Regional Cooperation Efforts in the Mekong River Basin: Mitigating river-related security threats and promoting regional development

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The development of international rivers is often perceived as leading to conflicts or even water wars. However, as the development of the Mekong River shows, cooperation has not only prevailed in the last decades, but River Basin Organizations (RBOs), established to mitigate river-related conflicts and/or develop the river basin, have also contributed to the emergence of more general cooperation structures, mainly by creating spill-over effects in other issue-areas, bringing cooperation to policy fields beyond the river itself. This article assesses the contribution of the Mekong River Commission *(MRC) and the* Greater Mekong Sub-Region *(GMS) to the sustainable development of the Mekong Region as well as to the promotion of regional cooperation in mainland South-East Asia in general.*

Keywords: Environmental Security, Shared Natural Resources, International Rivers, Mekong River Basin, River Basin Organizations

Die Entwicklung grenzüberschreitender Flüsse wird oft mit Konflikten oder gar Kriegen um Wasser assoziiert. Wie jedoch die Entwicklung im Mekong-Becken zeigt, waren die vergangenen Jahrzehnte nicht nur von Kooperation gezeichnet, sondern Flussbeckenorganisationen konnten außerdem dazu beitragen, weitreichendere Kooperationsstrukturen zu entwickeln, die sich auf andere Politikfelder ausdehnen. Dieser Artikel beschäftigt sich mit dem Beitrag der Mekong River Commission *(MRC) und der* Greater Mekong Sub-Region *(GMS) zur nachhaltigen Entwicklung in der Mekong Region sowie zur Förderung allgemeiner regionaler Kooperation im Festländischen Südostasien.*

Schlagworte: Umweltsicherheit, gemeinsame natürliche Ressourcen, internationale Flüsse, Mekong-Einzugsgebiet, Flussbeckenorganisationen

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1. Introduction

While the political map of the world is structured according to nation states, the Earth is composed of ecosystems, not necessarily matching with national boundaries. This holds particularly true for international rivers. The use of a river by one riparian necessarily affects the opportunities of other riparians, creating externalities or common pool resources situations leading to international collective action problems. Since international rivers provide 60 percent of the world's freshwater flow and their basins cover 45 percent of the world's surface, inhabiting 40 percent of its population (Wolf, 2004, p. 2), the emergence of opposing interests and strategies is likely. Environmental security approaches (Homer-Dixon, 1991, Homer-Dixon, 1994; Bächler, Böge, Klötzli, Libiszweski, & Spillmann, 1996; Gleditsch, 1998; Carius & Lietzmann, 1999) have emphasized the strong link between environmental degradation and conflicts. They argue that increasing stress on natural resources and the environment is likely to lead to an intensification of collective action problems, possibly responded by vulnerable states through conflict or even war. Especially in the early 1990s, water was perceived as one of the resources the most prone to conflict, with various authors forecasting the emergence of water wars (Starr, 1991; Bulloch & Darwish, 1993; Frey, 1993; Gleick, 1996; Butts, 1997). Although most of the water war studies focus on the Middle East, the Mekong River Basin (MRB) has also often been referred to as a basin likely to experience major conflicts (Wolf, Yoffe, & Giordano, 2003).

However, reality in international basins has shown that collective action problems are more likely to serve as incentives for cooperation, particularly when riparian states realize that cooperation can generate benefits and lead to positive-sum-games: Out of the 1832 events coded by the Transboundary Freshwater Dispute Database (TFDD)[2] for the second half of the twentieth century, 1228 have been cooperative. And out of the remaining 604 conflictive events, only 37 involved any form of violence, all of them below the threshold of war (Wolf, 1998; Wolf et.al., 2003). This also holds true for the Mekong River Basin, where cooperation on river-related issues has prevailed

2 The TFDD Events Database coded every event on international rivers since the late 1940s. Additionally, the level of conflict or cooperation has been measured on the basis of so-called "Basins-at-Risk"-intensity values, ranging from -7 (highest level of conflict, i.e., war) to 7 (highest level of cooperation, i.e., voluntary merging of countries due to water) (see TFDD, n.d.; Wolf et.al., 2003).

in the last decades.

International institutions play an important role in turning water-related conflicts into cooperation, with the Mekong River Commission (MRC) and, although to a smaller extent, the Greater Mekong Sub-Region (GMS) being the most important ones in Mainland South-East Asia. Besides the direct contribution to the resolution of river-related conflicts, they advance regional cooperation in more general terms by creating spill-over effects in other issue-areas and extending cooperation beyond the river. Thereby, spill-over effects play a decisive role: Originally developed by neofunctionalist theories of regional integration (Haas, 1980), the more general concept of spill-over describes the phenomenon that increased cooperation in one specific policy field leads to the emergence of more cooperation in other issue-areas as well. The creation of interdependencies and increased regional cooperation or even integration will then limit the opportunities for unilateral actions and the likelihood of conflict.

