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CLIMATE POLITICS IN THE LOWER MEKONG BASIN

NATIONAL INTERESTS AND TRANSBOUNDARY COOPERATION ON CLIMATE CHANGE

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Contents

Preface

Climate change is expected to intensify water security concerns in international river basins. UNFCCC and DAC-donors have been important generators of political attention to the climate agenda among governments in the Mekong Basin in relation to regional cooperation, national policy-making and capacity building. However, the formal commitment to climate action is not necessarily reflected in the everyday business of development. In this paper we use a political economy approach to understand when and how climate change becomes a political priority for the governments of Laos, Thailand and Vietnam, and for transboundary cooperation. Uneven distribution of climate hazards and vulnerabilities create different national risk perceptions and commitment to climate action. Donor funding and national development strategies are also strong drivers of climate action and inaction. Climate change is sometimes used as a scapegoat for domestic policy failures and as a tool to acquire donor funding. We recommend prioritizing climate action in the context of immediate development challenges and 'no regrets' interventions that are likely to enhance adaptive capacity and governments' commitment.

1. Introduction

Climate change is predicted to intensify concerns over water security within or between countries in international river basins (Nordås and Gleditsch 2007; Michel and Pandya 2009; De Stefanoet al. 2012). Projected impacts have the potential to disturb hydro-political balances and aggravate existing tensions and conflicts between countries. In the Mekong Basin, climate scenarios project a warmer, wetter and more varying climate (Mekong River Commission 2009). The scenarios are likely to present economic and political challenges for riparian countries in terms of the needs for adaptation at both the national and the regional level. This is a difficult issue for the Lower Mekong Countries (Thailand, Vietnam, Laos and Cambodia), where climate hazards, political attention to climate change and adaptive capacities are unequally distributed. Moreover, the transboundary discourse is dominated by controversies over mainstream hydropower dams.

Riparian governments generally accept the G77 discourse in the UNFCCC negotiations, according to which developing countries are the victims of climate change incurred by the developed industrialized world. Governments claim a right to develop their economies without curbing emissions, which they see as the responsibility of the rich countries. In this perspective, developed economies should also help poor countries adapt to the future ravages of climate change.

National discourses in the Mekong region increasingly incorporate climate change. The 2011 monsoon caused severe floods in Thailand. Millions of people lost their homes, factories were flooded and real GDP growth decreased by 1.1 percent (World Bank 2012). The governor of Bangkok, Sukhumbhand Paribatra, argued that 'We need to take a hard look at the problems that may arise from climate change and take a long-term perspective on how to deal with them' (Watts 2011). And in Vietnam, Can Tho province in the Mekong Delta has been flooded for five days twice a month (interview with the Vietnamese National Mekong Committee, May 2012). Official records show the sea levels of the South China Sea to have risen twenty centimeters during the last fifty years, a figure attributed to climate change by Vietnamese scientists and politicians (Ministry of Natural Resources and Environment 2010b). In Laos, the plans to develop hydropower on the Mekong River are officially communicated as a mechanism for low-carbon growth in the region (Water Resources and Environment Administration 2010).

These official concerns are not always reflected in strong political support for climate policies and climate action. Economic growth, food and energy security dominate the daily business of development in most developing (and developed) countries, including the Mekong countries. The imperatives of climate science, donor funds and expert advice are not necessarily translated into political priorities in everyday decision-making or international development cooperation. The road to action on climate scenarios is much more complex. It involves a dynamic interplay between climate knowledge, risk perceptions, economic interests and other development concerns driven by domestic and international stakeholders.

In this report, we investigate when and how climate change becomes a political priority for governments nationally and regionally through cooperation on water resources in the Lower Mekong Basin. Our approach deviates from policy-oriented studies on climate change and transboundary water governance, which tend to focus on climate scenarios and normative policies aimed at increasing resilience (Easthamet al. 2008; Cooley et al. 2009; Goulden et al. 2009; TKK and RC 2009; Huntjens et al. 2011; De Stefano et al. 2012). These policy studies serve to strengthen the rationale for climate action, as well as develop and demonstrate the toolbox for mitigation and adaptation to climate change.

However, if climate change is not considered important by governments and political decision-makers, the effect of normative mitigation and adaptation policies is limited. Starting out from this hypothesis, we take a closer look at the politics of climate change in three Lower Mekong countries and analyse the factors influencing: i) national political priorities to climate change; and ii) cooperation between governments in a single river basin.

The aim is to provide strategic recommendations to external partners (global development institutions, donors, NGOs) to better understand the barriers and opportunities to climate action in the Lower Mekong Basin. We believe that such understanding is a necessary prerequisite for working with national stakeholders to increase ownership of the climate agenda, rather than just disseminating normative policy models. As some of the barriers and opportunities are structural, our recommendations regarding climate action may have applicability for other developing countries.

2. Analytical framework and methodology

We apply a political economy approach to understanding the climate strategies of governments in the Lower Mekong Basin and the political capital they invest in climate policy-making and implementation. We build our approach on a series of studies focusing on the political economy of national and transboundary water governance (Molle 2008; Mollinga 2008; Swatuk 2008; Zeitoun and Allan 2008; Cascão and Zeitoun 2010; Jensen et al. 2012; Jensen and Lange 2013). The approach puts stakeholders, political discourse, economic interests and power at the centre of the inquiry.

We use four indicators of political priority regarding climate change to structure the analysis:

Perception of risks

The perception of climate risks by decision-makers is important for determining the degree of political priority accorded to the climate agenda. Perception of risk is influenced by climate scenarios, vulnerabilities and 'felt impacts'. Regional and local climate scenarios are developed from global models with different assumed carbon concentrations which cloak predicted impacts in uncertainty. Uncertainty makes climate mitigation and adaptation a 'wicked' problem without clear-cut policy solutions. It affects political priorities among decision-makers negatively, as short term returns on climate-related investments may be low and susceptible to political contestation. Vulnerability can be defined as 'a function of the character, magnitude, and rate of climate variation to which a system is exposed, its sensitivity, and its adaptive capacity' (IPCC 2001, p. 995). Climate vulnerabilities vary between countries and regions, providing different incentives for action. However, what is at stake here is not the scientific assessment of vulnerabilities but the political risk analysis in relation to future scenarios. Current phenomena (e.g. extreme climate events) interpreted as 'felt impacts' of climate change by stakeholders may also influence the political attention given to the issue. Hence, low perceived uncertainty, high vulnerabilities and many felt impacts are likely to motivate political prioritization of action on climate scenarios in the face of uncertainties.

Policy making

National policy-making on climate adaptation represents formal political commitment to the climate agenda. It may not, however, translate into national climate action other

than what is driven by external stakeholders (donors and NGOs). Policy-makers establish political goals, design implementation strategies and assign responsibilities among government institutions to deal with the challenges of climate change. In order to understand national commitment to the climate agenda, it is important to assess the distribution of power, interests and institutional capacities among government agencies and non-government stakeholders involved in climate policy-making. Strong policy goals backed by strong institutional arrangements and strong climate champions indicate strong political priority and vice versa. However, the establishment of normative climate policies does not necessarily lead to strong climate action when other development priorities assign a back seat to the climate agenda.

Climate finance

Climate policies need climate finance to be implemented. From a developing country perspective, funding can be obtained from several sources, such as domestic, multi- or bilateral donors, global climate funds under the UNFCCC and carbon markets, for example, the Clean Development Mechanism (CDM) or Reducing Emissions from Deforestation and Forest Degradation (REDD+). Dedicated climate funds in national budgets indicate high political priority. External funds play a more questionable role in terms of political commitment to the climate agenda. When high opportunity costs and poor economic and administrative capacity hinder climate mitigation and adaptation activities, donor funding becomes important in facilitating action.[1] However, the increasing amount of earmarked climate funds may also induce strategic behaviour in riparian governments, who reformulate existing development strategies and projects in climate jargon to access donor coffers. This kind of behaviour questions the genuine ownership of the climate agenda among policy-makers in developing countries.[2]

Climate in the development agenda

The position of climate change in the development agenda of the Lower Mekong countries is also important for the assessment of political priorities. Climate adaptation competes for political attention with other development priorities like economic

[1] Weak reporting practices and diverse sources of climate funds make it impossible to estimate exact and exhaustive disbursements to specific developing countries in quantitative terms.

[2] For a discussion of national ownership of the climate agenda in the case of Zambia, see Funder, M. and Mweemba, C. *The Climate Change Agenda in Zambia: National Interests and the Role of Development Cooperation*, DIIS Working Paper (forthcoming, 2013).

growth, poverty alleviation, energy and food security.[3] Formal climate policies should be mirrored in the overall national development strategies. Strong linkages between general development priorities and climate adaptation in national discourses signal commitment. However, climate change may also be used strategically by governments or other stakeholders in domestic or basin-wide negotiations on development plans and projects. Climate-change mitigation or adaptation arguments may legitimise interventions or externalise the responsibility for development problems. Such biases make political statements in support of climate mitigation or adaptation more symbolic than reflecting real priority.

