of producing workable recommendations for forward action.
- MSPs help deliberation to become routine, enabling complex water issues to be more rigorously examined in better informed negotiations.

We see MSPs as having an important role to play in GPA, but MSPs are seen by some as disrespectful of, and at times subversive to, existing public decision-making structures. Both WCD and other MSPs – particularly processes led by civil society – have been accused of being undemocratic, and too empowering of interest groups with policy positions which may differ from dominant policy positions within state governments or parts of their associated bureaucracies. Advocates claim the opposite, that in fact these types of processes are complementary to formal state decision-making processes and deepen democracy. To overcome some of these tensions, the relationship between MSPs and wider issues of democratic governance need to be more adequately addressed if MSPs are to create and maintain wide credibility.

CONCLUSION

It is no surprise that differences of opinion remain in the debate on large dams. As Klaus Töpfer, UNEP's former Executive Director, stated "we should not be so naïve as to expect all divisions will be washed away" (DDP, 2003) by any single commission or its follow-up. Key issues remain, and ways forward continue to be sought. Given the complexity surrounding the WCD subject matter, we clearly see the need for pluralism as society experiments with, and sometimes learns, better ways to communicate with mutual respect, shared knowledge, and negotiating key decisions.

The discussion in this paper has focused on GPA issues, distilling lessons from public participation, and proposing both justice principles and ideal state-society elements conductive to GPA. But, of course, there must still be outcome targets to ensure the 'gold standards' do not lose sight of their purpose. Using the case of the Traveston Crossing dam in Australia, Wasimi (2010) has used the three lenses of economic development, social equity and environmental sustainability to analyse a proposed large dam project in rural Queensland. Using the WCD and DDP guidance as a point of departure, Wasimi examines the contested facts and values surrounding the project that are similarly contested in countless other places around the world. He observed how semi-structured multi-stakeholder engagement has enabled the clearer articulation of very different perspectives and the overall quality of constructive engagement to be lifted. This may be more democratic and potentially just, but it is still a difficult GPA road.

In conclusion, with constructive intent, the following ideas are offered as examples of the actions required to move forward with GPA. First, recognise that there is no single correct way for GPA and, therefore, encourage further experimentation and learning with governance processes, such as MSPs. Openness, transparency and fairness are best achieved through multiple avenues, by creating multiple arenas for dialogue and debate and channels for public input on decision making. However, it must also be recognised that the capacity and experience of personnel in all sectors is limited, and it is therefore essential in many places to build the capacity of both state and non-state actors to co-design, use, fund, participate in, and monitor MSP inputs to, aid decision making.

Second, we need to dispel the myth that public participation is wasteful of resources by highlighting the rights to participation, and demonstrating the value of genuine public participation to affected peoples, the general citizenry, investors, credit providers, and state agencies. This requires more sharing of GPA experiences from fields other than large-scale water and water-related energy policy, planning and projects.

Third, we need to create incentives for effective partnerships to be reproduced, by praising and rewarding state agencies and other actors that effectively use process-based and distributive justice principles when consulting the public.

Finally, we suggest effort be made to deconstruct the assumption (by some) that know-how about processes of governance, including for GPA, is centred in so-called mature economies and, therefore, encourage more openness to learning lessons of good practice from developing countries.

DISCLAIMER

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Multi-Stakeholder Platforms (MSPs)

3.1 MSPs: a basis for fairer water governance

Multi-Stakeholder Platforms (MSPs) are a part of governance in which different stakeholders are identified and, usually through representatives, invited and assisted to interact in a deliberative forum that focuses on:

- sharing knowledge and perspectives
- · generating and examining options
- · informing and shaping negotiations and decisions

MSPs are not the only places where deliberation takes place. MSPs and dialogues are words that are often used interchangeably. This may be misleading. Any 'dialogue process' implies deliberation is central. There may be much dialogue and deliberation embedded in advocacy organizations, diplomacy, operations within the party room, the parliament, contract drafting, the corporate board room or the village committee. However, as the name specifies, MSPs refer to where deliberation is fostered among multiple, diverse stakeholders.

MSPs are an approach for constructive engagement and learning about complex problems where facts and values may be in dispute. Choices about water often involve society contesting facts, such as the most efficient way to supply water, recover delivery costs, and provide efficiency incentives. Choices about water also often involve contesting values, for example, whose priorities and needs matter most, when there is insufficient water to satisfy all demands.

MSPs may lead to the creation or strengthening of bridges of understanding between actors representing wide-ranging interests, and the satisfactory resolution of at least some differences. An MSP can bring into sharper focus substantive differences of approach and priorities that may not be easily reconcilable. By articulating these differences in the public sphere, an MSP can contribute to a sounder basis for negotiation and decision making.

"MSPs ARE AN APPROACH FOR CONSTRUCTIVE ENGAGEMENT AND LEARNING ABOUT COMPLEX PROBLEMS"

MSPs can be influential by bringing together stakeholders in a new form of communication and decision finding. In this way, they can ensure that differences are respected – or at least better understood – while pursuing fair and effective workable agreements about complex issues.

Influence is different to authority. Many MSPs are not necessarily vested with, nor must they claim, authority to make decisions. To do so may invite resistance and be counter-productive. Although not all dominant political cultures support or permit MSPs, in many places MSPs are part of a broader trend towards new forms of governance based on collaboration that build and draw upon social capital.

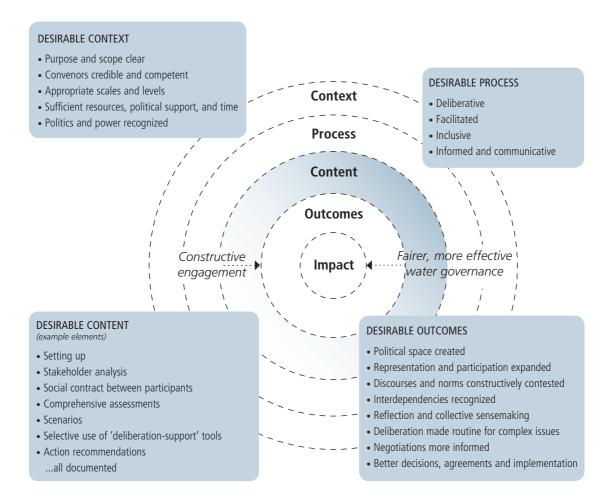
A way of focusing the MSP contribution to water negotiations is to use the 4Rs, (introduced in Chapter 1) as part of a systematic and semi-structured approach. Recapping, the 4Rs refer to rewards, risks, rights and responsibilities. For example:

- The rewards being sought from the care, use and further development of water resources, and the distribution of the full spectrum of the possible rewards/benefits/costs of various options.
- The involuntary and voluntary water-related risks.
- Water-related *rights*.
- The various water-related *responsibilities* of State and non-State actors.

While the 4Rs can always be useful as reference points, MSPs do not all need to follow the same format or structure. MSPs exist in different shapes and sizes. But, as a guide, there are desirable characteristics of MSPs. These are summarized in Figure 3.1 and explained in Sections 3.2–3.5 to provide an outline for an 'ideal type' of MSP that can contribute to fairer, more effective water governance.¹⁹

"MSPs EXIST IN DIFFERENT SHAPES AND SIZES"





ANU page 170

3.2 Desirable context for MSPs

3.2.1 Clear purpose and scope

The purpose of an MSP needs to be clearly articulated in terms of its political and practical boundaries to enquiry, the derivation, extent and duration of its mandate, and a justification of how the MSP might improve existing governance.

Questions to consider include:

- Is the MSP trying to shape the higher-level discourse of the wider political and institutional environment, i.e., the 'big context'? Examples are MSPs focusing on climate change and its implications (including for the Earth's hydrological cycle), examining global drivers and possible societal responses, such as mitigation approaches, financing adaptation, and establishing equitable carbon markets. Other MSPs include the deliberations before, during and after global fora such as the World Water Forum and the World Water Congress.
- Is the MSP focusing on building a policy-shaping network and space for debate in a particular community or place, intending to catalyze reflection and action on some shared issues? An example is the MSP working with the many actors and institutions with a stake in improving river basin governance in Namibia and Botswana's Okavango floodplain; or the Mekong Region (see Case 3.1).
- Is the MSP focusing on informing and shaping a particular negotiation process? For example, devising a fair and effective water allocation and management regime in the irrigation systems of the Viet Nam delta; or the MSP informing the negotiation and review of the agreement to enable the continuation of mining –subject to more stringent Fly River pollution controls, and sharing of rewards – in the western provinces of Papua New Guinea.²⁰

Answers to these questions should determine the design of the MSP and tactics to optimize engagement, particularly regarding choices of convenors, facilitators, invitees, agenda and tools. There are more ideas on how to clarify the purpose and scope of an MSP later in this chapter.

Case 3.1: 'Exploring Water Futures Together' in the Mekong Region

A new water governance paradigm was needed in the Mekong Region which encompasses Cambodia, Laos, Myanmar, Thailand, Viet Nam and southern China.

On main streams and tributaries disputes exist resulting from interventions to natural flow regimes and overt or default allocation decisions. These interventions are justified on grounds of: flood control, more irrigation for food or fibre production, urban or industrial supply, improving ease of navigation, or boosting energy production via hydropower. There are associated disputes about altered sediment and nutrient loads, fisheries, livelihood options, groundwater use, water re-use, and diversions (inter-State, intra-State, inter-basin and intra-basin).

An alliance of actors in the Mekong Region cooperated to convene and implement an MSP undertaken at national and regional scales. The convening coalition comprised: IUCN, the Thailand Environment Institute (TEI) – a national organization focused on sustainability; the International Water Management Institute (IWMI) – an international research organization; and the M-POWER regional knowledge network whose core membership is from, and focus is on, the six Mekong Region countries.

The purpose and scope has been to make it routine in the Mekong Region for important national and transnational water-related options and decisions to be examined in the public sphere from a range of perspectives. The MSP aimed to demonstrate this practice.²¹

3.2.2 Credible and competent convenors

Convenors are those who call people to come together and collectively engage in an issue. There are many possible convenors for MSPs and they can be either from within or outside of government (see Box 3.1). Credibility and competence are essential. Credibility will be linked to the 'social capital' of the convenor or convening coalition. Without the capacity to build new or upon existing relationships, convenors will be unable to establish an MSP constituency. Without competence, convenors will not be able to maintain the constituency or have an effective engagement.

Box 3.1: MSPs and dialogue tracks 1, 2, 3

The terminology of dialogue tracks 1–3 is one way of differentiating between water governance fora, some of which are MSPs, and the different convening possibilities.

Track 1 refers to processes of governments and associated bureaucracy, including inter- and intra-State fora. In the eyes of States these are 'official' and the most legitimate. The dominant logic is, for the most part, still implicitly accepting of rational, self-interested behaviour, particularly in international affairs. Track 1 dialogues are convened by State actors for State actors. The UN General Assembly is an example. They may be deliberative, but they are not multi-stakeholder.

Track 2 refers to governance processes involving State, UN family, donor/lender, civil society and business. These interactive forums are usually convened and led by an actor or coalition closely aligned with States ensuring government representatives remain privileged actors, such as with the International Assessment of Agricultural Science and Technology for Development (IAASTD). The convenors are usually focused on enhancing the effectiveness of States by widening the field of ideas and influences. Track 2 MSPs may be convened by State or non-State actors, but usually widen the range of stakeholder involvement.

Track 3 refers to research, dialogue and advocacy efforts led by civil society or business, less impeded by or less subordinate to State actors. These fora are committed to enlarging the political space and are often optimistic about the potential of MSPs to find and assist in negotiating better ways forward for society. The convening is led by non-State actors, and by design should bring in the full range of relevant stakeholders or possible contributors to addressing an issue. Convening coalitions are often a useful way of aggregating the social capital of the individual convenors. Tracks 2 and 3 are often now grappling with the idea and practices of deliberative MSPs. Practice may be less than ideal, but there are many promising efforts around the world where Tracks 2 and 3 are trying to improve the quality of their MSPs to inform and shape water-related debates, generate options, and inform and shape negotiations.

3.2.3 Appropriate scales and levels

Clarifying purpose and scope is a precursor to thinking about scales and levels.²² Scales are the spatial, temporal, quantitative or analytical dimensions used to measure, or rank, and study an issue (see Figure 3.2). Levels are the units of analysis that are located at different positions on a scale.

Water management is often institutionalized around the spatial scales of government (i.e., administrative) or hydrology. The scale of government has different levels, for example: district, provincial, national, regional, global. The scale of hydrology also has different levels, for example: well, aquifer, stream, lake, reservoir, small watershed, larger national river basin, or international river basin. MSP convenors must be aware that analysis and action may best occur at various scales and levels – single or multiple. For complex water issues it is usually multiple. A strength of MSPs is that they can be flexibly constructed so as to fit any scale or level, but also to enable cross-level and cross-scale deliberations.

"A STRENGTH OF MSPs IS THAT THEY CAN BE FLEXIBLY CONSTRUCTED SO AS TO FIT ANY SCALE OR LEVEL, BUT ALSO TO ENABLE CROSS-LEVEL AND CROSS-SCALE DELIBERATIONS"

Figure 3.2: Scales and levels

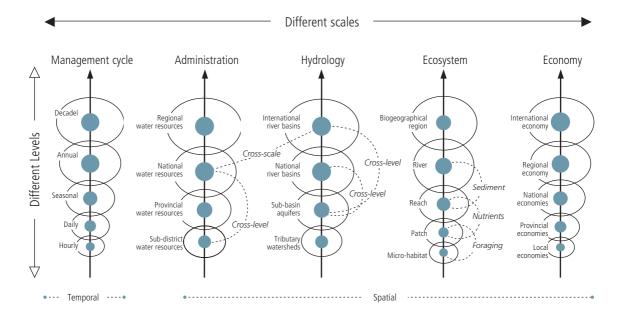


Figure 3.2²³ shows some examples of typical levels on five different scales (one temporal and four spatial). Examples of cross-level and cross-scale interactions are given for a pair of spatial scales. Some multi-level processes are shown on the ecosystem scale.

Actors contest scales and levels, overtly through debates, media releases, lobbying and protests, and more subtly, through use and control of technologies, indicators, deliberations over measurements and controlling political sites. Thus, some actors push for hydrological scales – watersheds to river basins – as levels correspond to manageable units in the models or infrastructure they operate. Others promote conventional, area-based administrative hierarchies – districts to regions – arguing that this is where capacity, accountability and legitimacy already exist. Differences between administrative and hydrological scales, for example, are a common source of tensions in water resource governance.

Contests can arise in MSPs because different actors favour particular scales and levels in their analysis, arguments and responses. Convenors may take steps in selection of participants and format to ensure there are constructive exchanges and debate within and between relevant scales and levels.

The scales and levels used in an MSP should eventually be a joint product of biophysical and social processes. It is rarely possible, and probably undesirable, in an MSP being undertaken for a complex water issue, to be too strict, too early about scale and level choices.

The physics of flows, and the dynamics of ecosystems or social institutions can often be collectively better understood if scale and level boundaries are not overly constrained at the beginning of an MSP. For example, seasonal dynamics of flow regimes are important to fish (and thus fishers) on different temporal levels than the operational and planning logics of hydropower generation, irrigation and flood risk management.

3.2.4 Sufficient resources, political support and time

Without adequate resources – human, financial, informational and intellectual – an MSP will not reach its potential. Competent people will be needed to support the operation of the MSP. Costs will be incurred and so funding needs to be organized. Uncertainties will need to be addressed with information and people that have the knowledge that can help to move forward.

It is vital that any MSP has sufficient political space and momentum to permit or encourage establishment and support. The need for some degree of political support is unavoidable. This does not just refer to political support from the State, but rather is a reminder that an MSP must have some type of supportive stakeholder constituency with either influence or authority. In the case of Cape York, Australia (see Case 3.2) the political support wavered, but endured for long enough to ensure the MSP was given a chance to make its best contribution.

"IT IS VITAL THAT ANY MSP HAS SUFFICIENT POLITICAL SPACE AND MOMENTUM"

Case 3.2: Breaking down the wall in Australia's Cape York

The MSP of CYPLUS (Cape York Peninsula Land Use Strategy) was born in the 1990s after 20 years of intensifying conflict about major development proposals, mining, land rights, cattle grazing and Aboriginal land rights in the Cape York Peninsula of north-eastern Australia. CYPLUS was an intensive and extensive MSP to develop a land-use strategy – not water-focused, but undoubtedly complex – in a remote area of northern Australia covering 137,000 km² but home to only 18,000 people, the majority of whom are of Aboriginal or Torres Strait Islander descent. All levels of government were actively involved.

People who studied CYPLUS were told by one participant: 'Before CYPLUS there was a brick wall between graziers (cattle farmers), greens and aboriginal people on Cape York – they were all trying to cut the Cape up into little pieces for themselves but there wasn't enough to go around. CYPLUS broke down the wall'. The researchers also warned of the need for a long-term commitment, which for CYPLUS was envisaged as at least 10 years, during which time there would be (in the Australian political system) 'at least three elections and countless changes in policies, programs and players involved in the effort'.

"IF THE MSP IS NOT FOLLOWED UP, OR IS NOT TAKEN INTO ACCOUNT BY DECISION MAKERS, MANY PARTICIPANTS WILL BE DISILLUSIONED"

The saying 'Rome was not built in a day' also applies to MSPs which require an investment in time and patience, some degree of continuity, and then follow-up. If the time allowed is too short, it is hard for an MSP to do its job. If the MSP is not followed up, or is not taken into account by decision makers, many participants will be disillusioned and re-engaging with them in the future will likely be more difficult.²⁴ A key lesson noted by an observer of a Canadian MSP (see Case 3.3) was that: 'One of the main criticisms aimed at collaborative systems of governance is that whilst they provide opportunities for deliberation and wider participation in decision making, they often produce implementation failures because insufficient attention is given to outputs that will have an impact on the problem at hand. As a result, participants may lose enthusiasm for further collaboration if there is little sign of their efforts having a positive effect'.²⁵

Case 3.3: Balancing power in the Fraser Basin Council in Canada

The Fraser Basin spans 13 watersheds in western Canada and supports more than 2.5 million people with an economy based on natural resources. The need for a more integrated approach to effectively and sustainably managing the land and water resources has long been recognized.

The Fraser Basin Council was established in 1997 as an MSP to pursue sustainable development through integrated river basin planning and management. It succeeded the Fraser Basin Management Programme, which was seen as being dominated by government interests.

The Council is a not-for-profit organization with a corporate structure that aims to address multi-jurisdictional issues to resolve disputes using a consensual rather than a legal or bureaucratic approach. It was specifically designed to complement, as opposed to duplicate, government management functions. A Charter for Sustainability was initially developed as a means of creating shared understanding among the diverse groups. The Charter outlines problems as well a vision, and articulates the values, principles and rules to guide collective action.

The institutional set-up of the Council was carefully crafted in order to create a space for equitable deliberative opportunity amongst diverse stakeholders to influence policy and programme decisions. It was recognized that a key challenge for collaborative governance is to provide fair representation, given that there are always economic and political power imbalances between groups that have legitimate interests in various facets of river basin management.

The Council included 36 directors drawn from three tiers of government (federal, provincial and local), First Nations, community groups, businesses as well as social, economic and environmental interest groups. To ensure fair local involvement, there were five regional committees for specific watersheds comprising representatives from local government, First Nations and sectoral interests.

3.2.5 Politics and power recognized

When scoping an MSP it is necessary to consider politics and power explicitly.

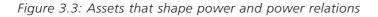
Politics is a slippery concept. Comments from almost 50 years ago remain useful: 'Politics is about policy, first and foremost; and policy is a matter of either the desire for change or the desire to protect something against change' and 'Politics is a natural reflex of the divergences between members of a society... [where]... there is a variety of perpetual disagreements which arise from fundamental differences of condition, status, power, opinion, and aim'.²⁶ Water sharing is not just about technical choices. Contesting different views is the realm of politics. MSPs are a place for this contesting. MSPs are one way of ensuring that political tussles include evidence and exploration of different values and perspectives.

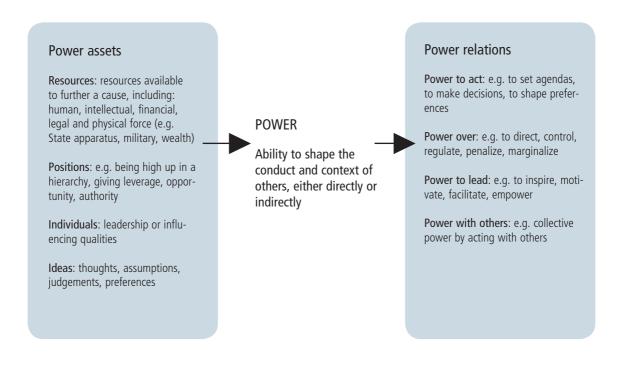
Another elusive concept is power. It can be seen as the ability to shape the context and conduct of others. This is helpful, but it only gets you so far. It is useful also, and very relevant to MSPs, to think of power in terms of assets and power relations (see Figure 3.3).²⁷ Thinking of both can help in understanding the context.

"WHEN SCOPING AN MSP IT IS NECESSARY TO CONSIDER POLITICS AND POWER EXPLICITLY"

MSPs are likely to be more influential if they are endowed with adequate helpings of 'assets' including: resources, participants in strategic positions, individuals with leadership ability, and a rich inflow of ideas.

For some, politics and therefore political analysis, is focused on an analysis of power – identifying and interrogating its distribution, exercise and consequences. How power relations are manifested is just as important as whether particular actors have power – 'power to act', power with others', 'power over' and 'power to lead'²⁸ – all are important, as with the invocation of the wax, wick and flame metaphor in Box 2.1 in Chapter 2. MSPs are more likely to be agents of constructive engagement if the power relations manifested are a healthy mixture of these different forms. Perhaps most important and integral to the success of MSPs is fostering the acceptance by many participants that there is new and additional power in collectively working with others.





3.3 Elements of good process

MSPs earn legitimacy, at least in part, by demonstrating high-quality process. To do so requires attaining and maintaining high standards of deliberation, facilitation, inclusiveness, information exchange and communication with the participants and wider constituency.

3.3.1 Deliberative

Deliberation is integral, by which we mean: 'deliberation is debate and discussion aimed at producing reasonable, well-informed opinions in which participants are willing to revise preferences in light of discussion, new information, and claims made by fellow participants. Although consensus need not be the ultimate aim of deliberation, and participants are expected to pursue their interests, an overarching interest in the legitimacy of outcomes (understood as justification to all affected) ideally characterizes deliberation'.

MSPs are rooted in a belief in the value of 'authentic deliberation'²⁹ between people with different perspectives. In this way, MSPs give privilege to the power of argument, explanation and reason over other types of power. Therefore, it is important to note that stakeholders who do not have language and communication skills can be disadvantaged, unless adequately represented.

"MSPs GIVE PRIVILEGE TO THE POWER OF ARGUMENT, EXPLANATION AND REASON OVER OTHER TYPES OF POWER"

3.3.2 Facilitated

To enable deliberation, good facilitation is an essential characteristic if MSPs are to reach their potential. Ideally in a group of MSP facilitators, there would be a mixture of men and women of varying cultural backgrounds, united by having open minds. These facilitators need to possess a reasonable share of the following traits:

Listener: Ability to listen and create an atmosphere where others will listen (not just talk).

Enabler: Ability to see who is participating and who is not, and to find ways to enable all participants to contribute in an authentic way. This includes stopping any particular individual or group from dominating an MSP.

Linker: Willingness to prepare by thinking through the programme and backgrounds of participants, anticipating what might happen. It is important the facilitator link the steps in the MSP process, maintaining some direction/focus, whilst also being adaptable to the needs of participants.

Respectful: Respect and empathy for different people and the different world views that they hold. This includes respect for different forms of knowledge – engineering, agriculture, ecology, economic, cultural, social, national politics, local villagers.

Energetic: To maintain the enthusiasm of the participants to persist and work through what may be difficult tasks, the facilitator usually requires large reserves of personal energy.

Familiarity with appropriate 'facilitator techniques': There are many techniques to encourage creative expression, such as buzzing, mind mapping, rich pictures. A skilful facilitator can draw on these as components of the MSP method.³⁰

"TO ENABLE DELIBERATION, GOOD FACILITATION IS AN ESSENTIAL CHARACTERISTIC"

3.3.3 Inclusive

MSPs should enable representation of a wide range of stakeholders and their disparate interests via a flexible process which may have many different facets. Inclusiveness implies being respectful of diverse ethics, ways of reasoning, world views and priorities of actors.

3.3.4 Informed and communicative

MSPs should use and share the best available information, building the knowledge base. MSP participants should become familiar with other relevant fora, plans, agendas etc. The MSP also needs to communicate effectively with the wider public sphere if it wishes to create and maintain a constituency.

3.4 Desirable MSP content

MSPs are not all the same. Figure 3.4 provides a practical example of a hypothetical MSP which shows a plausible flow from acknowledgement of a concern through to deliberation and agreement on next steps.

MSPs may involve regular meetings between core participants. These might be informal gatherings beside an irrigation canal, next to a wetland, or on the banks of a river. There might also be conferences/discussions open to the wider public, locally hosted field visits, electronic exchanges, government briefings, films, plays, historical texts, testimony, or commissioned research.

Despite differences in the way they are set up and implemented, examples of desirable content can be suggested.

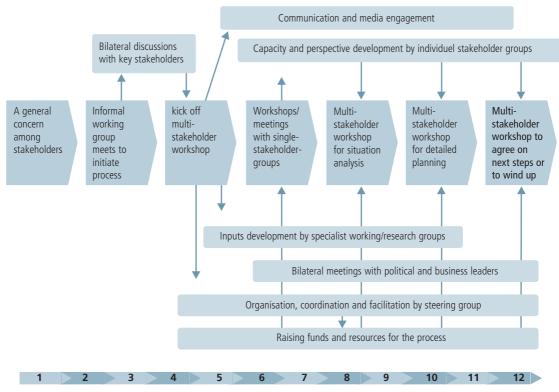


Figure 3.4: Timeframe and sequence of hypothetical MSP³¹

Time frame in months

ANU page 178

3.4.1 Setting-up

Setting up refers to the practical steps that must be taken in establishing an effective MSP.³² Essential steps include:

- establishment of an interim MSP steering group
- articulating clear rationale for the MSP
- building a constituency for the MSP
- preliminary examination of the wider MSP context
- assessing potential MSP designs and mandates

Establishment of an interim MSP steering group

There are now hundreds of examples around the world of water-related MSPs. To get going has usually required an interim MSP steering group. Some say 'interim', others 'initial' or 'informal'. Some prefer 'working group' or 'committee' to steering group. It's important, though, not to get hung up at this early stage. The key is to start somewhere. Final convening, management and coordination responsibilities for the MSP are sorted out and adjusted during the setting-up phase (see Case 3.4).

Case 3.4: Improving agricultural knowledge, science and technology

A prominent recent example of an MSP was the International Assessment of Agricultural Science and Technology for Development (IAASTD). This was a five-year process from 2003–2008. Whilst not focused on water, it is nevertheless an excellent example.

In the beginning a Steering Committee of 40 representatives from governments, agencies, industry, farmers and other rural producers, consumers, environmental and other NGOs produced a basic document in August 2003 calling for the International Assessment. They chose to address this question: How can we reduce hunger and poverty, improve rural livelihoods, and facilitate equitable, environmentally, socially and economically sustainable development through the generation, access to, and use of agricultural knowledge, science and technology?

A design process soon followed. The first meeting of the parties (governments), five co-sponsoring UN agencies, the World Bank and civil society representatives took place in 2004. The government representatives (45 countries present) decided to go ahead with the Assessment. They agreed on the content and scope of the Assessment and adopted outlines and procedures, a timetable and a budget of US\$ 10.7 million.

The process became a UN inter-governmental process, which means the participating member State representatives made the final decisions and were asked to adopt the final report. The initial Steering Committee morphed into a multi-stakeholder Bureau of 60 representatives of governments (30), civil society (22) and international institutions (8) to oversee the process.

The IAASTD then undertook a comprehensive global assessment that included five more detailed sub-global reports, of the role of agricultural science and technology in development, culminating in a final plenary in Johannesburg in April 2008 at which synthesis reports and summaries for decision makers were presented to all stakeholders.

Articulating clear rationale for the MSP

The need for an MSP has to be explained and accepted before people will agree to invest time and effort. What problems or opportunities will the MSP seek to address? How will an MSP fill a gap, or add value, to the existing efforts being made? Diverse goals have catalyzed recent local, national, regional and global MSPs, including:

- Bringing some element of public deliberation into decision making about possible links between 37 major rivers across India (see Case 3.6).
- Micro-watershed equitable sharing of irrigation water in the Lingmutey Chu Watershed, Bhutan (see Case 3.7 Companion Modelling).
- Combining maintenance of the character of natural floods with hydropower generation in the negotiation of 'environmental flows' in the Senegal River Basin (see Case 3.9).
- Energy future using national follow-up to the World Commission on Dams to address controversies about building large dams in Nepal (see Case 3.10).
- Better use and care for ground water in Umatilla County, USA.³³
- Improving cooperation among interest groups and negotiating a water charter to guide land on water management in the Komadugu Yobe Basin of Lake Chad, northern Nigeria.³⁴

"THE NEED FOR AN MSP HAS TO BE EXPLAINED AND ACCEPTED BEFORE PEOPLE WILL AGREE TO INVEST TIME AND EFFORT"

Building a constituency for the MSP

To reach its potential an MSP needs a constituency of diverse supporters. Providing early opportunity for involvement is important. Although people may constructively engage for different reasons, most will want to be convinced that the MSP is a genuine and worthy effort to search for fair and effective ways forward. Building a constituency means building a base of MSP supporters who are committed to engaging in a collective process. It is far more than 'engaging with stakeholders' or undertaking a 'stakeholder analysis' (see section 3.4.2).

"TO REACH ITS POTENTIAL AN MSP NEEDS A CONSTITUENCY OF DIVERSE SUPPORTERS"

Preliminary examination of the wider MSP context

The interim steering group needs to ensure that the wider MSP context is understood. Some call this the 'operating environment' or the wider 'political economy'. It is important to get a basic overview of the present and relevant history, including an initial understanding of the range of perspectives of the MSP stakeholders. This will provide guidance on the areas to be explored in more detail.

Assessing potential MSP operating structures

There are usually various choices for an MSP operating structure which will determine function, legitimacy and credibility. Links to existing authority structures need to be clear. For example, what is to be the link to existing levels of government (if any)? Taking the time to investigate and introduce an appropriate structure is vital.

Assessing MSP designs and mandates

In the words of one expert: 'MSPs, by any other name, are currently 'hot' in the water sector' attracting diverse actors to operate collectively – at least for a time – in a 'weird and wonderful panorama' of different multi-stakeholder processes.³⁵

That said, there are many choices for the design of an MSP, which must match the purpose and scope. The design includes operating structures and plans for carrying out the MSP. The setting-up phase is critical in negotiating appropriate designs and mandates, so that the particular MSP can serve the needs of the part of society grappling with a particular issue, hoping to make water governance fairer and more effective via a well-intentioned platform.

3.4.2 Stakeholder analysis

Stakeholder analysis is essential to properly design and implement an MSP. It helps to clarify who to involve in an MSP and in what way. It should provide a foundation and plan for participation throughout the MSP making it easier for stakeholders to engage, be respected, and learn from each other.

MSP drivers – that is, the convenors, or steering group – must agree on criteria for determining stakeholders. For many MSPs, the 4Rs are a useful starting point. What are the benefits and who may be involved in reaping a reward or bearing a cost? What are the risks and who are the voluntary or involuntary risk bearers? Who has or may claim a right to be involved, recognizing that some will always say their 'right to participate' is greater than others? Who has a responsibility to be involved – legal or perhaps because of 'civic duty' – given the insights they possess and may be able to contribute?

List all the people and organizations that might fit the criteria. The list may need to be revisited several times to ensure that all key groups and people are given the opportunity to engage, either directly or via representatives. Allowing stakeholders to self-nominate can also ensure that those with an interest are not excluded. Decisions need to be taken on how best to involve people. It is sensible to hear from all parties likely to be interested in the MSP so as to hear how they think they can be optimally involved in different ways.

Various tools can be used to learn about stakeholders and their relationships, such as: brainstorming, actor mapping, interviews with key informants or producing 'rich pictures' with focus groups.

It can be helpful to make a stakeholder matrix with the stakeholders along one axis and 4Rs criteria along the other (see Table 3.1). In complex situations, it is often the case that there are contesting views. It can help to use the 4Rs to research the roles of different stakeholders in the MSP key issues.

Cross-checking with different people can lessen the risk of oversights or bias. If not too provocative, it can also be useful to prepare preliminary summaries of the influence and authority of different actors. Recognizing the dynamism of actor relationships, it can also help to use the 4Rs to reflect on the power (influence and/or authority of different stakeholders).



Photo 3.1 Dams and Development Dialogue meeting (Nepal).

4Rs —	Rewards: Potential benefits	Risks: Risks voluntarily being taken or invol- untarily borne	Rights: Rights claimed	Responsibilities: Formal or informal responsibilities			
Stakeholders (Examples)	Examples of the rewards, risks, rights and responsibilities which should be explored during stakeholder analysis						
Locally affected people	• Local rewards need to be assessed. They could include: equitable access to quality water or related resources; compensation for loss of access to resources; cessation or redesign of project with impacts that are too negative.	• May be involuntary risk bearers. Examples include: negative impacts related to reduced quality or quantity of water or ecosystems; threatened livelihood security etc.	 Right to free prior informed consultation. (Right to withhold con- sent is contested vigor- ously by State officials). Right to be made bet- ter off, or at least not worse off. 	• Recognition of the rights of others to try and improve their lives.			
Developer	• Profit from construction or operation of a new facility.	 Construction cost over- runs, or unprofitable operation. Borrowing and invest- ment risks. 	• As per authorized con- tracts.	 Follow the laws. Full disclosure of all anticipated impacts. Construction and operation as per agree- ments. 			
Expert	• Fees, sometimes future profit share.	• Minimal, except for reputational if shown to be incorrect.	• Right to provide unbi- ased advice for con- sideration by decision makers.	• To operate within their fields of expertise, and to provide clear and impartial advice.			
NGO representative	• Often negligible, but as with others, this should be examined. Inclusion of issues they feel are important.	 Risk of being marginal- ized from the political or legal process if not a directly affected person. Reputational, if seen to be engaging in a less than ideal MSP or of making too great con- cessions. 	• Right to explore, ques- tion and present their ideas and opinions.	• Political accountability to their stakeholder constituency.			
Financier	• Return on investment.	• Loss of investment.	• To lend within the spaces provided within the law.	• Due diligence, adher- ence to internal and industry policies, includ- ing codes of conduct.			
Government official	• Benefits should be restricted to those to be enjoyed by wider citizenry.	• Minimal, except for reputational if shown to support unwise or unfair development.	• To discharge their duties as authorized and employed citizens.	• Adjudicate wisely and fairly, upholding the spirit of just laws and guiding regulations.			

Table 3.1: Stakeholder analysis using the 4Rs in a hypothetical water project

3.4.3 Social contract between participants

The social contract is a summary of the rules of engagement in the MSP. A social contract ³⁶ needs to be established between the convenors and all stakeholder representatives, which requires reaching some workable agreement on purpose, scope, political space, resources, time and process so that participants in an MSP understand the roles and responsibilities of all.

Social contracts – which are also usually negotiated – should make the 'participation promise' clear, to lessen the chance of a mismatch between reality and expectations. For example, are stake-holder representatives being invited to:

- Come together primarily to build relationships and share information?
- Set the agenda for subsequent public or private-sector action?
- To brainstorm and problem solve?
- Join a consensus-building initiative?
- To provide recommendations, or to take decisions?

The social contract needs to be unambiguous and documented, such as for the global Hydropower Sustainability Assessment Forum (see Case 3.5).

"THE SOCIAL CONTRACT IS A SUMMARY OF THE RULES OF ENGAGEMENT IN THE MSP"

Case 3.5: The 'social contract' of the Hydropower Sustainability Assessment Forum

In 2004, the International Hydropower Association (IHA) adopted Sustainability Guidelines, followed in 2006 by the adoption of a Sustainability Assessment Protocol (SAP). During 2008–2009, the Hydropower Sustainability Assessment Forum (HSAF)³⁷ examined whether it is possible to establish a broadly endorsed sustainability assessment tool to measure and guide performance in the hydropower sector, based on the IHA's SAP. The HSAF included on-ground assessments and meetings in USA, Zambia, China, Brazil, Iceland and Turkey. In August 2009 it released its draft Hydropower Sustainability Assessment Protocol (HSAP).

The Forum membership included representatives of developed and developing countries involved in hydropower as well as from the NGO, finance and industry sectors. At the beginning of the Forum, participants signed a Memorandum of Understanding and agreed to detailed 'Communications and Operating Procedures' including, for example, that:

- The HSAF will be transparent, conducted with goodwill, and will search for consensus.
- Where a consensus cannot be reached, the differences will be recorded and acknowledged in all HSAF documentation.
- The HSAF will only use the name and brand of participants in public communication after obtaining their permission.
- The decision on endorsement of the final product will be taken by each participant at the end of the process, after consultation with their respective constituencies.
- Participants reserve the right to withdraw from the MSP during the process. If this action is taken, the withdrawing participant will provide a written explanation to the Chair.