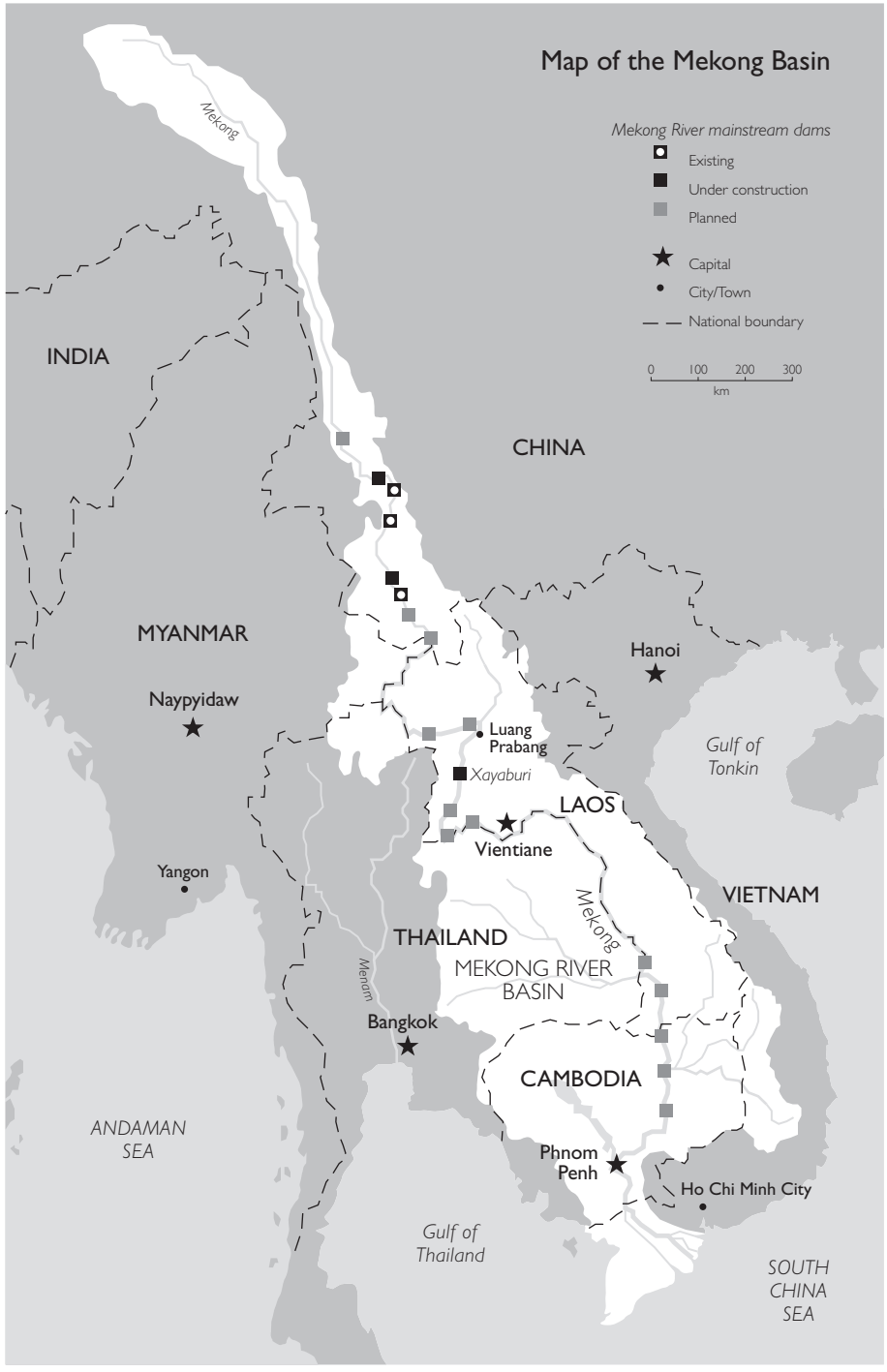
Zooming in on three Mekong countries

Laos, Thailand and Vietnam have been selected as case countries for the analysis. They vary in terms of the above four indicators of political priority. Through these variations, they demonstrate factors that both enhance and inhibit political commitment to adjusting development strategies according to projected climate change. Climate adaptation is the primary focus of the three case studies, as the Lower Mekong countries do not have any obligation to cut emissions under the Kyoto Protocol.

Methodology

We shall apply the above four indicators of political priority in our analysis of commitment to climate adaptation at the national level and in regional cooperation. At the regional level, the literature on transboundary water governance and climate change emphasises the importance of international water treaties and 'flexibility mechanisms' to increase climate adaptive capacity at the basin scale (Fischhendler 2004; Cooley et al. 2009; Goulden, Conway et al. 2009; De Stefano et al. 2012). In Section 5, these flexibility mechanisms are applied to the 1995 Mekong Agreement and the pattern of transboundary cooperation that has evolved in the Mekong River Commission (MRC). Furthermore, we look at the political commitment to the MRC's 'Climate Change Adaptation Initiative' (CCAI) launched in 2008. The wider geopolitical context, particularly the hydro-politics of mainstream dams, also provides important sources of information on regional climate politics and priorities. Our data and information consist of climate scenarios and vulnerability assessments,

[3] This is not only a phenomenon in developing countries. In the developed world, the priority given to tackling the current financial and economic crisis has pushed the climate agenda to the background.


Map of the Mekong Basin
Mekong River mainstream dams
Existing
Under construction
Planned
Capital
City/Town
National boundary
0 100 200 300
km
Mekong
INDIA
CHINA
MYANMAR
Naypyidaw
Hanoi
Luang Prabang
Xayaburi
Gulf of Tonkin
LAOS
Vientiane
Yangon
VIETNAM
Mekong
THAILAND
MEKONG RIVER BASIN
Menam
Bangkok
CAMBODIA
ANDAMAN SEA
Phnom Penh
Ho Chi Minh City
Gulf of Thailand
SOUTH CHINA SEA

national and regional policy-papers, media and research articles, as well as interviews with national and regional stakeholders conducted during fieldwork in the Lower Mekong in May 2012.

In the next section (Section 3), we present a number of regional and national climate scenarios. We analyse the role of the global climate regime (including donors) for climate policy-making in the Lower Mekong. This is used as a backdrop for our analysis of the national political economies of climate change in Section 4.

3. Climate scenarios and global policy drivers in the Lower Mekong Basin

The body of climate-related studies of the Lower Mekong Basin has been growing steadily at both the regional and national levels in recent years. Establishing a climate scenario is a complex exercise rife with uncertainties. Differences in choice of climate and hydrological models, carbon emission scenarios, socio-economic methods for impact modelling, and vulnerability assessments and data availability all affect the results. This creates inconsistencies between different studies in terms of the magnitude and distribution of climate change impacts in the Mekong region. However, they present a similar overall trend in climate change which is briefly summarized here (Eastham et al. 2008; International Centre for Environmental Management 2009; TKK and RC 2009; DAI and ICEM 2013).[4] Figures cited are taken from the recent US-sponsored ICEM-DAI study presenting a 2050 scenario for the Mekong Basin supplemented with data from older studies.

Warmer, wetter and drier

Scenarios predict that the future climate in the Mekong region will become slightly warmer, with a longer hot season covering a larger area of the basin. Daily maximum and minimum temperatures will be higher. Temperature increases vary considerably between parts of the basin (1.5-4.5 °C) but are projected to be higher in the cooler northern catchments. Annual precipitation is also projected to increase between 3-14%, predominantly from higher intensity rainfall during the monsoons. Increases are expected to be lower in the southern catchments, where dry-season precipitation is also expected to decline (the Cambodian floodplains, Tonle Sap and the Mekong Delta).[5] This will make seasonal variation in rainfall higher in these parts of the basin. In contrast, the middle and northern regions of Thailand and Laos may receive more rain in the dry season. The Mekong Basin is located in the middle of two cyclonic zones and may eventually experience increasing frequency and intensity of cyclones, compounding peak precipitation. Precipitation and run-off impacts on the hydrology of the Mekong will increase discharge and water availability, especially in the downstream regions during the wet season. The Mekong Delta in Vietnam and the Cambodian floodplains face the accumulated effects of precipitation and run-off

[4] These are the newer climate studies of the region; see Eastham et al. 2008 and ICEM 2009 for more references.

[5] Eastham et al. 2008 deviates from other studies on dry-season projections for downstream catchments by expecting an increase in rainfall rather than decline.

changes upstream. This translates into an increased variability of the annual flood pulse, with higher flood peaks and more risk of flooding in all parts of the basin. Simultaneously, these regions, as well as southern Laos, northeast Thailand and the Vietnamese highlands, may experience extended drought periods in the dry season.

Different threats and vulnerabilities

Looking at climate change from the perspective of a whole river basin makes sense from a scientific point of view. However, when it comes to climate politics and transboundary climate cooperation, the devil is in the detail. Table 1 presents climate scenarios for the three case countries, the major socio-economic threats to their economies and an estimate of their adaptive capacity. Impacts are unequally distributed, with Vietnam and Thailand facing more climate hazards than Laos. Adaptive capacities are also very different, primarily due to the large development disparities between countries in the basin and varying dependence on natural resources in their national economies. In this sense, Laos is the more vulnerable country compared to the economically stronger Thailand and Vietnam. Governments in the Mekong region clearly face different incentives, vulnerabilities and capabilities that are likely to influence the degree of political priority ascribed to climate policies and climate action.

Policy framework and funding

The global climate negotiations have been an important generator of policy-making in the Lower Mekong region. Several global climate funds have been established under the UNFCCC to support policy-making and implementation. Donors disburse considerable amounts of climate finance to developing countries to reduce the opportunity costs of climate adaptation and mitigation. The Kyoto Protocol's Clean Development Mechanism (CDM) and the emerging REDD+ schemes have also established partly market-driven tools to generate funds, technology transfers and capacity-building in developing countries. All the Lower Mekong governments are signatories to the climate convention and the Kyoto Protocol and have submitted National Communications (NC) to the UNFCCC (Prime Minister's Office 2000; Ministry of Natural Resources and Environment 2010b; 2010a). As members of the group of least developed countries (LDCs), Laos and Cambodia have also established National Action Programmes for Adaptation (NAPA's) (Water Resources and Environment Administration 2009). The preparation of these documents has attracted finance and technical assistance from global climate funds, injecting the capacity to design climate policies into national bureaucracies.

Table 1. Climate scenarios (2050), socio-economic impact analysis and adaptive capacity of the three Mekong case countries. Quantity and quality of climate studies and social impact assessments varies considerably.

	Laos	Thailand	Vietnam
Climate change scenario (2050)	• 0.7-0.8 temperature increase (2030), mostly in northern regions of the country • Increased annual precipitation and variability, wet-season precipitation increase, dry-season rainfall decrease in the south, but increase in the north • Increased intensity and frequency of floods, increased risk of drought in some regions	• Temperature increase 1-2 degrees, higher minimum and maximum temperatures, longer hot seasons • Annual average precipitation increases 10-20%, with higher rainfall intensity increases during wet season and decreases in dry season. Some regions face a drop in annual rainfall • Sea level rise (not quantified) affects coastal regions (inundation, salt water intrusion, coastal erosion) • Increased risk of drought/flood • Increased intensity of typhoons	• Temperature increase 1-2 degrees, more in the north and the highlands than in the southern coastal regions • Annual average precipitation increase 0.5-5%, more in the northern zones and highlands, higher rainfall intensity in wet season, lower in dry season, especially in the south • Sea level projected to rise 28-33 cm, affect coastal zones, Mekong and Red River Deltas (inundation, salt water intrusion, coastal erosion) • Increasing annual flows of rivers (2-7%) through increased wet season flows and decreasing low season flows • Increased risk of drought/flood • Increased intensity and frequency of typhoons
Socio-economic impacts	• Decreasing agricultural output, change in cropping patterns and forest composition • Floods threaten agriculture, industries and urban centres in the Mekong floodplains in the central and southern parts of the country, including the capital, Vientiane • Natural resource-dependent extractive industries (forestry and hydropower) are sensitive to changes in water availability	• Decreasing agricultural output, change in cropping patterns and forest composition • Salt water intrusion may alter coastal ecosystems, create freshwater shortages and affect food production • The greater Bangkok area affected by floods which has national and regional economic impacts • Inundation threatens coastal regions and tourist locations • Increasing water scarcity and conflicts over water allocation, which is already a problem in some parts of the country • Floods threaten agriculture, aquaculture, tourism, industries and urban centres along major rivers, including the capital, Bangkok • Typhoons create hazards for population, business and infrastructure investments • Infectious diseases may increase	• Decreasing agricultural output, change in cropping patterns and forest composition • Inundation of the Mekong Delta threatening livelihoods of 20 million people and national food security (potential 40% drop in rice production) • Salt water intrusion and decreasing ground water recharge may alter coastal ecosystems and create freshwater shortages affecting agriculture, aquaculture, industries and urban centres • Floods threaten agriculture, aquaculture, industries and urban centres in the Mekong and Red River Deltas, including in Ho Chi Minh City • Typhoons create hazards for population, business and infrastructure investments • Infectious diseases may increase
Adaptive capacity	• Low • HDI 0.524, widespread poverty and high reliance on natural resources (rain-fed agriculture, fisheries, forestry) for livelihood • Low capacity in government agencies to establish scenarios, design and implement climate policies • Weak infrastructure and low electrification, but potential for adaptation and mitigation through existing and planned hydropower dams on the Mekong mainstream and tributaries	• Medium-high • HDI 0.692, but highest inequality in the region, diversified economy, but poverty widespread among rural population dependent on agriculture and other natural resources • Medium-high capacity in government agencies to establish scenarios, design and implement climate policies • Relatively strong energy security and infrastructure development	• Medium • HDI 0.593, improving through sustained high growth rates in industries and services, natural resources dependency widespread but decreasing • Medium-high capacity in government agencies to establish scenarios, design and implement climate policies • Considerable improvement of energy security and infrastructure in recent years

Sources: Prime Minister's Office 2000; International Centre for Environmental Management 2009; TKK and RC 2009; Water Resources and Environment Administration 2009; Yusuf and Francisco 2009; Ministry of Natural Resources and Environment 2010a; b; DAI and ICEM 2013; UNDP 2013

The role of donors

At the regional level, donors are supporting the MRC's 'Climate Change and Adaptation Initiative' (CCAI). The programme was launched in 2008 following a call from MRC member states for the MRC Secretariat to mount a collaborative climate initiative addressing shared adaptation challenges (International Centre for Environmental Management 2009; Mekong River Commission 2009; 2011b). The programme has received 16 million USD in support from Australia, Denmark, Finland, Germany, Luxemburg and Sweden for its initial phases alone. The CCAI focuses on demonstrating adaptation through pilot projects, capacity-building for adaptation planning, and monitoring and improving climate scenarios for the region. It aims to mainstream climate change into the MRC's many other programmes and engages with regional and international research institutions that are already producing climate knowledge on the region (e.g. SEA START, CSIRO, IWMI, ICEM and others). Multilateral development institutions like the World Bank, AsDB, IUCN and UNDP also support other climate projects and initiatives in South East Asia, and many international NGOs are active partners for local and national governments (e.g. WWF, OXFAM, CARE, etc.).

The global political processes linked to the climate agenda and international stakeholders have been major drivers of the climate agenda in the Lower Mekong countries. Their initial knowledge, generated by international stakeholders (UN system, the World Bank, DAC-donors, NGOs and academia), and the funding of policy-making in the region have been important in drawing political attention to climate change. The available climate funds, scenarios and vulnerability assessments provide incentives for policy formulation and action by Lower Mekong governments.

In the next section, we analyze the position of the climate change agenda in Laos, Thailand and Vietnam, including the degree of government ownership.

4. National climate politics: Laos

Low adaptive capacity and modest risks

Policy-makers in Laos face an obstacle in terms of detailed climate scenarios being virtually non-existent for the country (International Centre for Environmental Management 2009). The country's NAPA and the 'Strategy on Climate change' build their risk assessments on global or regional climate studies instead (Water Resources and Environment Administration 2009; 2010). Climate changes boil down to a slight temperature increase, more variable precipitation and more extreme weather events (summarized in Table 1 above). However, supported by a donor-sponsored study, and contrary to the official regional scenarios, the national climate strategy portrays Laos as one of the most vulnerable countries in South East Asia (Yusuf and Francisco 2009) due to low adaptive capacity in the government and the population in general. The Laotian economy relies almost exclusively on climate-sensitive natural resources (agriculture, forestry, fisheries, hydropower, etc.) and human development is among the lowest in the Mekong region. The Laotian government also claims that Laos already is experiencing climate impacts through more floods and droughts, higher temperatures and erratic rainfall. There is no scientific evidence to justify this claim, which makes it difficult to evaluate its validity, but it is an illustration of the Laotian government's low capacity to establish climate baselines, which consequently injects a high degree of uncertainty into future climate scenarios for the country. Generally, the formulation of climate scenarios for Laos remains a donor-driven affair (Interview with DAC-donors). In sum, climate change is perceived as creating modest risks for the national economy. This is quantified in the 7th National Socio-Economic Development Plan (NSEDP), which notes that climate change has the potential to reduce GDP by 1% annually (Ministry of Planning and Investment 2011).