"THE SOCIAL CONTRACT NEEDS TO BE UNAMBIGUOUS AND DOCUMENTED"

ANU page 183

3.4.4 Comprehensive assessments

There are many deliberation-support tools that can be helpful when negotiating water-related resource use and further development. It is axiomatic that MSPs should strive to ensure a comprehensive, meaning 'sufficiently thorough', assessment of issues, informed by all stakeholders, and ultimately of use to them all. There is now extensive experience in undertaking MSPs that have a substantial knowledge-assembly, contesting and building component.

Case 3.6: Civil society-led dialogue assessing river-linking schemes in India

River diversions and basin transfers are some of the most contested water issues globally. India's mega Interlinking of Rivers (ILR) project has proposed to provide 173 billion m³ of water to irrigate 37 million hectares through 31 links in Himalayan and peninsula rivers and associated large dams, reservoirs and canals.

Proponents argue the merits of diverting water from 'surplus' rivers to 'deficit' rivers to increase irrigation and thereby food grain production, mitigate floods and droughts, and reduce regional imbalance in the availability of water. Critics cite the negative ecological, economic and social costs, and argue for more effective ways to address food security.

A coalition of civil society groups, led by the World Wide Fund for Nature (WWF), initiated an MSP in 2003 to comprehensively assess the benefits and risks of the project, and explore alternatives to river linking. An initial working group, including civil society, government representatives, political leaders and media, spent eight months negotiating the set-up of the forum, and especially its members. The resulting 'National Civil Society Committee' (NCSC) was comprised of eminent persons representing diverse views. The NCSC was expected to: generate public debate; facilitate and improve information sharing between civil society and government; make available past knowledge and experience; and generate new knowledge about the project through independent studies.

The NCSC successfully raised public debate on the issue and influenced government to rethink its procedures and actions. Although the establishment of the forum took longer than anticipated, the credibility and legitimacy of the process was largely due to the diversity of perspectives represented and the comprehensiveness of the analysis.³⁸

3.4.5 Scenarios

Scenarios are stories that outline possible futures. For complex situations with associated uncertainty, scenario building in an MSP can help all participants think laterally and learn about each others' different interests, values, priorities, assumptions, constraints and options.

Scenario analysis has a history going back to the 1960s in the military and business. In recent times, as both the pace of change and uncertainty has increased, there has been renewed interest in scenario analysis and planning.

The basic principle of scenario planning is to try and understand plausible future trends to help make strategic decisions based on an analysis of the possible consequences. Some form of scenario analysis is highly relevant to many MSPs (see Box 3.2).

Scenarios are an interpretation of the present as well as an image of a possible future. Qualitative scenario storylines should be internally consistent and describe paths from the present to the possible futures. Where data exists, quantitative modelling is a way of making scenarios more explanatory and coherent by making important connections more explicit.

"SOME FORM OF SCENARIO ANALYSIS IS HIGHLY RELEVANT TO MANY MSPs"

Box 3.2: Steps used in scenario building

Step 1:	Identify driving forces – from whatever source: politics, economics, social or ecological change,
	technical breakthroughs etc.
Step 2:	Identify predetermined factors – assessing what is inevitable about the future.
Step 3:	Identify critical uncertainties – assessing those areas where the future is uncertain, which can be
	prioritized according to importance and degree of uncertainty.
Step 4:	Develop scenario storylines – a series of plausible alternative futures.
Step 5:	Assess the implication of different scenarios – for the issue(s), organization(s), place(s) or sector(s) of concern.
Step 6:	Identify and use indicators – to enable continual reassessment and adaptation.

Formats and settings can be experimented with creatively. The Georgia Basin Futures Project, for example, drew on expert knowledge and community inputs to build tools and a game for exploring *what-if*-type scenarios for a basin on the west coast of Canada. Visioning is commonly used in scenario building and decision making, for example by policy makers and youth in Europe,³⁹ and for much longer by indigenous people grappling with water sharing in the High Atlas mountains and Negev desert.

Role-playing games can also help stakeholders explore each others' perspectives on water management options. Case 3.7 introduces Companion Modelling, which combines role-playing games with computerized modelling to explore scenarios.

"VISIONING IS COMMONLY USED IN SCENARIO BUILDING AND DECISION MAKING"

Case 3.7: Companion Modelling

Companion Modelling combines role-playing games with computer model simulations to facilitate shared learning and explore scenarios in order to assist with collective decision making.

The approach has been successfully applied to resolve conflict amongst villagers on water allocation for rice irrigation in Bhutan and Thailand. Farmers in the Lingmutey Chu watershed in Bhutan played several sessions of the game to see the outcomes of various water-sharing strategies when applied both within their village and also in a collective approach between villages. Role swapping was particularly effective in building common understanding amongst participants of the situations of other parties.

The computerized multi-agent model allows rapid simulation of a more comprehensive set of scenarios of water-sharing rules. It examines the interactions among different actors (or 'agents') and between these actors

and the common resource to be shared. Researchers and participants can discuss the outcomes of the scenarios, and adapt the model so that scenarios genuinely reflect the on-the-ground situation.

Participants initially engaged in the games as an exercise, but soon realized the power of the tools for joint analysis of complex issues. Plenary discussions amidst the gaming sessions took the deliberations from simulation to reality. Villagers in Bhutan concluded their sessions with a formal agreement on how to allocate water more fairly, including the creation of a water management committee and steps to develop rules and procedures.⁴⁰

Case 3.8: Scenarios in the Millennium Ecosystem Assessment

The Millennium Ecosystem Assessment (MA)⁴¹ assessed the consequences of ecosystem change for human wellbeing. From 2001–2005, the MA involved the work of more than 1,360 experts worldwide. Their findings provide a state-of-the-art scientific appraisal of the condition and trends in the world's ecosystems and the services they provide, as well as the scientific basis for action to conserve and use them sustainably.

The MA Scenarios Working Group considered scenario development as a tool to explore possibilities for the future that cannot be predicted by extrapolation of past and current trends.

The MA considered the possible evolution of ecosystem services during the 21st century by developing four global scenarios exploring plausible future changes in drivers, ecosystems, ecosystem services, and human wellbeing:

• The Global Orchestration scenario depicted a worldwide connected society in which global markets are well developed and where there is a high degree of global cooperation.

• The Order from Strength scenario examined a regionalized and fragmented world preoccupied with security and protection.

• The Adapting Mosaic scenario explored a fragmented world resulting from discredited global institutions, in which local ecosystem management strategies are evolved and adopted by strengthened local institutions.

• The TechnoGarden scenario was characterized by a globally connected world relying strongly on technology and highly managed and often-engineered ecosystems to deliver needed goods and services.

Wetlands and water was a key part of the MA analysis, and many evidence-based key messages were distilled for policy makers. For example, noting and exploring the policy decisions that have to be made involving trade-offs between agricultural production and water quality, land use and biodiversity, water use and aquatic biodiversity, and current water use for irrigation and future agriculture production.

3.4.6 Selective use of tools

There are many tools to support water negotiations, including the previously introduced stakeholder analysis, comprehensive assessments and scenarios. Other tools are explored in companion books to NEGOTIATE, such as FLOW, PAY, SHARE and RULE.⁴²

FLOW introduces the user to the essentials of environmental flows. Implementing 'environmental flows' requires establishing water flow regimes which recognize ecosystem needs whilst trying to satisfy social and economic demands (see Case 3.9). FLOW explores how societies define flow requirements, modifications that might be necessary to infrastructure design and operation, finance and incentives, policy and legal frameworks, and the necessity to generate and maintain political momentum. Environmental flows work requires the integration of a range of disciplines including engineering, law, ecology, economy, hydrology, political science and communication. An MSP approach is very suitable for informing the negotiations and decision making about how humans interfere with natural flow regimes.

Case 3.9: Negotiating environmental flows in the Senegal River Basin

Transboundary cooperation in the Senegal River Basin is led by OMVS (The Senegal River Basin Development Organization) which provides a forum for joint efforts by Mali, Mauritania and Senegal (and recently, upstream Guinea) to respond to development challenges while operationalizing integrated water resource management.

In 2002, the OMVS member countries adopted the first-ever River Basin Water Charter in sub-Saharan Africa, which was preceded in 2000 by the establishment of an Observatory of the Environment responsible for monitoring the state of the environment in the basin and impacts of development interventions. The Charter and Observatory were the culmination of a two-decade-long process marked by studies and debates on optimal ways of managing the river waters and investing in major water infrastructure projects.

The objective of the Charter is to provide for efficient allocation of the waters of the Senegal River among many different sectors, such as domestic uses, urban and rural water supply, irrigation and agriculture, hydropower production, navigation, fisheries, while paying attention to minimum stream flows and other environmental matters. It also establishes a process for approving new projects that may have significant impacts on those sectors, based on the provision of information to, and consultation with, all riparian stakeholders including local users.

The Charter drew on comprehensive analysis of the effects of the Diama and Manantali dams and exploration of alternatives to their current operation. The studies revealed the considerable and diverse benefits of the natural flood system – in terms of wetlands, fisheries, agriculture, livestock, forestry and groundwater recharge – benefits which needed to be factored into the operation of the dams and in planning of future development interventions. This was particularly essential since the majority of those affected rely heavily on the exploitation of water-dependent natural resources (traditional agriculture, fisheries, livestock, and exploitation of forest and wetland products).

As a result, the Water Charter includes specific provisions for the release of water from the dams to help restore the floodplains and generate an annual flood, thereby recognizing the value of the floodplain ecosystem and traditional livelihood strategies.⁴³

"WORKABLE RECOMMENDATIONS FOR FORWARD ACTION MUST BE SOUGHT"

3.4.7 Action recommendations

MSP content must provide action recommendations. There is no need to manufacture consensus if it cannot be reached, but workable recommendations for forward action must be sought, otherwise the MSP might end up being nothing more than an interesting discussion. If empowered to do so, the MSP might also take and implement decisions, but this is dependent on the extent of the mandate.

The World Commission on Dams (WCD) (see Case 3.10) is an example of an MSP that provided extensive action recommendations, without claiming decision-making authority.

Case 3.10: World Commission on Dams

Don't plan, build, protest, operate, decommission, propose, oppose or discuss a dam without it! By 2000, the world had built 45,000 large dams to irrigate a third of all crops, generate a fifth of all power, control floods in wet times and store water in dry times. Yet, in the last century, large dams also disrupted the ecology of

over half the world's rivers, displaced over 40 million people from their homes and left nations burdened with debt (Earthscan advertizing material promoting the WCD report)

The World Commission on Dams (WCD) was a high-profile MSP which emerged from increasing public criticism of large dams. It aimed to undertake a rigorous, independent review of the development effectiveness of large dams, to assess alternatives and propose practical guidelines for future decision making. The WCD attempted to conduct an ideal, deliberative multi-stakeholder learning process. Government participated, but with the same standing as civil society. There were many actors involved at the local, regional and international level – dam 'practitioners', economists, sociologists, ecologists, political scientists and the media. The process received enormous publicity and international recognition. In its own words it 'provided a unique arena for understanding complex choices facing societies in meeting their water and energy needs'.

The WCD commissioners produced a 'consensus' report, an informed and negotiated contribution, which was launched in a blaze of publicity in 2000, evoking a range of responses.⁴⁴ The 'WCD decision-making framework' has since been evaluated for use as both an implementation and advocacy tool. It is complex. The framework includes three grounding global norms, five core values, five key decision points, seven strategic priorities, 33 associated policy principles, and 26 guidelines. The task of trying to figure out how to combine these pieces of advice remains a challenge for post-WCD activity.

Following the release of the WCD report, there were numerous follow-up activities, including MSPs, undertaken around the world. The Dams and Development Dialogue in Nepal⁴⁵ is just one example where diverse stakeholders assembled and persisted over several years to explore sensitive large dam issues in the Nepal context.

3.5 Outcomes and impact

There is a suite of desirable outcomes possible from MSPs that successfully manage to read and respond to the context, establish a fair and safe process, and generally display the desirable characteristics outlined in the preceding sections.

In some places, the MSP approach has already become routine behaviour, but in other places an MSP is a new possibility. In an example from Peru, it is claimed that an MSP has provided a positive and 'unprecedented' experience: 'The multi-stakeholder platform is an unprecedented mechanism in the country. Throughout its history, Peru has developed a culture based on confrontation rather than one based on negotiation. Therefore, experiences such as that of Yakunchik imply 'learning to negotiate' after a long tradition of domination, submission and violence'. (The MSP 'Yakunchik', after the Quecha word for 'our water', was established at the end of 1998 in the central highlands of Peru). It was further claimed that: 'As a result of the platform's initiatives, irrigation has been placed on the regional agenda, and has led to the discussion of other issues such as the rural-urban relationship, conflict negotiation, organizational and institutional water management-related problems, and rural development. In other words, the platform is contributing not only to the development of a new social fabric, but also to activating the agenda of regional development'.

There is no attempt here to claim that all MSP experiences have been positive, but lessons have been learned, and there is sufficient evidence from around the world to conclude the following:

- MSPs can lead to the expansion of representation and participation of stakeholders in governance, potentially increasing the legitimacy of public decisions.
- MSPs can provide greater opportunity for discourses and norms to be launched and contested, ensuring that new and old perspectives are examined on their merits.
- MSPs can assist in the recognition and understanding of interdependencies. Societal learning about interdependencies is vital among stakeholders who will often have different values, motivations, perceptions and priorities.⁴⁶

- MSPs enable reflection by representatives of various constituencies, clarification of existing accord and differences among stakeholders, and collective sense making.
- MSPs can help deliberation become routine, enabling complex issues to be more rigorously examined.
- MSPs increase the prospects of negotiations being more informed.
- By providing a pathway for deliberation, MSPs can lead to better decisions, agreements and implementation.

MSPs can be a valuable, collaborative addition to water governance when the issues are complex. It needs to be stressed that MSPs are a complement to other forms of governing, not a replacement, and not a panacea. There is potential for their wider use.

Establishing the link between the policy-informing and decision-searching processes of an MSP, and policy making and decision taking, remains a skilled task. However, by favouring deliberation, MSPs can give people of goodwill a better chance to constructively influence decisions that affect their lives.

Chapter 4 provides guidance on consensus building, an elusive but key element of MSPs. The construction and operation of MSPs, and the pursuit of consensus building, are central pillars of constructive engagement, improving negotiations, and a move towards fairer, more effective water governance.

"MSPs ARE A COMPLEMENT TO OTHER FORMS OF GOVERNING, NOT A REPLACEMENT, AND NOT A PANACEA"

References

- 1 The difference between participation and negotiation, and many other thought-provoking messages, are taken from: Both ENDS and Gomukh. (2005). *River Basin Management: A Negotiated Approach*. Amsterdam: Both ENDS; and Pune: Gomukh. Personal communication with Danielle Hirsch (Both ENDS) has also been appreciated.
- 2 Mehta, L., Leach, M., Newell, P., Scoones, I., Sivaramakrishnan, K. and Way, S.-A. (1999). *Exploring understandings* of institutions and uncertainty: new directions in natural resource management. IDS Discussion Paper 372. Brighton: Institute of Development Studies, University of Sussex.
- 3 Rogers, P. and Hall, A.W. (2003). *Effective Water Governance*. Technical Advisory Committee Background Paper #7. Stockholm: Global Water Partnership (GWP) Secretariat.
- 4 WCD. (2000). Dams and Development: A New Framework for Decision Making. Cape Town: World Commission on Dams.
- 5 See also Scanlon, J., Cassar, A. and Nemes, N. (2004). *Water as a Human Right?* Environmental Policy and Law Paper No. 51. Gland and Cambridge: IUCN. Examples of international rights declarations:
 - Universal Declaration of Human Rights which says that the lives of all people have equal value and that all individuals should be respected and have basic rights, see UN (1948). "Universal Declaration of Human Rights". New York: United Nations;
 - Right to Development which says that all peoples, but particularly those in need, have the right to try and
 improve their living situation, see UN (1986). "Declaration on the Right to Develop". New York: United Nations;
 - Rio Declaration on Environment and Development which greatly raised the profile of sustainability as a core concern for global society, see UNCED (1992). "The Rio Declaration". Statement of the United Nations Conference on Environment and Development, Rio de Janeiro, 3–14 June 1992. New York: United Nations; and
 - The Earth Charter which articulates values and principles for a 'sustainable future' with an action agenda framework of: respect and care for the community of life; ecological integrity; social and economic justice; democracy, non-violence and peace, seeECC (2000). "The Earth Charter". San José: Earth Charter Commission c/o University for Peace.
- 6 CESCR. (2002). "General Comment #15 about the Right to Water". Proceedings of the 29th Session 11–29 November 2002. Geneva: Committee on Economic, Social and Cultural Rights.
- 7 UNECE. (1998). "Convention on access to information, public participation in decision-making and access to justice in environmental matters". Geneva: United Nations Economic Commission for Europe.
- 8 Raiffa, H. (1982). The Art and Science of Negotiation. Cambridge MA: Harvard University Press.
- 9 Ibid.
- 10 Based on IAP2 (2007). "Spectrum of Public Participation". Thornton CO: International Association for Public Participation.
- 11 Decades of conflict over wastewater management were only resolved once a government was elected that was more open to engagement with local stakeholders. See *NEGOTIATE* case study on the IUCN Water website: *Learning to listen government openness to work with community members resolves decades of conflict over wastewater treatment in Coffs Harbour*, Australia by Pam Allan .
- 12 Fisher, R., Ury, W. and Patton, B. (1992). *Getting to Yes: Negotiating an Agreement without Giving In.* 2nd edition. London: Arrow Business Books.
- 13 See Lewicki, R., Barry, B., Saunders, D. and Minton, J. (2003). *Negotiation*. 4th edition. New York NY: Irwin/McGraw-Hill, for numerous examples of competitive negotiating tactics.
- 14 See *NEGOTIATE* case study on the IUCN Water website: *The Challenge of International Watercourse Negotiations in the Aral Sea Basin* by Richard Kyle Paisley.
- 15 Wertheim, E., Love, A., Peck, C. and Littlefield, L. (2006). *Skills for Resolving Conflict. Second Edition*. Cowes VIC: Eruditions Publishing.

- 16 See for example, Emerton, L. and Bos, E. (Eds) (2004). VALUE Counting Ecosystems as Water Infrastructure. Gland: IUCN. VALUE describes how different types of economic and ecosystem values can be linked. If the relationships between ecosystems, water demand and supply can then be given consideration and 'integrated' into water management decision making, this can lead to new incentives, investment opportunities and value chains that incorporate ecosystem values. This opens new pathways for increasing the sustainability of agreements and of global development goals.
- 17 See NEGOTIATE case study on the IUCN Water website: How the Weak Prevailed Nepali Activists Engage the World Bank over Arun-3 and From "No Dams!" to "No Bad Dams!" Nepal's Engagement with the World Commission on Dams by Dipak Gyawali.
- 18 For details on the process, lessons and outcomes of the review, see NEGOTIATE case study on the IUCN Water website: Ok Tedi and Fly River negotiation over compensation: using the mutual gains approach in multi-party negotiations by Barbara Sharp and Tim Offor.
- 19 The figure guiding the chapter uses earlier work on MSPs (see Dore, J. (2007). "Mekong Region water-related MSPs: Unfulfilled potential". In: Warner, J. (Ed.) Multi-Stakeholder Platforms for Integrated Water Management, 205–234. Aldershot: Ashgate); and relates it to outcome mapping by Earl, S., Carden, F. and Smutylo, T. (2001). Outcome Mapping: Building Learning and Reflection into Development Programs. Ottawa: International Development Research Centre; and re-presentation of this mapping by Ricardo Wilson-Grau (unpublished). This latter conceptual-ization introduces 'spheres of control' that are useful to keep in mind when considering the possibilities and limitations of MSPs. The core of this outcome mapping approach is the focus on the importance of changing the social behaviour of actors. Context is only partially within the control of the MSP, as context is partly inherited. Process, content and outcomes are within the control of the MSP and its participants. Impact (higher-order than outcomes) is usually dependent on changing the behaviour of actors beyond the MSP participants.
- 20 See IIED and WBCSD. (2002). "Ok Tedi Riverine Disposal Case Study (Appendix H)".In: Mining for the Future. London and Conches-Geneva: International Institute for Environment and Development and World Business Council for Sustainable Development; and NEGOTIATE case study on the IUCN Water website: Ok Tedi and Fly River negotiation over compensation: using the mutual gains approach in multi-party negotiations by Barbara Sharp and Tim Offor.
- 21 For a summary of a Mekong MSP see IUCN, TEI, IWMI and M-POWER. (2007). *Exploring Water Futures Together: Mekong Region Waters Dialogue. Report from Regional Dialogue*, Vientiane, Lao PDR. IUCN, Thailand Environment Institute, International Water Management Institute and Mekong Program on Water Environment and Resilience. At http://www.mpowernet.org/download_pubdoc.php?doc=3274
- 22 The section on scales and levels is adapted from Dore, J. and Lebel, L. (2009). "Deliberation, scales, levels and the governance of water resources in the Mekong Region". M-POWER Working Paper, Chiang Mai University, who drew on earlier work of Lebel; and that of Gibson, C., Ostrom, E. and Ahn, T.K. (2000). "The concept of scale and the human dimensions of global change: a survey". Ecological Economics 32: 217–239; and Sneddon, C., Harris, L. and Dimitrov, R. (2002). "Contested waters, conflict, scale and sustainability in aquatic socio-ecological systems". Society and Natural Resources 15: 663–675.
- 23 Dore and Lebel, ibid.
- 24 A case on an MSP for a water and sanitation project in Bolivia illustrates the importance of timing to enable MSP recommendations to be acted upon (see A Multi-Stakeholder Platform to solve a conflict over a Water and Sanitation Project in Tiquipaya, Bolivia by Vladimir Cossio on the IUCN Water website
- 25 This quote is taken from from Watson, N. (2007). "Collaborative capital: a key to the successful practice of integrated water resources management" (in Warner (2007)), from which Case 3.6 about the Fraser Basin Council is derived. More background information can be found at http://www.fraserbasin.bc.ca/
- 26 Miller, J.D.B. (1962). The Nature of Politics. Harmondsworth: Penguin Books.
- 27 Hay, C. (1997). "Divided by a common language: political theory and the concept of power". Politics 17:1, 45-52.
- 28 VeneKlasen, L. and Miller, V. (2002). A New Weave of Power, People and Politics: The Action Guide for Advocacy and Citizen Participation. Oklahoma City, OK: World Neighbours.
- 29 To the deliberative democrat, Dryzek, deliberation is 'multifaceted interchange or contestation across discourses within the public sphere' (see Dryzek, J.S. (2001). "Legitimacy and economy in deliberative democracy". Political Theory 29(5): 651–669) where discourses are seen as 'shared sets of assumptions and capabilities embedded in language that enables its adherents to assemble bits of sensory information that come their way into coherent wholes' (Dryzek, J.S. (1999). "Transnational democracy". The Journal of Political Philosophy 7(1): 30–51, at 34). MSPs pro-

vide a mechanism for such 'contestation across discourses'. In so doing, they are in accord with the social learning perspective, the 'building blocks' of which are: the constructivist paradigm, an orientation towards reflection and action, and commitment to a holistic approach, see Maarleveld, M. and Dangbegnon, C. (2002). "Social learning: major concepts and issues". In: Leeuwis, C. and Pyburn, R. (Eds) *Wheelbarrows Full of Frogs*. Assen: Koninklijke Van Gorcum. Just as MSPs are diverse in their purpose and emphasis, so too is the 'broad church' of constructivism which 'both seeks and serves to restore politics and agency to a world often constituted in such a way as to render it fixed and unyielding' (Hay, C. (2002). *Political Analysis: A Critical Introduction*. Basingstoke and New York: Palgrave). So it can be seen that the deliberative democrats, the social learning school, and constructivists, have much in common. Each emphasize the role of ideas as significant in reshaping the world.

- 30 Wageningen International in the Netherlands maintains a very helpful MSP portal which includes excellent information about techniques, but also a regularly updated compilation of experiences from around the world.
- 31 The figure is adapted from Vermeulen, S., Woodhill, J., Proctor, F.J. and Delnoye, R. (2008). Chain-wide learning for inclusive agrifood market development: a guide to multi-stakeholder processes for linking small-scale producers with modern markets. International Institute for Environment and Development, London UK, and Wageningen University and Research Centre, Wageningen, The Netherlands, 111. The figure is taken from page 57.
- 32 The text on setting up, stakeholder analysis and scenarios draws heavily on Dore, J., Woodhill, J., Keating, C. and Ellis, K. (2000). Sustainable Regional Development Kit: A resource for improving the community, economy and environment of your region. Yarralumla ACT: Greening Australia [Resource book + CD].
- 33 See NEGOTIATE case study about Umatilla ground water on the IUCN Water website.
- 34 See *NEGOTIATE* case study about Komadugu Yobe Basin on IUCN Water website.
- 35 See Warner, J. (Ed.) (2007). *Multi-Stakeholder Platforms for Integrated Water Management*. Aldershot: Ashgate. This quote is taken from the preface to this highly relevant book which provides 16 chapters exploring water-related MSPs from all corners of the world.
- 36 The notion of the social contract for the participants is similar to the IAP2 'promise to the public' (discussed in Chapter 2). An elaboration of this typology – looking at whether participants are invited to speak based primarily on their knowledge and skill (experts?), or based on their capacity to commit (authority?) or significantly influence the commitment of a constituency – can be found in Susskind, L.E., Fuller, B., Ferenz, M. and Fairman, D. (2003). "Multistakeholder Dialogue at the Global Scale". *International Negotiation* 8: 235–266.
- 37 http://www.hydropower.org/sustainable_hydropower/HSAF.html
- 38 See NEGOTIATE case study on the IUCN Water website: Interlinking of Rivers in India: Dialogue and Negotiations by National Civil Society Committee by Biksham Gujja; and Alagh, Y.K., Pangare, G. and Gujja, B. (Eds) (2006). Interlinking of Rivers in India. New Delhi: Academic Foundation, in collaboration with the National Civil Society Committee on Interlinking of Rivers in India (NCSCILR).
- 39 See NEGOTIATE case study on the IUCN Water website: Visioning on the future of the rivers Scheldt and Waal by Jeroen Warner.
- 40 See NEGOTIATE case studies on the IUCN Water website: Sharing Irrigation Water in Bhutan: Companion Modeling for Conflict Resolution and Institution Building by Gurung et al.; and Using Companion Modeling to level the playing field and influence more equitable water allocation in northern Thailand by Barnaud et al. See also Building Shared Understanding – Use of role-playing games and simulations to negotiate improved water management in the Republic of Kiribati by Natalie Jones.
- 41 http://www.millenniumassessment.org/en/Index.aspx. For the conceptual approach and detail of the MA scenarios, see Millennium Ecosystem Assessment. (2005b). Ecosystems and Human Well-being: Scenarios, Volume 2. Washington, DC: Island Press, with particular attention to Chap. 8 by Cork et al. Water and wetland findings and recommendations are synthesized in Millennium Ecosystem Assessment. (2005a). Ecosystems and Human Well-being: Wetlands and Water Synthesis. Washington, DC: World Resources Institute.
- 42 Dyson, M., Bergkamp, G. and Scanlon, J. (Eds) (2003). FLOW The Essentials of Environmental Flows. Gland: IUCN; see also Smith, M., de Groot, D. and Bergkamp, G. (Eds) (2008). PAY Establishing payments for watershed services. Gland: IUCN; and Sadoff, C., Greiber, T., Smith, M. and Bergkamp, G. (Eds) (2008). SHARE Managing water across boundaries. Gland: IUCN. All available at http://www.iucn.org/about/work/programmes/water/wp_resources/ wp_resources_toolkits/index.cfm. SHARE provides a practical guide to water sharing across boundaries (or borders), with a focus on the 260 river and lake basins shared worldwide by two or more countries. It explores potential costs and benefits of cooperation, and of non-cooperation, and principles and mechanisms for incentive creation and benefit sharing. Transboundary negotations about water are an important issue between States. An infusion of

deliberation, whether multi-stakeholder or not, would often improve the basis of negotiations and decision making. *PAY* provides ideas about payment systems that can be established to maintain or restore watershed services critical for downstream water users. When upstream services are valued, it provides an incentive for market systems to be explored as one way of encouraging land and water use that meets the needs of more than just upstream users.

- 43 For more information see the Senegal contribution to the 1st World Water Development Report (OMVS. (2003). "Chapter 20. Senegal River Basin, Guinea, Mali, Mauritania, Senegal". In: UNESCO-WWAP (Ed.) Water for People, Water for Life: The United Nations World Water Development Report, 1st Report, 450–461. Barcelona: Bergahn Books).
- 44 There was a huge knowledge base assembled and debated by the WCD platform which informed the final report of the Commissioners (WCD. (2000) Dams and Development: A New Framework for Decision Making. Cape Town: World Commission on Dams). All reports, including details of the process, can be found online at www.dams.org. Critiques abound, but any reviewer of this process should include Dubash, N.K., Dupar, M., Kothari, S. and Lissu, T. (2001). A Watershed in Global Governance? An Independent Assessment of the World Commission on Dams. World Resources Institute, Lokayan and Lawyer's Environmental Action Team.
- 45 Dixit, A., Adhikari, P. and Bisangkhe, S. (Eds) (2004). *Constructive Dialogue on Dams and Development in Nepal*. IUCN and Nepal Water Conservation Foundation.
- 46 In the words of one MSP research team: 'If there is not a full recognition of interdependence by stakeholders, including water bureaucracies, and the need for concerted action, MSPs will remain paper tigers' (Wester, P., Hoogesteger van Dijk, J. and Paters, H. (2007). "Multi-stakeholder platforms for surface and groundwater management in the Lerma-Chapala basin, Mexico". In: Warner (2007), 151–164).
- 47 For a detailed explanation of the four criteria for measuring the results of public policy negotiations see Susskind, L. and Cruikshank, J. (1987). *Breaking the Impasse: Consensual Approaches to Resolving Public Disputes*. New York NY: Basic Books.
- 48 For a detailed discussion of how to create value in negotiations by trading across issues see Raiffa, H. (1982). The Art and Science of Negotiation: How to resolve conflicts and get the best out of bargaining. Cambridge MA: Harvard University Press.
- 49 For a more detailed discussion see the NEGOTIATE case study on the IUCN Water website.
- 50 The Danube River Protection Convention (DRPC) was initially signed in 1994, and came into force in 1998. In 2007 the contracting parties include the States of Austria, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Germany, Hungary, Moldova, Romania, Serbia and Montenegro, Slovakia, Slovenia and Ukraine. It aims to ensure that surface waters and ground water within the Danube River Basin are managed and used sustainably and equitably. The International Commission for the Protection of the Danube River (ICPDR) is the platform for the implementation of the DRPC. See http://www.icpdr.org
- 51 The report can be accessed at http://assets.panda.org/downloads/worldstop10riversatriskfinalmarch13.pdf. Although the merit of listing the Danube in this report can be debated, it does signal the need to address unresolved conflicts between different ideas of how the river should be used and developed.
- 52 The Danube Commission was established to supervise the implementation of the 1948 Convention regarding the Regime of Navigation on the Danube (known as the Belgrade Convention). The 11 member States are Austria, Bulgaria, Croatia, Germany, Hungary, Moldova, Romania, Russia, Serbia, Slovakia and Ukraine. It has its origins in the Paris Conferences of 1856 and 1921 which established an international regime to safeguard free navigation on the Danube. It is recognized that the Convention needs to be updated to reflect present-day circumstances where there has been a change in the politics of the region, with new States and territories. See http://www.danubecom-intern.org/
- 53 Susskind, L.E. (1994). *Environmental Diplomacy: negotiating more effective global agreements*. New York NY: Oxford University Press.
- 54 See Susskind, L., McKearnan, S. and Thomas-Larmer, J. (1999). *The Consensus-Building Handbook: a comprehensive guide to reaching agreement*. Thousand Oaks, CA: Sage Publications; and Susskind, L.E. and Cruikshank,, J.L. (2006). *Breaking Robert's Rules: The new way to run your meeting, build consensus and get results*. New York NY: Oxford University Press, for a detailed definition of consensus.
- 55 Ibid.; and Susskind, L.E., Levy, P.F. and Thomas-Larmer, J. (2000). Negotiating Environmental Agreements: how to avoid escalating confrontation, needless costs, and unnecessary litigation. Washington DC: Island Press.
- 56 Derived from : Susskind, L., McKearnan, S. and Thomas-Larmer, J. (1999). *The Consensus-Building Handbook: a comprehensive guide to reaching agreement*. Thousand Oaks, CA: Sage Publications

- 57 This case study draws largely on private communications with B.W. Fuller and material from Fuller, B.W. (2005). "Trading Zones: Cooperating for water resource and ecosystem management when stakeholders have apparently irreconcilable differences". Dissertation, Department of Urban Studies and Planning, Massachusetts Institute of Technology; and Boswell, M.R. (2005). "Everglades Restoration and the South Florida Ecosystem". In: Scholz, J.T. and Stiftel, B. (Eds) Adaptive Governance and Water Conflict: New Institutions for Collaborative Planning, 89–99. Washington DC: Resources for the Future. For a more detailed discussion see the NEGOTIATE case study on the IUCN Water website.
- 58 Mekong River Commission, the implementing organization for the Mekong Agreement.
- 59 Radosevich. G.E. (2007). Private Communication.
- 60 Radosevich, G.E. (1995). "Mekong Agreement History and Commentary", 29. Unofficial Report.
- 61 See the NEGOTIATE case study on the IUCN Water website: Using Structured Decision Making in Collaborative Planning Processes for Better Water Management: An Innovative Approach to Water Use Planning in British Columbia, Canada prepared by Lee Failing and Graham Long, Compass Resource Management.
- 62 This text box draws on private communications with Dr G.E. Radosevich; material from the case Mekong River Basin, Agreement & Commission (see NEGOTIATE case study on the IUCN Water website; and from an unofficial 1995 report Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin: Commentary & History, both prepared by George E. Radosevich.
- 63 For a detailed discussion of Best Alternative To a Negotiated Agreement (BATNA) see Fisher, R., Ury, W.L. and Patton, B. (1981). *Getting to Yes: Negotiating agreement without giving in*. New York NY: Penguin Books.
- 64 For more on this see Susskind et al., 2000, supra note 9.
- 65 See the *NEGOTIATE* case study on the IUCN Water website: *Komadugu Yobe Basin: A case study of participatory water charter development for sustainable and equitable management of water resources* prepared by D.K. Yawson, H.G. Ilallah and I.J. Goldface-Irokalibe.
- 66 At the time of writing, a change in government had delayed the Charter's entry into force as some of the top officials required to endorse and implement the agreement had been replaced. Nevertheless, it is hoped that these new leaders will support the Charter when they learn about the multi-stakeholder process through which it was created and the overwhelming support it garnered
- 67 The Social Learning Group. (2001). Learning to Manage Global Environmental Risks. Volume I: A Comparative History of Social Responses to Climate Change, Ozone Depletion, and Acid Rain. [Clark, W.C., Jäger, J., van Eijndhoven, J. and Dickson, N.M. (Eds)]. Cambridge MA: The MIT Press.
- 68 See NEGOTIATE case study on the IUCN Water website: Sharing Irrigation Water in Bhutan: Companion Modeling for Conflict Resolution and Promoting Collective Management by Tayan Raj Gurung, Francois Bousquet, Aita Kumar Bhujel, Gyenbo Dorji and Guy Trébuil.
- 69 See http://www.idrc.ca/en/ev-85928-201-1-DO_TOPIC.html.
- 70 See Case 4.1 in Chapter 4.
- 71 See NEGOTIATE case study on the IUCN Water website: *Mekong River Basin Agreement and Commission* by George E. Radosevich.
- 72 http://www.hydropower.org/sustainable_hydropower/IHA_Sustainability_Guidelines.html
- 73 http://www.mdbc.gov.au/about/murraydarling_basin_initiative_overview
- 74 See NEGOTIATE case study on the IUCN Water website: Community-Based Approaches to Conflict Management, Umatilla County Critical Groundwater Areas by Todd Jarvis.
- 75 http://www.equator-principles.com/index.shtml
- 76 See NEGOTIATE case study on the IUCN Water website: Komadugu Yobe Basin: A Case Study of Participatory Water Charter Development for Sustainable and Equitable Management of Water Resources by D.K. Yawson, H.G. Ilallah and I.J. Goldface-Irokalibe.

- 77 See NEGOTIATE case study on the IUCN Water website: Negotiation Processes in Institutionalising Grassroots Level Water Governance: Case of Self Employed Women's Association, Gujarat, INDIA by Smita Mishra Panda.
- 78 See NEGOTIATE case study on the IUCN Water website from WANI projects in Guatemala, Mexico and El Salvador.
- 79 A catchment in the South African context is equivalent to a river basin as well as part of a river basin. See NEGOTIATE case study on the IUCN Water website: Multi-stakeholder Platforms and Negotiation: The Case of Kat River Valley Catchment Management Forum by Eliab Simpungwe.
- 80 For more information see http://www.nilebasin.org/
- 81 A 'mécanisme de concertation permanent pour le Système Aquifère du Sahara Septentrional'. See NEGOTIATE case study on the IUCN Water website by Kerstin Mechlem.
- 82 http://www.fraserbasin.bc.ca/about_us/documents/FBCcharter.pdf
- 83 See http://www.mdbc.gov.au/about/the_mdbc_agreement. For an excellent analysis, see Connell, D. (2007). Water Politics in the Murray-Darling Basin. Annandale NSW: Federation Press.
- 84 See case study prepared for a BothEnds publication, also on the IUCN Water website: *Negotiating our way through Livelihoods and Ecosystems The Bhima River Basin Experience* by Vijay Paranjpye and Parineeta Dandekar (http:// www.bothends.org/strategic/RBM-Boek.pdf).
- 85 See Case 5.3 for more details on the Code of Conduct.
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ANU page 196

Chapter 13

Mekong Region Water-Related MSPs – Unfulfilled Potential

John Dore

Introduction

Multi-Stakeholder Platforms (MSPs) are a technology for democratic governance which can assist society to reflect on the wisdom of past actions, more comprehensively explore and assess future options, and more openly negotiate workable strategies and agreements. The central ingredient is informed debate which gives ample opportunity for learning and possible reshaping of opinion. This may lead to the creation or strengthening of bridges of understanding between actors representing wide-ranging interests, and the satisfactory resolution of at least some differences. The MSP may also bring into sharper focus substantive differences of approach and priorities that may not be easily reconcilable. Either way, by articulating these differences in the public sphere, an MSP can contribute to a sounder basis for charting a forward path.