Focus on adaptation

Policy-making departs from the argument that Laos is a victim of climate change (Water Resources and Environment Administration 2010). The country is a net carbon sink due to its large forest cover, low degree of industrialization and an energy sector built on hydropower. The Laotian government sees climate change as an externally imposed problem that Laos is therefore not responsible to take action to mitigate. Rather, the official government policy is that Laos needs donor support and technical capacity-building to increase the country's adaptive capacity (Prime

Minister's Office 2000). The core criterion for adaptation is that it must be closely aligned with the government's high-priority development goal of Laos graduating from the group of LDCs by 2020. Climate adaptation should contribute to poverty alleviation, not create opportunity costs in the economy. The resulting adaptation policy goals are vague in terms of specific and measurable objectives, monitoring and evaluation. The Laotian government mainly focuses on mainstreaming climate concerns into national and sector development plans, as well as fundraising for the 45 most important adaptation projects identified in the NAPA (worth USD 85 million)(Water Resources and Environment Administration 2009; Interview with DAC donors).

Government institutional set-up and priority

The institutional set-up for climate change in Laos is built around the Ministry of Natural Resources and Environment (MONRE), which is responsible for implementation of the climate strategy, including mainstreaming, capacity-building and UNFCCC-reporting.[6] MONRE is a new ministry in the Laotian government with weak capacity, few resources and little political support (interview with stakeholders in the region; see also Jensen and Lange 2013). MONRE has been struggling to secure its mandates in relation to stronger ministries controlling the Laotian development agenda in the country, particularly the Ministry of Energy and Mines. Originally the government established a National Steering Committee on Climate Change (NSCCC) chaired by a vice-premier and eight sector working groups to oversee policy-making and implementation. However, both the working groups and the NSCCC have been dissolved, their functions now being performed by the National Environment Committee. This reshuffling of the institutional set-up and the anchoring of climate activities in the weak MONRE may contradict the formal political priority placed on climate change in policy papers. Consequently, this weak institutional anchorage may jeopardize implementation. Furthermore, the Laotian government exercises tight control over civil society, which is therefore extremely weak and in no position put pressure on the government for more action on the climate (interview with stakeholders in the region). Rather, climate change sometimes figures as an external cause underlying development problems that politicians and bureaucrats can call upon when they consider it opportune.

[6] The responsibility for natural disaster management has different institutional arrangements. The National Disaster Management Committee is directly under the Prime Minister's Office, with reporting responsibility not to the UNFCCC, but to the Hyogo Framework for Action (HFA).

Donors, NGOs and international climate funds drive the climate agenda

In this context, donors and international NGOs have become the main drivers of climate adaptation in Laos. In terms of finance, few domestic resources flow towards climate activities. All climate policy-papers and projects are sponsored by donors (e.g. GEF, UNDP, World Bank, AsDB). As noted above, the Laotian government makes no secret of saying that it is a donor responsibility to finance climate activities. MONRE looks to carbon markets for funding and technology transfers, but until now this has not been a success. Laos has attracted only a very few CDM projects compared to other countries in the region (Fenhann 2012). Also, Laos only recently became part of global REDD programmes, in spite of the country's huge forest cover and the low opportunity costs involved in forest conservation (UN-REDD 2013). The inability of government agencies to deliver the necessary institutional framework is a major constraint for potential CDM and REDD+ investors. This is also a recurring problem for these mechanisms in other LDCs (Lacour and Simon 2011). If there are no external funds, MONRE's climate department will have little leverage on the domestic scene. However, some adaptation is happening through other donor-supported natural resource development projects that are not specifically labelled climate adaptation measures (interview with DAC donors). Investments in forest and watershed protection, agricultural development and poverty reduction with an eye to climate change adaptation potentially increase the adaptive capacity of the population while also contributing to overall development goals.

Economic growth imperative and hydropower as a green solution

Hydropower currently overshadows other development initiatives on the Laotian development agenda. The country's topography allows for 18000 MW of hydropower to be installed on the Mekong mainstream and tributaries, but only a fraction of this has been developed so far. Hydropower expansion aimed at exports to neighbouring countries is the key ingredient in the economic growth strategy of the Laotian government regarding its 2020 development ambitions (Jensen and Lange 2013). The vision is that hydropower development will make Laos 'the battery of South East Asia' supplying the economic growth centres in the region, notably Thailand and Vietnam. This ambition dates back to the 1960s, but was not possible to realize it due to the Indochina wars and a lack of investor confidence (Middleton et al. 2009). The recent surge in hydropower projects fuelled by South East Asian investors has been redressed by the Laotian government to suit the climate agenda. Laos's hydropower programme has been launched as a combined climate mitigation and adaptation measure providing

low carbon energy and opportunities for river flow management at both the national and regional levels. According to the national climate strategy: 'Laos's hydropower potential and strategic territorial position within one of the world's fastest growing regions can contribute to regional sustainable solutions' (Water Resources and Environment Administration 2010). The Laotian government has also given voice to the climate change mitigation argument in the transboundary negotiations on the Xayaburi dam on the Mekong mainstream as a means of building legitimacy around Laos's development ambitions and to counter downstream opposition from Cambodia and Vietnam. However, efforts in the direction of sustainable development with adaptation elements are challenged by illegal logging, forest concessions removing the forest cover to give way to large-scale plantations, and mining and hydropower development along the Mekong.

Low political priority and climate opportunism

The Laotian government's core priority is its 2020 development goals, which, as already stated, are largely to be achieved through the expansion of hydropower and extractive industries. Economic growth and poverty alleviation ambitions drive development interventions with some positive side-effects in terms of adaptation to climate change. In spite of the policy attention being given to climate change, it is considered neither a great risk nor a priority compared to other development challenges. This de facto approach to climate on the part of the Laotian government corresponds somewhat to the available climate scenarios. A weak policy foundation, weak funding and weak government institutional arrangements and capacity are key indicators of the low political priority assigned to climate change. The rhetorical adherence to the climate agenda is largely strategic and opportunistic in its aims of acquiring donor funds for development and legitimacy in the face of downstream opposition to Laos's hydropower plans. This makes climate change action largely a donor-driven affair in Laos.

5. National Climate Politics: Thailand

Uncertainties and knowledge gaps

Climate scenarios for Thailand predict a temperature increase of 1-2 degrees, longer hot seasons, more precipitation in the wet season and less in the dry season (see Table 1 above). Increasing climate variability may create more floods and drought. In the coastal regions, rises in sea level will cause inundation and salt water intrusion. These impacts are unevenly distributed among country regions. However, national climate scenarios build on downscaled global climate models, which create uncertainties and 'cause the main bottleneck to research and development on V&A [vulnerability and adaptation] in Thailand' (Ministry of Natural Resources and Environment 2010a: 62). Thai research funds and research institutions, as well as international partners, have been engaged in reducing these knowledge gaps. According to the Thai government, the uncertainties of the climate scenarios make assessment of socio-economic impacts difficult, and they block effective policy-making on climate adaptation. This has not deterred the Thai government from identifying climate change as a major challenge for Thai society in the country's 11th development plan (National Economic and Social Development Board 2011).[7]

Risks and vulnerabilities

The sectors perceived to be most at risk are agriculture (erratic precipitation), aquaculture (saltwater intrusion due to rises in sea level) and water resources. Water scarcity is already a problem in some regions, particularly the northeast, and climate change is expected to increase competition for resources. Bangkok also figures prominently in the government's risk analysis, as it is among the most vulnerable cities in the world (World Bank 2010), sitting on the floodplains of the Chao Phraya River close to the Gulf of Thailand and having been flooded periodically for centuries. Flooding will be aggravated by the projected changes in precipitation and sea level rise. However, due to its higher adaptive capacity, Thailand is not considered as vulnerable as Laos (Yusuf and Francisco 2009). A more diversified economy, more capable government institutions and higher levels of human development are the main assets in this regard. Importantly, the 2nd National Communication to the UNFCCC also argues that Thailand is already feeling the impact of climate change through increasing variability and more extreme weather events, which are causing 'substantial damage to

[7] The other two are an aging society and increased competition for natural resources.

food production and rural livelihoods, as well as to the country's national economic and social development' (Ministry of Natural Resources and Environment 2010a). While uncertainties make sound policy responses difficult, Thai policy-makers formally perceive climate change as creating high risks for sustainable development of the Thai economy both now and in the future.

Climate policies

In terms of policy-making, climate change has officially been integrated into national development plans since the beginning of the 1990s (Ministry of Natural Resources and Environment 2010a). The key national policy paper is the National Strategy on Climate Change Management for 2008-2012, which is currently under revision (Ministry of Natural Resources and Environment 2008a). Also, a long-term strategy up to 2050 is being prepared with the overall goal of Thailand becoming a 'low carbon society' during the next forty years (Ministry of Natural Resources and Environment 2012b). The Thai government is concerned with both adaptation and mitigation, although Thailand is not obliged to reduce emissions. Mitigation focuses on energy efficiency, renewable energy sources and soft measures to create sustainable consumption. The core premises of these activities are that food security cannot be compromised and that mitigation should be balanced with economic growth. Proposed adaption measures center on forest conservation, food security and water resources management through capacity-building, awareness and knowledge generation. Mainstreaming into sector development plans also figures prominently as a policy goal, and some sector plans have already been prepared with climate mainstreaming. Climate adaptation and mitigation has also been integrated into some Thai legislation, signaling a fairly strong policy framework (International Centre for Environmental Management 2009).

Climate finance

Thailand has accessed significant amounts of climate finance from external sources. According to the 'Climate Funds Update', Thailand has received USD 386 million from global climate funds, mostly for mitigation activities (Heinrich Böll Stiftung and Overseas Development Institute 2013). This runs contrary to the government's claim in the second national communication that Thailand has become a net provider of technical assistance, especially to other countries in the Mekong region (Ministry of Natural Resources and Environment 2010a). There has been a strong government and donor focus on building capacity for the implementation of CDM projects.

Thailand's Ministry of Natural Resources and Environment (MONRE) has set up a Greenhouse Gas Management Organization to attract and administer CDM projects, which has been fairly successful. (The 177 Thai CDM projects amounted to 2.3 % of all CDM carbon credits in 2012.) Thailand is also part of the Forest Carbon Partnership and is in the process of formulating a REDD+ programme sponsored by the Asian Development Bank and other donors. Finance from carbon markets and global climate funds thus appear to be central sources of funds for climate adaption, as domestic funds have been limited (Marks 2011). This may indicate a weak political will to support the implementation of policy goals. Interestingly, the Thai government expresses doubts regarding the contribution of CDM projects to the Thai economy, as there is 'no systematic research on the additionality contribution of the projects, especially on technology transfer and investment…' (Ministry of Natural Resources and Environment 2010a). This indicates a lower commitment to the climate agenda than officially communicated and underlines the priority to create economic value immediately creation for Thai society as the primary driver of climate action.

The climate scapegoat

Recovery from the financial crisis and sustained economic development are dominant features of the Thai development agenda. The attention of Thai policy-makers has historically been focused on economic growth at the expense of environmental protection, creating an important barrier for climate policies (Marks 2011).[8] However, the 2011 monsoon floods in Bangkok and the provinces along the Chao Phraya River caused a significant stir in the public debate on climate change. The damage from the floods was severe, affecting millions of people and with the total cost amounting to an estimated USD 46.5 billion. There was a reduction of 1.1 % in real GDP growth, and regional and global supply chains were negatively affected (World Bank 2012). The Thai deputy prime minister argued that 'this has to be a result of climate change and global warming' (*The Nation*, 2012.11.14). However, the government's attempt to use climate change as a scapegoat was quickly contested by the political opposition, NGOs, academics and the media. They accused the government of mismanagement of flood-control infrastructure (reservoirs in the northern part of the country were filled too early in the season) and bad disaster management (ineffective coordination between responsible agencies): 'The blame for the floods is 30% with nature and 70% with the mismanagement of the authorities' (Watts 2011). These claims have been supported by a recent meteorological study showing that, although rainfall was

[8] This point could be made for most developed and developing countries in world.

extreme in 2011, it was not outside the range of natural climate variability based on one hundred years of records (van Oldenborgh et al. 2012). Other critics have argued that long-term economic development, urbanization and land-use changes amplified the scale and destruction of the floods[9] (World Bank 2010; Williams 2011). Whether or not the 2011 floods were caused by climate change, they exposed the strategic attempts by politicians to pull in the climate agenda as a scapegoat. The floods also revealed the bureaucratic dysfunctionalities[10] and political cleavages in Thailand that inhibit long-term adaptation efforts.

Institutional set-up

Since 2006, Thailand's multi-stakeholder National Climate Change Committee (NCCC), composed of line ministries, research institutions and business organizations, has overseen climate policy-making. The committee is formally chaired by the prime minister. Until the 2011 floods, shifting governments have not been very concerned with the long-term problems of climate resilience created by economic development (see previous footnote). MONRE is formally the climate champion in the Thai government administration. However, MONRE is one of the weaker ministries, and climate mainstreaming faces the challenge of a hierarchical and uncooperative administrative culture.

Capacity and politics

Climate policy papers refer to capacity problems, inadequate technologies and lack of research on socio-economic scenarios as the main barriers to implementation. Others argue that political clientelism and the red–yellow political polarization which has dominated Thai politics since 2007 block effective adaptation efforts (interview with stakeholder in the region, Marks 2011). Thai politicians also face increasing pressure from civil-society organizations and businesses wanting to secure their investments against climate hazards. Foreign investors and Thai companies, including the important tourism industry, were severely affected by the 2011 floods, leading not only to higher insurance costs, but also domestic and international demands on the Thai

[9] Extensive groundwater extraction, combined with rises in sea level, are causing Bangkok to sink, thus increasing its vulnerability to floods. The filling of traditional drainage systems and under-investment in flood-control infrastructure in the greater Bangkok area and beyond has undermined Bangkok's flood-management capacity. Also, residential and industrial settlements on the floodplains around Bangkok multiply the exposure to and cost of floods.

[10] Thailand has a complex set of water management institutions, with eight agencies sharing responsibility and with little power to influence political priorities (Marks 2011).

authorities to improve disaster management. Politically, this also translated into a call for long-term strategies to regain investor confidence (Chua and Chiangmai 2011).

A complex context for the climate agenda

Political priority to climate change adaption in Thailand is generally stronger than in Laos. The risks are perceived to be substantial, and at face value Thailand's climate policy framework appears comprehensive, backed up by legislation and linked institutionally to senior government officials. However, climate adaptation and mainstreaming ambitions suffer from the same weaknesses in implementation as in Laos. These weaknesses can to a large extent be explained by the fairly weak position of MONRE in the Thai administrative hierarchy and the low level of political will to push for implementation. Political clientelism and the red–yellow political cleavage[11] undermine giving consistent and long-term political priority to climate action. Politicians also behave opportunistically by using climate change as a scapegoat for poor policies and management. In this context, extreme events like the 2011 floods become important drivers of investments in disaster risk reduction that may also be labelled climate adaptation, although the floods are not scientifically validated to have been the result of climate change. Finally, Thailand has strong fundamental governance assets through its democratic and rule of law institutions working in favour of the climate agenda. Therefore, pressure from a vibrant civil society, free media and strong (international) business interests may become important drivers of political priority to climate adaptation in future governments.

[11] The 'red–yellow cleavage' refers to Thailand's two bitterly divided political camps, the red shirts and the yellow shirts. The red shirts began as supporters of former Prime Minister Thaksin Shinawatra, who was ousted by a military coup in 2006. The red shirts' support was transferred to the ruling Pheu Thai party led by his sister Yingluck Shinawatra, who is now Prime Minister of Thailand. The yellow shirts represent those opposed to Thaksin Shinawatra and the Pheu Thai party. The yellow shirts were the force behind the street protests that led to the 2006 coup. They include royalists, ultra-nationalists and the urban middle class and are also known as the People's Alliance for Democracy (PAD). The red-shirt supporters are a mixed bag including rural workers from outside Bangkok, the electorates of the northern and northeastern parts of Thailand, students, left-wing activists and some business people.

6. National Climate Politics: Vietnam

High vulnerability

Vietnam is among the countries in the world that is most exposed to climate hazards due to its downstream and coastal position (International Centre for Environmental Management 2009). Climate scenarios project a sea level rise that will inundate large parts of the Red River and Mekong Delta, pollute ground water resources and alter coastal ecosystems. Climatic changes in the north-west Pacific may also increase the frequency and intensity of typhoons. Temperature increases vary across the country, as does precipitation, but variability between wet and dry seasons is predicted to increase. The vulnerability of the Mekong Delta figures prominently these scenarios (Yusuf and Francisco 2009; Ministry of Natural Resources and Environment 2010b; World Bank 2010). The low-lying floodplains around the mouth of the Mekong River face the accumulated effects of hydrological changes in the river basin and of rises in sea level. Projections show that 90% of the Delta is at risk of being inundated if a one-meter rise in sea level by the end of the 21st century becomes reality (International Centre for Environmental Management 2009). Increased monsoon precipitation upstream may also increase the inflow into the Delta, increasing the risk of flooding. An extended dry season may in turn reduce inflow and invite additional saline intrusion into the Delta.