The vision for MSPs put forward in this chapter is for important transboundary water-related governance, affecting Mekong Region livelihoods and ecosystems, to be more informed and influenced by public deliberation. In this vision MSPs would be accepted as a legitimate element of governance, providing a mechanism for many different stakeholders in the State-society complex to explain, defend and potentially adjust their perspective.

This is not a utopian vision constructed in ignorance of the daunting Mekong Region political context where many substantive decisions are made without an airing in the public sphere. The power relationships embedded in this context, within and between countries, undoubtedly influence the extent that meaningful MSP participation and negotiation is possible. But, it is noted that there are some inspirational examples of MSPs at the local and national scales. The contention is that regional water-related MSPs could also display desirable characteristics, more conducive to socially just and ecologically sustainable development.

This chapter unfolds in the following way. First, the Mekong Region is introduced. Second, the relationship between governance and MSPs is made clear. Third, the existing diversity of regional water forums in the Mekong Region is shown, but no claim is made that all 'earn the label' of MSP. Some of the most prominent forums are discussed. Some issues are of region-wide significance, still others: transboundary, transborder, crossborder, or interbasin. This chapter uses the term 'regional' to encompass any issue involving at least one of these characteristics. Fourth, some key challenges for MSPs are identified, evident from current practice and debate. Finally, I point to several major infrastructureheavy, mega-projects with transboundary dimensions. These include current plans for large-scale hydropower development in China's Yunnan Province, a hydropower-reliant energy grid being promoted via the Association of South East Asian Nations and the Asian Development Bank, a multi-faceted water grid being explored by the Government of Thailand, and a 'regional water stategy' being developed by The World Bank. The governance of each would be enhanced by a high-quality, transboundary MSP.

The core argument is that MSPs have unfulfilled potential in the Mekong Region, within but also well beyond the realms of water-related governance.

The Mekong Region

The Mekong Region comprises the five countries of Cambodia, Lao PDR, Myanmar, Thailand, Vietnam – plus China's Yunnan province (see Table 13.1 and Figure 13.1). The territorial area is 2.3 million km², which is home to a rapidly growing population of about 255 million people. Since the early 1990s the region is enjoying an unprecedented period of relative peace between the countries. This is remarkable, given the tumultuous recent history of the region, and becomes particularly relevant to regional governance and the prospects for regional MSPs.

The present dynamic of the Mekong Region is heavily influenced by its shared and overlapping regional history. As with elsewhere in the world, the borders of the modern nation States do not neatly subdivide cultural affiliations. The numerous indigenous cultures of the region were heavily influenced by a fusion of Indian and Chinese (Han) culture beginning two thousand years ago. The Mon, the Karen, the Chin, the Burmese, the Kachin, the Khmer, the Tai, the Viets, etc. had their languages, religions and other customs heavily shaped, whilst of course retaining their own distinctive elements.

Significant parts of the region were isolated for much of the latter half of the twentieth century as a result of a series of wars and internal turmoil. In the last 70 years the Mekong Region has been a battlefield for the Second World War, post-Second World War independence struggles against colonial powers, ideological struggles between the communists of Vietnam-Cambodia-Lao PDR (and their allies, including at different times the former Soviet Union and China) versus other parts of Mekong societies and the USA (who had another wide range of 'allies'). New nation States were created in Myanmar in 1948, China in 1949, Vietnam and Lao PDR in 1975, and (effectively) Cambodia in 1993.

In the last 25 years there have been various invasions and skirmishes between Cambodia and Vietnam, China and Vietnam, Thailand and Lao PDR, and Thailand and Myanmar. These and the earlier conflicts have left many scars and continue to influence regional perceptions. For example: Thais are constantly reminded of their wars with the Burmese, people from Lao PDR remember various interfering



Figure 13.1 Mekong Region

Source: United Nations map number 4112, Revised January 2004.

	Cambodia	China ^a	Lao PDR	Myanmar	Thailand	Vietnam
Area						
(x 1,000km ²)	181	9,561	237	677	513	330
Population (millions)	13.4	1,285.0	5.4	48.4	63.6	79.2
GDP						
(\$ billion)	3.4	1,159.0	1.8	4.7 ^b	114.7	32.7
GDP per head (\$ in PPP) ^c	1,790	3,950	1,540	1,500 ^b	5,230	2,070
Median age	17.5	30.0	18.5	23.4	27.5	23.1

Table 13.1 Mekong Region country overview

- a The data concern China as a whole (minus Hong Kong and Macau). Yunnan has a population of approx. 43 million people (2000 census) of which more than one third are ethnic minorities. It is the 8th largest province in China, covering an area of 394,100 km². It shares 4,060 km of border with Myanmar, Lao PDR and Vietnam. Whilst the Yunnan economy is growing fast, the province remains relatively poor compared to China's eastern and coastal regions. In 1997 36% of the population was classified by China's government as still living in poverty (annual income less than USD 77).
- b An estimate as official Myanmar economic data are unavailable or unreliable.
- c PPP refers to purchasing power parity, which adjusts for cost of living differences.

Source: The Economist (2004). Data refer to the year ending 31 December 2001.

forces which made for a long hard revolutionary road, Cambodians remember the Vietnamese territory encroachments and military invasions (or liberation from the Khmer Rouge), and the Vietnamese remember Thailand providing air bases for enemy bombers during their struggle with the USA. Sometimes these past enmities are unnecessarily stirred by elites appealing to nationalism for various political purposes.

Current social and economic conditions, ethnicity, intra-regional and international negotiating powers all vary enormously. Aggregated national statistics do not adequately reflect the cultural and political diversity of the region, nor the gender and environmental complexity, but they do highlight some obvious similarities and differences (see Table 13.1).

The Mekong Region is taken to encompass the territory, ecosystems, people, economies and politics of Cambodia, Lao PDR, Myanmar, Thailand, Vietnam, and China's Yunnan Province.

In the Mekong Region, disparate *regionalisms* have emerged from desires related to peace, poverty reduction, disease control, infrastructure installation, drugs, wealth-seeking, and preference for ecoystem approaches, all of which

may favour a regional logic which transcends State borders. These are reflected in various political solidarities between actors in the State-society complex – whether governments, bureaucrats, non-governmental organisations (NGOs), the private sector, militaries, ethnic minorities, or lobby groups.¹ These are manifested in an array of *regionalisations*, identifiable via many regional organisations, initiatives, networks and coalitions. Actors in old and new regionalisations are learning how to co-exist, compete or combat with each other.²

Water Concerns

One of the key social challenges for the region is to negotiate the reasonable and equitable utilisation of water.³ The major river basins of the region – from west to east – are the Irrawaddy, Salween, Chao Phraya, Mekong and Red (see Table 13.2).⁴ Conflicts exist and others are looming,⁵ over many, often-connected issues, such as: growth in water and energy demand, interference with natural flows via dams, timing of dam releases for energy or irrigated production, water diversions, altered sediment and nutrient loads, and reshaping rivers to rivers to make navigation easier and safer.

¹ The concept of the State-society complex resonates well in the Mekong Region. It transcends the more simplistic notion in which actors have often been classified as either State, business, or civil society. Such a classification ignores many other key groups, such as the military and donors/funders, implies homogeneity within groups, and ignores multiple roles. For example, business or military actors may dominate government.

² The conceptual difference between regionalisms and regionalisations is elaborated by Schulz et al. 2001. The point has been made that 'the identification of new patterns of regionalisation (co-existing with older forms) is more relevant than attempting to identify a new era of regionalisation' (Hettne 1999, 8). The later section distinguishing between Tracks 1–4 is an attempt to do just that.

³ There are many other challenges which transcend Mekong Region borders, such as: pressures on forests and biodiversity, ethnic minority marginalisation, labor migration, human trafficking, HIV-AIDS, narcotics, dealing with the pressure to embrace agriculture biotechnology including genetically modified crops, and other impacts of international economic integration (see Mingsarn Kaosa-ard and Dore 2003).

⁴ The Salween, Mekong and – to a lesser extent – the Irrawaddy have their flow influenced by the annual Himalayan/Tibetan snow melt, in addition to the monsoon rains. The Chao Phraya and Red are shorter rivers which originate below the snowline, hence their flow is dependent on the monsoonal climate. Across the region, there are also countless sub-basins, natural lakes, aquifers, and human-built dams and reservoirs. Plus there are many coastal river basins, some of which are quite large. Collectively, they comprise the visible and accessible freshwater 'life source' or 'resource'.

⁵ I agree with the view that non-violent 'conflict is not necessarily bad, abnormal or dysfunctional', but rather an inherent element of human interaction (Moore 1986) due to the common incompatibility of goals, interests, perceptions or values. However, many Mekong actors prefer to speak of disputes, or differences, as the English word conflict is tainted by bad memories of the particularly troubled, not too distant past.

River basin	Unit	Irrawaddy	Salween	Mekong	Chao Phraya	Red
Countries in basin		China, Myanmar	China, Myanmar, Thailand	Cambodia, China, Lao PDR, Myanmar, Thailand, Vietnam	Thailand	China, Vietnam
Basin area	km ²	413,710	271,914	805,604	178,785	170,888
Ave. water yield	Million m ³ / y	410,000	151,000	475,000	29,800	177,000
Average population density	people / km ²	79	22	71	119	191
Water supply	m ³ / cap / year	18,614	23,796	8,934	1,237	3,083
Large cities in the basin	,	6	1	9	3	3

Table 13.2Major river basins of the Mekong Region

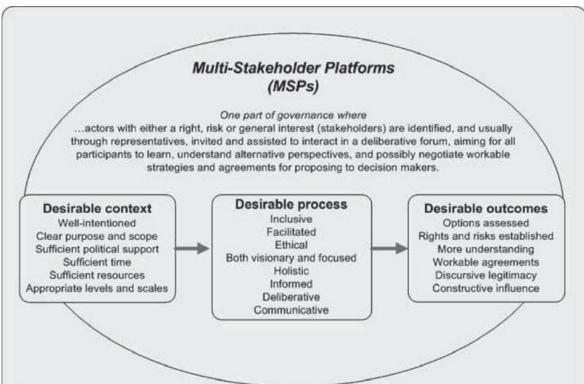
Source: Water Resources e-Atlas (WRI, UNEP, IWMI, IUCN), and Mekong Region Environment Atlas (ADB and UNEP 2004)

Governance and MSPs

Although the English word 'governance' has been in existence since at least the 14th century, its use was limited and for a lengthy time rather unfashionable. In the latter part of the 20th century the word had been widely resurrected '*as something of a catch-all*' (Mehta et al. 1999, 18) helping explain a more complex world, where there is:

... a growing role of active and skillful publics and their protests ... [and] greater salience of non-governmental organisations (NGOs), corporations, professional societies ... [and] many other new actors now crowding the global stage (Rosenau 2004, 11).

MSPs are just one part of governance where actors with either a right, risk or general interest (stakeholders) are identified, and usually through representatives, invited and assisted to interact in a deliberative forum, aiming for all participants to learn, understand alternative perspectives, and *possibly* negotiate workable strategies and agreements (see Figure 13.2). An MSP may involve regular meetings between core participants, conferences/discussions open to the wider public, locally hosted field visits, electronic exchanges, government briefings, films, plays, historical texts, testimony, or commissioned research. MSPs (the term Dialogues is also commonly used; this is synonymous with the platform conception) have been defined as:



Actors

People in the State-society complex, at various levels, 'acting' either individually or collectively in some type of group or coalition.

Institutions

Persistent, reasonably predictable, arrangements, laws, processes, customs or organisations structuring aspects of the political, social, cultural, or economic transactions and relationships in a society; although by definition persistent, institutions constantly evolve (as per Dovers).

Governance

Multi-layered interplay of negotiations, agenda-setting, preference-shaping, decision-making, management and administration between many actors and institutions in the State-society complex, at and between different levels and scales.

For example, governance may involve: governments, bureaucracies, non-government organisations (NGOs), businesses, militaries, donors, lenders, lobbyists, community groups, active individuals, laws, treaties, policies, contracts, formal and informal agreements, commercial contracts, force-bearing dictates, common understandings.

Water governance

As per governance, but specifically water-related,

The interplay between the wide range of actors and institutions which influence water and water use.

Water governance in the Mekong Region involves actors such as: political leaders, water and energy planners, storage and delivery authorities, military, agricultural irrigators, energy generators, fishers, navigators, ecologists, urban and rural dwellers; and *institutions* such as water-related legislation, river basin organisations, community-based water user associations, allocation policies, use and development agreements, regulations, quotas, pricing, and occasional use of armed force to ensure compliance etc.

Figure 13.2 Key concepts of MSPs

...a contrived situation in which a set of more less interdependent stakeholders in some resource are identified, and, usually through representatives, invited to meet and interact in a forum for conflict resolution, negotiation, social learning and collective decision making towards concerted action' (Röling 2002, 39).

Well-intentioned Clear purpose, and scope	Catalysed by a genuine need or desire to do something constructive about a complex situation or problem. Clear articulation of: MSP purpose; political and practical boundaries to enquiry; the derivation, extent and duration of mandate- and instification as to how the MSD might immove existing covernance
Sufficient political support	Sufficient political space and momentum to permit or encourage establishment and support.
Sufficient time	Sufficient time for the MSP to make its contribution/s.
Sufficient resources	Adequate resources to pursue and achieve goals, including human, financial, informational, and intellectual.
Appropriate levels and scales	Cognisant that analysis and action may best occur at various levels and scales. The appropriate level for one MSP may be predominantly within government, for another at the local community. The appropriate scale of analysis may be local, provincial, watershed, national, basin, regional; however, cross-scale issues may also be important.
Desirable process	
Inclusive	Enables 'representation' of a wide range of 'stakeholders' and their disparate interests via a flexible process which may have many different facets
Facilitated	Exemplifies, to the extent possible, a fair and forward moving process, guided by an independent facilitator committed to transparency
Ethical	Respectful of diverse 'ethics' – ways of reasoning, world views and priorities of actors. However, also committed to privileging 'goods', such as: respect and care for life, ecological integrity, social and economic justice; democracy, non-violence and peace.*
Both visionary and focused	Encourages expression of alternative views of preferred, long-term visions for people and places, whilst also identifying and focusing on key issues.
Holistic	Takes an integrated or holistic view of issues taking account of: social, cultural, economic and ecological issues, their actions and interdependencies.
Informed	Utilises and shares the best available information, building the knowledge base. Whilst not essential to be integrated with the MSP should become familiar with other relevant forums, plans, agendas etc
Deliberative	Induces reflection upon preferences, without coercion, by representatives of competing points of view.
Communicative	Effectively communicates high-quality, honest information to MSP participants, and the wider public sphere, State or transnational authorities.
Desirable outcomes	
Options assessed	Assesses nuances of positive and negative aspects of alternative options.
Rights and risks established	Acknowledgement and scrutiny of the multiple rights and risks (borne voluntarily or involuntarily) of stakeholders.
More understanding	More learning, understanding and appreciation by all of the positions of other stakeholders.
Workable agreements	Depending on the mandate, negotiation of workable strategies and agreements for proposing to decision makers.
Discursive legitimacy	MSP earns legitimacy by demonstrating these desirable characteristics!
Constructive influence	Has a constructive influence on the situation, enhancing the overall governance.

Sources: Adapted from Dore and Woodhill (1999:43 ES), Dovers and Dore (1999: 128), with additional ideas from Dryzek (2000, 2001).

But, a problem with Röling's definition is the inclusion of decision making in the remit. Many MSPs are not vested with, nor do they claim, decision-making authority. To claim such authority may invite resistance and be counter-productive. Hemmati is aware of the danger of including decision-making. She has described MSPs as a 'political phenomenon' which: '... aim to bring together all major stakeholders in a new form of communication, decision finding (and possibly decision making) on a particular issue' (2002, 63). Supporters of MSPs believe:

... there is integral value in messier, participatory arenas which value negotiating and social learning within a more open democratic process which encourages exploration and bounded conflict (Dore et al. 2003, 176).

An important characteristic of MSPs is that they be a site of 'authentic deliberation,⁶ meaning debate between people with different world views and prioities which 'induces reflection upon preferences in non-coercive fashion' (Dryzek 2000, 2). But, there is a range of other desirable characteristics for each of context, process and outcomes which are introduced in Figure 13.2 and elaborated in Table 13.3.

Water Governance Forums in the Mekong Region

In all the waters of the Mekong Region, local communities, governments, civil society organisations (local, national, regional and international), business interests, donors and international agencies have interests which they wish represented in governance. Few would claim that historical or current regional water governance is adequate, which partly explains the interest of some actors – but not all – to make 'genuine' MSPs part of regional governance orthodoxy. There is a hope that using MSPs may contribute to greater transparency, and more informed, and equitable decisions.

For now, there are many regional water-related governance forums, but few MSPs. How might they be better understood? While some of them are 'old' style, State-centric and grounded in State interventions, others are qualitatively different and 'new' with lead roles being taken by non-State actors. The new wave of younger regionalisations is coexisting with older types. The terminology of tracks 1–4 is one

⁶ To the deliberative democrat, John Dryzek, deliberation is 'multifaceted interchange or contestation across discourses within the public sphere' (2001, 652) where discourses are seen as 'shared sets of assumptions and capabilities embedded in language that enables its adherents to assemble bits of sensory information that come their way into coherent wholes' (1999, 34). MSPs provide a mechanism for such 'contestation across discourses'. In so doing, they are in accord with the social learning perspective, the 'building blocks' of which are: the constructivist paradigm, an orientation towards reflection and action, and commitment to a holistic approach (Maarleveld and Dangbegnon 2002, 70–75). Just as MSPs are diverse in their purpose and emphasis, so is the 'broad church' (Hay 2002:208) of constructivism which 'both seeks and serves to restore politics and agency to a world often constituted in such a way as to render it fixed and unyielding' (2002, 201). So it can be seen that deliberative democrats, the social learning school, and constructivists have much in common. Each approach emphasises the role of ideas as significant in reshaping the world.

	Track 1	Track 2	Track 3	Track 4
Summary	Formal and	Governance	Research,	Civil society
	informal	processes	dialogue and	organisations
	processes of	involving	advocacy	supporting
	governments	State, UN	efforts led	(where
	and associated	family,	by civil	possible)
	bureaucracy,	donor/lender,	society, less	locally-led
	including	civil society,	impeded by or	governance
	inter- and	interactive	subordinate to	processes.
	intra- State	forums but	State actors.	
	forums. In	led by an		
	the eyes of	actor closely		
	States these	aligned with		
	are 'official'	States ensuring		
	and most	States remain		
	legitimate.	privileged		
		actors.		
In eyes of	Official	Semi-official	Unofficial	Unofficial
States				
Dominant	For the most	Trying to	Activist,	Activist,
logic	part, still	enhance the	optimistic	localist; low
	implicitly	effectiveness	about the	expectations of
	accepting the	of States by	potential of	State capacity
	dominance	widening the	MSPs to find	and intent;
	of rational,	field of ideas	and assist	more explicit
	self-interested	and influences.	negotiate	concerns
	behaviour,		better ways	about power
	particularly in		forward for	imbalances,
	international		society.	domination
	affairs.			and cooption.

Table 13.4Goverance forums – Tracks 1–4

Source: Adapted from Dore (2003: 412)

way of differentiating the forums. Track 1 depicts the 'old' type of forum. But the spectrum in the Mekong Region has widened to now include more examples akin to tracks 2, 3 and 4.

Each of the Tacks 1–4 can be discerned at the local/national scale, and also the regional scale. Each can adopt an MSP approach to address any particularly complex problem. However, at the regional scale in the Mekong Region, Track 1 has shown little inclination to use an MSP approach, mostly remaining hostage to the 'traditional' political norms manifested in international diplomacy and national conventions where State actors see themselves as the only legitimate representatives of a country's citizens – in water issues, self-interested State approaches dominate. Track 2 and track 3 are more likely to take an MSP approach to tackle regional issues. Track 4 users are more likely to see regional platforms as advocacy stages. As with track 1, in track 4 the multi-stakeholder and deliberative elements tend to be downgraded, with other political strategies and approaches being considered more effective (see Table 13.4).

To illustrate the present situation, in the next few pages I will refer to a sample of the wide array of regional water governance forums in the Mekong Region.⁷ There is plenty of room for improvement, and no shortage of regional opportunities to experiment more with an MSP approach.

Track 1

There are many Track 1 water-related governance forums in the Mekong Region (see Table 13.5). Within countries the State government and bureaucracies dominate water governance. There are also many bilateral negotiations between government representatives which are pure Track 1, vitally important, but not the focus of this chapter. The comments here are restricted to the most obvious transboundary example, that being the Mekong River Commission (MRC) which has a State government mandate in the Lower Mekong Basin (the territory of the Mekong River Basin, excluding Myanmar and China).

The 1995 Mekong River Agreement (Governments of Cambodia-Lao PDR-Vietnam-Thailand 1995) created a formal inter-government forum committing signatories to cooperate in all fields of sustainable development, utilisation, management and conservation of the water and water-related resources of the Mekong River Basin, including but not limited to irrigation, hydropower, navigation, flood control, fisheries, timber floating, recreation and tourism. The 1995 Agreement put water utilisation negotiations and basin development planning on the agenda. Amongst others, a third agenda item which has emerged is the need for transboundary environment assessment in the Mekong Region. Various dialogues – relatively exclusive – are occurring around each of these tasks. None resemble ideal-type MSPs.

Thus far, all have been primarily the domain of State agency officials, international donor representatives, many international consultants, and just a few local consultants. If you believe that these actors will adequately represent the interests of all Lower Mekong country citizens, such exclusiveness may be untroubling. However, many local and international actors do not have such confidence and are pressing the MRC secretariat to be more inclusive, meaning greater involvement of civil society, and to allow for more open to alternative knowledge and ideas. This is not so easy for the secretariat to do, as to a large extent their scope is set by their governing Council,

⁷ Whilst this chapter is focused on the regional scale, it is not meant to deny or overshadow the existence of an equally diverse plethora of water governance forums focused on the national and sub-national scales. Tracks 1, 2, 3 and 4 are also discernible at these scales. To acknowledge these, some promising national/sub-national MSP examples are included in the section discussing Track 3. These examples are provided partly to inspire transboundary efforts which could be similarly motivated and constructed.

and most of the staff – from either riparian countries, or international recruits – are understandably cautious about moving out of synch with national processes. There is insufficient political support from the member States for the MRC to be proactive in controversial areas. Member States continue to act unilaterally whenever possible, and either bilaterally (stronger members – Thailand and Vietnam) or multilaterally (weaker members – Lao PDR and Cambodia) as a last resort. Nevertheless, some complex interdependencies and donor support keep the MRC cooperation alive.

The fact that China and Myanmar are not members of the MRC further cripples the organisation, particularly at a time when China is building a substantial cascade of dams on the upstream portion (Dore and Yu Xiaogang 2004). A united front from MRC member countries towards effective dialogue with China has also been scuttled, at least in part by effective bilateral diplomacy by the Chinese circumventing and undermining the MRC forum. China has demonstrated considerable power and influence over downstream countries to stop protests emanating from MRC.

Indicative of the marginalisation of the MRC within some of its own member States, the commission was also excluded from playing any role in the track 1 forum which negotiated the signing of a commercial navigation agreement for the Mekong River, between the four upstream riparian countries (Governments of China-Lao PDR-Myanmar-Thailand 2001). The signatories, from transport and communication ministries, have since presided over the installation of Chinese-funded extensive new navigation aids, and blasting of rocky navigation impediments. Improving the navigability of the river, and the alteration to the natural flows – depending on the operations of the hydropower dams – will come at a cost to the integrity of the ecosystem, with as yet unquantified livelihood costs for river-dependent communities.

It would be reasonable to expect some level of protest, or at least enquiry, from downstream government elites via their river basin commission. However, Cambodia has pragmatically accepted Chinese offers for railway support in exchange for muting its disquiet. Similarly, the Thailand government and associated bureaucracy has also refrained from supporting the MRC to become more proactively involved, accepting boat-building and river transport contracts from the Chinese, whilst at the same time continuing with plans for more tributary interventions of their own. Lao PDR is caught in the middle of the navigation project between China and Thailand, unempowered and with few obvious benefits to the country.

The MRC will not proactively lead any MSP process relating to Thailand's resurgent plans for water resources development, which have Mekong (and other) basin implications. Thailand's reluctance to publicly share its national water resources development agenda with neighbours caused a crisis in the Mekong River cooperation in the early 1990s (Bui Kim Chi 1997, 302–316). More than ten years later the MRC secretariat is still unable or unwilling to provide any comment on the the basin-wide, cross-basin and cross-border implications of various Thailand development possibilities. Of course, influential actors in Lao PDR, Vietnam – and to a lesser extent Cambodia – have plans of their own which are already substantively changing the river basin.

The MRC has also struggled to sustain a proactive role in a recent high profile conflict between Cambodians and Vietnamese caused by loss of life and other problems stemming from the operation of the Yali Falls dam, situated on a stretch of the Se San River in Vietnam's territory. In theory, MRC would be able to play a key role in fostering deliberative processes which could lead to more informed decision making. In practice, due to a lack of political support, it has not yet been possible for the MRC secretariat to countenance leading MSPs which are fully informed and holistically assess all options.

Track 2

Relevant to the Mekong Region are the Track 2 forums led or inspired by groups such as the UN's Economic and Social Commission for Asia and the Pacific (ESCAP), that have convened meetings exchanging information on issues such as water allocation policies and practices in Asia-Pacific, including all Mekong countries (ESCAP 2000). Between 2000 and 2005 ESCAP has continued leading national 'strategic water planning' processes in partnership with others, such as Food and Agriculture Organisation (FAO). Slightly less formal have been the track 2 regional forums held under the auspices of the Global Water Partnership, namely the Southeast Asia Regional Dialogue on Water Governance in 2002, and the ensuing South East Asia Water Forum in 2003. Both the ESCAP and GWP forums mostly involve government officials, UN agencies, natural sciences technical experts and international NGOs. Thus far there has been virtually no participation by local civil society (see Table 13.5).

The United Nations Development Program (UNDP) is also initiating track 2 water governance initiatives as the key component of its new 'Asia-Pacific' (but Mekong Basin focused) Regional Environmental Governance program, attempting to play the role of honest broker facilitating between governments, communities and different interest groups, and/or capacity building others (such as the various parts of the Mekong River Commission) to do the same. UNDP have yet to prove they can catalyse and sustain Mekong Region MSPs, but they now have another chance.

The most important of the Track 2 regional initiatives is the 'Greater Mekong Subregion' (GMS) economic cooperation initiative facilitated by the Asian Development Bank (ADB). This GMS programme has brought together the six countries to focus on the coordinated development of infrastructure (ADB 2001, 2002). Many 'master plans' have been completed which are unrealistic dreams, or visionary guides, depending upon your point of view.

The GMS program was endorsed at the November 2002 summit meeting of the political leaders from each of the Mekong Region countries. The forward workplan at that time outlined 'flagship projects' requiring more than \$900 million in investment financing and almost \$30 million in technical assistance. The flagships are intended as multi-disciplinary, large-scale interventions with high visibility and significant economic impact on the GMS economies. There are 11 projects relating to: north-south, east-west and southern economic corridors (roads plus associated infrastructure); completion of a regional telecommunications 'back bone'; regional power grid completion plus power trading arrangements; private sector 'participation and competitiveness' boosting; cross border trade and investments support; implementing a region-wide Strategic Environmental Framework (SEF)

Track 1	Track 2
Mekong River Commission	ESCAP technical meetings about water
inter-government processes	allocation policies, GMS development
between Cambodia, Lao PDR,	cooperation 2001–2009 etc.
Thailand and Vietnam.	Global Water Partnership regional
Negotiations between transport	'dialogues', such as the Chiang Mai
ministries leading to signing of	1 st South East Asia Water Forum
Navigation Agreement between	2003, and Bali 2 nd South East
China, Burma/Myanmar, Lao	Asia Water Forum 2005, building
PDR and Thailand 2000, and	on earlier national dialogues.
subsequent river modifications.	UNDP Asia-Pacific regional
Greater Mekong Subregion (GMS)	environmental governance initiatives
Leaders Summit 2002 which signed	2004+ inc. support to Mekong
an agreement to establish an electricity	River Commission and crossborder
grid between Mekong Region and	local community 'dialogues'.
some other ASEAN countries.	Asian Development Bank
ASEAN Mekong Basin Development	(ADB) processes, such as:
Cooperation 1996+, thus far	□ the GMS program of economic
focused on railway, not water.	cooperation activities 1992+
Bilateral negotiations between	development of the Strategic
governments, such as:	Environment Framework
Thailand with its neighbours	(SEF) for the GMS 2001+
over proposed water diversions and	□ fostering establishment of Tonle Sap
associated dam and tunnel constructions	lake/basin management authority 2004+
Vietnam and Cambodian	review of ADB policy on
governments formal meetings	decision-making about large scale
over Se San River dams	water resources projects 2005+
downstream impacts 2000+	

Table 13.5 Recent regional water-related governance forums (Tracks 1–2)

(SEI et al. 2002); and supporting country efforts to control floods and 'manage' water resources; and tourism.

The main participants in the GMS initiative are State government representatives, ADB bank officials and consultants. A significant role is also played by shareholder member governments that contribute financially to the Bank, principally USA and Japan. The latter augments its influence via extra mechanisms such as the Japan Special Fund. A primary aim is to entice the private sector to become more involved either supplying funds (eg. money market) or implementing projects. In recent years civil society has taken an active role on the periphery of this Bank-led process eg. parallel forums coinciding with the annual meeting of the Bank's Board of Governors etc. Civil society has faced the question of whether to become more involved with ADB or to maintain its critical advocacy from outside. Critical advocacy has resulted in changes to the ways in which the GMS program operates, in particular with regard to transparency, expansion into social areas such as health, and willingness to engage

with non-State actors. However, insiders admit that the ADB still struggles to initiate and sustain dialogue efforts which in any way resemble MSPs.

Track 3

Lack of faith in Tracks 1 and 2 by parts of civil society has led to the emergence of Tracks 3 and 4, both of which may proceed with or without direct State involvement. In the eyes of States, track 3 is 'unofficial' but this does not, and should not, deter activists optimistic about the power of discursive forums to enhance the quality of problem identification and solving, or, more positively, goal-setting and attainment.

There is an increasing number of examples in Mekong Region countries of civil society led governance forums in water and water related areas, such as energy and fisheries. At the local/national level these include MSPs about Se San hydropower, Cambodian fisheries law, and community-led research and watershed management (see Table 13.6).

There are also many track 3 initiatives focused on the regional scale. Again, space precludes doing more than discussing one example, with its couple of offshoots. World Resources Institute (WRI) and Stockholm Environment Institute (SEI) were the drivers of the Resource Policy Support Initiative (REPSI) – mostly via a WRI office in northern Thailand, at which I was based. My role was to support the construction and facilitation of a two year dialogue on environmental governance which emerged from a meeting about cooperation on international rivers, held in Yunnan in 1999 (He Daming et al. 2001). A wide range of regional actors were recruited/invited to participate in a process intended to learn about, and where necessary challenge, the ways in which decisions are made about 'environment' issues in Mekong Region countries (Badenoch 2001).8 The Regional Environment Forum (REF) is a WRI-led evolution from REPSI which has a more explicit role for local organisations in the management of the initiative, with Thailand Environment Institute (TEI) and Cambodian Institute for Cooperation and Peace (CICP) taking leading roles. Despite this supposed local independence the initial outputs of this forum (REF participants 2002) have closely mirrored the general WRI environmental governance agenda, exemplified in the The Access Initiative (Petkova et al. 2002), which closely parallels the European Århus Convention (UNECE 1998). In 2004 WRI has closed its regional office, and SEI is now countering with its own new network initiative. Of the two, SEI in particular sees a niche for itself as a 'boundary organisation' occupying a mediating space between science, policy, business (Guston 1999, 2001) and perhaps even civil society advocacy groups.

IUCN – The World Conservation Union is increasingly using its convening capacity in the Mekong Region to focus on significant water-related governance challenges. An example was a recent 'high-level roundtable' at the 2004 World Conservation Congress held in Bangkok. IUCN is an unusual hybrid organisation

⁸ Whilst to funders REPSI was focused on the uplands, to encourage the participation of a wider range of regional actors it was necessary to broaden the geographic scope to encompass the Mekong Region.

Box 13.1 Recent civil society-led local/national MSPs

Cambodian fisheries law dialogue

220

The adoption of Cambodia's Community Fisheries Sub-decree, drafted between 2000 and 2004, is critical if there is to be non-violent and 'sustainable' accessing of the extraordinary Tonle Sap fishery. The drafting has involved an MSP including small-scale fisher representatives, plus local and national officials. Critical facilitation has been provided by NGOs such as Oxfam Great Britain and the local Fisheries Action Coalition Team. The MSP has been supported by various international organisations such as the Environmental Justice Foundation, other Oxfams and the UN's Food and Agriculture Organisation. Critical context for the MSP was the political support provided by Prime Minister Hun Sen since 2000. Progress has been made in a process shaped by civil society actors working with sympathetic government officials.

Thai Baan action research and dialogue

Villager-led research groups are now operating in northern and northeast Thailand. This movement is commonly referred to as the Thai Baan research. The villagers are the researchers. Those helping them are research assistants. Thus, traditional research hierarchies are being turned upside down. Thai Baan is boosting the understanding of communities and government officials of the links between rivers, wetlands and rural livelihoods. Thai Baan groups are being supported by partnerships between local organisations such as the Chieng Khong Conservation Group, regional NGOs such as the South East Asia Rivers Network (SEARIN), tambon and provincial officials, and other organisations such as IUCN and Oxfam America. This chain of MSPs is focused on the local scale. Thai Baan has rapidly gained credibility by 'bringing in' and respecting the knowledge of local fishers and farmers, and effectively communicating their knowledge to other actors through photo exhibitions, Thai and English booklets and videos.

Se San hydropower dialogue

The Se San Protection Network (see (Hirsch and Wyatt 2004) is an initiative of 'downstream' Cambodian villagers in the Se San River Basin seriously affected by operations of Vietnam's Yali Falls dam. The network is gradually succeeding in working cooperatively with formal State actors such as the Cambodian National Mekong Committee Secretariat, and the Cambodian Standing Committee for Coordination on Dams and Canals along Cambodia – Lao PDR, Vietnam, Thailand Borders. External support to the network is being provided by NGOs such as Both Ends, the Oxfams, and the Australian Mekong Resource Centre. Civil society groups have created and are sustaining their efforts to lead a constructive MSP.

Yunnan community-based watershed management

The Lashi watershed management committee in Yunnan Province brings together local communities and government officials in an MSP to aid watershed decision making (Igbokwe et al. 2002, Lazarus 2003). The establishment process has been facilitated by Green Watershed, a local Chinese NGO, with support from Oxfam America. The MSP started in sixteen villages with awareness raising through watershed management trainings, participatory rural appraisal activities, gender training, historical reviews and trust building among two ethnic minority groups. It has now advanced to tackle more difficult subjects, such as an upcoming county-level project to raise the level of the small dam (dike) to increase the water flow to Lijiang town and the potential impacts on local livelihoods (such as loss of fisheries, water, agricultural crops and land). Having established a solid base it is now scaling up to be more relevant to other townships and the whole of the watershed and is seen by parts of the Chinese government as a model learning site.

being a union of some 80 state government and 1000 non-state organisation members. IUCN's secretariat can use its membership base as a justification for a discussion format quite unlike the normal inter-government meetings on offer. Engaging in the Bangkok deliberation were Ministers from 5 of the 6 Mekong countries (excluding Burma/Myanmar), and many non-State representatives, some of whom delivered focused presentations on substantive and controversial issues such as Nu-Salween river development in China, Burma/Myanmar and Thailand; water basin diversions, with special reference to Thailand; and threats to the Tonle Sap freshwater lake in Cambodia. IUCN is committed to supporting waterrelated MSPs at different scales throughout the Mekong Region, in part as the regional manifestation of its global Water and Nature Initiative (WANI) (see www. waterandnature.org). They recognise that MSPs need to have a diverse, but robust, knowledge base. For this reason IUCN remains keen to continue its support to local research institutions in the Mekong Region. Many of these institutes are now collaborating in a water governance network whose joint activities are undertaken via M-POWER (Mekong Program on Water Environment and Resources) which is coordinated from Chiang Mai University's Unit for Social and Environmental Research (www.sea-user.org).