The Mekong Delta at risk

The Mekong Delta has an important position in the Vietnamese government's climate risk analysis, as it is part of the country's economic backbone (Prime Minister's Office 2011; Government of Vietnam 2012). During the last twenty years the Delta has become the national food basket, and its importance for food security is rising. It accounts for only 12% of Vietnam's land area, but more than 50% of Vietnam's rice, 60% of its fruits and 50% of its marine fishery is produced in the Delta (Ministry of Natural Resources and Environment 2012a). Nearly a quarter (20 million) of the Vietnamese population derive their livelihood from the Delta's natural resources. In this context, climate change is perceived to create major risks capable of causing 'serious socio-economic damage' (Ministry of Natural Resources and Environment 2010b:69). Vietnam's GDP may drop by 10% if the Delta is inundated, leading to substantial out-migration (Government of Vietnam 2012).

Felt climate impacts

Policy papers and Vietnamese officials emphasize that climate change impacts are already being felt (Ministry of Natural Resources and Environment 2010b, Interview with Vietnam's National Mekong Committe). Temperatures are increasing, precipitation patterns have become unstable, and more typhoons are ravaging the country. Sea levels have risen by twenty centimetres over the last fifty years, resulting in frequent floods in Ho Chi Minh City and the provinces of the Delta. Coastal erosion is rampant, salt water is increasingly contaminating groundwater, and freshwater shortages are a reality in some Delta districts. The linkage between climate change and these tangible problems adds to the political importance ascribed to climate adaptation by Vietnamese policy-makers.

Institutional set-up and priority

The Ministry of Natural Resources and Environment (MONRE) is the national anchor for climate change in Vietnam (International Centre for Environmental Management 2009). Unlike Laos and Thailand, a strong institutional framework has been developed to link MONRE as the national climate champion to higher levels of government. The National Steering Committee on climate change was set up in 2008, headed by the prime minister to supervise policy-making and implementation. MONRE formally cooperates with the powerful Ministry of Planning and Investments (MPI) and implements climate policies through relevant line agencies, provincial and district governments. Disaster management is controlled by the Ministry of Agriculture and Rural Development (MARD). MONRE has produced a comprehensive body of climate policy papers underlining that climate adaptation is a priority for the Vietnamese government (Ministry of Natural Resources and Environment 2008b; 2010b; Prime Minister's Office 2011). Projected climate changes threaten the economy, and measures to deal with climate impacts are identified as integral to the sustainable development of the country. Policy goals focus on establishing climate scenarios and building knowledge and capacity in the government, including mainstreaming climate adaptation into national, sector and regional development plans. Raising public awareness, disaster management and flood control measures also figure prominently. However, the National Climate Strategy has a clear long-term perspective (2011-2100), including both adaptation and mitigation measures that will supposedly make Vietnam a climate resilient and low-carbon economy in the long term.

Climate finance

Vietnam's overall funding strategy for climate adaptation is to provide 50% from national budgets and attract 50% from donors. The Vietnamese government has already assigned significant amounts of domestic funds for climate adaptation, indicating genuine ownership (Ministry of Natural Resources and Environment 2010b). These funds are especially linked to disaster management and flood control measures. Not surprisingly, these are the areas that have demonstrated the strongest results in implementation (e.g. coastal zone management, replanting of mangroves, construction of dykes etc.). Similarly, results have also been substantial with regard to climate scenario research and awareness campaigns among civil society and government organizations. Funds from bi- and multilateral donors have also been vital for knowledge generation, policy-making and capacity-building around climate change. Vietnam has received USD 732 million from global climate funds and, judging from the number of internationally supported climate projects, has become a 'donor darling' (Heinrich Böll Stiftung and Overseas Development Institute 2013). Vietnam's hot-spot status and its institutional capacity to manage climate projects becomes a magnet for climate funds. MONRE has established an International Support Group for Natural Resources and Environment (ISGE) as a dialogue forum for donors on climate change adaptation measures. The climate agenda is becoming a tool to attract funds, technical assistance and technology transfer both now and in the coming decades, when Vietnam will graduate from the group of developing countries and no longer qualify for conventional development assistance (Prime Minister's Office 2011, interview with DAC donors). Vietnam has also built a strong position on carbon market instruments. It ranks eighth globally in terms of Certified Emission Reductions issued under the Clean Development Mechanism (CDM) and is third in Asia in terms of CDM projects (Fenhann 2012). Only the much larger economies of China and India have been able to attract more projects. Vietnam is also one of UN-REDD's pilot countries and has been able to gain considerable bilateral and multilateral support for REDD+ activities (UN-REDD 2013).

Climate sensitive plans for the Mekong Delta

The Vietnamese development agenda continues to be dominated by economic growth and poverty alleviation imperatives. However, the perceived vulnerability of the Mekong Delta has become an important driver directing political attention to climate adaptation in Vietnam. Championed by the powerful 'South West Steering Committee', the government is developing a 'Mekong Delta Plan' with Dutch support (Government of Vietnam 2012). The plan deals with the combined threats of

climate change and of domestic and upstream developments. The last twenty years of impressive agricultural growth in the Delta has largely neglected environmental externalities, which have now surfaced as depleting groundwater resources, pollution, deforestation, industrial and residential settlement in flood-prone areas, etc. The delta provinces are no longer growing as fast as the rest of the country, which is booming due to expansion in the industrial and service sectors. According to the preliminary plan, southern Vietnam's comparative advantage is its rich natural resources, which suggest that 'the standard economic development policy for Vietnam does not hold for the Mekong delta' (Government of Vietnam 2012). It also emphasizes the dire need to adapt planning, infrastructure investments and management regimes to climate scenarios. This links socio-economic development and climate adaptation closely together in the Vietnamese political context.

Upstream Mekong developments increase Delta vulnerability

Increased awareness of climate vulnerabilities in the Delta spills over into a strong Vietnamese stake in upstream developments on the Mekong River. Upstream hydropower development, the extraction of sand, deforestation, etc. affect hydrology and ecosystems downstream and ultimately contribute to the erosion of the Delta. The MRC Secretariat's Strategic Environmental Assessment (SEA) of mainstream dams made the impacts of hydropower on the Delta visible to the Vietnamese government. With climate threats to the Delta as a multiplier, this led to strong opposition to Laos's Xayaburi dam (International Centre for Environmental Management 2010; Jensen and Lange 2013).

Civil society engagement

Vietnamese civil society, which is normally tightly controlled, has also been allowed to voice criticism of upstream countries on this issue. Like the environment, climate change is an area where Vietnamese NGOs and academia, often in close collaboration with the government, have been active in knowledge-generation and capacity-building at the community level. However, civil-society advocacy beyond or against government policy remains controversial (interview with stakeholders in the region).

The cost of no action or climate opportunism

Securing the Delta from both upstream and climatic changes is thus a strong generator of political attention to climate adaption in the Vietnamese government.

These externally induced changes sometimes overshadow the negative effects of poorly planned domestic development and the mismanagement of natural resources. Interestingly, Vietnam faces the same uncertainties regarding climate scenarios as the other Mekong countries. However, as impacts are projected to be significant and negative, the risk of taking no action is perceived to be high in government circles. Combined with already felt impacts, especially sea level rise and saline intrusion, the incentives for action are strong. The political priority given to climate change adaptation is much higher than in Laos and Thailand, as reflected in the institutional arrangements and allocations of domestic funding. However, the Vietnamese government also displays some opportunism in its engagement with the climate agenda. Vietnam's status as a climate hot-spot opens up new venues for donor support that the government is using strategically. As in the other riparian countries, proposed climate adaptation measures are often closely linked with existing development and climate variability problems (e.g. floods, typhoons and deforestation). Finally, in the transboundary dialogue Vietnam repeatedly draws attention to the Delta's vulnerability to climate change as an argument against any upstream changes in the Mekong flow regime. Some observers argue that Vietnam is stretching the Delta climate risk argument too far (beyond scientific evidence) in order to create legitimacy for its opposition to mainstream dams in the Mekong basin (interview with climate experts in the region).

7. Regional climate politics in the Lower Mekong Basin

Climate politics in Laos, Thailand and Vietnam result in rather different national priorities being assigned to climate adaptation. These different priorities influence regional climate politics in the Lower Mekong Basin.