Track 4

It is sometimes difficult to distinguish between Track 2 and Track 3 forums, but Track 4 is quite different. It reflects the position of what are often called 'localists', increasingly prominent in water governance. In general, civil society localists assert the significance of the rural community and local governance as an opposition to discourses propounding economic growth, urbanisation and industrialism (Hewison 2001, 22). They usually have a greater emphasis on self sufficiency and lower expectations of government, often believing that States and dominant elites are neither sufficiently legitimate, competent or inclined to adequately represent local communities. Suffice to say that there are numerous localists in the Mekong Region acting constructively in communities where the State is largely absent, until such time as large projects or resource extraction opportunities arise.

A recent, high-profile Track 4 water governance forum was the 'Dialogue on River Basin Development and Civil Society in the Mekong Region' embodied in forums held in Australia and northeast Thailand. The forums included policy researchers, government agencies from Mekong countries, Mekong River Commission, Murray-Darling Basin Commission, NGOs and other advocates, farmers, fishers, plus representatives from many different people's movements and campaigns. The dialogue took a critical look at the types of knowledge included in decision making processes and the development paradigms of States. It aimed to shake up the Track 1 river basin management commissions. The meeting in Thailand, in particular, provided a stage for airing the grievances of local communities negatively affected by some of the development in the region (Local people 2002). The Vietnamese National Mekong Committee (VNMC) attended and issued the first public apology from Vietnamese government officials to those affected by the Yali dam tragedy (see Table 13.6).

Table 13.6 Recent regional water-related governance forums (Tracks 3–4)

Track 3

Forums of the Mekong Learning Initiative 1998+, concentrating on community based natural resources management, and transboundary learning partnerships between a group of Mekong Region universities.

Forums of the Oxfam Mekong Initiative and its partners which have concentrated on trade, poverty reduction strategies, infrastructure and capacity building.

Annual meeting of the Regional Environmental Forum 2002+, driven by World Resources Institute, focused on environmental governance.

Mekong Region water governance network 2003+ focusing on crossborder research partnerships and dialogue about water and food, water and energy, water and nature via M-POWER (Mekong Program on Water Environment and Resources).

Southeast Asia consultations in World Commission on Dams, and follow-up, such as IUCN-supported Dams and Development dialogues in Mekong countries 2001+

IUCN-convened Mekong Region roundtable at World Conservation Congress, Bangkok 2004.

Track 4

Dialogue on River Basin Development and Civil Society in the Mekong 2002 run by coalition of NGOs including Towards Ecological Recovery and Regional Alliance (TERRA) and the Australian Mekong Resource Centre.

NGOs partnering in campaigns challenging the sensibility of the energy paradigm embedded in the ASEAN/GMS electricity grid proposal, as at 2004.

Meetings of the Dam Affected People and their Allies – Rasi Salai, Thailand 2003.

International Rivers Network advocacy against projects such as Nam Theun 2 dam in Lao PDR.

Probe International advocacy against the approach being taken in projects such as the GMS/ ASEAN electricity grid.

Activities of the Rivers Watch East and Southeast Asia (RWESA) network which focuses on linking communities and advocacy efforts related to dams and river development.

The Ubon Ratchatani and Brisbane events did not emerge from a vacuum, and should be seen as just a part of an ongoing political struggle led by those opposed to the dominant water resources development paradigm. They were moments when stakeholders with different views and interests came together, but these actors are already, and will remain, involved in the highly political, often polarised, governance processes surrounding Mekong Region development decision making. Each participant has a history shaped by and shaping past events, represents particular views and has different objectives and preferred strategies for interacting and negotiating (or not).

The 2nd International Meeting of Dam Affected People and their Allies was also held in northeast Thailand the following year. Again a localist discourse dominated

(Dam affected people and their allies 2003). This is not meant to infer that track 4 leaders/participants only 'support' their own forums and 'reject' others. Rarely are issues so clearly cut. For example, the declaration from Rasi Salai expressed clear support for the track 3 World Commission on Dams process. However, regional-scale track 4 forums in the Mekong Region have thus far been more associated with assembling and profiling public testimony for lobbying purposes and discourse-shaping, and less optimistic or interested in engaging in any genuine deliberation with most actors representing either developmental States or business interests.

Issues Concerning MSP Prospects in the Mekong Region

An investigation of water forums, seeking an understanding of MSP prospects, turns up many issues. In this section just a few will be discussed. Comments are made about some of the issues related to context, process and outcomes.

Context – Windows of Opportunity

Proponents of MSPs have no magic formula to sweep away the many hurdles to trying the approach more widely in the Mekong Region. The countries are now ruled by various forms of multi-party, single-party and military junta systems of government. Cambodia is a pseudo-democracy, trending back to authoritarianism, with internal violence on the increase. China is a single party system, but there is increasing political space permitted for questioning leadership decisions, and the media is increasingly opening up. Lao PDR is a single party system, led by mostly military figures, where no internal public dissent about national policies is permitted - although it should be noted that very recently new types of citizen organisations are being allowed to form. The Burma/Myanmar government is a military junta which strictly controls internal media, and suppresses dissenting views as a threat to national security (or regime survival). Thailand's citizens have hard-won democratic freedoms. Vietnam is a single party system, but where recently there has been a substantial expansion of political space. The dominant political culture does not provide the most supportive setting for regional MSPs to realise their potential, however, already at the local/national level there have been some praiseworthy MSP efforts which provide a basis for cautious optimism.

Advocates of 'well motivated dissent' have also been encouraged by particular events in 2004 which may have opened the door for the MSP approach to be more seriously incorporated into regional water governance. In China, Premier Wen Jiabao responded to extensive domestic lobbying and suspended plans to develop the Salween River hydropower cascade until a more complete impact assessment of the proposed development is undertaken. In the following year more than 60 projects were halted in China by the State Environment Protection Agency (SEPA) and ordered to go through an impact assessment process, which has at least some deliberative character. These positive moves have been offset by a reassertion at the provincial level of the power of government officials, many of whom resent any interference by central government or civil society actors. In Thailand, protests resulted in the government altering its privatisation plan for the Electricity Generating Authority of Thailand (EGAT) which is a major regional water resources development actor. In Cambodia, the government has finally joined the chorus of concerns from local and international actors about the future of the Tonle Sap Lake fishery in the Mekong River Basin, which is threatened by upstream dams (and local over fishing). In Lao PDR, debate about whether to build the Nam Theun 2 dam spilled over regional borders, with the World Bank feeling compelled to conduct multi-stakeholder briefings, albeit in an attempt to 'sell' the benefits of the now-approved project. All of these examples are connected threads of the Mekong Region water and energy web. Key actors are now engaging more openly in a battle for transnational discursive legitimacy in which regional MSPs could play a valuable role.

In any regional MSPs, there is a need to clarify the scope for negotiations. In water governance the need to negotiate is integral due to 'the mundane fact that modern societies are complex, multicultural, and populated by individuals who are often quite sensitive about their personal rights' (Baber 2004, 333). However, formal negotiations are not an essential element of MSPs, as MSPs may not have any formal decision making or formal negotiating mandate. Far from being problematic, this may actually give participants more space to explore options and propose workable agreements.

A concern for some people heavily committed to the learning possibilities of MSPs is that widening the scope to allow negotiation encourages MSP actors to act in a self-interested manner. This is seen as regressive by those committed to MSP participants being completely impartial, and MSPs being a-political 'time-outs' from an external world where all negotiations should take place. But, MSPs do not have to unrealistically deny that actors have interests that they will continue to pursue, inside or outside the MSP. Nor do MSPs have to function as an impartial jury. It is quite plausible for '*parallel learning and negotiation trajectories (to be) taking place at more or less the same time*' (Leeuwis 2000:950) either in the same or separate forums. MSP facilitators need to be quite explicit about all this.

There are some general preconditions before substantive negotiations can take place: divergence of actors' interests; actors' recognition of mutual interdependence in resolving problems; and actors capability of communicating with each other (Leeuwis 2000:951). At the regional scale, the first condition is invariably met – actors do have different interests. Mutual interdependence is another matter – in reality there is often independence-dependence. For example, an upstream water user such as China or Vietnam is able, with relative impunity, to act independently of dependent downstream neighbours, such as in Lao PDR or Cambodia. The final point about communication is central to MSPs. A platform without effective modes of communication will be an MSP failure.

Process – Legitimacy from Representation and Political Responsibility

Legitimacy has been usefully defined as 'moral justifications for political and social action' (Atack 1999:855). A key aspect of MSP legitimacy relates to the inclusiveness

of an MSP process. This relates to notions of accountability, representation and political responsibility.

For many commentators, actor participation in an MSP is only legitimate if they are, or are formally representing, a 'direct' stakeholder. Agents of the State, such as government or bureaucracy officials, have a formal constituency whom they can usually claim to represent. Similarly, company executives are, or should be, accountable to shareholders they are entrusted to represent. However, this framing is often used to deny bestowing legitimacy on actors who do not claim to represent others, whose status as a stakeholder may be contested, but who have much to offer in improving the quality of public debate. Civil society groups in the Mekong Region are often challenged in this way.

Political responsibility is a normative concept that differs slightly from accountability in that accountability has formal obligations embedded within its definition (Jordan and Van Tuijl 2000, 2053). The concept of political responsibility offers a way forward through the 'legitimacy' impasse encountered when some actors challenge an actor's accountability, and right to be involved in an MSP.

The NGO Focus on the Global South (FOCUS – http://www.focusweb.org), active in the Mekong Region, is an illustrative example. FOCUS is neither bound – nor empowered – by an external mandate. In the absence of a formal legitimising mechanism such as membership endorsement, they have to clearly define their position. FOCUS's commitment to addressing the marginalisation of large numbers of people throughout 'the South' has defined their constituency; however, they do not claim to 'represent' these diverse peoples, as they recognise they have no such mandate. But, they do have their own accountability mechanisms, linked to political responsibility for particular interests. This argument has been persuasively made by an NGO member:

... the right to speak claimed by NGOs is not necessarily derived from a strict or formal notion of direct representation of particular group interests but rather from a commitment to a set of values and insights which form the basis for an analysis of particular situations and a strategy to act on that analysis. Sometimes these are best expressed as impacts on local people or environments... (For example) there would be no inherent contradiction for an NGO to make submissions and arguments relating to a proposed big dam even when no 'local' group shares those views – the arguments should be taken up in public debate and dealt with on their own merits (Greeff 2000, 75).

In the absence of formal accountability to constituents, and without necessarily claiming to represent another, the notion of political responsibility is sufficient to claim legitimacy as a social actor wishing to participate in regional MSP.

Outcomes - Consensus, Consent, Consultations

In many MSPs, where diverse representation has been obtained, there is confusion about whether the goal is consensus. For example, the WCD sought 'consensus', at least between the commissioners, driven by a view that 'without consensus, a commission will be seen to have reproduced divisions among stakeholders, rather than transcending them' (Dubash et al. 2001, 4). However, if consensus is 'unanimous agreement not just on a course of action, but also on the reasons for it' it follows that 'in a pluralistic world consensus is unattainable, unnecessary and undesirable. More feasible and attractive are workable agreements in which participants agree on a course of action, but for different reasons' (Dryzek 2000, 170). Using this definition, failure by an MSP to reach a complete consensus should not be seen as a disappointment, provided that progress is made in the search for an acceptable and workable agreement.

Fundamental disagreements about rights will remain problematic. This is part of the MSP context, and is not a criticism of the approach. For example, waterrelated MSPs are still grappling with diverging opinions about the principle of *free prior informed consent* (FPIC) which is often now included in generic international declarations. If accepted, FPIC explicitly recognises indigenous and tribal peoples' rights to give or withhold their consent to activities affecting their land and water resources. FPIC holds that consent must be freely given, obtained prior to implementation of activities and be founded upon an understanding of the full range of issues implicated by the activity or decision in question (MacKay 2004). In MacKay's view, articulated in a briefing note for the World Bank's Extractive Industries Review (EIR), but applicable also to the water resources development debate:

Decisions about when, where and how to exploit natural resources are normally justified in the national interest, which is generally interpreted as the interest of the majority. The result is that the rights and interests of unrepresented groups, such as indigenous peoples and others, will often be subordinated to the majority interest: conflict often ensues and the rights of indigenous peoples are often disregarded (MacKay 2004).

The issue is whether the rights of local resource users/occupiers have primacy? If so, FPIC is a right to veto development. The final EIR report supported FPIC. The Bank response was that they too support FPIC, but they 'stole' the acronym and redefined it as *free prior informed <u>consultation</u>*! (World Bank 2004 annexed responses – points 15–16). FPIC was also a hot issue for the World Commission on Dams (WCD). Adoption of 'gaining public acceptance' as a strategic priority recommendation of the final WCD report represented a compromise by the commissioners and a restriction of the FPIC principle. FPIC becomes critically important to any MSPs which is mandated with decision making powers. Non-acceptance of FPIC significantly reduces the negotiating power of local resource users/occupiers.

FPIC is closely related to the concept of 'meaningful participation'. Both are highly relevant to MSPs. According to Goodland (2004), 'meaningful participation' became mandatory in World Bank assisted projects from the late 1980s and early 1990s. He claims the Bank interpreted this to mean the people being consulted about a proposal had a right to say no. If this was the case, it would appear that the trend is now in reverse. As with Dryzek, the international financial institutions (IFIs) seem to be accepting that consensus is just not always possible. The ADB provides a good example of what is at stake. Their current policy for large water resources projects says (ADB 2004):

Paragraph 32: ADB will adopt a cautious approach to large water resource projects – particularly those involving dams and storage – given the record of environmental and social hazards associated with such projects. All such projects will need to be justified in the public interest, and *all government and non-government stakeholders in the country must agree on the justification.* Where the risks are acceptable and ADB's involvement necessary, ADB will ensure that its environmental effects will be properly mitigated, the number of affected people in the project area will be minimised, and those adversely affected will be adequately compensated in accordance with ADB's policy on involuntary resettlement. In line with its energy sector policy, ADB will continue to extend its support for technically and economically feasible hydropower projects that form part of a country's least-cost energy development plan, provided their environmental (including impact on fisheries) and social effects can be satisfactorily managed in accordance with ADB policies.

The Bank now sees this policy as unworkable because of (in the Bank's words) the 'impractical requirement for all stakeholders to agree on the justification of large water resources projects'. In 2004 ADB proposed the following revision (italics added):

... All such projects will need to be justified in the public interest and *stakeholders must* be provided the opportunity to comment regarding the justification with their views considered. The ADB will promote the participation of government, civil society and other stakeholders in the country towards this end. Where the risks are acceptable...

This is a significant shift in approach by both the World Bank and the ADB. They have backed away from endorsing MSPs which have negotiating mandates. They now support only consultative/advisory MSPs. For a brief period, MSP policy of the IFIs had strengthened the negotiating positions of less powerful actors. However, the IFIs are now reaffirming the priority they attach to the decisionmaking authority of governments.

Whilst noting the oscillation of the IFIs, it should be clearly noted that even a shift towards accepting consultative/advisory MSPs in the Mekong Region would be a significant step forward, as at present regional water governance is largely devoid of multi-stakeholder deliberative processes.

Opportunities

Something needs to be done to lift the standard of regional water governance in the Mekong Region. Despite many types of regional water forums, large-scale water resources development is still deficient with negative domestic and transboundary impacts consistently ignored or outweighed by decision makers. Important next steps for the region would be to add robust regional MSP elements – giving space for the airing and scrutiny of all perspectives – to the governance of, for example: the Salween in China, Burma/Myanmar, and Thailand; the GMS/ASEAN electricity grid impacting on all six Mekong coutries, and Thailand's nebulous water grid, plans for which directly affect several of its neighbours.

228

Salween River – Prioritising Big Business, Natural Heritage or Human Rights?

Substantial hydropower expansion is part of Chinese national planning and Yunnan's role is key. Yunnan is seen as having 24% of China's hydropower potential for 'medium' and 'large' sized projects (He Jing 2002). In late 2003 much more information filtered into the public domain outlining extensive hydropower development proposed for the Salween which flows from China into Burma/Myanmar. The upper watersheds of the Salween, Mekong and Yangtze are known as the Three Rivers region, declared a UNESCO World Heritage site in July 2003.

There are advanced plans for a cascade of thirteen dams on the Chinese reaches of the presently undammed Salween River, which, if built, would have a profound impact. The China Huadian Corporation is one of the 'big 5' power generation companies receiving assets from 2003 onwards which were previously 'owned' by the giant State Power Corporation. The 'right to develop' the Salween River is seen by Huadian as one of the transferred 'assets' now in their portfolio. Since major energy industry reforms were announced late 2002 there has been a stampede by the 'big 5 + 1' – not forgetting the Three Gorges development group – to secure their assets, principally coal-related, and move to develop their new assets, including 'rivers for hydro' in various types of partnership with local authorities (Dore and Yu Xiaogang 2004).

The decision-making and approvals processes were initially far from transparent. The economic justification unspecified, and the ecological and cultural risks downplayed (both in China and further downstream). Moreover, the lines between public and private interest and ownership have become increasingly blurry as the energy companies blend State authority with private sector competitive opportunism. Remarkably, as the plans entered the public domain, broader civil society – beyond the usual officials, business operatives and 'experts' – became much more involved.

There are five other dams being promoted downstream of China, including Ta Sang – planned to produce 7,000 megawatts. The Ta Sang dam, involving many actors including the Bangkok-based MDX company, is already controversial due to numerous reports of human rights abuses of the Shan people in the dam area by the Burma/Myanmar military. Another two are planned for further downstream where the Salween forms the border between Burma/Myanmar and Thailand. Without any public debate, officials from both those countries have supposedly already committed in August 2004 to jointly 'develop' the river (Pradit Ruangdit 2004).

All this has major implications for local livelihoods in each of these countries and a proposed regional electricity grid (see below). The situation is ripe for a regional MSP to ensure the driving assumptions, proposed development benefits, tradeoffs and transboundary impacts are more fully considered.

GMS/ASEAN Electricity Grid – The Best Option?

The Asian Development Bank (ADB) and the Electricity Generating Authority of Thailand (EGAT) are the major promoters of two overlapping schemes known as: the Greater Mekong Subregion (GMS) Power Interconnection and Trade, and the Association of Southeast Asian Nations (ASEAN) Power Grid. An intergovernmental agreement forming an electricity grid was signed in 2002 by the leaders of the six Mekong Region countries. ADB has prepared a list of USD 4.58 billion worth of loans and grants for financing 32 grid and grid-related projects in the Mekong Region (Ryder 2003:3). A further USD 43 billion would be needed for the twelve hydropower dams and the transmission system (IRN 2004:10). Proponents cite the logic of 'no alternative'. Opponents challenge the economic and technical justification. Embodied in the plan is a massive change in the way in which water resources are developed throughout the region.

In the last 10 years of planning, there has been practically no involvement by civil society in any related governance process. This is now changing as local, national, regional and international actors are becoming involved. For the ADB, the grid should become a test case of their Strategic Environment Framework (SEI et al. 2002), intended to guide bank investments in the Mekong Region water and transport sectors. A properly conducted, regional MSP focused on the electricity grid would be a very constructive governance intervention.

Thailand Water Grid – For Irrigation, Agribusiness Transformation or Urban Supply?

At present contained primarily within the domestic political arena of Thailand, are the intra-government negotiations concerning the demand and distribution aspects of Thailand's proposed, but somewhat vague (at least in its publicly presented form) national water grid. A key driver for the grid is the increasing water scarcity in the Chao Phraya River Basin which is the principal food bowl of Thailand, and provides much of the water for the capital city of Bangkok. Many parts of the 'grid' have been previously conceived, designed and touted in the past. Recently, new life has been breathed into quite a few of the old plans but publicly available information is scarce.

Numerous potential diversions have implications for the river dependent communities in Lao PDR, Burma/Myanmar, Cambodia and Vietnam. The future of millions of Thai farmers is also unclear as the only way of funding such a scheme is if water pricing policies are introduced and agribusiness contract farming is given access to the 'new water'. So is it water for a new 'war on poverty', or water for agribusiness, or water for Bangkok? Whose water is it anyway? Many wish to shift the debate about the water grid into the public sphere. A regional MSP about the Thailand water grid would allow these types of questions to be addressed.

The World Bank's Mekong Region Water Resources Assistance Strategy

The World Bank is now back into funding large-scale water resources infrastructure. This is evidenced in the contents of the Bank's Water Resources Assistance Strategy (WB 2004), the substantial forward budget allocations, and the subsequent burst of efforts to develop national and/or regional strategies in places such as Pakistan, India and China. The Mekong Region is one of the places designated to receive a regional strategy. In 2004 there was a pseudo-consultative process involving donors, governments and civil society. The blueprint is being developed and is scheduled for

release in 2005 or 2006. The implications for the region could be very significant. Again, it would seem that a more genuine MSP could lead to more informed public deliberation and choices.

Conclusion

230

MSPs are rooted in a belief in the added value provided by deliberation which is inclusive, information-rich and flexibly facilitated, actively promoting analysis of different views. However, MSPs are seen by some as disrespectful of, and at times subversive to, existing public decision making structures. MSPs in the Mekong Region led by civil society have been accused of being undemocratic, and too empowering of interest groups with policy positions which may differ from dominant policy positions within State governments or parts of their associated bureaucracy. Advocates claim the opposite, that in fact these types of processes are complementary to formal State decision making processes, serving as a counter weight to many undemocratic water-related governance forums and, thus actually 'deepen democracy'.

There is some new political space in the Mekong Region created by globalisation, and corresponding 'new regionalisms' which is providing oxygen to MSP approaches. However, proponents will invariably continue to meet resistance from State actors and others with vested interests reinforced by the *status quo*. Many State actors still believe, or at least rhetorically pretend, that domestic-led criticism is unpatriotic, and – despite an emerging body of international water law – crossborder enquiry/ criticism of water resources development plans is an unacceptable encroachment on hard-won State sovereignty. This political resistance to MSP approaches, grounded in self-interest and transboundary geopolitics, should not be underestimated. Other forms of advocacy will remain important to encourage more and less powerful actors to give MSPs a chance to fulfill their regional potential by being sites for authentic deliberation, learning by all actors, and (possibly) negotiation.

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232

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Deliberation and Scale in Mekong Region Water Governance

John Dore · Louis Lebel

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Abstract Understanding the politics of deliberation, scales, and levels is crucial to understanding the social complexity of water-related governance. Deliberative processes might complement and inform more conventional representational and bureaucratic approaches to planning and decision-making. However, they are also subject to scale and level politics, which can confound institutionalized decision-making. Scale and level contests arise in dialogues and related arenas because different actors privilege particular temporal or spatial scales and levels in their analysis, arguments, and responses. Scale contests might include whether to privilege administrative, hydrological, ecosystem, or economic boundaries. Level contests might include whether to privilege the subdistrict or the province, the tributary watershed or the international river basin, a river or a biogeographic region, and the local or the regional economy. In the Mekong Region there is a recurrent demand for water resources development projects and major policies proposed by governments and investors to be scrutinized in public. Deliberative forms of engagement are potentially very helpful because they encourage supporters and critics to articulate assumptions and reasoning about the different opportunities and risks associated with alternative options, and in doing so, they often traverse and enable higher-quality conversations within and across scales and within and between levels. Six case studies from the Mekong Region are examined. We find

J. Dore

L. Lebel (🖂)

Unit for Social and Environmental Research, Chiang Mai University, Chiang Mai 50202, Thailand e-mail: llebel@loxinfo.co.th evidence that scale and level politics affects the context, process, content, and outcomes of deliberative engagement in a region where public deliberation is still far from being a norm, particularly where there are sensitive and farreaching choices to be made about water use and energy production.

Keywords Water governance · Politics of scale · Deliberation · Mekong region · Hydropower · Dialogue · Multistakeholder · Facilitation · Participation

There is no single, correct area for managing freshwaters. Within the Mekong Region the spaces corresponding to formal systems of representation or administrative authority over water and land uses typically have different boundaries and are part of separate hierarchies of responsibility and accountability (Hirsch 2001; Lebel and others 2005; Molle 2007b; Sneddon 2002). These, in turn, rarely correspond to simple, hydrological notions of basins, subbasins, watersheds, aquifers, or lakes.

Interbasin diversions and transfers, groundwater extraction, tidal barriers, and virtual water in trade increasingly make it hard to manage water solely at the level of *the basin*, which in recent times has become the dominant level in the Integrated Water Resources Management (IWRM) discourse. A subdiscourse has emerged around Integrated River Basin Management (IRBM) further privileging the basin level in the hydrological-scale hierarchy.

Key ecological processes, from the life cycles of aquatic organisms through major nutrient cycles and sediment transport and deposition, are often complex and require careful consideration of both spatial and temporal scales and levels (Sidle and others 2006; Sneddon 2007). As a consequence, the goods and services arising from resources

AusAID, Mekong Region Water and Infrastructure Unit, Vientiane, Lao People's Democratic Republic

and flows of water and associated ecosystems are often multiscale and multilevel. Different users and uses become more closely associated with different scales and levels, both of which are key features of freshwater politics in a region that transcends national and basin boundaries.

In the Mekong Region, local impacts, uses, and management actions are often rendered invisible by the ways in which key state agencies enumerate benefits, burdens, and risks. When objectives in development are articulated in terms of monetary flows through national or provincial governments, it is the grand, or "mega," projects that are emphasized and promoted (Bakker 1999; Molle and Floch 2008). Large dams for hydropower, massive diversion schemes for irrigation and urban supply, and long walls for flood protection are promised as ways to solve water management problems, securing energy, food, and urban supply, and alleviating poverty. Whereas if development objectives are framed in terms of livelihood security of households dependent on seasonal river flows and wetland inundation, then alternative priorities and options emerge. With this latter framing, more importance is given to maintaining the production from seasonal wetlands, foraging, fisheries, and local riverside farming. Technologies that can be locally accessed and controlled-like small weirs, canals, and pumps-are emphasized and valorized.

The objectives and means of water resources management and development need to be debated. Different perspectives on developing regional waters need to be compared, for instance, with how they might affect socialecological resilience, which social values they prioritize and the understandings upon which they are based. The proposals of national leaders and investors need to be scrutinized in public for the benefits and risks they involve both within and across borders (Dore 2007). Deliberation is an important process because it requires supporters of policies and projects to articulate their reasoning and identify which interests they serve or risks they create.

This is both a need and a challenge in the Mekong Region. All countries share recent histories of highly centralized authorities and remain, at best, semidemocracies. Access to information through normal channels remains uneven. International banks and private firms have often had better access to information from, and stronger accountability relationships with, national governments than a country's own citizens. In these circumstances there are expectations and hopes that various alternatives arising out of direct action by citizens, including farmers and fishers, or structured assessments, joint fact-finding, multistakeholder dialogues, and other forms of deliberative engagement will lead to fairer water allocation and investment. Given the significance of scale and level issues in water politics in the Mekong Region, it is inevitable that deliberative forms of engagement will have to grapple with the associated challenges. Thus, the main question addressed by this article is the following: How have efforts at deliberative engagement been affected by, and responded to, the politics of scales and levels?

Deliberative Engagement

Deliberative engagement in this article refers to structured and informed conversations in which various stakeholders "are willing to revise preferences in light of discussion, new information, and claims made by fellow participants" (Chambers 2003). A key feature is that there is time and a process that enables consideration of different issues, evidence, and arguments. Deliberation can help people learn about others' interests, problems, and shared resource constraints (Dryzek 2000; Leeuwis and Pyburn 2002). It might also expand acceptance of decisions and outcomes and, thus, effectiveness of negotiation and implementation efforts (Dore and Lebel 2010). It is a legitimate element of governance, providing opportunity for many different stakeholders in the state–society complex to explain, defend, and potentially adjust their perspectives (Dore 2007).

Deliberative engagement can be catalyzed or convened by state, multilateral, private, or community organizations. Such efforts can privilege or depart from different scales: management cycles driven by strategic planning periods, such as 5-year plans; administrators seeking to clarify their jurisdictions and responsibilities; and experts adopting frames of reference based on their disciplinary training for example, hydrology or ecology or economics.

Deliberative engagement also takes place at different levels. Water-related exchanges might range from local watershed groups negotiating about allocation practices and the validity of claims about causes of shortages, to national water committees debating priorities between national basins and sectors, or to international meetings, perhaps seeking consensus about "reasonable and equitable" water utilization between sovereign states. Deliberations should also confront questions about the appropriate scale and levels of assessment and policy responses (Pingree 2006).

Deliberative engagement can and does take place between different scales and levels, driven by or drawing in actors whose views or positions are shaped by their roles in the many organizations and interest groups in society. Water-related policy and decisions can be driven by local livelihoods intimately tied to local ecosystems, but also by regional economic planners making energy production and investment choices with shorter or longer time frames.

Deliberative engagement can and does take place simultaneously with actions and counteractions being taken by multiple actors operating within or via many different governance nodes that are tied strongly or loosely to different scales or levels. Not surprisingly, deliberative engagement, therefore, might be part of, help shape, and be subject to the politics of scales and levels to which we now turn.

Politics of Scale and Level

For our purposes, the politics of scale and level refers to the tensions when and where actors cooperate, compete, or conflict as they endeavor to exercise their influence on the present and future of water resources use and further development—with an emphasis on the scale and level aspects. Our Mekong water-related study of these politics is about scrutinizing the actors and institutions, priorities, and decisions of those coming from or privileging one or another scale or level.

Scale is defined as the spatial, temporal, quantitative, or analytical dimensions used to measure, or rank, and study any phenomenon (Gibson and others 2000) and levels as the units of analysis that are located at different positions on a scale (Fig. 1). Scales of interest in water management often have, or imply, hierarchy (Lebel and others 2005). Thus, choosing a scale implies constraining and often specifying a particular set of levels.

Scale represents a class of key choices, commitments, and constraints (Cox 1998; Lebel 2006; Swyngedouw 1997). Some actors are free to select their vantage or participation points, whereas others are restricted by mandates to engaging in water resources and management from a particular level. Actors contest scales and levels. overtly through debates, media releases, lobbying and protests, and, more subtly, through use and control of technologies, indicators, measurements, and controlling the channels of contestation (Lebel and others 2005). Thus, some actors push for hydrological scales with levels that correspond to manageable units in the models or infrastructure they operate. Others promote conventional, areabased administrative hierarchies, arguing that this is where capacity, accountability, and legitimacy already exist. Differences between administrative and hydrological scales are a common source of tension in water resource governance. An obvious example of this in the Mekong Region, as elsewhere, is when national interpretations of sovereign rights to develop national territory and waters intersect with transnational river basins and notions of shared responsibilities and risks embedded in soft law constructs such as "reasonable and equitable utilization: (UN 1997) for all riparian people.

Scale contests also arise in dialogues, assessments, and other forms of deliberative engagement because different actors privilege particular temporal and spatial scales in their analysis, arguments, and responses (Lebel 2006; Lebel and others 2005). Actors will push short- or longterm actions depending on their drivers. They might push to privilege the sometimes competing scales of administration, hydrology, ecosystems, and economy. Level contests also arise when actors push to privilege—for example, with economic arguments—different territory and economies at local, provincial, national, or regional levels.

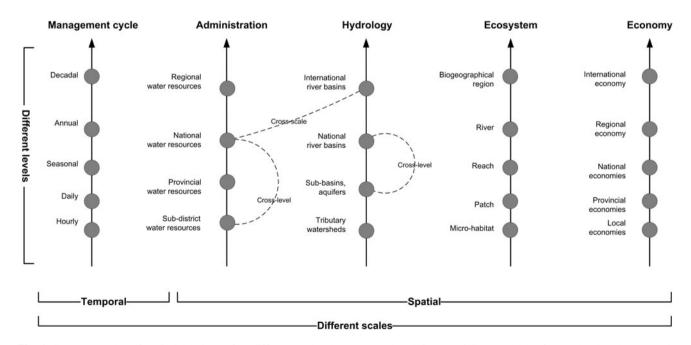


Fig. 1 Some examples of typical levels on five different scales (one temporal and four spatial). Examples of cross-level and cross-scale interactions are also given for a pair of spatial scales

However, scales and levels cannot be adjusted or shifted entirely at whim. There are logics to different choices. Seasonal dynamics of flow regimes are important to fish (and thus, fishers) on different temporal levels than the operational and planning drivers for hydropower generation, irrigation and flood risk management (Sneddon and others 2002). The most appropriate ecological levels depend on what landscape, waterscape, and ecosystem is the subject of debate (Lebel and others 2008). Ultimately, the scales and levels *in use* are a joint product of biophysical and social processes; they are not unambiguously defined by the physics of flows, the dynamics of ecosystems, or social institutions.

Conveners of deliberative processes should take steps in inviting participants and formatting to ensure that there are constructive exchanges and debates between voices representative of different scales and levels. Rarely does a single scale or level have the sole claim to legitimacy. A key strength of deliberation is that it can ensure that different scale and level perspectives are heard and competing logics are examined. Water-related decision-making is often complex and necessarily should take into account many different scale and level perspectives; deliberation is a way of coping with this complexity and contributing to ensuring that negotiations and policy making is better informed than might otherwise be the case (Dore and others 2010).

Methods

Our approach is to analyze a set of six case studies of deliberative engagements (Table 1) concerned with water resources development and management within the Mekong Region. As we will discuss later, there are many Mekongs (Dore 2003), but here the Mekong Region is taken to encompass the territory, ecosystems, people, economies, and politics of Cambodia, Lao PDR, Myanmar, Thailand, Vietnam, and China's Yunnan Province (Fig. 2).

Cases have been selected to demonstrate different modes of engagements—some more deliberative than others—and aspects of the politics of scale and levels that illustrate the challenge for those actors committed to understanding and improving Mekong Region water governance. The first two cases relate specifically to the Mekong River Commission (MRC). The others center on other actors in the Mekong Region. The cases are not independent of each other; sometimes the overlapping processes driven by different actors with their own interests and focus become intertwined. Not all interrelationships among the cases can be fully explored in this article, but a few key connections and disconnects are highlighted.

For the case on negotiating the 1995 Mekong Agreement case, we drew on information from secondary sources,

supplemented by interviews with key actors. For four of the cases—basinized planning, regionalized banking, regionalized energy and power, and Tonle Sap management experimentation—we had the benefit of direct observations as participants in some of the associated processes, supplemented by secondary sources of documentation and interviews. For the multilevel water dialogues we examine, the authors were intimately involved as members of the convening group.

The six case studies map to different levels on two spatial scales—hydrological and administrative–territorial—and overlapping time or planning scale. These cases, plus a few of the key organizational actors convening the associated processes are shown in Fig. 3.

In the Mekong Region there are many water-related state agencies, watershed or river subbasin organizations, irrigation districts, and water-user groups associated with dialogue processes important for water management at finer time scales (Fig. 3). Depending on the powers they are given, national water committees—where they exist—also inform, influence, or make decisions about long-term, large-scale infrastructure as well as shorter-term seasonal decisions about water allocation and flood diversions for major national river basins. These other actors and arenas, although just as important and with their own scale and level politics stories, are not explored in this article.

Creation of the Mekong River Commission

The history of "lower" Mekong River cooperation efforts stretches back to the 1950s and have been given extensive treatment elsewhere (ESCAP 1997; Hori 2000; Ojendal 2000). An important new phase of negotiation culminated in the signing of the 1995 Mekong "Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin" (Governments of Cambodia-Laos-Vietnam-Thailand 1995) that established the MRC, which has also been the subject of much analysis (Dore and Lazarus 2009; Hirsch and Morck-Jensen 2006). Our focus here is the actual negotiation of the 1995 Agreement.

The negotiation was difficult because, without the active engagement of China, the incentives to cooperate were perceived by Thailand to be less than for Laos, Cambodia, or Vietnam (Radosevich 2000). Thailand, like China, had the resources and interest in making bilateral deals to meet growing water and energy needs (Dosch and Hensengerth 2005). The interventions of the United Nations Development Program (UNDP) were critical, as initial maneuvering by Thailand and Vietnam threatened to prematurely end negotiations (Browder 2000). It took a series of meetings, first agreeing on the terms and procedures and then moving through multiple rounds of revisions of a

Context		Process	Content	Outcomes
· ~	Recognition of opportunities for further peace- building, economic development, and poverty reduction through regional cooperation on water resources development and management as relationships among countries improved, especially in the Lower Mekong Basin	<i>Conveners</i> : United Nations Development Program (UNDP) <i>Participants</i> : Governments of Cambodia, Lao PDR, Thailand, and Vietnam	Negotiating the principles and governance framework for water allocation and sustainable development of the Mekong River Basin Multiple rounds of consultation to identify and address issues and build consensus	Sought: Acceptance of interdependence by Mekong countries. New institutions to enable Mekong cooperation to evolve Endorsement of the 1995 Mekong Agreement and the creation of the MRC Actual: Agreement signed and MRC created in 1995 Largely marginalized for next 13 years. Demarginalizing now underway, evidenced by 1st MRC Summit with Prime Ministers in 2010
×	Key follow-up to 1995 Mekong Agreement driven by donor and member country notions of opportunities from developing the "undeveloped" basin, especially in terms of hydropower and irrigation	<i>Conveners</i> : Mekong River Commission (MRC) Secretariat and National Mekong Committee (NMC) secretariats <i>Participants</i> : Mostly MRC Secretariat and NMC Secretariat personnel	Baseline establishment, consultations, production of options, more consultation, and, finally, "agreement" on a forward plan was the original intention First phase produced little more than a giant wish list of potential projects of interest to representatives of MRC member states Second phase dominated by extensive modeling of various hydropower and irrigation expansion possibilities. This has been largely sensitivity analyses—without a hint of more radical alternative futures exploration	<i>Sought:</i> Sustainable water resources development in the Lower Mekong River Basin, guided by an agreed and effectively adhered to plan Demonstrated multistakeholder deliberation to inform whole of basin and subarea planning <i>Actual:</i> Plan not yet completed or agreed, as of mid- 2010 Although inclusiveness has been high, deliberative method and knowledge foundation to underpin that deliberation have been relatively weak. Major risks externalized or downplayed throughout most of the process End result road-tested "scenarios" and a water resources allocation strategy—plus some amended version of the possible projects list from the first phase Actual influence on national water resources
\$ \$	World Bank's Water Resources Sector Strategy (WRSS), approved by the Bank in 2003 World Bank dissatisfaction with performance of the MRC	<i>Conveners</i> : World Bank, later joined by ADB <i>Participants</i> : Governments of Cambodia, Lao PDR, Thailand, Vietnam, and other water resources donors operating in the Lower Mekong	"Whole-of-basin" knowledge input was dominated by hydrological modeling outputs provided by MRC National knowledge inputs were various consultancies exploring: institutional gaps—with a focus on Lao PDR and Cambodia; and the merits of various possible startup projects, such as Lao-Thai water transfer Numerous consultations over several years with national governments Occasional consultations with other water resources donors attempting to build a coalition of support for a new investment framework Rare consultation with any potentially altermative or critical voices from Mekong or international civil society	Sought: Focus and constituency for future World Bank and ADB "technical assistance" and infrastructure investments in Lower Mekong countries, articulated in a Mekong Water Resources Assistance Strategy (MWRAS) Actual: MWRAS initiative was a flawed process that never obtained any sizable constituency from governments, other donors, or civil society Some technical outputs of MWRAS, such as the institutional analysis, have been further developed and are being used as the basis for modest interventions in Lao PDR, Cambodia, and the transboundary Mekong subbasins of Sekong, Srepok and Sesan, known as the "3S area" (in territories of Lao PDR, Cambodia, and Vietnam)

Case	Context	Process	Content	Outcomes
Regionalized energy planning and power trading (2000–2010)	Increased cooperation among Mekong countries under the auspices of the Asian Development Bank (ADB) facilitated Greater Mekong Subregion (GMS) initiative opens a door for regional energy planning and power trading	<i>Conveners</i> : ADB <i>Participants</i> :Energy ministries and industry representatives, primarily from Cambodia, China, Lao PDR, Myanmar, Thailand, Vietnam, and ADB's Manila headquarters ADB's Manila headquarters	Comprehensive overviews of energy sources, exploitation, and transmission possibilities by GMS Technical Working Group on Energy Expert-created strategy documents Consultation meetings Modeling exercises Identification of benefits from expanding hydropower and coperation on related energy infrastructure	<i>Sought:</i> Optimized energy production and trading from China through mainland and peninsular Southeast Asia Better shared understanding of energy demand trends Acknowledgement of different supply options More transparent energy planning <i>Actual:</i> Substantial progress by ADB in providing a blueprint for an energy future, albeit still contested World Bank also drawn into the regional energy planning space 2008+ offering alternative paradigm grounded in the quest for efficiency and lower-carbon economies Major disconnects remain between energy planning and water resources planning
Multilevel water dialogues (2004-2010)	Demand for alternative and complementary activities to conventional representational politics Dissatisfaction with the lack of transparency surrounding water resources development decision- making in the Mekong Region Conscious choice by the deliberation conveners to decenter the Mekong River and the Mekong River Basin to open up the discussion between the supposed realm of the MRC and bring in national and wider region development agendas	<i>Conveners:</i> M-POWER water governance network, in different initiatives, at times working closely with: IUCN, Thailand Environment Institute (TEJ), International Water Management Institute (TMJ), and others <i>Participants:</i> Civil society, including advocacy, science and policy groups; private sector, governments, regional organizations, and multilateral development banks	Series of structured dialogue events from 2004+, with catalytic knowledge inputs, and facilitated roundtables Initial focus on sensitive topics such as proposed hydropower on the Salween River, Thailand water grid, and threats to Tonle Sap Later on, evaluation of MRC, ADB, and World Bank water resources development strategies. Moving to exploration of usefulness in the Mekong of transnational codes of conduct	<i>Sought:</i> Better understanding of views on rewards, rights, risks, and responsibilities from various water resources development options Demonstration of high-quality deliberation leading to normalizing this practice in the Mekong Region. Constructive influence on strategies of international actors <i>Actual:</i> Some success in bringing sensitive issues into the public space Some success in demonstrating and normalizing multistakeholder deliberation
Tonle Sap Management in Cambodia (2005–2010)	Tensions within and between commercial and subsistence fishers, agricultural encroachment destroying flooded forest essential for fishery habitat and production, and interest in hydrocarbon exploitation ADB searching for a vehicle through which to contribute development funding New actors interested in funding hydropower and irrigation in the Tonle Sap Basin, beyond the immediate area around the lake and seasonally flooded forest Continuing poverty	<i>Conveners</i> : Initially ADB and thereafter different Cambodian basin or lake management organizations <i>Participants</i> : ADB advisors and many state actors from national and provincial agencies Limited role for the numerous Cambodian civil society organizations	Tor Innanciers and developers Formal meetings with limited deliberation Mandate confusion Searching for a niche Too much effort expended seeking to expand mandate Multitude of background research, development/ exploitation options assessment, and policy advice	<i>Sought:</i> River Basin Organisation (RBO) to facilitate and coordinate needed development in the heart of Cambodia <i>Actual:</i> Objectives overtaken by power struggles among ADB, actors within the newly created (and soon downsized and disempowered) Tonle Sap Basin Authority, the Ministry of Water Resources and Meteorology (MOWRAM) and other parts of national government In 2009, TSBA renamed Tonle Sap Authority, signaling the downsizing of its territorial mandate. At the same time, greater control exercised over it by MOWRAM. Mandate is still being contested

Table 1 continued

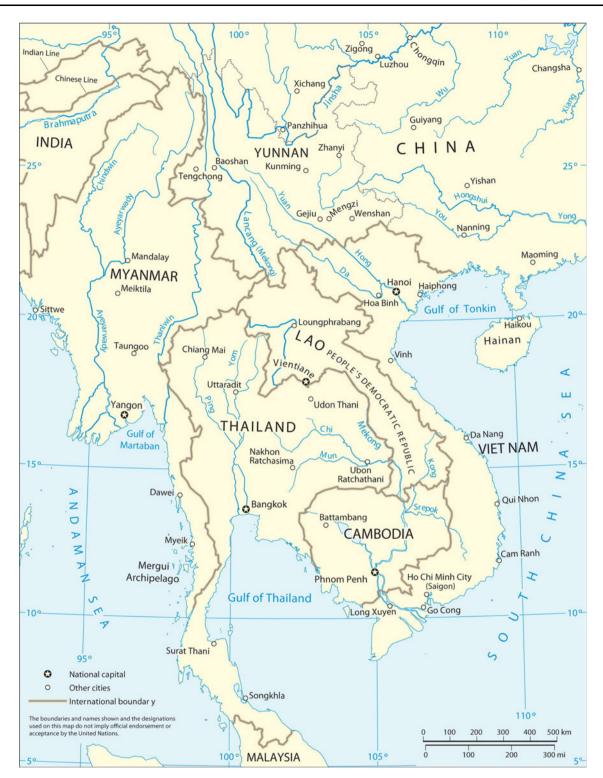
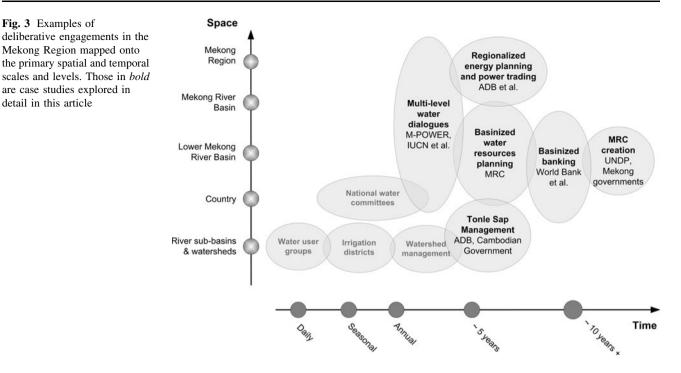


Fig. 2 Map of the Mekong Region. Source: The United Nations Cartographic Section, New York, Map No. 4112, Rev. 2. January 2004

single negotiating text (Radosevich 2000). It was not multistakeholder in the sense that it only involved state actors and some experts, but it was highly deliberative and carefully facilitated over many months. With an eye to the future possibilities for dams and diversions, the most difficult negotiations centered on Articles 5 and 6 (Radosevich 2000). The text negotiators finally agreed to embed a principle of "reasonable and

Fig. 3 Examples of

detail in this article



equitable utilization," subsequently also adopted in international water law (UN 1997). It was agreed that different rules were to apply for the Mekong mainstream than for the tributaries. It was also agreed that some interventions would require only notification of all members; more substantial interventions with possible transboundary impacts required prior consultation (Ma and others 2008). The 1995 Agreement was less constraining for Thailand than the earlier ones of 1957 and 1975, as it no longer included a veto power on Mekong River mainstream development by any members (Browder 2000).

Although it was the best that could be negotiated at the time, the final agreement resulted in an important rescaling of what was deemed transboundary. It effectively scoped out China. The existence of the Agreement has not thus far tangibly influenced the extensive hydropower damming projects on the mainstream in China's Yunnan Province. It turned projects like Thailand's Khong-Chi-Mun interbasin transfer scheme and the controversial Pak Mun dam (Foran 2006), which began life as internationally driven exemplars but became the subject of huge challenge to their sensibility, into "national" projects with "local conflicts" (Sneddon and Fox 2006). For many years, any engagement by the MRC in Lao PDR's or Vietnam's tributary planning and construction, or in hydropower at all was kept off the MRC's agenda. In recent times, this has changed, in part because of the increasing apparent absurdity of a situation in which the MRC had nothing to say about these projects that are transforming the region's waterscapes (Molle and others 2009) and the insistence of external actors that MRC must surely engage.

How did this happen? By design, the MRC is an amputated river basin organization. Despite the holistic sound of the title of the Agreement, which implies wholeof-basin mandate and cooperation, in practice its headwaters have been lopped and tributaries pruned. This first step toward regionalism has been anchored-and, therefore, hindered-by national interests. Moreover, the Agreement's focus on equitable utilization among states has helped render fishers, and other water users who rely on local services, less visible (Bakker 1999; Sneddon and Fox 2006).

Nevertheless, under the 1995 Agreement, the negotiating states agreed to ensure acceptable minimum monthly flows, enable natural wet season reverse flow of the Tonle Sap/Great Lake in Cambodia, and to not exacerbate floods. Given China's nonparticipation, these ambitions were always going to be hard to achieve. Given China's dambuilding program, the issue of minimum monthly flows might become a nonissue, as there will be increased dry season flows. Each of these is a complicated story and will not be further explored here. It was further agreed that the details-such as defining what is "acceptable"-would need to be worked out subsequently in the formulation of a basin development plan (Article 24) and the establishment of rules for water utilisation and interbasin diversions (Article 26). Both of these endeavors have since consumed substantial time and resources and at the time of writing, 15 years after the signing of the 1995 Agreement, remain unfinished.

The 1995 Agreement established the MRC as the implementing agency with a separate Council at the Ministerial level, a Joint Committee (JC) of senior bureaucrats and the MRC Secretariat (MRCS) (Fig. 4). Each of the countries separately established National Mekong Committees (NMCs) and Secretariats headed by their representatives on the JC. Subsequently, for example, Thailand found it easy to weaken its MRC links, commitments, and presence by appointing an NMC marginalized from real decision-making and water resources development planning and investment within the country. Since 2002 administrative reforms, the Thailand NMC and NMCS have been closely affiliated with the Department of Water Resources in the Ministry of Natural Resources and Environment. The department and NMCS remains weakly connected to other ministries and lack influence over more powerful agencies like the Royal Irrigation Department and the Electricity Generating Authority of Thailand. These circumstances persist because it has suited Thailand to scope-down the role of MRC, its territorial mandate, and the sector interests on which it has focused. These disconnects are both cause and consequence of the scale and level politics at play.

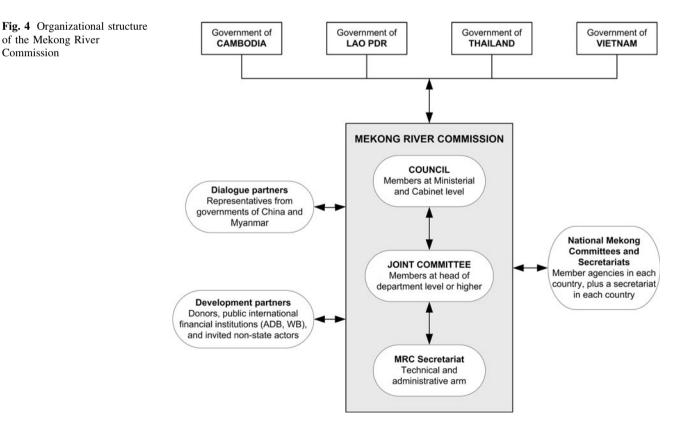
The interests of donors and multilateral agencies in the "basinization"—saying regionalization would give the wrong impression—of one of the Mekong Region's international rivers were critical to the establishment of the MRC. This influence has continued with most of the MRC's budget for work activities coming from donors. The financial independence from the member countries has its merits and drawbacks. On the one hand, it can mean

assessment and research activities going ahead without being easily blocked by member states withholding funding; on the other hand, this also makes it easier for governments to disown and externalize MRC's work if it is not seen as being in their interpretation of sovereign interests.

The negotiations that culminated in 1995 are an example of a deliberative process among governments promoted by international actors, shaped by national concerns, but cognizant of basin-level issues, that ended in agreement to cooperate. Subsequent negotiations on the specifics of planning basin development and water allocation rules have been difficult and the tasks set for the MRC remain unfinished. True cooperation remains elusive.

Basinized Water Resources Planning

Article 24 of the 1995 Mekong Agreement mandated the MRC to prepare a Basin Development Plan (BDP). Commencing the process took 7 more years, in part because of insufficient donor funds (Browder 2000) but also because the MRC member countries and secretariat were wondering what to do and how to do it. For some, it was seen as something they had to do, as a legacy of the 1995 Agreement, not necessarily something they wanted to do. By the time the BDP commenced, the process for establishing rules for water utilization, known as the Water Utilization Program (WUP)—the task set by Article 26—had already



been underway for 2 years, for no particular reason other than that the World Bank arranged for funds from the Global Environment Facility (GEF) faster than the Government of Denmark provided its principal support to the BDP.

BDP1, the first phase, began in 2002. National governments were viewed as the primary stakeholders in MRC negotiations: Governments were described as "internal" and nonstate actors were described as "external." In the BDP1 process, external stakeholders became involved through forums at country, basin, or subarea levels. These happened relatively late in the process, but by early 2005, a series of forums had been completed (MRC 2005). The consultations resulted in more than 400 project proposal ideas. Many were at relatively local levels, whereas the BDP's mandated focus has been on basinwide development projects and national projects with potential transboundary impacts (MRC 2006). Among the lessons acknowledged were that there were important differences among member countries over how they perceived and incorporated public participation in planning. Deliberative norms were obviously still far from being widely accepted, with water bureaucracies continuing to privilege internal expert and politician-led assessment of options and decision-making. The MRC BDP group also thought that transboundary multisector dialogues were more difficult to conduct than those within a country about a single sector (MRC 2005). Pech and Sunada (2006) predicted that major disconnects between conversations in the MRC structures and those within countries were likely to persist and thus prevent real integration of basin-level and national-level development plans. In any event, BDP1 achieved very little substance, other than the aforementioned wish list of projects. Most of those involved were disappointed with the limited achievements of the first phase; nevertheless, plans were soon put forward for a second phase.

The initial plans for BDP2 were striking in their lack of recognition of other efforts being made throughout the lower Mekong Basin to better understand and evaluate multiple visions of future development and analysis to support one or other points of view. The BDP2 agenda was revised several times but was finally approved by the MRC Council in 2005. It strongly emphasized investment but was later revised again as a result of donor calls for a more balanced view of development before it would be funded. According to the MRCS, the second phase (2007–2010) was designed to institutionalize the participatory planning process established during the first phase of the basin development planning venture (BDP1)-though there is little evidence to suggest that BDP1 reached beyond the immediate parts of the MRC involved in implementation. Nevertheless, it is true that the second phase, BDP2, from 2007-2010 has made substantially greater effort to bring in state actors from national and provincial line agencies. BDP2 has also sought to provide more opportunity for nonstate actor voices to be heard. That said, BDP2 has been dominated by the production and airing of extensive modeling of various hydropower and irrigation expansion possibilities. This has been largely sensitivity analyses without a hint of exploring more radical alternative futures.

In March 2008 the MRC organized a stakeholder consultation forum on BDP in Vientiane, Lao PDR (MRC 2008). Members from the water governance network M-POWER provided suggestions on the draft agenda and facilitation support. Several experts in the network also participated in a follow-up workshop to review draft working papers on the proposed development scenarios and an "IWRM-based Basin Development Strategy." In these discussions, questions frequently arose about choices of levels and scales at which indicators and model outputs should be evaluated.

In any case, events were overtaking plans. On paper, the MRC has a role as a convener, but in practice it has, until 2008, scrupulously avoided contentious issues and disputes. It has often been absent from, or silent about, major bilateral or national government proposals for, and decisions on, water resources development in the basin (Dore and Lazarus 2009; Jacobs 2002; Osborne 2004). For example, as mentioned earlier, in the first decade of its operation, the MRCS had little involvement in, and usually very limited information about, the hydropower development on the Mekong River mainstream in China and on tributaries in Lao PDR and Vietnam. Its Initiative on Sustainable Hydropower first agreed to in 2001 only secured funding in 2006, and in September 2008, it held its first regional multistakeholder consultation. Since 2008, to be fair, it has made significant progress in a very short time, ramping up engagement, from a zero base, with ministries responsible for hydropower in all member countries.

Indicative of the MRCS's marginalization in the past from significant national water resources agendas were its sidelining from negotiation of an agreement among the four countries of the upper Mekong—namely China, Myanmar, Lao PDR, and Thailand—to implement a navigation improvement project that involved the blasting of several rapids along a 900-km stretch of the river between Jinghong in China to Chiang Saen in northern Thailand. In the past, it has also been excluded from speculations about possible Lao–Thai water transfers and diversions from the Mekong to irrigate more of northeast Thailand (Molle and Floch 2008). It distanced itself from the environmental impact assessment process for Sesan dams and operational incidents that have affected downstream communities (Wyatt and Baird 2007).

Although it has not been able to engage when it probably should have, the MRCS has begun to emerge as a significant knowledge broker. A combination of consultants, external to the region, and appointed researchers, within the region, has produced a significant body of knowledge that could inform public deliberations on many aspects of water resources development and management. Unfortunately, until 2008 the wider dissemination and use of data, models, and other research findings was often very restricted. Out-going communications were filtered by centralized information management practices within the MRCS (Hawkesworth and others 2007). The MRCS argued then, as now, that it is not an independent organization and is bound to respect member countries wishes, especially on sensitive information. This lack of transparency has frequently been raised by critics in dialogue (e.g., IUCN and others 2007a) and has undermined the credibility of the organization (Hawkesworth and others 2007). If claiming the role of broker, knowledge needs to be disseminated more widely; doing so will strengthen, not weaken, the role of the MRC in facilitating and supporting deliberative engagements.

The first phase of the core MRC program on BDP1 was largely a donor-funded sideshow; its impact on negotiations within and between countries has been slight, if measurable at all. At the time of writing, the influence of BDP2 is yet to be determined. Level politics is part of the explanation of why BDP1 deliberations did not influence joint planning decisions. Other actors-in particular, national governments, banks and investors-were meeting, in other arenas, and debating and forwarding water resource development agendas without any regard for the BDP process. However, there was also a scale aspect to the problem; the focus of the BDP-at least until 2009-on the hydrological scale has led to those searching for substantive deliberation about social, ecosystem, and multilevel economic impacts of different options to shift the locus of their debating efforts to other nodes of possible influence.

Basinized Banking by the World Bank

The release of the World Bank's Water Resources Sector Strategy (2003) signaled its intention to reengage in water resources infrastructure funding of high risk-high reward projects. In the Mekong Region, the new push was seen as arising from World Bank dissatisfaction with the performance of the MRC, seeing it as unable or unwilling to facilitate investment by multilateral development banks. The World Bank global strategy needed to be regionalized or basinized to give it traction in the Mekong Region. Regionalizing might have put the World Bank in direct competition with Asian Development Bank's (ADB) Greater Mekong Subregion (GMS) initiative, although water was not at that time on the GMS agenda. Regionalizing would have also been difficult given the need to include China, which was not part of the World Bank's conceptualization of the "Mekong Region." On the other hand, claiming a convening role at the basin level was always going to pit it against the MRC. Offsetting this risk was the World Bank's intention to develop national-level investment portfolios independent of any engagement with the MRC.

The two multilateral banks soon found a way to cooperate. In June 2006 they coauthored a working paper for an assistance strategy for water resources development in the Mekong Region (World Bank and Asian Development Bank 2006). The paper reaffirmed the World Bank's (2004) Mekong Water Resources Assistance Strategy, which used the hydrological models in the MRC's Decision Support Framework to justify further investments in dams based on the argument that they have acceptably low impacts on hydrology at larger spatial levels. Other scales that bring in transboundary ecological or local livelihood issues were not a part of the analysis. The joint paper argues for the potential for development of Mekong water resources and claims the "basin has flexibility and tolerance". It also called for abandonment of the "precautionary approach of the past decade that tended to avoid any risk associated with development, at the expense of stifling investments" (World Bank and Asian Development Bank 2006). These strategies were important topics in an independently convened dialogue (see the section on water dialogues below) because various civil society organizations did not feel there had been sufficient public input during their original formulation, and they contested their conclusions.

Regionalized Energy Planning and Power Trading

Although it might be true to say that, to a certain extent, all regions are imagined, it is clear that the Mekong "region" is increasingly becoming an institutionalized reality for both state and other actors. There are several notions of "region." In the previous two cases we focused on the Mekong River Basin, or the "lower" basin—excluding China and Myanmar territory—as it has been constructed for and by the MRC. In this case we explore the deliberative elements of initiatives driven by the ADB-led construct of the GMS that has recently further expanded its definition of GMS within China to include the Guangxi Zhuang Autonomous Region (ADB 2007).

The GMS economic cooperation was established in 1992 with financial support from the ADB to emphasize transboundary expansion of trade, investment, and infrastructure among six countries—Cambodia, China, Lao PDR, Myanmar, Thailand, and Vietnam—an idea found attractive to their national governments. The profile of the ADB–GMS has grown in recent years with a series of intergovernmental summits between Heads of State. "Regional waters" were initially left off the GMS agenda to ensure that the developing cooperation on a range of other fronts was not destabilized. It has been consistently justified by disingenuously claiming that this was the role of MRC. However, this does not mean water resources development has not been on the agenda of the ADB. Behind the leaders' summits are numerous ministerial and expert group meetings and negotiations. In more recent years, many of these have dealt with energy security and cooperation (Yu 2003), often providing entry points to water resources development issues.

Multilateral banks have played a role in constructing a narrative of a Mekong Region in which more investments in hydropower are likely. In 2005 the World Bank approved loan guarantees for the Nam Theun 2 dam in Lao PDR, making it possible for the financing of almost USD 1.6 billion to go ahead, the largest single investment in the country's history. Both the World Bank and ADB have opportunities to guide investments through conditionality on loans, technical expertise, and political connections. Looking to the future, the political influence and leverage of the multilateral banks might be on the wane, as a more diverse group of commercial banks and other investors have entered the region, with often lower standards of safeguards and many less conditions on loans. This will create new challenges for coordination and transparency. Ensuring responsible corporate practices in these circumstances will require adherence to transnational codes of conduct for the private sector, such as the Equator Principles for the finance industry and the International Hydropower Association's Sustainability Assessment Protocol for the hydropower industry.

The ADB organized three regional consultation workshops in Bangkok on the GMS Energy Strategy between July 2006 and June 2008 to discuss the findings of their energy strategy study. The first workshop included senior government officials from the GMS countries and representatives from academia, civil society, development organizations, and the private sector (ADB 2006). At the workshop there was broad agreement that "a participatory approach would be essential in strengthening ownership among GMS countries, facilitating consensus building, and ensuring the sustainability of the regional energy strategy" (ADB 2006). Representatives from civil society groups argued the importance of assumptions and quality data, as these could greatly effect outcomes of the modeling work and the need to improve transparency of energy planning processes at the national level. Another area of concern and of divergent views was on what were the realistic expectations for renewables in future energy mixes (ADB 2006). The draft strategy document (ADB 2008) tabled at the third workshop argues strongly in favor of regional integration of energy supply infrastructure from an economic perspective but gives much less attention to political and financial risks.

For more than a decade, a discourse of the Mekong Region as underdeveloped has been used by multilateral banks to regionalize-which is akin to changing the dominant level-plans for how resources should be managed for capital-intensive development. The main arguments in favor of this approach highlight the benefits and economies of integration and the naturalness of the region (Bakker 1999; Molle and Floch 2008). Conventional hydropower technology fits neatly with notions of regionalizing and internationalizing development. Large projects still need international investment and expertise. Although size makes these projects conspicuous; technical complexity often keeps the planning and decision-making processes out of the public domain and well beyond the reach of many local communities that would ultimately be affected by such projects (Bakker 1999). Moreover, hydropower converts a water service to electricity that serves distant consumers, outside the basins and even beyond national borders where the infrastructure is located and impacts are felt. This rescaling brings with it changes in groups of state-level or international stakeholders that must be dealt with (Hirsch 2001).

Multilateral, and increasingly other large commercial, banks through loan agreements, technical support, and teams of consultants have a huge influence over large and long-time-frame project cycles because these require money and human resources. Multilateral banks are creating an investment region; other actors now need to mobilize to make sure those investments are adequately scrutinized.

Multilevel Water Dialogues

Transnational public consultation by the MRC and multilateral banks has historically been very limited. Most decision-informing meetings have been dominated by states and their officials, multilateral development banks, and the private sector. As a result, several groups have launched parallel activities to query and propose alternatives. In November 2002, for example, a meeting on "Dialogue on River Basin Development and Civil Society in the Mekong Region" held in Ubon Ratchathani, Thailand concluded with calls for much greater civil society involvement (Dore 2003). Another meeting convened by the nongovernmental organization Towards Ecological Recovery and Regional Alliance with other partners in November 2004 drew similar conclusions and called for the establishment of a Mekong People's Council (Wongruang and Samabuddhi 2004). A National Water Dialogue held in Lao PDR in 2005 illustrates some of the challenges for civil society-led events: Half of the knowledge inputs were banned the night before the event. The National University of Laos was informed that any papers that specifically mentioned China were considered inappropriate for discussion in Vientiane at that time.

In this section, we focus on the activities of one network that the authors helped establish and have been closely involved in. M-POWER-or the Mekong Program for Water Environment and Resilience-began in 2004 as the Mekong Water Governance Network (M-POWER 2008). M-POWER made a deliberate choice to focus on the wider region, including several international and many domestic river basins, rather than to overly focus on the Mekong River Basin and thereby frame too much "in" or too much "out" of different political arenas. M-POWER activities are supported by a network of about 30 partner organizations. Most members are from academic and nongovernmental organizations but also belong to international organizations and government agencies. The network has funding from several sources, including Echel Eau and International Fund for Agricultural Development (IFAD) through the Challenge Program for Water and Food for its activities but relies mainly on the diverse voluntary contributions of its partners.

In November 2004, the Water and Nature Initiative of the International Union for Conservation of Nature (IUCN) convened a high-level roundtable on "Using Water, Caring for Environment: Challenges for the Mekong Region" at the World Conservation Congress in Bangkok. The M-POWER network provided facilitation support and speakers. The event included ministers from five Mekong countries (all but Myanmar) as well as nongovernmental actors. Some sensitive issues, like interbasin diversions, Nu-Salween infrastructure, and threats to the Great Lake-Tonle Sap ecosystem were discussed. This 2004 event was the first step towards "Exploring Water Futures Together," to which we now turn.

In July 2006, IUCN with other partners, including the Thailand Environment Institute (TEI), the International Water Management Institute (IWMI), and M-POWER, hosted the "Mekong Region Waters Dialogue: exploring water futures together". The event, held in Vientiane, covered governance issues in several sectors and at several levels (IUCN and others 2007a, b). The dialogue was intended to be "a regional multi-stakeholder platform organized to provide an opportunity for high-quality, multi-faceted, debate and learning that will contribute to improving water governance in the Mekong Region." One part of the meeting and report specifically asked participants to evaluate the role and governance performance of

the World Bank, ADB, and MRC. Other parts reviewed their strategic plans for the region, providing commentaries and suggestions.

The multiple and changing roles of MRC and its secretariat were hotly debated. Some stakeholders would have liked to see it involved more in investment facilitation, others in regulation, and yet others more as a knowledge broker or convener of dialoguelike activities. As described in the earlier case studies, the MRC has had some difficulties with each of these roles individually. It has struggled to take information that it has in hand or needs about ecological processes at multiple levels into planning. It has also struggled with simultaneously considering waterrelated services derived from the basin and used at different levels and scales. Overall, the deliberative engagement stressed the need for greater transparency and stakeholder participation, consistent with some of the promises in the draft 2006–2010 Strategic Plan (IUCN and others 2007a).

The critique of the ADB and World Bank's Mekong Water Resources Assistance Strategy covered many areas, including issues of process, like the need to make available all relevant documents sufficiently in advance of consultations, preferably with local language summaries, so they can be properly reflected on during dialogue activities (IUCN and others 2007a). The discussions also questioned some of the key assumptions about development needs and river basin management capacities. Although there was no consensus reached in these debates, they were important in helping different stakeholders learn about the limitations of their own understanding and analyses as well as the sometimes very different perspectives of other stakeholders.

The dialogue event was followed up by exchange of correspondence between conveners and these agencies that were included in the final report (IUCN and others 2007a). "Exploring Water Futures Together" demonstrated again, as had the joint Ministerial-civil society engagements in Bangkok at the World Conservation Congress, that multistakeholder deliberation about sensitive water resources development is possible. The Vientiane dialogue contributed to subsequent downplaying by The World Bank and ADB of their Mekong Water Resources Assistance Strategy that died soon after. It also helped trigger greater interest and demonstrated how to conduct a multistakeholder platform, at different levels-whole-of-basin and national. It is no coincidence that in 2008 the MRC BDP2 and a new MRC Initiative for Sustainable Hydropower also demonstrated their new approach to multistakeholder engagement, for good reasons but also to wrest back the convening role for deliberation that they had never previously claimed.

A set of follow-up national-level and language dialogues then took place in Lao PDR and Cambodia. The activities in Cambodia, for example, were organized through the Cambodian Water Working Group, which represents more than 30 nongovernmental, international, and other organizations. The working group is facilitated by the Cambodian Center for Study and Development in Agriculture (CEDAC)—CEDAC was also one of the founding members of M-POWER—and places a strong emphasis on irrigation and its interaction with other water uses and users. Between November 2005 and February 2007 the working group held 12 meetings and 2 study tours.

A 2-day dialogue event was also held in October 2006 in Chiang Mai, Thailand to specifically follow up discussions at the Vientiane event on the ADB-facilitated North–South Economic Corridor (Foran and Lebel 2007). This meeting was notable for its diverse participation, including representatives from Myanmar as well as the ADB. The event focused on exploring development assumptions through building scenarios at local, regional, and global scales.

Networks and organizations with flexible and diverse links with governments, firms, and civil society are in a good position to convene and facilitate dialogues on sensitive but important topics for development in the Mekong Region. The outcomes of these are not primarily in terms of decisions on projects, policies, or institutional reform (Table 1) but rather in making sure that alternatives are assessed, rights, risks, and responsibilities acknowledged, and mutual understanding improved (Dore 2007). On the other hand, such processes might lack the coherence and continuity that well-funded and institutionalized relationships bring with them. Thus, by 2009 the Water Futures dialogue process appeared to be splitting into several relatively independent threads. IUCN and M-POWER, for example, were planning to convene and follow up different parts of the agenda, whereas other actors like the MRC have been increasingly taking on convening roles for consultation-style events. At more local levels within countries, parallel experiments are underway-in particular, with river basin organizations of various sorts and at different levels, often premised on notions that they would support engagement with various stakeholders within and beyond government (Molle 2007a; Thomas 2005). A deliberative turn is underway.

Tonle Sap Management in Cambodia

The fisheries of the Tonle Sap-Great Lake (TS-GL) ecosystem are crucial to the diet and livelihoods of the population of Cambodia (Kummu and others 2006, 2008; Pech and Sunada 2006). More than 60% of the floodwater of the TS-GL comes from the Mekong River; the remainder comes from the catchment areas of the lake. At full flood, the TS-GL temporarily stores about 15% of the average annual discharge of the Mekong River (MRC 1998). Although estimates vary, one finding puts the present annual fish catch from TS-GL at 235,000 ton, depending on the season (van Zalinge and others 2001), an indication of the lake ecosystem's extraordinary productivity (Lamberts 2006).

The Tonle Sap Basin Organisation (TSBO) was set up with funding from ADB as a dialogue forum among line agencies and local government under the Cambodian National Mekong Committee (Wright and others 2004). At a meeting on the ADB's Tonle Sap Basin Strategy in Phnom Penh in March 2004, Olivier Serrat (2004), a senior economist, said that

Natural resources do not recognize administrative boundaries and decisions in one part of a basin can have significant impacts on natural resources elsewhere... it stands to reason that the Tonle Sap basin's natural resources would be best managed through the mechanism of long-term plans developed collaboratively by local, provincial and national stakeholders.

However, practice has unfolded differently. The extent of opportunities for public participation in its operations and future planning roles appear modest with representation on committees by "selected" nongovernmental organizations. The original plan called for subbasin institutions (Milner 2005), but these have not yet been linked or created, as the parent itself continues to lurch and find its way. From the outset, limited financial resources, technical skills, and inadequate representation from a diversity of stakeholder interests have constrained the effectiveness of the basin organization (Pech and Sunada 2006).

The lake looms large in national politics in Cambodia by its sheer size and importance as food and income sources, but when development discussions are scaled up to regional development, these values are often downplayed in assessing other metrics—like counting potential megawatts of hydropower electricity generation and more recently the size of oil reserves.

Scientific assessments give grounds for concern about the local social and environmental impacts of upstream dams and diversions on natural flood regimes and sediment transport (MRC and WUP-FIN 2007). Looking up a level, attempts to manage the lake area without reference to planned interventions elsewhere in the Mekong River Basin make no sense. Looking down a level, there has been no effort to integrate the organization's basinwide management actions with preexisting local arrangements (Middleton and Tola 2008). In Pech and Sunada's (2006) view, the proliferation of institutions, within Cambodia and internationally, is a barrier to problem solving because of fragmentation and compartmentalisation of responsibilities.

In October 2007, the donor-driven TSBO was summarily replaced with a new entity—the Tonle Sap Basin Authority (TSBA)—by the Cambodian government (Royal Government of Cambodia 2007). The Royal Decree that established the authority was prepared quickly and without broad public consultation (Middleton and Tola 2008). The 30 or so members of the new Authority came largely from various central ministries and provincial governors. The Cambodian National Mekong Committee has one member. No positions were available for fishers or farmers or civil society organizations. Some press articles have claimed that a primary motivation of this new agency was to coordinate the exploration of oil (Associated Press 2007).

In the Mekong Region, integrated water resources management at the basin level through the creation of river basin organizations has again and again proven much more difficult in practice than plans and promises would suggest (Biswas 2005; Molle 2008). Linking institutions at different levels has been hard, in part, because none of the individual levels are secure or functional. The Tonle Sap management case study again underlines that claims about stakeholder participation and dialogue in basin initiatives need to be treated with skepticism. Very often what is meant is the participation of different central government agencies and more local government structures (e.g., provincial) and integration means little more than trying to achieve some modest degree of coordination.

Deliberation Bridging Scales and Levels

Ecological processes, actors, and social institutions relevant to governance of water resources in the Mekong Region map to different levels on multiple scales (Fig. 2). This creates opportunities and tensions in which scale and level choices and consequences come to the fore in political contests for resources and influence.

In this section we delve into more, but by no means all, important aspects of context, process, content, and outcomes. This is informed by our use of scales and levels lenses in previous sections when touring examples of Mekong water-related governance processes.

Context: The Importance of the Convener

The broader context and scale-level aspects of the cases were outlined previously. Here we wish to draw attention to conveners—those who call people together and collectively engage in an issue. As our case studies show, there are many possible conveners for a water-related dialogue. Our Mekong region/basin/country examples included the UNDP, MRC, World Bank, ADB, and a coalition of IUCN/ TEI/IWMI/M-POWER. Credibility and competence are essential. Credibility is linked to the "social capital: of the convener or convening coalition and their capacity to build new or upon existing relationships. Without competence, conveners will not be able to maintain a constituency or lead effective, deliberative engagement.

There are multiple motivations for convening. It can be a strategic position that might give an actor leverage, opportunity, authority, or prestige. In each of the cases, actors have used their convening role to shape the conduct and context of others, either directly or indirectly. The following diverse examples illustrate the point.