The transboundary logic

The impacts of climate change in international rivers cross borders by nature. This implies that increased adaptive capacity in the basin as a whole needs to build on transboundary cooperation. From a normative and scientific perspective, climate change adaptation efforts in international river basins therefore require transboundary water management institutions (Goulden et al. 2009). Furthermore, climate adaptation – or the absence of adaptation – in one country may affect other riparian countries positively or negatively, making assessments of trade-offs and arrangements for benefit-sharing important (Funder et al. 2011).

The MRC's climate initiative

The raison d'être for the MRC's regional climate programme (CCAI) to a large extent reflects these concerns (Mekong River Commission 2011a, interview with the MRC Secretariat). Officially, the CCAI was launched to address shared adaptation challenges in the Mekong basin. These have been identified as national capacity-building, climate scenario development, knowledge-sharing and the mainstreaming of climate concerns into other MRC programmes. In practice, national interests in the programme have been quite different. Vietnam has been strongly committed to all aspects of the programme, while Laos has primarily been interested in capacity-building. Thailand's role in the programme has been ambiguous, which largely reflects the general Thai skepticism of the MRC (Jensen and Lange 2013). This pattern of interest and commitment also largely reflects the differing political priority assigned to climate adaptation in the three Lower Mekong case countries. Their common ground has primarily been the climate programme's ability to attract donor funds, which is generally perceived to be beneficial by all countries (interview with stakeholders in the region). Consequently, the regional climate programme rests on a fragile framework that is intimately linked to different national climate politics and levels of commitment to climate action. It remains to be seen how the programme will unfold, particularly in the extent

to which it can foster stronger multilateral cooperation on climate adaptation in the Lower Mekong Basin.

Basin cooperation and adaptive capacity

The literature on climate change and transboundary water governance identifies bilateral and multilateral water agreements as tools to enhance the adaptive capacity of the whole basin and mitigate potential conflicts (Fischhendler 2004; Drieschova et al. 2008; Cooley et al. 2009). Climate change potentially creates conflict in international river basins, as it can alter hydro-political balances or act as a multiplier that aggravates existing conflicts (Brown and Lall 2006; Funder et al. 2011). The adaptive capacity of a river basin to a large extent depends on the interaction between climatic changes and the regional institutional capacity to absorb these changes (De Stefano et al. 2012). The institutional capacity builds on the mechanisms of allocation, conflict resolution, review and amendment (according to hydro-political circumstances) embedded in transboundary agreements like the 1995 MRC Agreement and its associated governance and knowledge institutions (i.e. the MRC Council and Secretariat). The more these flexibility mechanisms (in the style of adaptive water management) are built into agreements, the more they are able to contribute to adaptive capacity. If we apply these considerations to the wider pattern of transboundary cooperation in the Lower Mekong Basin, a somewhat pessimistic picture emerges, as presented in the following sections of the paper.

Mekong mainstream dams

For half a decade, mainstream dams have dominated the dialogue between the MRC member states. The mainstream dam agenda is driven by the economic and social development priorities of the upstream countries. China has unilaterally constructed a cascade of dams on the Lancang River to develop its poorer southwestern Yunnan province. State-owned Chinese companies are also important dam builders in Laos (Middleton et al. 2009; Magee 2012; Jensen and Lange 2013). Thailand's national energy utility EGAT is the main buyer of hydropower from Laos, and Thai companies have also developed the Xayaburi dam on the Mekong mainstream. Thai involvement is motivated by the Thai government's energy policy, which is aimed at diversifying the sources of energy supply. Hydropower from Laos is a preferred source as it is cheap compared to domestic options. Laos's development strategy builds almost exclusively on capitalization of its natural resources through foreign investments and power exports. Laos, Thailand and China therefore have a strong mutual interest in dam

development on the Mekong. The climate change mitigation and adaption benefits of hydropower are primarily afterthoughts that these upstream governments have added to their development plans in order to increase their legitimacy. The massive upstream hydropower plans have the potential to alter the hydrology of the river and the ecosystems of the basin significantly (TKK and RC 2009; DAI and ICEM 2013). As noted in the case of downstream Vietnam, this has been a major cause of concern in relation to the analysis of risks to the Delta.

Climate and hydro-politics

Mainstream hydropower dams are highly controversial in the Lower Mekong. The controversy has a climate dimension, as it involves a trade-off between climate mitigation (upstream 'green' hydropower) and climate adaption (downstream Delta conservation). Climate change has become a multiplier in the upstream-downstream controversy between Laos (backed by Thai economic interests) and Vietnam (and Cambodia). Vietnam sees the combined effect of climate change and changes in upstream river flow as a major threat to the Delta. The result has been a historical tension between the two communist governments who are traditionally seen as 'brothers in arms' (with Vietnam as the bigger brother). Consequently, the climate change agenda has been embedded in the water resources allocation and the geopolitical struggle in the Mekong, which will define hydro-political balances in the future.

Conflict, climate and the MRC Agreement

MRC member state cooperation on the MRC's CCAI programme has been largely uncontroversial and unaffected by the Xayaburi conflict. It is also worth noting that the compromise between Laos and Vietnam over the Xayaburi apparently did not take any adaptation mitigation trade-offs into account. The Xayaburi controversy has revealed the limitations of the 1995 Mekong Agreement (Mekong River Commission 1995). It refers to principles of 'reasonable and equitable use', rather than firm criteria for the allocation of water resources among signatories (Hirsch and Jensen 2006). The agreement provides little guidance on conflict resolution in Xayaburi-like situations. The primary responsibility for reaching consensus rests with governments, who can call upon a third party to mediate if they think it necessary. Generally, the agreement does not prescribe any methods for review and amendment, including measures to increase adaptive capacity in the transboundary context. There are no mechanisms to adjust to changing circumstances, such as the possible effects of climate change.

8. Conclusion

Different political priorities

The three case countries display considerable disparities in terms of the political priority to climate change as summarized in Table 2 . The three governments formally adhere to the global discourse on the necessity of climate adaptation. UNFCCC institutions and global climate funds are important generators of political attention. Governments have translated scenarios and impact studies into policies and strategies relevant for their national development context. However, the lack of any human and institutional capacity to deal with complex climate scenarios and development planning is a recurring problem in all countries, particularly in Laos.

Climate change is largely a donor-driven agenda in Laos, and government ownership of it is weak. The climate agenda in Laos is also characterized by low risks, a strong focus on economic development and dependence on donor funding. In Thailand, the attention given to climate change is more ambiguous. The high risk analysis has not been able to circumvent political economy barriers, and the push for climate adaption comes from domestic non-government stakeholders (i.e. business and civil-society organizations). The Vietnamese government's priority regarding climate change is primarily driven by the high risk scenarios and the economic necessity of preserving the Mekong Delta. The climate agenda also offers a strategic opportunity to attract donor funds, as well as to build legitimacy around its interference in upstream hydropower development on the Mekong.

Table 2. Summary of national case studies: priority to climate change

	Laos	*Thailand*	*Vietnam*
Risk perception	Low	High	High
Policy-making	Weak	Moderate	Strong
Funding	Low, donor-dependent	Low to medium	Medium, donor-facilitated
Development agenda	Strategic coupling	Controversial	Integrated
Mekong cooperation	Capacity, legitimacy, national development	Hesitant	Capacity, legitimacy, upstream development
Political priority	Low	Medium	High

The low political priority given to climate change in Laos is not surprising when the national development context and the climate scenarios are taken into account. As presented above, more pressing issues dominate the Laotian government's development agenda. The interesting comparison is that between Thailand and Vietnam, both of which face significant climate risks and 'felt impacts'. While less economically developed than Thailand, Vietnam has invested considerable political attention and resources in capacity-building, climate scenarios, socio-economic analysis and policy-making, especially for the Mekong Delta and coastal zones. Vietnam's climate institutions, with MONRE at the center, have strong links to powerful ministries, the prime minister's office and the provinces. Because of its high risk position, Vietnam has rightfully received considerable external funding from international partners and carbon markets, more than both Thailand and Laos. This appears to have been an important element in the motivation for the government to act in spite of uncertainties in future climate scenarios. The case of Thailand illustrates that there is no one to one relationship between high perceptions of risk and political priorities. The political economy and development agenda in the country is an important factor structuring national climate politics.

Climate games

The political controversies over the 2011 floods in Thailand also exposed the strategic political games that the climate agenda can initiate in developing (and developed) countries. Climate change may be used politically to externalize the responsibility for unregulated economic development, the over-extraction of natural resources and management failures by governments. These challenges underline the close link between the respective problems of sustainable development and climate vulnerabilities, which tend to increase proportionally.