The UNDP sought to influence the shape of the 1995 Mekong Agreement, or at least ensure that a commonly acceptable agreement was negotiated, after early negotiations had stalled. Its triumph was self-acclaimed soon after by an insider of the organization (ESCAP 1997). It sees itself as a parent of the MRC, and rightly so, via its various interventions and support since the 1950s. In the last 10 years or more, however, the UNDP has played no role whatsoever in MRC operations, having handed back its convening/facilitating role in 1995 and thereafter having withdrawn.

After many years of not taking up the role for which it is mandated, the MRC has, since 2008, finally taking a proactive approach to secure for itself a role as a convener of development debates. It is constrained by the boundaries of the Mekong River Basin and, more particularly, to the Lower Mekong due to the nonmembership of China and Myanmar. It is, however, reaching upward to China and outward to the hydropower industry, as it seeks to build its credibility. There are deliberative gains and losses to this new approach. As the convener of the Lower Mekong BDP process, the MRC has framed implementation in a way that builds in assumptions about the range of choices open to Lower Mekong countries. Scenarios are less diverse and resemble sensitivity analyses of a particular development pathway-more or much more hydro, more or much more irrigation-rather than explorations of quite different future possibilities.

The World Bank—later joined by the ADB—sought, via its convening of the Mekong Water Resources Assistance Strategy (MWRAS) process, to usurp the MRCS and provide their own vision of essential water resources development interventions at a time when the MRCS was relatively inactive. This coincided with the need perceived by the World Bank for them to step forward and "subglobalize" (whether basinizing or regionalizing did not really matter) their global Water Resources Sector Strategy (World Bank 2003) and this, at least partly, drove the MWRAS process, with or without the MRC being on-board.

The ADB's convening role of the GMS Working Groups also provides it with the opportunity to direct the agenda, as the GMS Energy Strategy example clearly demonstrates. The power and influence of their convening role is amplified by the ability to provide grants and loans to support the development agenda that emerges from the Working Group deliberations. They are not, however, alone in their desire to set the regional energy agenda. In September 2009, US embassies led the convening and hosting of a GMS energy conference (US Department of State 2009), a tentative step as it repositions its engagement in Mekong geopolitics under the Obama administration.

The IUCN/TEI/IWMI/M-POWER decided to convene "Exploring Water Futures Together" in 2006 to expand a transboundary water-related deliberative space at a time they judged that many perspectives were still being excluded from consideration, such as in either MWRAS 2004+ or the BDP1. This represented an expansion of a previous coalition between IUCN and M-POWER from 2004 that focused on getting substantive transboundary issues—Thailand water grid, Salween hydropower development, and domestic and international threats to Tonle Sap—into the public space for discussion between senior government officials and nonstate actors.

After effectively removing the ADB from its convening role in shaping a Tonle Sap basin organisation, a dominant faction within the Cambodian government directed the creation of the TSBA. Those appointed to it interpreted its mandate as entitling it to convene and dictate terms to various government agencies, such as the Ministry of Water Resources and Meteorology (MOWRAM), Ministry of Agriculture, Forestry and Fisheries (MAFF), and the Ministry of Environment (MOE). By mid-2009 it was clear that it did not have the support of the constituency it sought, its formal powers were reduced, and it was repositioned lower down in the institutional hierarchy, under the oversight of MOWRAM. Its reinvention is now underway and it might yet establish influence in Cambodian policy making in and around the Great Lake-that is, at a lower level (subnational) and lower scale (lake and surrounds, rather than entire Tonle Sap Basin, which covers a large proportion of Cambodia).

Each of the cases shows that convening has its advantages and so the flux will likely continue, as different actors press for such a role.

Process: Social Contracts, Participation, and Facilitation

The process aspects we will focus on are the social contract, who participates, and facilitation.

Social contracts

The social contract is a summary of the rules of engagement. A social contract needs to be established among the conveners, facilitators, and all stakeholder representatives, which requires reaching some workable agreement on purpose, scope, political space, resources, time, and process so that participants in a deliberative process understand the roles and responsibilities of all.

Social contracts should make the participation promise clear, to lessen the chance of a mismatch between reality and expectations. For example, are stakeholder representatives being invited to come together primarily to build relationships and share information, to set the agenda for subsequent public or private sector action, to brainstorm and problem-solve, to join a consensus-building initiative, to provide recommendations, or to make decisions?

Each of the cases examined offered a different social contract, recognizing that differences matter. The UNDP was inviting states to continue their efforts to establish a transboundary river basin organization with a decision-making mandate. Once established, the MRC in operation offers different invitations depending on the status of the intended participant in MRC processes. After the events, nonstate participants in 2008 and 2009 multistakeholder consultations for the MRC BDP2 "basinized planning" remained unsure as to whether they had been brought in for tokenism, to be shown and impressed by the status of work-in-progress, or to provide recommendations on methodology. No invitation to join decision-making was offered, that much was clear, but the connection of the BDP itself to national decision-making remains unclear.

The MWRAS and ADB GMS energy planning processes did not offer any social contract beyond invitations to being an observer at the World Bank's own attempts at basin planning and investment prioritization.

"Exploring Water Futures Together" endeavored to broaden the transboundary public debate in 2004 by expanding the public agenda, but in 2006, it still needed to focus on bringing people together to build relationships and share information as a precondition to constructive deliberative engagement at the regional level.

In each of the examples, the social contracts among the conveners, key participants, and invited others were being stretched or renegotiated between levels and scales, as actors sought to increase their space and influence.

Participation

Scale and level politics defines and limits who participates and with what roles in deliberations. The Mekong Agreement negotiations were driven by tensions between international agencies and a few donor countries interested in regionalizing development and rather disparate state interests. One consequence was the exclusion of the upper basin countries China and Myanmar, neither of which had much to gain from joining and potentially more to lose. Another was a rather narrow focus on state-level interests. At one level lower, the Tonle Sap case study documented similar winnowing processes at work determining who participates. Deliberation here took place largely among central and provincial state agencies. There was little opportunity to deal with important transboundary issues related to international developments in the basin or to engage with local-level institutions already in place within the basin. These two example show how deliberation at, and about, some levels might be hindered by scale politics.

The BDP process inherited many constraints from the initial Mekong Agreement, especially the emphasis on state-level interests and transboundary impacts within the lower basin. Nevertheless, the MRC responded to criticisms about the lack of wider engagement with stakeholder consultation meetings in the latter half of phase 1 and from the beginning of phase 2. This created opportunities for information about ecological processes important to more local-level livelihood interests to be tabled. This is an example of leveling, as it drew attention to different levels at which water resources and related services are used and managed. It is still too early to see if these decisions by conveners will have any influence on national planning or practices.

In the Mekong Region governments are still seen by many as the actor that needs to be convinced or changed to solve water governance problems in the region at all levels, from international through to local. But research and practices suggest a much more complex mix of actors are involved in water governance (Lebel and others 2007). Moreover, the array of firms and banks and, to a lesser extent, local water-user groups, and environmental and social development advocates are not without strategies and skills in deploying various institutions of the state at the levels at which they work best.

Multistakeholder engagement requires careful attention to participation. One lens that is helpful in identifying sets of interests and stakes in water management is scale. Many water-related services have level-dependent elements or are subject to strong cross-scale interactions, which, if taken into consideration through representation, might lead to more constructive politics in deliberative arenas. Thus, if a disadvantaged group with strong level-dependent interests and stakes is being ignored or sidelined in policy and negotiations, it makes sense for conveners to find ways to include them.

Facilitation

Quality facilitation of meetings is crucial to give fair opportunities for everyone present to meaningfully participate and to ensure that claims and arguments can be queried, verified, or countered. Many sessions in dialogues and consultations with stakeholders remain dominated by formal presentations by the conveners and their selected resource people; opportunities to query and discuss key issues in-depth are contained to short periods before breaks after a Powerpoint tsunami. Facilitators in the Mekong context need to not just consider language but also power and influence associated with positions, and in response to deploy tactics to allow different stakeholders to engage without being crushed by the articulate or influential.

Scale and level politics has shaped the format, venues, and procedures of dialogues and assessments. The basinization efforts in the Mekong Agreement, Basin Development, and hydropower cooperation cases have been challenged by farmers, fishers, and civil society organizations as not giving sufficient attention to local place-specific impacts, interests and concerns. Such groups have used the mass media and created alternative events to comment and provide their perspectives on development.

Venue and language choices empower different stakeholders. For the cases we studied, however, physical venues continue to be largely convention halls, government offices, or large hotels in capital cities. Interests aligned with large spatial levels are usually favored by such settings. In the Mekong Region, several of the case studies described illustrate the value of allowing periods for discussion and reflection in native languages as these improve content and level of engagement in discussions.

Conveners and their facilitators have also tried to respond to debilitating effects of some form of scale politics. In the "Exploring Mekong Water Futures Together" dialogue process, the main regional dialogue focusing on transboundary issues and multilateral agencies and was held separately from several national-level events, but with some cross-participation. One of the rationales for these activities was to try to create more direct conversations among actors with strengths and capabilities at different levels. Some conveners and facilitators will adopt tactics like keeping some groups of stakeholder of very even capacity, power, or highly polarized positions in separate events or tables during part of the process.

Most of the cases we studied indicate the need for, but challenges in, carrying out meaningful multilevel conversations without undermining credibility, salience, or legitimacy. In deliberative engagements, some actors, including conveners, continue to exercise power through controlling where, when, and how deliberative engagement takes place, what decisions are on the table for scrutiny and discussion, and which are taken as given.

Content

Scale and level politics have shifted agendas and the substantive content of deliberations. The processes of scaling and leveling have been prominent. On the one hand, leaders in government, business, and financing focus incessantly on regional geometries-growth quadrangles and corridors, water and energy grids. A pertinent example is the promotion of a Thai Water Grid by the then Prime Minister Thaksin Shinawatra of Thailand in which diversions and withdrawals from neighboring states were glossed over by labeling as a national project because it was convenient to do so (Molle and Floch 2008). These discursive practices shift agendas to larger interest levels and associated technologies and projects. The rescaling of regions via large infrastructure projects renders some levels more visible than others. Local uses of water resources for irrigation and fishing are simply made invisible by a high, regional vantage point and the statistics or policies operating at that level. Our case on cooperation in energy and water is a strong example of this form of scale politics affecting the content of conversations. The Mekong Agreement case is another, in that the focus on allocation among states has made invisible many of the intrastate allocation issues.

Problems with access to, and the quality of, scientific knowledge has been an important constraint in several of the cases we examined. Until recently, the MRC, for instance, had a history of suppressing access to reports, preventing its own scientists from speaking about their findings in regional events and avoiding disclosure of information that it felt might be "sensitive" to member governments. On the one hand, this is seen as careful management and, on the other, it is seen as a lack of transparency. The tensions between international and state level as well as state and more local levels is part of the explanation for these constraints on the content of deliberative engagements in the region.

Even so, new understanding or awareness of issues from increasingly independent research capacities in the region is countering efforts that would seek to compress issue management into a particular scale and level. For example, the river basin scale might suit surface water flows but be a poor fit for aquifer management issues that arise as groundwater exploitation increases. Likewise, climate change requires action within, but also beyond, the boundaries of any subglobal polity.

Some conveners have tried to create constructive discussions about cross-level and cross-scale issues through structuring who speaks in which session and the mix of topics covered in meeting agendas. "Exploring Water Futures Together" had, for example, a multilevel scenariobuilding exercise that encouraged participants to grapple with development issues at several spatial levels, first separately and then together (Foran and Lebel 2007).

Deliberative engagement activities like dialogues and roundtables can help deal with scale issues by querying choices of scales and levels. They might be particularly important when they draw attention to vulnerable and disenfranchised stakeholders with limited access and influence via other political channels.

Outcomes Matter: Sought After Versus Actual

Scale and level politics has altered the outcomes of deliberations from what was sought to what is actually discernible with the benefit of hindsight. The conveners of the effort to create the MRC sought acceptance of interdependency by all Mekong countries concerning their water resources development pathways and agreement to fully cooperate in exploring development possibilities and jointly managing the precious, water-related resources of the basin. The actual outcome was a partial "whole-ofbasin" organization that has taken many years to become modestly influential. Nevertheless, the rise of water, hydropower, and climate change adaptation to the top of the political agenda was evidenced by the 1st Mekong River Summit in April 2010, which brought together the prime ministers of the four Lower Mekong countries, with very senior representation from China and Myanmar. After more than 50 years of cooperation to greater and lesser extents and 15 years after the signing of the Mekong Agreement, this was a high point for MRC to show, finally, that it can convene substantive deliberations at the highest political level about "whole-of-mainstream" development, even if still not "whole-of-basin."

The MRC's restricted mandate to the Lower Mekong Basin has hampered its efforts to develop an agreed and effectively adhered to plan for water resources development of the area within its purview. The reluctance of members and nonmembers to candidly exchange views has been a mighty deliberation challenge, but clear progress has been made. Nevertheless, the actual influence on national water resources development agendas has yet to be seen.

The sought-after outcome of World Bank's efforts to basinize banking was to be a widely supported MWRAS. The global water resources strategy of the Worl Bank had a clear vision, but the Mekong version was a pale imitation and seemed to focus more on building a constituency for future World Bank technical assistance and infrastructure investments. The actual outcome was an unsupported, unimpressive strategy that by 2010 has disappeared and was never widely circulated and not even rating a mention in the World Bank Water Strategy mid-term progress report (World Bank 2010).

Convergence and divergence between sought-after and actual outcomes across the case studies (Table 1) can be partly explained by how well scale and level politics were addressed by deliberative engagements. The ADB-led initiative to regionalize energy planning and power trading seeks an outcome in which energy production and transmission is optimized. The outcome of the ADB-GMS decision to "leave water to the MRC" has resulted in energy planning being very disconnected from water resources planning. Institutionalized agreements are moving forward for power trading among countries to enable efficiencies.

M-POWER and partners have been clear about the outcome sought since the early days of its dialogue activities, that being more rigorous public examination of the comparative opportunities and risks of various development scenarios. This persistent effort to demonstrate how to go about, and normalize, multistakeholder deliberation has contributed to measurable success.

An objective of the Tonle Sap management experimentation in Cambodia has been, since the 1990s, to establish some type of functional government oversight and control of the way in which the land and water-related resources of the lake are used. This objective, however, has been lost or overtaken by power struggles among the ADB, actors within the newly created (and soon downsized and disempowered) Tonle Sap Basin Authority, MOWRAM, and other parts of national government. In 2009 the TSBA leadership was removed, the organization was renamed Tonle Sap Authority, signaling the downsizing of its territorial mandate. At the same time, greater control was exercised over it by MOWRAM. At the time of writing, the mandate is still being contested and the added-value to water management is difficult to discern.

Deliberative engagement among diverse stakeholders cannot be expected to reach consensus or address all the challenges in making policy and institutional changes. However, it should at least improve mutual understanding among actors, allow exploration of alternative options, help define rights, risks, and responsibilities, and have some constructive influence on future behavior (Dore 2007). Some disconnects will persist in part because of scale- and level-dependent interests and power.

Overall, attributing, or attempting to measure, the impacts of deliberative engagement on policy-making processes, negotiation outcomes, and institutional forms is not a straightforward exercise; making strong claims about level-sensitive variations is even more difficult. Additional conceptual work is needed on how to best delimit deliberative activities into meaningful units of analysis and to characterize their features so that their evolution can be clearly described and alternative initiatives can be compared (Pingree 2006). More work is also needed on using scale as a lens to describe political interactions in more mechanistic ways (Lebel and others 2005; Young 1994). This work can build on the findings here that show that important scale politics is not only evident among the formal institutional arrangements but also found in the less formalized and often loosely connected world of dialogues, consultations, and roundtables that make up the essence of many deliberative engagements.

Conclusions

In the Mekong Region, water governance is multiscale and multilevel, with many connections but also many disconnects. Actors draw on both formal and informal institutions as well as more ad hoc arrangements at different scales and levels, as issues move between relatively exploratory and more decision-oriented arenas and practices. Actors also push and pull issues between scales and up and down levels to political and territorial arenas where they have more influence and power—in processes of rescaling or releveling.

There are many "Mekongs": river, river basin, and various regional framings. The interests of investors, officials in government agencies, and small, local users of water, such as fishers and farmers, or distant city dwellers needing energy are visible or not depending on how Mekong arenas and their boundaries are set. Likewise, there are many "waters". From flood protection and energy production services through to meeting needs of farmers in the dry season and securing valuable fisheries, there are correspondingly very different ways of valuing and prioritizing uses and users.

Scale and level politics contribute to the context and influences the process, content, and outcome possibilities from deliberative engagements. Informed multistakeholder deliberations that are sensitive to multiscale and multilevel interests appear crucial to influencing powers, challenging the way issues and stakes are framed, and negotiating for or protecting the interests and needs of minorities, women, migrants, and diverse groups of the poor. Such deliberations also appear crucial to navigating the complex contests over rights to, and responsibilities for, regional waterrelated resources that are invariably difficult to contain within the boundaries of a basin drawn at a particular level and scale.

Many important decisions about water in the Mekong Region are still made in nontransparent ways. Meaningful public deliberation is still the exception rather than the rule. Among early efforts, deliberative engagements vary hugely in inclusiveness, quality of content, structure, and how they are facilitated. As a result, the quality and influence of those conversations and relationships varies. Dialogues good and bad, broad and narrow—might all influence negotiations that help shape decisions that are crucial to improving water governance, but more needs to be done if they are to contribute to their full potential.

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ANU page 248

Journal of Hydrology 466-467 (2012) 23-36

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A framework for analysing transboundary water governance complexes, illustrated in the Mekong Region

John Dore^{a,*,1}, Louis Lebel^{b,2}, Francois Molle^{c,3}

^a Australian Agency for International Development (AusAID), Laos

^b Unit for Social and Environmental Research, Chiang Mai University, Thailand

^c Institut de Recherche pour le Développement (IRD) and International Water Management Institute (IWMI), Egypt

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1. Introduction

SUMMARY

In this paper we present a framework for analysing transboundary water governance complexes, illustrated in the Mekong Region. In this region, the sharing of waters between countries adds a critical dimension to decision making about producing food and energy, maintaining vital ecosystems, and sustaining livelihoods. Hydropower, dams, diversions, expanding cities and irrigation schemes are all in the mix. The key elements of the framework are: context, drivers, arenas, tools, decisions and impacts. The use of deliberation, technical and advocacy tools is explored and normative governance improvements are suggested.

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HYDROLOGY

Water governance can be understood as a social process of dialogue, negotiation and decision-making; or, instrumentally, as a means to achieve pre-determined objectives. In this paper, we present a framework for analysing transboundary water governance complexes (Fig. 1).

The framework portrays the importance of, and connections between: context, drivers, arenas, tools, decisions and impacts. There are many different water governance actors dealing with a variety of issues influenced by their individual and shared contexts. Actors engage in multiple arenas, depending on opportunity, necessity and choice. Drivers are what influence and motivate actors. We suggest three are key: interests, discourses and institutions. Actors employ tools to establish and legitimise their positions, inform debate and influence negotiations; or resist, reinforce and reframe perspectives. We define tools broadly and categorise them as being predominantly for deliberation, technical support, or advocacy. Decisions emerge from arenas. We separate the decisions that

* Corresponding author. Address: AusAID Laos, Locked Bag 40, Kingston, ACT 2604, Canberra, Australia. Tel.: +856 20 55514815; fax: +856 21 353831.

E-mail address: johndore@loxinfo.co.th (J. Dore). ¹ Senior Water Resources Advisor – Mekong Region. emerge as being primarily about framing, supply and demand. Ultimately, we are interested in the impacts of decisions in terms of the fairness and sustainability of water allocation, that reshapes the water governance context. We define allocation broadly to include water use, related investment and sharing arrangements.

In our heuristic framework, we recognise that some elements of our categories can overlap. We illustrate the framework with our experiences in Mekong transboundary water governance with emphasis, in this paper, on highlighting the diversity of actors and the role of decision tools in allocation decision-making. We draw on the research and engagement findings of a regional network on water governance known as M-POWER (Lazarus et al., 2011; Lebel et al., 2007; Molle et al., 2009b), especially a project that explored the tools used in water allocation in Mekong countries (Dore et al., 2010a).

2. Research method

The aim of the project was to contribute to water allocation policy and practice that results in more optimal and equitable use of water by society. This aim was pursued by research across the Mekong Region and active engagement with policymakers. We examined the use of a wide range of decision-support tools, in many decision-making arenas. In doing so, the research team sought to understand decision contexts and drivers, and also build capacity to undertake governance research.

² Director.

³ Senior Scientist.

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J. Dore et al./Journal of Hydrology 466-467 (2012) 23-36

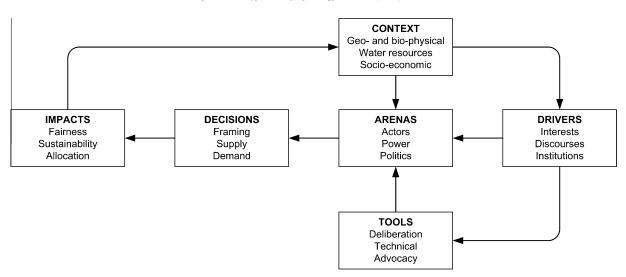


Fig. 1. Framework for analysing transboundary water governance complexes.

The team explored how tools have been used in different places and political arenas in the Mekong Region to govern water. The tools examined included: multi-stakeholder platforms, scenario building, cumulative impact assessment, strategic environmental assessment, environmental flows, hydrological modelling, and lobbying campaigns.

This paper is drawn largely from the project but only covers part of the research findings in the 26 working papers, most of which are proceeding through to formal publication (including: Dore, 2010; Dore and Lebel, 2010; Floch and Blake, 2011; Johnston and Kummu, 2012; Keskinen, 2012; Keskinen et al., 2012; Lazarus et al., 2012; Suhardiman et al., 2012). The project involved 52 researchers from 15 countries, including five Mekong countries.

3. The Mekong transboundary water governance complex

3.1. Context

Water resources lie at the heart of development in the Mekong Region (Fig. 2). This region refers to: the territory, ecosystems, people, economies and politics of Cambodia, Laos, Myanmar, Thailand, Vietnam and China's Yunnan Province (Kaosa-ard and Dore, 2003) and is home to about 260 million people. Future quality of life in the region is strongly linked to the choices made about sharing, developing and managing water to: produce food and energy, maintain vital ecosystems, and sustain livelihoods. Many water resource projects have been completed, are underway, or are being planned. Dams, river diversions, inter-basin transfers, thirsty cities and irrigation expansion are all in the mix. While some projects have been celebrated, others are subject to disputes and protests. The transboundary and interconnected nature of the Mekong's waters adds a critical dimension.

There are many rivers in the Mekong Region, but the iconic Mekong River can be used to illustrate many water governance issues. It is the epicenter of contemporary debates about water resource development in the wider region. It is the longest river in Southeast Asia with an estimated length of nearly 4900 km. The Mekong is the eight largest (in terms of the amount of water), and twelfth longest river in the world. The Mekong River is an international river. It begins in mountains on the northeastern rim of the Tibetan Plateau in wetlands situated about 5000 m above sea level. For nearly 2200 km it flows through Chinese territory in Qinghai, Tibet and Yunnan. During its first 1000 km the river travels in a southerly direction in rough parallel with the Salween and Yangtze rivers which originate in the same highlands. By the time the river leaves China the altitude has fallen to about 400 m above sea level (Daming and Kung, 1997; Hori, 2000). The river then winds its way for just over 2700 km through Myanmar, Laos, Thailand, Cambodia and Vietnam, before spilling into the South China Sea.

Leaders of Mekong countries are aware their countries' destinies are entwined and will be partly shaped by the way increased cooperation of the past 20 years is extended into the realm of water resources development on the Mekong River (MRC, 2011b), but also on other transboundary rivers, such as the Irrawaddy, Salween and Red. The Mekong Region's waterscapes are being contested (Molle et al., 2009c) evincing a confrontation of interests and worldviews that are hard to reconcile despite a fresh rhetoric of tradeoffs, benefit sharing and win–win solutions. Dams that are "powering progress" and publicly justified by reference to development aspirations and poverty alleviation might well, simultaneously, jeopardise food security and the livelihoods of the poorest by harming the extraordinarily bountiful wild fisheries (Barlow et al., 2008).

A major challenge for Mekong water governance is the complexity of societies, economies and ecologies, in a region "where nothing is as it seems" (Hinton, 2000). In contrast, analysis and planning is often based on "state simplifications" (Scott, 1998) that are confounded as people continue to make autonomous decisions, wherever possible. Spatial differences in wealth, job opportunities, resource endowments, environmental degradation, business regulation, law enforcement and political freedom result in flows of people and capital. These flows reshape societies and economies and usually add further pressure to natural resources, including rivers and ground water. Understandings of ecological processes are incomplete. For example, in the Mekong River there is limited, albeit increasing, understanding of fish migration and reproduction, and the relationships between sediment and nutrients (Sarkkula and Koponen, 2010). This makes it difficult to pre-determine the impacts of major interventions, such as the aforementioned dams, diversions and expansions of urban and irrigated areas.

There is additional uncertainty from external forces that shape the future of the region. For example, climate change is expected to affect river flows and agricultural potential (Hoanh et al., 2010a; Mainuddin et al., 2010; Rerkasem, 2011). Global economic growth and contraction will also influence the final outcome of many Mekong-made decisions. Dealing with uncertainty is the fate of most decision-makers, not only of those taking water resources decisions. Yet, because of the way it interconnects people's livelihoods and ecosystems, "the complexity of water" (Dore and Smith, 2010) has particular importance.

J. Dore et al./Journal of Hydrology 466-467 (2012) 23-36



Fig. 2. Mekong Region SOURCE: Based on Map No. 4112, Rev. 2. January 2004. United Nations Cartographic Section, New York, US.

3.2. Drivers

A recent treatment of primary drivers in the Mekong Region focused on demographic changes, human development needs, energy and food security concerns, increasing investment and trade, and climate change (Grumbine et al., 2012). For our decision analysis purpose here, we address the more generic drivers of *interests*, *institutions* and *discourses*. We devote more space to illustrating the latter.

Interests are what underlie stated positions and provide insight into needs, wants, desires, concerns, hopes, fears and values (Vernon et al., 2010). All actors have a variety of interests which is what can make water governance so socially complex. Different interests manifest themselves within and between different categories of actors. Moreover interests are entwined and change through time.

National interest is a term regularly invoked in transboundary water governance, often simplistically. At least in the Mekong, the term is used in two main ways; first "to identify assumed benefits, or avoided costs, to a particular country that are distinguishable from the well-being of other countries" and second "to assert a greater good at the nation-state level, often where sacrifices are required of a smaller group within that same country" (Hirsch and Morck-Jensen, 2006). For example, national interest is ascribed to China in seeking to improve navigation of the Upper Mekong River mainstream for trade, to Lao for wanting to produce and export electricity, to Thailand for its plans to divert Mekong mainstream waters into northeast Thailand, to Cambodia for wanting to protect its freshwater fishery, and to Vietnam for wanting to maintain the productivity of its part of the Mekong delta. There is some truth in each of these claims but the national position of each country depends on who is representing that view, and how they weigh the diverse interests of many actors that resist being fused into singular national policy positions.

Institutions are rules and norms, both formal and informal, that provide structure for behaviour and relationships in a society (Handmer and Dovers, 2007; North, 1990, 1993). Water decisions in the Mekong Region, as elsewhere, reflect the outcome of contests and interplay between entwined and evolving interests and discourses, governed by institutions.

A prominent transboundary water governance institution is the 1995 Mekong River Agreement that articulates an inter-government decision-making and management mandate for the mainstream, tributaries and lands of the basin within the territories of the Lower Mekong countries (Browder, 2000; Governments of Cambodia Laos Vietnam Thailand, 1995). This Agreement is the most recent institutionalisation of a cooperation that has been evolving, with ups and downs, since the 1950s (Bui, 1997; ESCAP, 1997). Article 1 of the Agreement commits the four member countries to cooperate in all fields of sustainable development, utilisation, management and conservation of the Mekong River Basin in fields such as irrigation, hydropower, navigation, flood control and fisheries. Another regional institution, with great implications for water governance, is the Inter-Governmental Agreement on Regional Power Trade in the Greater Mekong Subregion (GMS) (Governments of Cambodia China Laos Myanmar Vietnam Thailand, 2003). The power agreement and subsequent implementation agenda impacts water resources development in many ways, including the incentive it creates for hydropower expansion to feed into crossborder transmission grids.

Discourses are shared sets of concepts, categories and ideas that provide adherents with a framework for making sense of situations, embodying judgments, assumptions, capabilities, dispositions and intentions (Dryzek, 2006). Work by this team (Dore, 2001; Molle et al., 2009c) has illustrated the importance of discourses in Mekong transboundary water governance – actors weaving narratives, labelling people, framing debates, and brandishing meta-justifications. Actors align themselves with discourses such as 'fighting poverty', 'good governance', 'sustainable development', 'water security', 'energy security', 'food security', 'national security', 'integrated water resources management (IWRM)' and the 'water-energy-food (WEF) nexus'.

Discourses are powerful. For example, northeast Thailand is consistently portrayed as a poor and parched inhospitable place, begging for more irrigation (Molle et al., 2009a), wild capture fisheries are said to be doomed from over-exploitation (Friend et al., 2009). With this backdrop, infrastructure projects in the Mekong Region have been presented as solutions to fight poverty, and opponents derided as anti-development or more interested in environmental protection than people.

Discourse dominance is highly sought after and a noticeable part of Mekong Region politics. Once captured, dominance is maintained by "disallowing or marginalising alternatives" (Shore and Wright, 1997). The advent of IWRM provided common ground and an initial consensus; adopted by the international water community – "Just like participation, IWRM appears as something desirable and uncontroversial, and official documents suggest that governments can resort to it abundantly and at 'no cost'. It thus becomes a coveted discursive currency that is therefore also likely to be hijacked by state, sectoral or private interests seeking to legitimise their agendas" (Molle, 2008).

Recently the WEF nexus discourse has emerged, globally, and in the Mekong Region. Whilst already on the research agenda of some, 2011 has seen a WEF emphasis in Davos (Waughray, 2011), Bonn (Hoff, 2011)⁴ and Phnom Penh.⁵ The trend is continuing in 2012 with WEF being the core of a GMS 2020 conference in Bangkok⁶ facilitated by the Asian Development Bank (ADB), and a Mekong2Rio event in Phuket facilitated by the Mekong River Commission (MRC)⁷. The WEF framing has gained momentum at the expense of IWRM which has "tended to stay within the domains of the water, agriculture and environment professionals and not had much traction with energy sector professionals" (Bird, 2012). WEF is proving useful as more actors are identifying with the interdependence of water resource management, with food and energy production. Within this WEF discourse, many actors see a logical, sectoral entry point for themselves in compelling, new, multi-sector, interdisciplinary and transboundary deliberations.

Discourse shifts also flow through to funding shifts. For example, ADB's Water Financing Partnership Facility work plan for 2012 calls for "projects and activities that seek to address the water-food-energy nexus", which as the program document says will require "tightening the link of water to food and energy" that is "particularly crucial in responding to climate change"(ADB, 2012). Success and timing matter. It is unlikely the rhetorical (and financial) turn to WEF would have been so swift without the late 2009 failure of the United Nations Climate Change Conference in Copenhagen.

Discourse dominance is also reflected in the naming of institutions. The international language of the sustainable development discourse became embedded in the 1995 Mekong Agreement title and text, perhaps partly basking in the afterglow of the 1992 Earth Summit era during which it was negotiated. If the negotiations for the Mekong Agreement had been concluded in 2005, rather than 1995, it may have been titled an agreement on the integrated management of water and water-related resources – that is, defacto IWRM – rather than an agreement on the sustainable development of the Mekong River Basin.

3.3. Arenas

In our framework we conceptualise decisions as emerging from arenas that vary from very restricted to wide open. Arenas are saturated with politics and power, obviously; yet both are elusive concepts. Long ago, Miller (1962) suggested that: "Politics is a natural reflex of the divergences between members of a society...[where]...there is a variety of perpetual disagreements which arise from fundamental differences of condition, status, power, opinion, and aim". For the authors of some World Water

⁴ http://www.water-energy-food.org/en/bonn_2011_process.html.

⁵ http://mekong.waterandfood.org/portal/whats-on/82-mekong-citizens-engagedin-dialogue.

⁶ http://www.gms-eoc.org/events/international-conference-gms2020.

⁷ http://www.mrcmekong.org/news-and-events/events/mekong2rio/.

Council literature, politics includes "the whole area of power relations during the identification of a problem and possible solutions, the consultation and decision making processes that follow and further on into the public action phase".⁸ These definitions explicitly recognise political and decision-making domains beyond states and the government sector of society. With this we agree, hence our efforts below to illustrate the variety of actors in water governance. What is less convincing about the WWC definition of politics, is the casual invocation of power. Power is defined in many different ways, often loosely. Lukes' "faces of power" (1974) drew attention to the ability to set agendas, take decisions, or shape preferences. More nuanced, Hay (1997) speaks of "ability to shape the context and conduct of others" and Vermeulen (2005) as "ability to achieve a wanted end in a social context, with or without the consent of others".

Ideas, leadership, positions and resources can all be seen as power assets. The case for ideas is succinctly put by North: "History demonstrates that ideas, ideologies, myths, dogmas, and prejudices matter" (1993). Leaders also matter. Leaders that obtain credibility, can engender trust, inspire commitment and be very influential, for better or worse (Avolio and Yammarino, 2003; Byman and Pollack, 2001; Graham, 2006). Positions matter, for example, being high up in a hierarchy or holding a strategic position gives an actor particular leverage, opportunity or authority – such as royal leaders, political leaders, religious leaders, and those in coordinating nodes in networks. And finally, resources matter. For water-related power, the extent and quality of the physical water resource is obviously central. However, financial and human resources also serve to constrain or empower. Resource availability changes, for example, with "new water" in the dry season from dams, or more finance influenced by swings in global and regional economies and the emergence of new donors and patrons that changes the quantum of funds available.

Arenas are primarily defined by the actors that take part in their processes. Arenas can be socially constructed to focus on particular scales and levels. Scale is defined as the spatial, temporal, quantitative, or analytical dimensions used to measure, or rank, and study any phenomenon (Gibson et al., 2000). Examples of temporal scale are management and electoral cycles. Spatial scales include domains of administration, hydrology, economy and ecosystem. Levels are the units of analysis located at different positions on a scale. For example, the administration scale can have district, provincial, national and regional levels. Whereas, levels of interest to a hydrologist will more likely be watershed, aquifer, sub-basin, national river basin, and international river basin. Elsewhere, two of the authors have provided a fuller treatment of scales and levels, in relation to deliberative water governance (Dore and Lebel, 2010). Multi-level and multi-scale interactions test the strength, and expose the limitations of many arenas. For example, hydrological and ecological cross-level interactions make local, basin, national and transboundary levels interdependent, with policy repercussions. As a result, the cumulative impact of policies emerging from, say, provincial arenas in the Mekong delta may prove incompatible with modifications of the water regime brought about by upstream development or climate change (Hoanh et al., 2010b). Indeed, in Mekong transboundary water governance there are "scalar disconnects" (Suhardiman et al., 2012).

In the Mekong Region, as elsewhere, there is a plethora of actors jostling for space in decision-making arenas. They have very different powers, diverse approaches, and varying degrees of influence. Understanding them and the overall governance framework within which they operate is useful. The multi-faceted nature of particular organisations defy simple designations, nevertheless, an attempt has been made here to identify and group water governance actors to assist sense-making (Fig. 3). We have categorised actors as: local, state, United Nations, non-government organisations (NGOs), media, business, financiers, policy research institutes, universities and networks.

Across the Mekong Region there are, of course: men, women, old, young, ethnic minorities and majorities, rich, poor, urban and rural. Not surprisingly, the people's movements, grassroots groups and local government across the region reflect this cultural diversity. Related to water governance, different movements and groups have emerged around issues such as contested infrastructure and access rights, for example, the Assembly of the Poor in north east Thailand (Missingham, 2004). There are also other local structures, including mass organisations, such as Farmer Water User Groups in Cambodia, and formal local government more closely linked to states.

State actors are of obvious importance in water governance, most notably national and sub-national governments' executives, judiciaries and parliaments, for example, the six national governments of Cambodia, China, Laos, Myanmar, Thailand, Vietnam; and others such as China's Yunnan provincial government. Public sector agencies, utilities, state holding companies and militaries are more specific parts of the state, relevant to water governance, and include China's Ministry of Water Resources, Electricity Generating Authority of Thailand, Lao Holding State Enterprises, and Myanmar's military Tatmadaw. Regional inter-government organisations such as MRC, Association of South-East Asian Nations, East Asia Community, their secretariats, summits and working groups, are also a part of the institutional tapestry. Non-Mekong governments also influence the waterscapes of the Mekong through their foreign policies and their participation in regional and bilateral relationships that involve geopolitics, positioning, donation, investment, lending and trading. For example: Japan, China, United States of America, South Korea, Singapore etc....who engage in or catalyse various bilateral and multilateral processes such as Japan's Mekong Initiative (that excludes China), and United States' Lower Mekong Initiative (that excludes China and Myanmar).

A caucus of non-Mekong (and Mekong) governments is the United Nations. In addition to peak councils, it has some influence via the UN family of organisations. For example, Food and Agriculture Organisation, Economic and Social Commission for Asia and Pacific and the United Nations Development Program all engage in Mekong water governance via a plethora of initiatives.

The umbrella term NGO does not express the complexity of function, origins, funding, motivation, priorities and agendas of actors lumped into this category. With that caveat, NGOs can be broadly divided into three types - local (principally operating within a particular country or loosely definable area), regional, and international. Actively engaged in Mekong water governance are national NGOs such as: Green Watershed (Yunnan), the 3S Rivers Protection Network (Cambodia); Water and Energy Working Group (Laos); Assembly for the Poor, and Living River Siam (Thailand); Vietnam Rivers Network – and their members, which may be other NGOs or grassroots peoples' movements. There are also regional NGOs such as Focus on the Global South (FOCUS) and Towards Ecological Recovery and Regional Alliance (TERRA) whose births were catalysed by a sense of disenfranchisement, threats to local livelihoods and the realisation of the importance and usefulness of the regional scale. Key actors in their formation process were prominent leaders of local NGOs. Associated actors include people's movements, local NGOs, activists and international funders. The two examples mentioned, FOCUS and TERRA, are very

⁸ http://www.worldwatercouncil.org/water_politics/. The World Water Council hosted a workshop in Marseilles, France on February 26–27, 2004, which brought together water practitioners, political scientists and politicians in charge of deciding and implementing water 'reforms', such as implementing the somewhat flexible agendas of Integrated Water Resources Management (IWRM) proponents. It aimed at identifying priority areas to be investigated and priority action. In particular, it asked what could be learned from political science.

J. Dore et al./Journal of Hydrology 466-467 (2012) 23-36

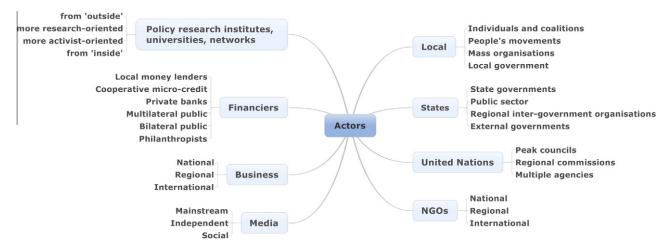


Fig. 3. Water governance actors in the Mekong Region.

different, but they each aim to provide effective facilitation, coordination and space for political representation of diverse civil society interests in national, regional and international forums. International NGOs also engage prominently in Mekong water governance. These include World Wildlife Fund, International Union for Conservation of Nature, the Oxfams, and International Rivers.

The media in the Mekong Region plays an important role (Garden and Nance, 2007). Whether controlled or independent, informed or uninformed, sensationalist, shallow or analytical, it cannot be ignored. Print media remains a part of the mix. That said, radio remains an important communication tool, whether managed by community, government or commercial providers. However, the discussion groups and information networks of the internet and social media are now increasingly prominent in the region and an important and strengthening counter to a shrinking pool of mainstream media owners.

Business is another central actor in the Mekong Region. These include local businesses; state actors in business, whether governments, military or politicians; consultants; transnational corporations; private financiers (the commercial banking sector); deal arrangers and insurers (often multilateral public financiers and their credit guarantee arms). In the Mekong these include local water-pumping entrepreneurs and nation-wide actors such as Vietnam's irrigation and drainage management companies. Ranging across boundaries are corporate titans like Italian–Thai construction group and China's quasi-state Lancang Hydro, the latter building and operating hydropower dams on the Upper Mekong. All influence water resources decision-making.

There are many financiers that play roles in Mekong water governance. Local money lenders and cooperative micro-credit providers are at one end of the spectrum. Private banks are also very active in larger water resources development, especially from China, Thailand and Vietnam. Multilateral public financiers active in the Mekong include the ADB and the World Bank family – International Bank for Reconstruction and Development, International Development Association, International Finance Corporation, and Multilateral Investment Guarantee Agency. Bilateral public financiers include aid organisations from Japan, United States, Sweden, Australia, Germany, etc. There are also bilateral giants such as Japan Bank for International Co-operation, China's Exim Bank, and their respective export credit guarantee agencies.

Philanthropists such as MacArthur Foundation, Blue Moon Fund, Ford Foundation, Rockefeller Foundation are active in grant-making; plus development assistance subsidiaries of non-Mekong political parties such as the German Green Party's Heinrich Boell Foundation; There are also distributor funds with Mekong windows, for example, the Critical Ecosystems Partnership Fund. All these groups have their interests reflected in their funding focus and criteria.

There are many Mekong policy research institutes, such as: Cambodia's Supreme National Economic Council and the Cambodia Development Resources Institute. In China, the Institute for International Economic Research takes an active interest in Mekong affairs as part of the powerful National Development and Reform Commission. The Institute of Geographic Sciences and Natural Resources Research, part of the Chinese Academy of Sciences, focuses on natural sciences, and has a team studying Mekong ecosystems. In Bangkok, the Thailand Development Research Institute is influential in economic policy, and the Thailand Environment Institute has done extensive work across the Mekong Region on environmental governance. Vietnam's Institute of Meteorology Hydrology and Environment, part of the Ministry of Natural Resources and Environment, leads research examining impacts of more irrigation and dams on the productivity of the Mekong Delta.

There are also a large number of institutes from outside the region that are active inside. These include International Water Management Institute, that hosts the CGIAR Challenge Program on Water and Food; Australia's Commonwealth Scientific and Industrial Research Organisation, Sweden's Stockholm Environment Institute, Stimson Centre from the United States, and the Danish Institute for International Studies.

Universities, research and/or advocacy networks also play important roles, although their influence on decision-making varies greatly between Mekong Region countries. There are universities located inside and outside the region which have a Mekong-focus. There are also networks of research organisations participating in joint research efforts aiming to better understand various Mekong issues, such as M-POWER. And there are various other organisations operating as research and advocacy networks, such as: Wetlands Alliance, Mekong Energy and Ecology Network, 3S Rivers Protection Network (Cambodia), Burma Rivers Network (Myanmar/Thailand), Living Rivers Siam (Thailand); plus networks of universities, policy research institutes, and NGOs. All contribute to water-related policymaking in the region.

Arenas are socially complex, and by definition are multi-actor. For example, members of the East Asia Community take part in the arena of the East Asia Summit but, clearly, many other actors are involved in either central roles, or on the margins. MRC creates and convenes arenas focused on the Mekong River Basin, many of which engage multiple actors, but other actors can and do move to create alternative arenas, even at the same scale and level, that operate with different rules and establish new hierarchies between participants. Even arenas can have typologies. Track 1 arenas are state-centric, official inter-government forums. Track 2 privileges states, but provide explicit space and roles for non-state actors. In track 3, civil society (NGOs, business etc.) leads, less impeded by and subordinate to states. In the Mekong there are also track 4 arenas and processes, imbued in localism, with low expectations of states, focused on supporting local communities (Dore, 2003).

3.4. Decisions

Arenas yield or shape decisions. Framing decisions refer to the strategies, frameworks, policies and legal regulation, which shape the environment in which other decisions will be taken. Supply decisions include major infrastructure investments that physically modify the hydrology of a system. Demand decisions include the creation of regulations and incentives to influence allocation through changes in water users' behaviour.

Framing decisions relevant to Mekong transboundary water governance include water, food and energy policies. A national illustration is Vietnam's Power Development Plan for 2011-2020 (Dao and Hawkins, 2011) with its targets for hydropower, thermal, gas, renewable and nuclear energy production. Another, amongst many, is Cambodia's Paddy Production and Rice Export Policy, with expansion targets by 2015, requiring more irrigation and agricultural intensification (Sok, 2010). A basin-wide example is provided by the IWRM-based Basin Development Strategy (MRC, 2011b) that articulates transboundary, water resources development risks requiring impact assessment and mitigation. A regional example of influence has been the strategic framework for the GMS economic cooperation programme 2002-2012 (ADB, 2002), recently renewed for 2012-2022 (ADB, 2011). Related framing decisions include the adoption of other GMS strategies that incentivise the context for power trading, new highways, bridges and "economic corridors" (ADB, 2010a,b,c), all of which have implications for water governance.

Supply decisions may be concerned, for example, with: storage, hydropower and irrigation projects; intra- and inter-basin diversions; and urban water delivery. For example, a dominant current issue in the Mekong is the rapid increase in new hydropower projects and proposals. A recent count found 82 existing and 179 potential hydropower projects in the wider region (King et al., 2007), many on Mekong River tributaries, where construction is now accelerating. There are over 17–19 projects either built or under serious consideration on the mainstream in China (Magee, 2012), with the feasibility of yet another cascade under consideration for the uppermost reach. A further twelve Lower Mekong mainstream projects (ICEM, 2010) have now emerged on the agenda of developers from China, Malaysia, Vietnam and Thailand who are currently negotiating with the Governments of Cambodia, Laos, Thailand and Vietnam.

Demand decisions also abound. They can relate to abstraction licenses, volumetric allocation rules, water user fees, metering and monitoring, and quests for increased efficiency of use. These decisions might be taken by, for example, water supply utilities and various rural and urban user groups.

3.5. Impacts

When introducing the framework, reference was made to sought after impacts of fairness and sustainability in water resources-related allocation. These need to be put into operation. One way to do this is to explore the rewards, risks, rights and responsibilities (4Rs) associated with water-related decision making. Our aspirations are for: rewards to be fairly shared, risks (and costs) minimised and fairly apportioned; rights to be agreed and respected; and actor responsibilities to be clarified and discharged.

Using the 4Rs can be useful to illustrate some recent Mekong transboundary water governance deficiencies. For example, dams proposed for the Salween River in Myanmar's Karen State, and others proposed in Kachin State, and further upstream in China have not been subject to a public analysis of the *rewards*, or justifications, for the projects. Impact assessments when done, are not in the public domain. Rights of affected people to be involved in life-changing decisions have been habitually ignored. Risks remain relatively unexplored and unaddressed.

In the Vietnam stretch of the Se San River – a major Mekong tributary – the *risks* to downstream were externalised by the developers and subsequently by the operators of the Yali Falls dam. The official Environmental Impact Assessment (EIA), undertaken in the 1990s, adopted a narrow definition of the project impact area, extending only 6 km downstream, totally ignoring the possibility of transboundary impacts to neighbouring Cambodians who were "never informed, consulted or officially given a copy of the EIA" (Wyatt and Baird, 2007).

In general, in the case of dams across the Mekong Region, involuntary risk bearers, especially project affected people, are claiming *rights* of access to information, participation and justice about decisions which affect their lives. These rights are enshrined, within a single-state paradigm, in Principle 10 of the Rio Declaration (UNCED, 1992), since embodied at the regional scale in Europe's Aarhus Convention (UNECE, 1998), and of potential significance to the Mekong Region in an international watercourses convention (UN, 1997). As yet they are not inculcated into Mekong transboundary practice.

When considering options for a Thailand water grid to further irrigate its northeast provinces (Molle et al., 2009a), the Government of Thailand continues to ignore the spirit of its *responsibilities* by only minimally sharing its plans with the MRC. Under the terms of the key agreement and the subsequently negotiated procedures, all substantial water resources development projects in the Mekong River Basin are to be reported to the MRC secretariat so that all parties to the 1995 Mekong Agreement can understand and assess possible impacts of proposals. In practice, ambiguity about "significance" results in notification being minimal and deliberation about the grid with neighbours non-existent.

Despite this recent background of shallow transboundary cooperation about water resources development, constructive engagement between Mekong countries has increased substantially in the past 20 years. From 1999 to 2008 the five countries and two provinces that comprise the GMS had economic growth double that of the world economy, with international trade growth 25% higher than world trade, intra-GMS trade more important in all GMS countries and poverty reduced significantly (CIE, 2010). The complexity and sensitivity about transboundary waters has made it a difficult agenda item. However, new decision-support tools are being used in transboundary water governance, providing prospects for more informed and informing exchanges between Mekong countries.

4. Use of decision-support tools in Mekong transboundary water governance

In our framework we assign tools as being predominantly deliberative, technical, or advocatory in their orientation and use. Deliberation tools should assist the exploration of options, examination of technical outputs and contestation of discourses. Technical tools should bring scientific knowledge into decision-making processes. Advocacy tools underpin campaigns supporting, opposing or otherwise seeking to influence decisions. J. Dore et al. / Journal of Hydrology 466-467 (2012) 23-36

4.1. Deliberation

Tools that should be explicitly rooted in deliberation include multi-stakeholder platforms (MSPs), environmental flows (Eflows) and scenario-building. An example Mekong MSP began with a high-level roundtable entitled 'Using Water, Caring for Environment: Challenges for the Mekong Region' convened at the 2004 World Conservation Congress in Bangkok. This initial event in a multi-step MSP included ministers from five Mekong countries (all but Myanmar) as well as non-governmental actors. Sensitive issues were tabled for discussion - inter-basin water diversions into Thailand, Salween hydropower development in China's Yunnan province, and threats to the Tonle Sap ecosystem that would be disastrous for Cambodia. At the time this was a significant achievement, specifically, bringing China and Lower Mekong governments, and non-state actors, within the same arena. The event served to register the Salween hydropower, Thailand grid and Tonle Sap threats as transboundary issues of high importance, that deserved to be the subject of multi-country, multi-stakeholder deliberation.9

Subsequent steps included the 'Mekong Region Waters Dialogue: Exploring Water Futures Together', covering governance issues in several sectors and at several levels. In short this MSP was intended to be "a regional multi-stakeholder platform organised to provide an opportunity for high-quality, multi-faceted, debate and learning that will contribute to improving water governance in the Mekong Region" (IUCN et al., 2007). It gave a boost to proponents of transparency and deliberation.

MSPs can help routinise deliberation, enabling complex water issues to be more rigorously examined in better informed negotiations (Dore et al., 2010b). This is not to say that MSPs are a panacea. For example, we have observed that MSPs can be captured by players who are able to frame and control the debate and keep it confined within the limits of their choice. We have also seen MSPs permitted to engage many stakeholders in good faith, but be ignored in subsequent decision-making (Hall and Manorom, 2010). Despite these caveats, we have found that networks and organisations with flexible and diverse links with governments, firms and civil society have been useful to convene and facilitate dialogues on sensitive but important topics for development in the Mekong Region (Dore, 2007; Dore and Lebel, 2010; Manorom, 2011). The outcomes of these are not primarily in terms of direct decisions on projects, policies or institutional reform; but rather, in making sure alternatives are considered and assessed, a diversity of views and arguments recognised and mutual understanding improved.

E-flows are another tool that can be employed in interactive ways conducive to social learning (Dyson et al., 2003; Lazarus et al., 2012). Discussing and setting E-flows regimes require the integration of a range of disciplines from across the social, political and natural sciences. Above all, it requires processes of cooperative negotiation between various stakeholders that help bridge their different and often competing interests over water. Hence, E-flows are well-suited to MSP approaches. There have been few applications of E-flows in the Mekong Region, but some with which the authors are very familiar include rapid E-flows assessments of the Huong River in Vietnam (IUCN, 2005), Songkhram River in Thailand (Blake et al., 2010), and Integrated Basin Flow Management (IBFM) project of Lower Mekong River (MRC, 2006), each of which have been recently reviewed (Lazarus et al., 2012). E-flows processes have substantial potential in the Mekong Region to assist river basin managers as they grapple with competing demands, including the need for environmental sustainability (Blake et al., 2010; Lazarus et al., 2012). At present, however, the tool has only been used in academic or technical settings and has not yet been internalised into MSPs or influential decision-making arenas.

Deploying scenarios can enhance MSPs, E-flows and other deliberative forums. Scenarios should improve understanding of uncertainties not hide them. The goal of formal scenario analysis is to generate contrasting stories of what the future of a geographical area, or a policy sector, or an organisation might look like, depending on plausible combinations of known, but uncertain social and environmental forces. The analyst and others participating in the process should gain insight in the contrast between alternative stories. Good scenarios are rigorous, self-reflexive narratives: they attempt to be internally coherent, to incorporate uncertainties, and to be explicit about assumptions and causality (Lebel, 2006).

Mekong organisations have been experimenting with scenariobuilding. A project review was critical of the high-profile use of scenarios by the MRC in its Basin Development Planning Phase 2, being surprised by the absence of supporting storylines for modeling work that made it hard to gauge the possible sequencing of events, to explore assumptions and alternatives, and consider the responses of people to be affected by the infrastructure expansion at the core of the basin planning considerations (Lebel, 2010). The reviewer was concerned that the scenarios "are not plausible stories of the future, but little more than alternative model runs" using too few variables; and moreover, that "another limiting feature is the lack of attention given to uncertainties, exactly the type of analysis for which scenario planning is most suited". The MRC scenarios (MRC, 2011a) initially had a narrow concentration on more, or much more, hydropower and irrigation expansion. Over time the surrounding narrative became richer (MRC, 2011b), aided by the deliberative force of independent panels of experts (International POE, 2010; Regional POE, 2010); M-POWER fielded the regional panel of experts in response to the findings of PN67.

Our scenarios research (Foran, 2010b; Lebel, 2010) found that more deliberative use of scenarios in the Mekong Region could improve the accountability of major private and state actors involved in water resources development and management in several ways. First, by encouraging actors to be more explicit about the key assumptions they make regarding causal connections, benefits and risks. Opportunities need to be created for this to happen, either in discussions around a table, or through periods where reports and findings are open for scrutiny and comment; or, by forcing actors to explore timeframes beyond typical planning horizons, and considering alternatives beyond familiar comfort zones and, in so doing, help generate creative water-related use and investment solutions.

4.2. Technical

Transboundary water governance in the Mekong evidences the use of various technical tools that claim to influence decision making. Here we consider the entwined practices of cost–benefit analysis, impact assessment and several types of modeling (some of which underpin scenario-building processes).

Given that development projects inevitably have numerous and varied impacts, formal approval processes require cost-benefit analyses, monetisation of values, and compensation recommendations. Cost-benefit analysis produces estimates of Net Present Value and Internal Rate of Return comparisons; but, is prone to externalising factors that can't be easily monetised. At the strategic level for a sector such as hydropower, a tool such as least-cost expansion planning is also vital (Maunsell and Lahmeyer International, 2004). Cost-benefit analysis and least-cost planning will always be important, but are now complemented by EIA, social impact assessment, strategic environmental assessment (SEA), cumulative impact assessment (CIA), vulnerability assessment, etc.

⁹ Impromptu filming of the entire event by a bold Chinese NGO, and dialogue transcription by Earth Negotiations Bulletin (http://www.iisd.ca/enbvol/enb-back-ground.htm) further assisted the semi-official registration of the topics.

Environmental impact assessments are commonly undertaken in the Mekong Region, usually with a project focus and are often seen as the final step in a pre-ordained approvals process. In the project we were more interested in the recent arrival of other impact assessment tools, such as CIA and SEA. There have only been a few experiences with these tools in the Mekong Region. A CIA of the Nam Theun 2 hydropower project in Laos (ADB, 2004), was technically strong, but remarkably disconnected from the Nam Theun 2 approvals process. The tool was deployed, but its findings were hardly deliberated, as the decision to proceed was already locked in. Another major effort was undertaken to prepare a CIA of the Nam Ngum 3 hydropower project (ADB, 2008). This is just one of a cascade of up to 14 dams being planned for Nam Ngum river basin, also in Laos. As with Nam Theun 2, the deployment of the tool was driven by the requirements of the Asian Development Bank. Again, there has been little discussion of the CIA's findings in Laos, due to the restrained opportunities for deliberation. But, the requirements of public financiers such as ADB and the International Finance Corporation, coupled with the creation of a new Nam Ngum River Basin Committee, may yet see this CIA assist decision-making about cascade management by providing an object around which to catalyse discussions.

SEAs are gaining in popularity. In Vietnam, hydropower expansion has been assessed within the context of provincial hydropower plans (ICEM, 2008), and the national power development plan (Soussan et al., 2009). There are now efforts by the Asian Development Bank to progress the production of a rolling GMS energy strategy, after first applying an SEA filter,¹⁰ however, at time of writing the extent of the buy-in by the lead energy sector representatives in each country is questionable, with Lao government representatives being the most vocal in their scepticism.

A review of the application of CIA and SEA in the Mekong Region (Keskinen and Kummu, 2010; Keskinen et al., 2012) found that they are often used in a limited way, for example, with the strategic element missing, and as a political patch, in an attempt to depoliticise and technically justify development decisions. To be most useful and aligned with their strategic purpose possibilities, these tool need to be employed early, providing stakeholders with opportunities and context to participate in a meaningful way in decision-making arenas.

The way problems are framed – as investigation of the transformation of the Mekong waterscape by large hydro-infrastructure as opposed, for example, to a detailed investigation of Mekong livelihoods transformation - ensures assessments still rely heavily on hydrological modelling. These only provide macro-level estimates of expected flows at particular nodes in a river basin, however, and cannot properly represent local complexity. They do not capture daily water level fluctuations or water quality changes and their relationships with aquatic ecosystems, most notably fisheries, and livelihoods. Hydrological analysis has focused on average monthly flow regime changes instead of the extreme years and events when hydropower impacts can drive natural systems over critical thresholds. Under the guise of sophistication, simple models have been used to legitimate interests, for example, by supporting a powerful narrative that a basin is ripe for further exploitation of its water resources: "the Mekong river system has significant tolerance for development, including of hydropower and water diversion for irrigation" (WB and ADB, 2006). It has been necessary to point out that "a river is more than a hydrograph, and the hydrological impacts (if the models are accurate) are not a proxy for drawing conclusions about ecological and social impacts" (IUCN et al., 2007).

Johnston and Kummu (2012) have reviewed various hydrological modelling activities in the Mekong Basin. Not many have given much support for a holistic and integrated approach in development impact assessment. Emerging plans for Mekong mainstream dam construction have highlighted the increasing need for information about ecosystem and social impacts and, consequently, are stimulating significant advances in modelling approaches to meet the "what if?" demands of inquiring observers.

Models can do more. A quest for greater coupling of hydrological and ecological systems (Richey et al., 2000) has gained momentum in the last decade. For example, models are being developed for Cambodia's Tonle Sap that predict how altered hydrological and sediment/nutrient regimes will affect riparian vegetation and the fisheries productivity of the lake (Kummu et al., 2006; Lamberts and Koponen, 2008; Sarkkula and Koponen, 2010). Climate and land use change are also being linked to water flows (Costa-Cabral et al., 2008; Hoanh et al., 2010a). There has also been progress in modelling sediment. An example of this work projects that more than 50% of total basin sediment load will be trapped annually by the Mekong mainstream hydropower cascade in Yunnan (Kummu et al., 2010). Existing and proposed dams in the Lower Mekong Basin would trap even more of the fertile sediments, possibly even 90% (Sarkkula and Koponen, 2010), with substantial likely negative impacts on Cambodia, including the entire Tonle Sap system, and parts of the Mekong Delta in Vietnam. A more robust and comprehensive sediment accounting for the entire system is yet to be done. More holistic models - including the MRC's Decision Support Framework, a watershed IWRM model, and a 3D flood, sediment and water quality model - have been integrated into an MRC Modelling Toolbox. Following this progress, a key next step is enhanced visualisation of the interactions in complex systems. In 2011, the MRC was able to launch a new portal system that brings a huge repository of decision support data into life. The Virtual Mekong Basin will likely catalyse rapid further development of integrated modelling applications.

In summary, we have found that the application of technical tools is seldom a neutral and scientific exercise insulated from politics and power relationships. For example, preparation of a strategic sector plan or an impact assessment can quickly transform into a political process where facts mingle with values and interests.

4.3. Advocacy

Campaigns can be considered a vehicle for the application of suites of advocacy tools, such as: lobbying, protesting, advertising, debating etc. Oppositional advocacy in (parts of) the Mekong Region is well-developed. Local, national or transnational networks of activists that are organised to resist dominant institutions, interests and discourses can play a large role in decision-making or decision-influencing processes (Dryzek, 2001). Wide-ranging analysis of advocacy has been provided, for example: exploring indigenous people's lobbying in the international arenas of the United Nations (Tauli-Corpuz, 1998); questioning whether global civil society is an opportunity or obstacle for democracy (Scholte, 2007); and documenting activist engagement in processes such as the World Commission on Dams (Briscoe, 2010; McCully, 2001; WCD, 2000). A subject of regular analysis is the controversial issue of the extent to which the "free, prior and informed consent" of project-affected people should guide project decision-making (Carino and Colchester, 2010). All these topics, as well as legitimacy and civil society strategies, are all highly relevant in the Mekong water context, as the following examples illustrate.

A major conflict in Thailand since the 1990s has been the battle over the construction, operation and consequences of the Pak Mun Dam, located in the northeast of the country, on the Mun River, near its tributary with the Mekong (Foran, 2006, 2010a; Foran

¹⁰ See ADB Regional Technical Assistance project #7764 'Ensuring sustainability of GMS Regional Power Development'.

and Manorom, 2009; Missingham, 2004; Amornsakchai et al., 2000). Project affected people at Pak Mun have learnt to mobilise, often in diverse coalitions, and capture public arenas of deliberation by undertaking, compiling and publishing their own data and research.

Under the slogan of "Our River Feeds Millions", the Save the Mekong campaign has been catalysed and galvanised by the resurgent interest in planned dams for the Lower Mekong mainstream. Campaign supporters argue that these dams pose extraordinary threats to local livelihoods, biodiversity and natural heritage as the flip-side to energy and income benefits. The campaign has successfully raised the profile of dam decision-making by Mekong governments through the strategic use of photography, media, letter-writing, and direct representation. For example, more than 23,000 signatures were attached to a petition warning of the negative consequences of Lower Mekong mainstream dams, sent to the Prime Ministers of Cambodia, Laos, Thailand and Vietnam on 19 October 2009. Word of the campaign also reached distant parliaments in places such as the United States (The Straits Times, 2011) and Australia.

The Save the Mekong campaign is an example of using advocacy tools to influence decision-making processes and arenas. In a short time, it has succeeded in heightening the understanding of risks to ecosystems and livelihoods, and is pressing governments – both in and outside the Mekong Region – to take their responsibilities for project affected people, and nature, seriously. A major achievement of the campaign has been to succeed, despite available science being inconclusive, in reframing the perceived dams threats from environmental protection to food security and the potential for "irreversible economic catastrophe" (Brown, 2011). This has contributed to greatly elevating the issues in the minds of regional and international policymakers.

Resistance can be fertile (Dryzek, 2001), but can also be dangerous. If perceiving decisions or plans over water as unfair, people can choose to resist through protest, or refuse to take the actions demanded of them (Scott, 1985). This can be a high-risk action in parts of the Mekong Region. Those with more power can choose suppression, to enforce or overturn decisions. Water resources development disputes can fuel or be a source of conflict, especially where there are wider tensions in society. Pak Mun had violent times. But, Myanmar is currently the most extreme case in the region, where resistance has spilled over into violence. There is military-led and resistance-led violence associated with several recently completed hydropower projects and others under construction (Burma Rivers Network, 2011; Environment News Service, 2011). For example, fighting erupted around the Chinese Tarpein Dam in northeast Myanmar in June 2011 between Kachin militia and government forces, with reports of at least 10,000 people displaced (Strangio, 2011). The Myitsone Dam, also in Kachin State, is another project being resisted, fueling substantial anti-Chinese sentiments, as this and other projects are seen as destroying local natural and cultural treasures whilst exporting energy and benefits to China (Din, 2011).

Resistance to these decisions will continue, particularly in the absence of any deliberation or negotiation opportunity. A decision in October 2011 by the Government of Myanmar to suspend the Myitsone project is being hailed as a triumph by local civil society campaigners, but the truth is more complex as the shifting geopolitical interests of the Government of Myanmar have also come into play. Of course lobbying can also be in the opposite direction. Many in China want the Myitsone dam to be re-started as for some it is a "bellwether on other major Chinese investments", such as oil and gas pipelines (Kemp, 2012). Inevitably, it will be a protracted struggle, with accusations and counter accusations being made. Already foreigners and local greens are being targeted, with claims that "with the support of foreign funding, extremist environmentalists were creating rumours and tricking people" (Boting, 2012). Decisions as large as Myitsone are complex. We simply argue that using our explanatory framework might usefully guide those trying to research and understand the detail of the shifting situation.

5. Discussion

5.1. Mekong water governance

The arenas in which tools are introduced in the Mekong Region are complex. Interests are diverse and capabilities of different actors to control agendas and shape decision-making processes are unevenly distributed. Many arenas are closed to key stakeholders, and those which are open may be irrelevant to decision-making. In general, decision-making unfolds in arenas characterised by debates and overlapping or antagonistic view points. Contested discourses (and associated options, ideas, values, narratives etc.), can be observed in confrontations at meetings, public hearings, and multi-stakeholder platforms, as well as in written texts and the media.

Rhetoric of participation is not always matched in practice. For example, Floch and Blake (2011), also part of the project, undertook transboundary water diversion research by examining a supply decision about whether or not to transfer "untapped" water from the "water-rich" Nam Ngum Basin in Laos, across the Mekong to the "water-stressed" northeast of Thailand. The researchers joined in a public hearing with a carefully selected audience of government officials, Thai scholars, and representatives from mainstream civil society organisations. The consultant team intended to test their working hypothesis on the practicality of the project, but discussions were disrupted by a group of protesters that took centre stage and demanded their voices be heard, that people "be informed about the project", and "the water transfer between Thailand and Laos be cancelled". In tracing the process, Floch and Blake found a wide gap between the rhetoric adopted both in national and international mainstream publications advocating more participatory practices and the real politik of water resources planning that seek to keep a lid on dissenting views.

Many decisions are taken on political grounds, by administrative fiat, or according to a particular, often narrow, web of interests. Hall and Manorom (2010) document numerous cases across the Mekong Region, such as Yali Falls, Pak Mun and Theun Hinboun dams, where scientific research was commissioned, ostensibly for decision-making purposes, only to be ignored by politicians making critical water infrastructure construction or operating decisions.

We observe that core decision-making processes about water in the Mekong Region are still often opaque to all but privileged insiders. Meaningful public deliberation is still the exception rather than the rule. Nevertheless, more recently, we observe a deliberative turn and hopeful signs of water governance change, for example: vibrant elements in the Chinese media interested in understanding and reporting the water-related perspectives of neighbouring countries (Xing et al., 2010); an increasingly inquisitive National Assembly in Laos; bold inputs to public policymaking debates by Vietnamese scientists; increased space for civil society analysts in Cambodia to engage in state irrigation policy debates; peoples' environmental impact assessment in Thailand (Manorom, 2011) building on villager-led *Tai Baan* participatory action research (Srettachau, 2007); and, improvements in MRC forums resulting in more participatory analyses of project merits.

Lower Mekong mainstream dams are now being examined more openly. This is a result of many factors, including the MRC SEA process (ICEM, 2010), and the subsequent, formal, prior consultation process facilitated by the MRC, that has yielded various technical contributions (MRC, 2011c), and opened an inter-government window for more informed discussions between Lower Mekong countries. Each of these processes has been improved by advocacy from civil society, science, academia and governments.

Across the Mekong Region we see River Basin Organisations (RBOs) being created ostensibly to address all types of land and water resources challenges. Thailand has created RBOs across the country. Vietnam has also experimented with the establishment of RBOs in several places, including the Red River (Molle and Hoanh, 2009), the Sre Pok, and has recently committed to another for (at least) the Vietnam portion of the Se San. In 2010, the Lao government also enacted a decree to establish RBOs and is proceeding to do just that. In 2011, Cambodia debated a river basin management subdecree that will also establish RBOs across the country. This wave of RBOs are obvious candidates to experiment with the application of deliberation and technical tools as a way of enriching the multi-actor engagement they are supposed to encourage and facilitate.

More generally, we note that among early efforts, deliberative engagements vary hugely in inclusiveness, quality of content, structure, and how they are facilitated. As a result, the quality and influence of those conversations and relationships varies. Dialogues, good and bad, broad and narrow, may all influence negotiations and decisions that are crucial to improving water governance – but, clearly, more needs to be done to improve their implementation if they are to contribute to their full potential.

In the Mekong Region more informed and informing, multistakeholder deliberations, that are sensitive to different scale and level interests, appear crucial to off-setting power imbalances, and increasing transparency and accountability within the politics of water. A shift to a more constructive and deliberative water politics would be assisted by the fostering of a community of water governance practitioners, analysts and policymakers that understand the influence of context and drivers, and the potential and limitations of decision-support and -exploration tools.

5.2. Benefits and observations from using the framework

The framework we have developed for analysing transboundary water governance assists our understanding of engagement and decision-making involving socially complex water. Each heading and subheading in the framework acts as a prompt to the analyst to take stock of the situation being assessed and reflect on key aspects. The framework acknowledges the centrality of power and politics but is not subsumed by these topics. Context, drivers, arenas, tools, decisions and impacts all matter. The benefit of using the framework is to keep all these elements within the realm of the analysis.

Though it may be power that enables, the framework reminds, and our experiences shows, that it is drivers that shape actors. Interests are often reflected in the preferred discourses and institutions that actors privilege. Drivers also influence tool selection. For example, adherents to discourses that trumpet transparency and accountability will tend to agree to the deployment of deliberation tools, and use of technical tools in more deliberative ways. On the contrary, adherents to scientific rationalism may have a natural tendency to deploy technical tools, such as modelling, in efforts to find techno-answers rather than as stimulants for more deliberative modes of scenario-building and debate.

Tools can become boundary objects of debate within arenas. We have found that, used in a deliberative setting, technical tool potential can be unlocked when their process or product becomes a boundary object, serving as an interface among different communities of practice (Guston, 2001; Star and Griesemer, 1989). Effective boundary objects help bring together different types of expertise – scientific, managerial and political. Boundary objects, as devices supporting research-action arenas (van Kerkhoff and Lebel, 2006) and assessments (Cash and Moser, 2000), can help bring different forms of knowledge together and lead to co-production of new knowledge. The ambiguity and flexibility of boundary objects allows different parties to continue conversation and negotiation without having or requiring identical understandings or objectives. For example, in our Mekong illustration, the SEA of Lower Mekong mainstream dams (ICEM, 2010) became a boundary object. In committing to a participatory process, the tool-wielders found themselves in the middle of a multi-sided debate where both facts and values were in dispute. The SEA process provided a space for debate that had not previously been available. The SEA product was also a critically important knowledge input for the subsequent, MRC secretariat's review of the Xayaburi dam proposal (MRC, 2011c).

Tools can contain or further empower actors. For example, use of a deliberation or advocacy tool can be a counter to obvious power imbalances. In situations where power assets are unequally shared, a campaign that successfully targets particular issues or opponents, can level the playing field. The Save the Mekong campaign provides another illustration. The campaign has competently reframed the debate about Lower Mekong mainstream dams via its multipronged efforts that include: use of the local and international media, regional and international politicians; and behind the scenes support for legal challenges that aim to ensure claims and counter claims are tested in the deliberative arena of the Thai court system.

In summary, the framework provides multiple points of entry to an analysis and can be used to map complex water governance situations. Used in this way it can assist those seeking both an overview and an understanding of specific aspects that are inter-related.

6. Conclusions

In the Mekong we have found evidence that water resources-related allocation choices can be improved by bringing into arenas different perspectives and fostering deliberation to inform and shape negotiations and decisions. Specifically, we suggest that water governance practice will be improved when:

- ... multi-stakeholder platforms exploring alternative futures, are deployed to build trust and cooperation needed for actors to work together to help resolve water allocation issues;
- ... environmental flows assessments are used to improve effective knowledge for water allocation, by clarifying risks and benefits of different flow regimes on different water users and ecosystems;
- ... scenario building, with the participation of marginalised peoples' representatives, is used to improve transparency in water resources-related allocation by clarifying and probing actors' assumptions and motivations;
- ... strategic environmental assessment is used to explore the broad impacts of existing, proposed and alternative development policies and plans early on;
- ... holistic modeling is used to quantitatively assess impacts of scenarios and development policies and to generate base information for EIAs, SEAs and CIAs;
- ... oppositional advocacy pressure is maintained to ensure that political space is available for civil society and concerned actors to safely contest and contribute to policies, proposals and decisions;
- ... prior to making major infrastructure investments, that scenario building, impact assessments, multi-stakeholder dialogue and transparent negotiations become a part of normal practice;

I. Dore et al. / Journal of Hydrology 466-467 (2012) 23-36

- ... negotiation processes retain both elements of competition and collaboration, realising they will never attain perfect consensus, but having an emphasis on coming to fair and workable agreements.

Within and beyond the Mekong, a multitude of diverse actors wrestle with drivers and tools within arenas that produce or influence water-related decisions. Appreciation of actor and arena dynamics is required. The framework for analysing transboundary water governance complexes assists our understanding of decision-making that is saturated with politics and the exercise of power. In addition to highlighting connections, the heuristic framework also includes desirable attributes of decision impacts. Policymakers and practitioners should pay full attention to the fairness and sustainability of allocation and associated investment choices. Ideally decisions will be the result of an informed and negotiated process that has assessed options and impacts, respected rights, accounted for risks, acknowledged responsibilities and sought to fairly distribute rewards - the essence of deliberative water governance.

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36

I. Dore et al. / Journal of Hydrology 466-467 (2012) 23-36

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12. Conclusions

Water governance in the Mekong Region can be made fairer and more effective by expanding the opportunities for new, and improving the quality of existing, deliberation arenas. A deliberation-deficit in the Mekong Region has led to poor decisions and unfair distribution of benefits, burdens and risks. But, recently, there also promising examples of quality deliberation and political shifts that are enhancing water governance.

The five journal articles and five book chapters presented in this thesis have explored the principal research question: *How can water governance be fairer and more effective in Mekong Region and beyond?* In this final section and chapter (Part D, Chapter 12), I present a synopsis of the research findings and lessons. Next I articulate my vision for Deliberative Water Governance. Finally, I reflect on the research process and point to worthy areas for future endeavour.