Climate and civil society

The Thai case illustrates the caveats of a democratic political economy dominated by clientelism and unregulated infrastructural development. It also demonstrates the benefits of an open society in which civil society and business organizations have become important domestic stakeholders driving the climate agenda and curtailing political attempts to make climate change a scapegoat. Such accountability dynamics are less evident under the more autocratic political systems of Vietnam and particularly Laos. However, climate change (together with the environment) has been one of the areas where Vietnamese civil society has been allowed to operate more freely in recent

years. The external causes of Vietnam's climate problems and donor legitimacy may be some of the explanations behind the opening of a window for civil society by the Vietnamese government. There is no similar civil society opening in Laos.

Climate and transboundary cooperation

National political priorities strongly influence regional climate politics, with Vietnam being the main champion. Despite being uncontroversial compared to other development issues, the MRC's climate initiative (CCAI) has not been able to build a strong common interest in climate adaptation among member countries primarily because of a weak commitment from other Lower Mekong countries. The MRC framework of cooperation does not appear to have adequate mechanisms for regional adaptive capacity. Rather, the controversies over the Xayaburi and mainstream dams have created political rigidity with mutually exclusive national interests. However, the conflict also shows how strong linkages between climate adaptation or mitigation and national interests in riparian countries can become highly relevant for transboundary cooperation – but not as a separate issue. Climate change has become part of the development equation in the Mekong through Vietnam's and Laos's incorporation of the climate agenda into their national interest in a way the MRC's CCAI may not be able to achieve. The mitigation–adaptation trade-offs of large-scale hydropower projects are likely to surface again when the next Laotian mainstream dam reaches the MRC Council. The question is whether MRC member states are willing to discuss benefit-sharing options linked to mainstream dams and, in particular, options that also take future climate change into account. In the short term this appears unlikely, as the regional climate discourse is strongly driven by the strategic and geopolitical concerns of the riparian states. The compromise on the Xayaburi dam demonstrated that political agreements over transboundary Mekong projects are likely to involve non-climate issues and even non-water issues.

Climate and development

It is the dynamics of development in riparian countries that drive the attention being given to climate change, especially the increased vulnerabilities of hot-spots in Vietnam and Thailand. The Mekong Delta is the prime example, where assets of national economic importance are at stake. But the dispute over the 2011 floods in and around Bangkok shows that water resources management and development are crucial for securing national and foreign capital investments in different economic sectors. Gradually felt impacts and extreme events (whether due to actual climate

change or normal climate variability) that damage the economy drive political attention towards climate change adaptation in both situations. The political will to act on climate scenarios becomes a reality only retrospectively regarding economic and infrastructure developments that have made certain regions vulnerable, such as the Mekong Delta and the greater Bangkok area. The vulnerability of both areas has a major domestic economic growth component that has nothing to do with climate change itself. The over-extraction of water resources in the Mekong Delta, land-use changes and infrastructural developments around Bangkok, as well as the historical lack of concern for environmental externalities in both Thailand and Vietnam (as in most other developed and developing countries), have created a vulnerability bottom-line against which climate change should be measured.

Consequently, climate change not only multiplies potential conflicts in and between countries: it also multiplies development problems, increasing the risks of poor water management and infrastructural development in both the short and the long term. The strong economic growth in the Mekong countries signals a pace of development that will create substantial 'facts on the ground' regarding hydropower, as well as other infrastructure and production facilities over the next two decades. Although climate change is slowly becoming part of the risk analysis in government offices, the question is whether ex-post climate retrofitting is the more likely outcome than ex-ante climate adaptation. A pessimistic view based on lessons learned from the environmental consequences of economic development in the region points to the climate retrofitting scenario.

9. Recommendations

Based on these conclusions, we suggest a set of strategic considerations to determine external development partner support for climate policies and climate action in the Lower Mekong, and possibly also in other regions.

Understand climate in its political economy and geo-political contexts

In spite of uncertain scenarios, it is necessary to understand future climate risks and vulnerabilities in a wider development context. External partners should therefore carefully assess climate change in the context of the evolving political economy of development in each Lower Mekong country. A political economy analysis of climate change serves to identify strategic points of convergence where high-priority development strategies intersect with climate mitigation or adaptation measures. In addition, climate change needs to be assessed in the context of the geo-political dynamics framing international cooperation over shared water resources. There is no straightforward and linear link between high-risk climate scenarios, political attention and climate action. The road to giving a political priority to climate change is bumpy and is easily blocked by more immediate and very real development concerns.

Understand climate in national development dynamics

Development partners need to recognize the following development dynamics influencing the climate agenda. *First*, the key political priority in the Lower Mekong and in most other developing countries is likely to be economic growth and poverty alleviation. This needs to be the point of departure for giving attention to climate change in order to identify the opportunity costs that may inhibit climate action. *Second*, climate variability and extreme weather events are often well-known challenges in developing countries, particularly in the coastal regions of South East Asia. When climate scenarios predict increasing variation and more extreme events, they often echo existing problems of 'dry and wet' natural resources management and disaster risk reduction. In terms of external partner support, this would mean 'more of the same'.[12] *Third*, more developed economies like Thailand and Vietnam increasingly face the erosion of their natural

[12] In this context, the advice of many water experts is that good water resources management equals good climate change adaptation.

resources base and social conflicts over resource availability. These are by-products of successful economic and human development that translate into the public, particularly the urban middle class, giving increased attention to environmental problems, some of which may have a climate link. *Fourth*, national climate champions such the MONREs do not necessarily have strong positions in political and administrative hierarchies, in spite of the cross-sector nature of climate mainstreaming. This increases the barriers to the implementation of policy goals. However, potential climate allies may be located outside government among (international) businesses and civil society. They can be important drivers directing political attention to climate change.

Support no-regrets climate action

Understanding the development dynamics and realistically identifying the degree of political priority being given to climate change by governments are the strategic stepping stones towards pushing the climate agenda. They emphasize the link between current problems of sustainable development and climate vulnerabilities, as well as the need to identify and support national climate allies and champions. Climate champions need to focus the attention of political decision-makers on no-regrets action for climate-sensitive natural resources management and disaster risk reduction with immediate benefits, rather than long-term scenarios and ideal adaptation models. A more pragmatic and contextualized approach could include partnerships with stronger government and economic stakeholders based on a clearer set of mutual interests. Such partnerships would also lead to stronger political coalitions around green growth in developing countries.

Support win-win climate action

However, in the short term opportunity costs or trade-offs between investments in climate adaptation and economic development may not always be avoided, and capacity problems are real obstacles for climate action in least-developed countries. In such contexts, donors can facilitate climate action. However, the shift by donors towards dedicating more funds for climate change mitigation and adaptation involves the risk of opportunism and strategic coupling to the climate agenda by developing countries, which does not reflect genuine political ownership. On the one hand, this is problematic due to the risk of creating a 'climate bubble' in developing countries where government and donor agencies, consultancies and NGOs thrive on climate projects that are not well anchored in national development priorities and institutions. Such modalities more often serve the narrow interests of national and international

climate experts than those of the wider population, and effective implementation is unlikely. On the other hand, redressing existing development projects to suit the climate agenda may be a win-win situation for donors and developing country governments: governments receive support for desired development sectors and specific projects, while donors are able to disburse development funds matching their climate policies. From the climate action perspective, the question remains whether there is real added value in terms of mitigation or increased adaptive capacity in development projects in sectors such as water resources, energy and agriculture. In order to measure climate action results in climate redressed or climate mainstreamed projects and programmes, it is necessary to identify specific climate indicators and outcomes at the outset and to monitor them accordingly.

Acknowledge that climate resilience is part of a larger development equation

National development using shared water resources dominates the regional agenda in the Mekong Basin. In a situation characterized by conflict between mutually exclusive development concerns in upstream and downstream Mekong countries, climate change is unlikely to become a key political priority in transboundary cooperation. However, the Xayaburi controversy has demonstrated that climate change is an element in the geo-politics surrounding mainstream dams. Although it is not officially part of the discourse on mainstream hydropower dams, it does appear as one of the justifications of national positions by the Laotian and Vietnamese governments. In both cases, there is collusion between national economic interests and parts of the climate agenda. The knowledge production on climate change in the Mekong region[13] has been important for making climate and development trade-offs visible to governments. Taking the national interests of Mekong countries into account, strategic knowledge on development trade-offs and benefit sharing options – linking climate impact studies to national development concerns – could provide a lever for increasing the political attention being given to climate change at the level of the entire river basin. As noted in the conclusion, economic development increases the stakes for countries in respect of the management of shared water resources and related climate vulnerabilities. Addressing climate resilience in the Mekong basin must start from issues that are: i) of real interest and concern to the countries involved; and ii) critical to sustaining and improving resilience. Developing mutual interests in sustainable development of the river and solving the conflict over mainstream dams are important steps in this direction.

[13] The IPCC down-scaled models, the MRC, NGOs, consultants and academia.

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