I refer the reader to the key diagram in Chapter 1 (Figure 3) that illustrates the logic of the thesis and my journey, firstly assessing water governance in the Mekong Region, before focusing on the existing use and potential of deliberative processes.

In Part B (Chapters 2-5), contested waterscapes were explored in chapters focused on the complex tapestry of Mekong regionalisms and governance, hydropower expansion, and a marginalised Mekong River Commission. Chapter 2 was an initial exploration to ascertain the general state of water-related governance in the Mekong Region. Due to its magnitude, opacity and potential for transboundary impact, the need became obvious to better understand Yunnan hydropower status and governance, hence the research and production of Chapter 3. It was clear by 2008 that Lower Mekong mainstream dams were back on the agenda for Lower Mekong governments, and that it was a major foreign policy issue for all Mekong countries and their external development partners, hence the research for Chapter 4. The role of the Mekong River Commission as a transboundary water governance actor warranted closer examination that yielded Chapter 5. In combination, the Part B analysis confirmed that significant scope exists for improving regional water governance, and that deliberation has been in short supply. Part C comprised six chapters (Chapters 6-11). Deliberation deficits observed and reported in Part B provoked exploration of deliberative processes in Part C as a potential pathway to improving water governance. I examined firstly international practice, including still-topical issues from the World Commission on Dams, and the potential of multi-stakeholder platforms (MSPs). Fair and effective ways to 'gain public acceptance' are central to each of Chapters 6-8. By then I had also examined Mekong practice and the efficacy of MSPs as a governance tool, noting their unfulfilled potential in Chapter 9. Having examined the context and made a case for MSPs in the previous chapters, Chapter 10 focused on the politics of deliberation, scales and levels in a series of Mekong Region examples. My research to this point had forced me to think more about the interplay within transboundary water governance complexes, which led to the articulation of an explanatory framework, and illustration in the Mekong Region.

This chapter distills and analyses a range of governance challenges, and provides evidence that deliberative processes – inserted into political arenas – have made water governance fairer and more effective, by reducing power imbalances among stakeholders and assisting negotiations to be more transparent and informed.

12.1 Synopsis of Part B Contested Waterscapes

Ch 2 sub-question: What is the general state of water-related governance in the Mekong Region?

In the research for this chapter I explored recent changes in the Mekong Region and concluded that they could be better understood using new conceptual frameworks for governance and regionalism – such as nodal governance, and the 'new regionalisms approach' – which recognise that the social geography has altered, and that state-centric modes of analysis no longer suffice, if indeed they ever did. I found that the regional governance landscape is being substantially reshaped by the efforts of many different actors, including an emerging critical civil society. Four tracks of regional governance fora were examined – Track 1 inter-government; Track 2 interactive state-civil society; Track 3 civil society leading, less impeded by and less subordinate to states; Track 4 civil society supporting local communities, with low expectations of states – each with a different, dominant logic (Chapter 2, Table 1).

Despite this diversity, it is acknowledged that states in the Mekong Region still dominate governance, but some states more than others. Regional governance in the Mekong – to the extent that water-related governance is a good indicator – is inadequate to equitably or effectively govern far-reaching regional change.

My inquiry pathways for assessing governance were a further set of questions that used power, sustainability, holism, participation, transparency, equity and accountability for enquiry. I found a dominance of national interest and the much vaunted Mekong 'spirit of cooperation' between countries to be optimistically over-stated. The research for this chapter also revealed: a great reticence by states to do anything that could be construed as ceding sovereignty; an absence of holistic approaches to examine options and impacts; restricted access to information within and between states; and restricted space for civil society engagement. Regarding the latter, I concluded:

Within an often oppressive context, finding mechanisms in each country to allow civil society to genuinely participate in decision making remains a significant challenge. Whilst slow change is evident, states still prefer top-down approaches which are often formal and intimidating to all but the most self assured. Nevertheless, as a tribute to persistence, and aided by some aspects of globalisation, there has been an emergence of a critical civil society in the Mekong Region. It is playing an important role in challenging and contesting governments of the region to improve and more robustly scrutinise each others' performance and approaches (Dore, 2003:435).

The chapter makes several contributions to theory and practice. Firstly, in the characterisation of new regionalisms and governance tracks, as illustrated in the Mekong Region. Secondly, in the governance assessment questions. Thirdly, in the detailed analysis of Mekong Region governance processes, including: Mekong River water use negotiations, the Mekong River 'channel improvement' project, and an initial exploration of the Lancang (Upper Mekong) hydroelectric dams in China.

Ch 3 sub-question: What is driving hydropower expansion in Yunnan and what are associated governance issues arising?

In this chapter I explored the drivers of hydropower expansion in Yunnan, including energy sector reforms across China. Yunnan has over 600 rivers forming six major river basin systems: Dulong (Irrawaddy), Nu (Salween), Lancang (Mekong), Jinsha (Yangtze), Zhu (Pearl), Yuan and Lixian (both flow into the Red in Vietnam). The province has 24% of China's hydropower potential. The Nu, Lancang and Jinsha are each in China's top six rivers for hydropower potential. The province already provides about 10% of China's hydropower, but a large increase in generation is planned to feed into national and regional grids. This chapter provided an update on the status of hydroelectric dam building in Yunnan – looking at the Nu, Lancang and Jinsha rivers – and then situated this within the wider context of China's changing political economy. Key drivers for Yunnan hydropower expansion were found to include the ongoing push drive for economic growth, China's associated energy security concerns, the Western Region Development Strategy and a political environment in which energy entrepreneurs have strong incentives to increase the size of their businesses.

At the time of this research many important governance issues had arisen. There is a blurring of roles in public-private partnerships that makes it difficult to determine or separate public and private interest. There is increasing dissatisfaction with the non-transparency of decision making, approvals and compliance processes which makes accountability difficult. There are concerns about the interests and types of knowledge that are being privileged and the process limitations which hinder presentation of alternative viewpoints. Moreover, many social and ecological costs are externalised from 'return on investment' equations, and the competitive need for companies – in the new business operating environment – to retain market share and steadily expand generating capacity.

The research identified the need for China to revisit its energy policy, including the hydropower component. It also identified the need to overhaul energy development governance processes, such as: option formulation, debate, evaluation, negotiation and monitoring.

A contribution of this chapter is its exploration of the connections between economic globalisation and the creation of quasi-public entities with state rights but lacking state accountabilities. A further contribution is the detailed analysis of Yunnan hydropower expansion – to that point, opaque to China outsiders – on the Nu, Lancang and Jinsha rivers. This chapter was first published as a working paper in 2004 at a time when Yunnan hydropower plans and data were tightly held, and not available for public discussion, either within or beyond China.

Ch 4 sub-question: What is driving hydropower in Lower Mekong and what are associated transboundary governance challenges?

The cumulative effects of the Lower Mekong hydropower projects – if built, and together with existing Chinese dams – will transform the Mekong by altering natural flow patterns and disrupting fisheries and other ecosystem services, to the detriment of the millions of people who depend on the river for their livelihoods. Proposals for new dam construction are driven by several factors, including changing human demographics and development needs, energy and food security concerns, economic cooperation, and climate change. The chapter links these social, ecological, economic, and political forces to ongoing regional governance issues and discusses how to improve the quality of Mekong hydropower decision making in a complex, transboundary setting.

The scale of Mekong hydropower expansion makes it a critical driver of change in the Lower Mekong in its own right. The first mainstream dam in the Lower Mekong proposed by Laos, the Xayaburi Dam, was drawn on to highlight several more specific drivers of change in action. First, the governments of Lower Mekong countries are recognising increased opportunities to proceed with large-scale development because of their decreasing dependence on multilateral funding provided by international institutions, such as the World Bank and the Asian Development Bank. So far, most private hydropower investors have demonstrated limited commitment to environmental review, mitigation, or human livelihood safeguards, though this is slowly changing. Second, although there are considerable differences between individual countries, in general, all Lower Mekong countries have substantial room for improvement in filling knowledge gaps and in implementing legal regimes and other public policies. Compliance with national environmental regulations is often lax, and current transnational private-sector protocols are mostly advisory, non-binding, and experimental.

The research undertaken for this chapter found that impact assessments in the region are often confined to the focus country, with ecological and social risks typically downplayed. Moreover, public policy decisions are often taken that serve narrow economic interests without seeking substantive input from those segments of society that will be most affected. High-quality, integrated assessments and associated deliberative processes involving all stakeholders are still the exception rather than the norm.

267

A contribution of this chapter is the identification of inter-connected large-scale drivers of change and their linkage to specific drivers of hydropower and associated governance challenges. A further contribution is in quantifying these drivers in the Lower Mekong context, and providing a concise update on the Xayaburi Dam based on my participation in the international policy dialogue surrounding the project, and my interviews with key actors in government, banking, the hydropower industry, and oppositional civil society.

Ch 5 sub-question: What is the transboundary water governance practice and potential of the Mekong River Commission?

This chapter reflects on the practice and potential of the Mekong River Commission (MRC), an inter-governmental organisation, at a time when all Mekong governments need to make informed decisions about whether, or how, to proceed with major projects that will have dramatic, transformative, national and transboundary impacts. My departure point was reference to a series of major transboundary water governance controversies where the MRC has been marginalised.

The chapter traces some of the tensions manifest within the MRC. Article 1 of the Mekong Agreement is clear that the territorial domain of the MRC is the entire Mekong River Basin. And yet, tributary development has usually been omitted from MRC Council and Joint Committee discussions. Typically, MRC has been subdued about the risks associated with many development projects. Notably, the first mention of the Precautionary Principle was in 2010 following completion of a strategic environmental assessment examining the potential impacts of Lower Mekong mainstream dams (ICEM, 2010). Debates continue about the extent of the MRC constituency and its primary roles. Also traced is the MRC's ambiguous role in a proposed hydropower project at Don Sahong in southern Laos where many of these tensions became apparent.

The chapter explains some of the nuances resulting in the deliberation deficit associated with transboundary water resources development:

This is partly because proponents meet resistance from actors who prefer to reinforce contexts that are unfriendly to deliberation and favourable to pursuance of their vested interests. Many actors still believe, or at least rhetorically pretend or are instructed, that domestic criticism of public policy is unpatriotic. There is often an unhelpful conflation whereby dissent is mistakenly seen as synonymous with disloyalty. Enquiry or criticism of water resources development plans, which impact across state borders, is seen by some as encroachment on hard-won state sovereignty and legitimate national security concerns. Hence, the resistance to transnational deliberative politics should not be underestimated (Dore and Lazarus, 2009:358).

That said, new flow regimes will have to be negotiated on Mekong River tributaries and, perhaps, the mainstream. Relatively little attention is being paid to how river flows will be 'managed' post-construction. There are a multitude of possible scenarios. I argued that state and non-state actors need to become more familiar with flow negotiation tools and approaches that have the potential to ensure that all relevant issues and perspectives are taken into account in the inevitable negotiations ahead. In particular, I emphasised that MRC must increase its engagement in these issues.

My research concluded the following:

The MRC has deservedly received criticism for its performance thus far; but there remain many optimistic, latent supporters of the MRC initiative, hoping 'the family' will be enabled to capably respond to the current challenges. This will require the member governments, at the highest level, to 'de-marginalize' the MRC and its implementing parts, allowing them to make their best contributions (Dore and Lazarus, 2009:378).

The contribution of this chapter includes my early signalling of my vision for more deliberative water politics and governance, which I develop in the subsequent chapters. Moreover, my identification of MRC tensions is of interest to transboundary water governance scholars and practitioners from other regions. A contribution to real world practice has been a prolonged effort to assist MRC experiment with deliberative processes in my work with IUCN, M-POWER and AusAID.

12.2 Synopsis of Part C Deliberation Deficit

Ch 6 sub-question: Is the World Commission on Dams still relevant?

The World Commission on Dams (WCD) was an experiment in multi-stakeholder dialogue and global governance concerned with a subject area – large dams – that was fraught with conflict and controversy. The WCD Report, *Dams and Development: A New Framework for Decision-Making*, was published in 2000 and accompanied by hopes that broad-based agreements would be forged on how to better manage water and energy development. Ten years later, I co-edited a special issue of the *Water Alternatives* journal to revisit the WCD and its impacts, was second author of the guest editors' synthesis (Chapter 6) and lead author of one of the papers in the set (Chapter 7).

The guest editors' paper distilled the themes emerging from the special issue, namely: diverse perspectives about water and energy futures; new drivers of dam development, including climate change and new financiers; the continued pursuit of environmental and social justice; new assessment tools; advances in participation and accountability; negotiation, and the role of multi-stakeholder platforms for informing and shaping agreements.

Drawing from messages repeated by many, but not all, contributed papers and viewpoints, we concluded:

Based on the diverse perspectives across a range of topics, the changing drivers of dam development, and the new financiers of dams emerging, the papers and viewpoints in this special issue demonstrate the need for a renewed multi-stakeholder dialogue at multiple levels. This would not be a redo of the WCD, but rather a rekindling and redesigning of processes and forums where mutual understanding, information-sharing, and norm-setting can occur (Moore et al., 2010:12).

Ch 7 sub-question: What are the critical issues in 'gaining public acceptance' for key decisions?

This chapter concentrates on gaining public acceptance (GPA), the first strategic priority recommended by the World Commission on Dams. The core idea is that "*public acceptance of key decisions is essential for equitable and sustainable water and energy resource development*" (WCD, 2000:215). GPA remains a central, thorny challenge for all parties interested in how society makes decisions about the development of water resources, the provision of energy, and the maintenance of ecosystems, whilst striving for social justice. The WCD's GPA is largely about issues of procedural justice (e.g. inclusion and access) and proposes process-related principles. Distributional justice is also important (e.g. equitable sharing of benefits; and, avoiding unfair and involuntary risk-bearing). To earn legitimacy and more likely acceptance of important public decisions the paper suggests a comprehensive set of 'gold standard' state-society attributes for improving governance, and also argues the case for multi-stakeholder platforms to be deployed.

The chapter was written to assist the debate on large dams move forward with the GPA concept by acknowledging and exploring different points of view and suggesting other ways to pursue reasonable acceptance. The contributions to theory include: clarifying the relationship of GPA to other WCD strategic priorities (Chapter 7, Figure 1); expanded justice principles for GPA (Chapter 7, Figure 2); and, ideal state-society elements conducive to GPA (Chapter 7, Figure 3).

The contribution to practice is in the analysis of problematic public participation issues. The chapter makes several arguments. Differences in development and sustainability orientations are apparent in debates on dams and need to be explicitly considered rather than glossed over. Politics and power imbalances pervade participatory processes, and require much more attention than they receive. The accountability and legitimacy of state and non-state actors are crucial but complex as there are many ways to build public trust. The arguments are reinforced with explanations and lessons gleaned from around the world.

Ch 8 sub-question: What is the practice and potential of water-related multi-stakeholder platforms (MSPs), globally?

As Warner notes: "Multi-Stakeholder Platforms, by any other name, are currently 'hot' in the water sector. As a recent phenomenon, they attract NGOs, national governments and multilateral development agencies under the same banner" (2007: Preface).

In this chapter I present a synthesis of my research findings in theoretical and practical exploration of Multi-Stakeholder Platforms (MSPs). Choices about water often involve contesting facts and values. MSPs are an approach to constructive engagement and learning about complex water problems. In an MSP, deliberation is fostered among multiple, diverse stakeholders to help them make joint analysis prior to decisions. Differences are respected – or at least tabled, and hopefully, better understood – while pursuing fair and effective, workable agreements about complex issues.

I have found that setting up an MSP requires good design and process led by credible and competent convenors. The purpose and scope of an MSP must be clear, with appropriate scales and levels for deliberation and analysis (for example watershed versus river basin, or local district versus national). There should be sufficient human, financial and information resources, political support and enough time available for deliberations to be completed. Explicit recognition of politics and power should be incorporated into the MSP design and process.

Moreover, I argued that high quality process, enabling effective deliberation, is key to MSPs earning legitimacy. MSPs need high standards of deliberation, facilitation, inclusiveness, information exchange and communication with the participants and wider constituency.

Practical steps for organising an MSP must keep in mind the final goal of producing workable recommendations for forward action. To commence, a steering group is often established and the rationale for an MSP is explained to help build a constituency of support for the process. Convenors identify relevant stakeholders using stakeholder analysis and, as they come together, convenors and participating stakeholder representatives agree on rules of engagement, and roles and responsibilities. A sufficiently thorough assessment of contested issues is needed that is informed by and of use to all stakeholders. Deliberation tools such as scenario building help participants create options for workable recommendations based on learning about each others' different interests, values, priorities, assumptions and constraints. MSPs might also take and implement decisions, depending on the extent of their mandate.

MSPs help deliberation to become routine, enabling complex water issues to be more rigorously examined in better informed negotiations. MSPs can lead to a variety of desirable outcomes. They can expand representation and participation of stakeholders in governance. They encourage learning and greater understanding of interdependencies among stakeholders and ways of resolving contested issues. By providing a pathway for deliberation, MSPs can lead to better decisions and water agreements that can be more successfully implemented.

A key contribution of this chapter is my further elaboration of my conceptual framework for MSPs (first elaborated in Chapter 9, when focusing in the Mekong Region) with an emphasis on context, process, content and outcomes. Moreover, I recommend institutionalising the practice of deliberative examination of options through the analytical lenses of: the **rewards** being sought from the use and further development of water resources, and the possible distribution of the full spectrum of the possible rewards/benefits/costs of various options; quantification of involuntary and voluntary water-related **risks;** clarification and protection of water-related **rights**; and acknowledgement of various water-related **responsibilities** of state and non-state actors.

Concentrating on the 4Rs can 'keep it simple'. In putting them forward I am building on the 'rights and risks' approach taken by the World Commission on Dams:

We believe there can no longer be any justifiable doubt about the following: ... By bringing to the table all those whose rights are involved and who bear the risks associated with different options for water and energy resources development, the conditions for a positive resolution of competing interests and conflicts are created (WCD, 2000:xxviii).

The 'rights and risks' approach has been subsequently elaborated to 'rights, risks and responsibilities' (Bird et al., 2005; 2006). In this chapter, and in the framing chapter for the *Negotiate* book (Dore and Smith, 2010) I extended the approach further still, bringing in 'rewards'.

Ch 9 sub-question: What is the practice and potential of MSPs in the Mekong Region?

In this chapter I explore the existing diversity of regional water forums in the Mekong Region, whilst making no claim is made that all 'earn the label' of MSP. Key Mekong challenges for MSPs are identified, evident from current practice and debate. I point to several major infrastructure-heavy, mega-projects with transboundary dimensions. These include the hydropower development proposed for the Salween River, a hydropower-reliant energy grid being promoted by the Association of South East Asian Nations and the Asian Development Bank, a multi-faceted water grid explored by the Government of Thailand, and a 'regional water strategy' developed by The World Bank and Asian Development Bank. I conclude that the governance of each project would be enhanced by a high-quality, transboundary MSP.

The core argument is that MSPs have unfulfilled potential in the Mekong Region, within but also well beyond the realms of water-related governance. In 2006 steps had been taken by IUCN and M-POWER, with other partners, to realise this potential via the launching of a Mekong Region Waters Dialogue (Annex D).

The contribution to theory of this Mekong-focused chapter is my early conceptualisation of MSPs and articulation of their desirable characteristics to best contribute to water negotiations. This chapter was published in a book led by the social learning school at Wageningen University that examined critically "the weird and wonderful panorama of multi-stakeholder processes from around the world" (2007: Preface). The theoretical basis of MSPs is further advanced in Chapter 8.

Ch 10 sub-question: How do the politics of deliberation, scales and levels influence water-related governance?

This chapter argued that understanding the politics of deliberation, scales, and levels is crucial to understanding the social complexity of water-related governance. Deliberative processes might complement and inform more conventional representational and bureaucratic approaches to planning and decision-making. However, they are also subject to scale and level politics, which can confound institutionalised decision-making. Scale and level contests arise in dialogues and related arenas because different actors privilege particular temporal or spatial scales and levels in their analysis, arguments, and responses. Scale contests might include whether to privilege administrative, hydrological, ecosystem, or economic boundaries. Level contests might include whether to privilege the sub-district or the province, the tributary watershed or the international river basin, a river or a biogeographic region, and the local or the regional economy.

In the Mekong Region there is a recurrent demand for water resources development projects and major policies proposed by governments and investors to be scrutinised in public. Deliberative forms of engagement are potentially very helpful because they encourage supporters and critics to articulate assumptions and reasoning about the different opportunities and risks associated with alternative options. In doing so, they often traverse and enable higher-quality conversations within and across scales and within and between levels. Six case studies from the Mekong Region are examined using the context-content-process-outcomes framework I have devised and presented earlier in Chapter 8. In this chapter I have presented evidence that scale and level politics affects the context, process, content, and outcomes of deliberative engagement in the Mekong Region where public deliberation is still far from being a norm. This is particularly so where there are sensitive and far-reaching choices to be made about water use and energy production.

The research contributions of this chapter include a framework depicting temporal and spatial scales and levels. Other contributions of note include mapping examples of deliberative engagements in the Mekong Region onto the primary scales, and the examination of the six cases: creation of the MRC, basin-based water resources planning, basin-based banking, regionalised energy planning and power trading, multi-level water dialogues, and Tonle Sap management in Cambodia.

Ch 11 sub-question: How can transboundary water governance complexes be better understood?

In this chapter I have led the development and illustration of a heuristic framework for analysing transboundary water governance complexes. The framework portrays the importance of, and connections between: context, drivers, arenas, tools, decisions and impacts. There are many different water governance actors dealing with a variety of issues influenced by their individual and shared contexts. Actors engage in multiple arenas, depending on opportunity, necessity and choice. Drivers are what influence and motivate actors. The chapter presents three as being key: interests, discourses and institutions. Actors employ tools to establish and legitimise their positions, inform debate and influence negotiations; or resist, reinforce and reframe perspectives. The chapter defines tools broadly and categorises them as being predominantly for deliberation, technical support, or advocacy. Decisions emerge from arenas. The framework separates the decisions that emerge as being primarily about framing, supply and demand. Ultimately, I am interested in the impacts of decisions in terms of the fairness and sustainability of water allocation, defined broadly, that reshapes the water governance context.

The research for this chapter found that core decision-making processes about water in the Mekong Region are still often opaque to all but privileged insiders, and that meaningful public deliberation is still the exception rather than the rule. Nevertheless, more recently, there has been a deliberative turn and hopeful signs of water governance change, for example: vibrant elements in the Chinese media interested in understanding and reporting the water-related perspectives of neighbouring countries; an increasingly inquisitive National Assembly in Laos; bold inputs to public policy-making debates by Vietnamese scientists; increased space for civil society analysts in Cambodia to engage in state irrigation policy debates; peoples' environmental impact assessment in Thailand building on villager-led Tai Baan (villager-led) participatory action research and, improvements in MRC forums resulting in more participatory analyses of project merits. In the research for this chapter I found further evidence that water resourcesrelated allocation choices can be improved by bringing into arenas different perspectives and fostering deliberation to inform and shape negotiations and decisions. The contribution of this chapter to theory is the explanatory framework. The contribution to practice is the illustration of the framework in Mekong transboundary water governance, with emphasis on highlighting the diversity of actors and the role of decision tools in water allocation decision making. Though it may be power that enables, the framework reminds, and the research showed, that it is drivers that shape actors. Interests are often reflected in the preferred discourses and institutions that actors privilege. Drivers also influence tool selection. For example, adherents to discourses that trumpet transparency and accountability will tend to agree to the deployment of deliberation tools, and use of technical tools in more deliberative ways. On the contrary, adherents to scientific rationalism may have a natural tendency to deploy technical tools, such as modelling, in efforts to find techno-answers rather than as stimulants for more deliberative modes of scenario-building and debate.

12.3 Vision for Deliberative Water Governance

Recently, John Dryzek has noted in Foundations and Frontiers of Deliberative Governance (2010) that deliberative turns are being observed around the world in institutional studies, systemic observations, practical and experimental initiatives, and empirical examinations and explanations. I have been engaging with the theory and practice of deliberative democracy and water governance in the Mekong Region since 2000 and can make the following observations. A patchy, systemic deliberative turn in the macro-politics of the Mekong Region is underway. For example, in the Burmese Spring where there is a flourishing of political freedoms, and creation of new spaces for deliberation in Myanmar (Osnos, 2012), and in Laos where a strengthening National Assembly is seeking to scrutinise development projects and government expenditure. Between countries, cautious and realist diplomacy still prevails in Track 1 fora, but there is an increase in Track 2 deliberative exchanges. The latter includes more regular convening of mini-publics deliberating about Mekong water resources development in various dialogues and roundtables, some of which are discussed in Chapters 9 and 10. There is new use of governance tools, such as strategic environment assessment (for example, see ICEM, 2010), that when deployed become boundary objects (Star and Griesemer, 1989) around which debates surge, discussed in Chapter 11.

Empirical analysis of these deliberative turns in the Mekong Region is evident, though immature. This thesis has made contributions to assist structured assessments, for example: the 'gold standard' of ideal state-society elements conducive to fairer and effective governance (Chapter 7, Figure 3), the MSP conceptual framework and desirable characteristics (Chapter 8, Figure 3.1) elaborated in the *Negotiate* book, and the framework for analysing transboundary water governance complexes (Chapter 11).

During my research I have investigated and analysed water governance practice, and have interrogated normative and explanatory theory to develop my understanding. I have either convened or participated in many water governance processes, more and less deliberative in their character, have distilled practical challenges, made conceptual contributions, and advanced informed suggestions. This section articulates a vision for Deliberative Water Governance, a new frontier in the field of deliberative governance, and a final research contribution of this thesis.

My aspirational vision of Deliberative Water Governance would define it as:

Constructive engagement that enables fairer and more effective water governance through inclusive, deliberative processes that emphasise different perspectives, learning, analysis and institution-building.

The vision is inspired by theory and promising examples, from the Mekong Region and elsewhere, examined in the thesis chapters, which demonstrate the need for and added-value provided by deliberation when it is inclusive, information-rich and flexibly facilitated, and actively promotes analysis of different views.

I now explain each part of my definition.

Constructive engagement

In the *Negotiate* book (Annex C) the case is made for constructive engagement as a preferred path when negotiating about complex water:

Stakeholders can contribute to, endorse or contest decisions through a variety of routes. If perceiving decisions or plans over water as unfair, stakeholders can choose resistance. They can protest or refuse to take action demanded of them. Those with more power can choose suppression, to enforce or overturn decisions. Both responses can sometimes escalate to include aggression and violence, with the result that water disputes can fuel or be a source of conflict, especially where there are wider tensions in society. Constructive engagement is an alternative path aiming to improve the fairness and effectiveness of complex decisions over water via peaceful, informed and inclusive processes (Vernon et al., 2010:23)

The complexity of water governance is neatly captured by Neils Roling from Wageningen University who has observed:

We are caught between the equally desirable goals of productivity, equity, sustainability and stability. But they do not add up. In fact, achieving more of the one is likely to reduce the chances of reaching the other. The only way out is politics. At the level of natural resource management, goal conflicts require bringing together multiple, and increasingly interdependent stakeholders (with their multiple perspectives and interests) to negotiate and agree on collective or concerted action with respect to the sustainable use of fresh water and other resources and ecological services (2002:27).

Negotiation approaches, more explicitly accepting of bounded conflict (Lee, 1992) are critical for complex water governance where there is, more often than not: a divergence of interests between actors who also recognise there is a degree of mutual interdependence in resolving problems (Leeuwis, 2000:951).

Deliberation

As the name suggests, deliberation is core to Deliberative Water Governance.

Deliberation is not a new concept; it has long featured in history since it was a foundation of ancient Greek politics (Elster, 1998:4-5). Democratic theorist Simone Chambers has provided a precise definition of deliberation, with which I agree:

Deliberation is debate and discussion aimed at producing reasonable, well-informed opinions in which participants are willing to revise preferences in light of discussion, new information, and claims made by fellow participants. Although consensus need not be the ultimate aim of deliberation, and participants are expected to pursue their interests, an overarching interest in the legitimacy of outcomes (understood as justification to all affected) ideally characterizes deliberation (Chambers, 2003:309)

In ideal-type deliberative processes, participants are open to changing their opinions through persuasion; rather than as a result of straight interest-based bargaining, coercion, manipulation, manufactured consent or deception. Such processes are also characterised by respect, sharing of information and allowing all actors to freely participate and capably communicate their views (Dryzek, 2000:1-2). There are hurdles to achieving legitimate and authentic deliberation (Sanders, 1997; Cooke, 2000; Parkinson, 2003; Fung, 2004; Ryfe, 2005) but this does not mean that pursuit of the ideal-type does not have merit. I concluded in Part B that there is a problematic, deliberation deficit in the Mekong Region and that an infusion of high-quality deliberate would improve regional water governance.

My understanding of deliberation owes much to the transnational, discursive and deliberative democratic theory developed of Dryzek (1990; 1999; 2000; 2006) who argues that deliberative democracy is vital if societies are to approach widespread understanding of complex issues and perceptions. Dryzek's conception of deliberative and discursive democracy is: "about communication as well as voting, about social learning as well as decision making" (2006:25); pluralistic "in embracing the necessity to communicate across difference without erasing difference"; reflexive "in its questioning orientation to established traditions"; and dynamic, being responsive to "ever-changing restraints upon and opportunities for democratisation" (2000:3).

Critical hydropolitical analysis

Deliberative Water Governance explicitly brings in 'the political' and in so doing must acknowledge its debt to critical political analysis (Hay, 2002) discussed in Chapter 1, and hydropolitics (Elhance 1999, Turton 2002, Sneddon and Fox 2006). Elhance defines hydropolitics as a research field focused on "*the systematic study of conflict and cooperation between states over water resources that transcend international borders*" (1999:3). However, I concur with Turton's conceptual expansion to encompass a wider field of issues, actors and institutions, that leads him to define hydropolitics as the authoritative allocation of values with respect to water (2002:13-17). For this Africanbased governance scholar, the range of hydropolitics issues is extensive, including:

... conflict and its mitigation, states and non-state actors, water service delivery, water for food, the social value of water, the psychological value of water, water demand management, water as a target of aggression, water as an instrument of peace, water and gender, water and ecosystems, and water as a critical element in sustainable development (Turton, 2002:17).

Moreover, Turton argues that hydropolitical analysis is pertinent at all levels "from the individual, to the household, village, city, social, provincial, national and international" (2002:17). This thesis has focused on the regional level, but has explored different scale and level aspects of political water governance. For example, Chapter 10 discusses the "push to privilege the sometimes competing scales of administration, hydrology, ecosystems, and economy" (Dore and Lebel, 2010:62) and the level contests that can also arise when actors promote different territorial or economic levels. In the Mekong these contests are between inter-mingling actors engaged in "multiple networks of political-economic, discursive and ecohydrologic processes" within which there are "alternative imaginings" of Mekong futures (Sneddon and Fox, 2006:184).

I agree with Sneddon and Fox (2006) that more critical hydropolitics is vital to making Mekong regional water governance fairer and more effective. I see it as an important element of Deliberative Water Governance, normalising ethical scrutiny of governance precepts and practice (Lambropoulos, 1996) and providing space for alternative perspectives.

Social learning

Deliberative Water Governance is further enhanced by explicitly incorporating a social learning perspective, the elements of which are: the constructivist paradigm, an orientation towards reflection and action, a concern for people and their environment, and commitment to a holistic approach (Maarleveld and Dangbegnon, 2002:70-74). That said, what sort of learning are we seeking in deliberative processes about water?

Huitema et al. searched for empirical evidence of cognitive, normative and relational learning in a Dutch water management citizens' jury. Their cognitive enquiry sought evidence of factual learning, without changing underlying norms, values or belief systems. They also searched for signs of normative learning, encompassing a change in norms, values or beliefs, and relational learning, evidenced by enhanced trust and improved understanding of the mindsets of others (Huitema et al., 2010). More work is needed in the Mekong Region to evaluate the learning outcomes from increased deliberation and the policy impact. But it is clear that the complex regional water context means that the learning process involves multiple actors with multiple perspectives and so relational learning is critical, and it is here where deliberation and dialogue have much to offer.

To slightly digress for a moment, a concern is that acknowledging the need to negotiate, implies an acceptance actors will continue, at least to some extent, to act strategically and rationally in pursuing their interests. This can be seen as a regression from the ideal-type constructivist, social learning approach embedded in the dominant rationale underlying deliberative processes such as MSPs. However, given my own observations (Dore et al., 2010) and reports from others (Warner, 2007), I agree with the view that it is quite possible for "*parallel learning and negotiation trajectories (to be) taking place at more or less the same time*" (Leeuwis, 2000:950).

Building institutions

Discursive democrats have an emphasis on theorising or demonstrating democratic processes which may have influence without necessarily having authority, whereas cosmopolitan democrats focus their efforts on the establishment of formal institutions with decision-making authority and establishing models of democracy (Dryzek, 2006:158). Deliberative Water Governance, as I am describing it, is concerned with creating political space for influence, via democratic processes and networks, but is also concerned with the establishment and conferring of authority.

Networks are an example of actor interaction that can have influence without necessarily having any formal authority. Networks focused on policy, civil society action, research, or campaigns are increasingly part of the governance fabric (Kickert et al., 1997; Rhodes, 1997; Klijn and Koppenjan, 2000; Kumar, 2000; Reinicke et al., 2000; McCully, 2001; Sorensen and Torfing, 2005). Accusations of illegitimacy can be levelled at networks if it is felt they have over-reached. For example, Briscoe (2010) levelled this charge at some of the non-state actor networks that participated in the World Commission on Dams, arguing they had no authority to be dictating to states.

Part of the influence of agents of deliberation – including network members, via their networks – can be in shaping the construction or evolution of, and providing a constituency for, authoritative institutions to overcome at least some of the present deficiencies in regional water governance. To be clear, I adhere to the following working definition for institutions:

Institutions are persistent, predictable arrangements, laws, processes or customs serving to structure transactions and relationships in a society. These transactions are political, social, cultural, economic, personal, legal and administrative. Institutions may be formal or informal, legal or customary, and in terms of function may be economic, cultural or informational, highly visible and regulatory, or alternatively, difficult to discern and relying on tacit understanding and adherence. Institutions allow organised, collective efforts around common concerns, and reduce the need for constant negotiation of expectations and behavioural contracts. Although persistent, institutions constantly evolve and adapt (Handmer and Dovers, 2007:30).

Ken Conca noted in an examination of water-related transnational politics and global institution-building that new and authoritative institutions may be quite different from those of the traditional, state-centred variety:

The presumption that states, and only states, are the authoritative agents of governance holds constant, at one extreme end of the spectrum, a key group of variables related to the constitution, distribution, and legitimisation of authority. We can conceive of institutions that construct more complex, heterogeneous, or fluid spaces for the exercise of authority, but such institutions would not be regimes as typically designed by diplomats, understood by participants, or interpreted by scholars (Conca, 2006:46).

The establishment in the Mekong Region of an atypical, nascent, transboundary deliberative regime – with independent nodes led by diverse actors, such as Mekong River Commission secretariat, IUCN, Towards Ecological Recovery and Regional Alliance, M-POWER network and others – is an illustration of what Conca has envisaged. Fitting the criteria of Guston's boundary organisations (2001:400-401), different actors are taking on the role of multi-stakeholder convenor, encouraging the use of technical and deliberative governance tools, and mediating at the frontier of politics and science.

12.4 Final reflections

A deliberative turn is underway in the water politics of the Mekong Region. Deliberative processes – inserted into political arenas – have already improved regional water governance, by reducing power imbalances among stakeholders and assisting negotiations to be more transparent and informed. There is a fresh momentum for deliberation across the region that opponents will find difficult to quell.

Deliberative Water Governance is a relevant and promising approach for several reasons. When practiced: extra political space is created, that transcends boundaries; representation and participation of stakeholders is expanded, potentially increasing the legitimacy of public policymaking; discourses and norms are more freely launched and contested; and political analysis is provided to increase transparency, and deepen exploration of interests, agendas, past decisions, and current options. Importantly, there would be greater learning opportunity for the regional Mekong polity where considerable mistrust, misinformation and misunderstanding still prevail. The conclusions section in Chapter 11 articulates some of the ways to put deliberation into practice.

282

My future research agenda will assess the extent and influence of Deliberative Water Governance at three governance levels. First, across the Mekong Region, I will embark on a fresh assessment of systemic change at the regional level using Dryzek's proposed tests of the capacity of deliberative systems (2010:10-12), further exploring political spaces and arenas, and the organisation and influence of deliberation. Second, focusing on an individual decision, I will apply the framework for analysing transboundary water governance complexes (presented in Chapter 11, Figure 1) to the Xayaburi dam project in Laos: detailing and explaining the interplay between: context, drivers, tools, arenas, decisions and impacts. Third, focusing on the efficacy of multi-stakeholder platforms, I will apply my framework for guiding and assessing multi-stakeholder platforms (presented in Chapter 8) in tracking the progress of a series of deliberative processes soon to be launched in South Asia's international rivers emerging from the Himalayas, focusing on MSP context, content, process and outcomes.

In summary, via its action research orientation and progressive publishing this thesis has contributed uniquely to both the theory and practice of Deliberative Water Governance. By actively engaging in governance practice and experimentation, and periodically publishing my analysis, I have benefited from feedback which, in turn, stimulated new lines of enquiry. With my past and future research agenda, I hope my work will be judged as a constructive and productive contribution to water governance scholarship, bringing in deliberative, analytical, learning and institutional perspectives to inform the practice and possibilities in the Mekong Region and beyond.

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