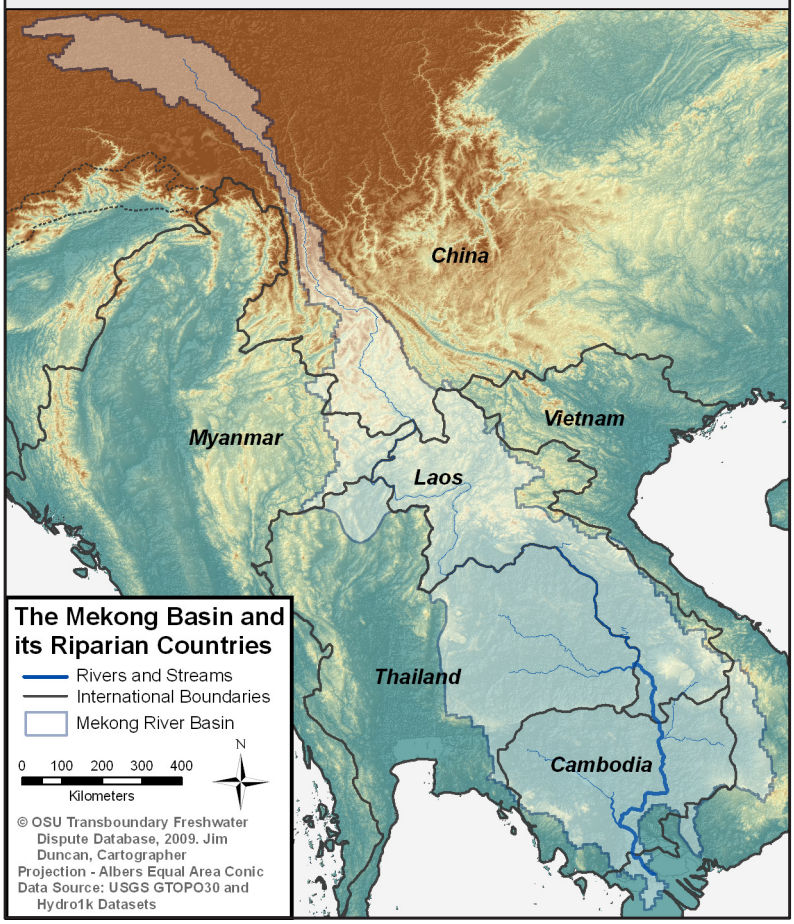
The main question of this paper focuses on whether and to what extent river-related collective action problems in the MRB are cooperatively managed through River Basin Organizations (RBOs) and, more importantly, whether and to what extent they have contributed to regional cooperation beyond the river, enhancing socioeconomic development and political stability. The paper is structured as follows: The first part introduces the different riparians' interests in developing the MRB and the potentially arising conflicts; the following part focuses on existing institutionalized cooperation efforts, namely MRC and GMS.

2. Conflict and Cooperation in the Mekong River Basin

Running through mainland South-East Asia for 4,900 km, the Mekong River is the region's largest waterway, with a catchment area of more than 800,000 km2 in six riparian states (see Fig. 1). It can be divided into the Upper Mekong (mainly the Chinese river stretch and the Lao-Myanmar border stretch), and the Lower Mekong Basin between Laos and the river's mouth.

Hitherto, the river is largely undeveloped, particularly if compared to other large river basins in the world. Only since the 1990s, riparian states have increasingly recognized the Mekong as a great potential for their socioeconomic development (MRC,

Fig. 1: Map "The Mekong Basin and its Riparian Countries"



2002, p. 7; Menniken, 2006, p. 14): The river is the most important resource for irrigation (with agriculture accounting for 85 percent of the entire river use) in a region largely depending on (irrigated) agriculture for food production and exports. It is essential for fisheries, significantly contributing to the daily protein needs of riparian communities and to riparian states' exports (with an average contribution to the GDP of 5 percent). Moreover, fisheries and agriculture employ nearly 75 percent of the population in the Lower Mekong Basin and contribute to growth, development and the reduction of poverty. And the river is increasingly important for industrial and household purposes, particularly in fast industrializing and urbanizing riparian states such as China, Thailand and Vietnam. The generation of hydropower is another important use, providing electricity for the rapidly growing riparians. And the Mekong – although not entirely navigable – is an important transport route, especially in those riparian countries still lacking sufficiently developed railway or road networks.

2.1. Riparian States' Interests – Between River Development and Protection

2.1.1. China

China is the most upstream state and controls half of the river's length. Its interests in exploiting the Mekong and its resources are all aimed at fostering the country's socioeconomic development: First, the central government wishes to develop the Southwestern provinces Tibet and Yunnan, which has so far not experienced the same levels of economic growth as the East, by integrating their markets with their South-East Asian neighbors. The Western Regional Development Plan (2000) emphasizes the importance of links between China and the other Mekong riparians, with the Mekong acting as a main transport axis. An 'Agreement on Commercial Navigation on the Mekong-Lancang River' has been signed with Myanmar, Thailand and Laos in 2000, aiming at improving the navigability of the upper stretches of the river. The first passenger connection between Thailand and China was opened in June 2006 by a Chinese company ("China to Thailand," 2006). The first ships transporting oil to the Chinese port of Simao followed in December 2006 ("Sparks fly," 2007). Since navigability is still restricted, the Chinese government is working with its neighbors on more projects, aiming at blasting more rapids and falls and creating a transport route on the entire length of the river.

China furthermore has an ever-growing need for hydropower: The government aims at developing a cascade of at least eight dams, which are able to generate electricity for Yunnan's future economic development and for electricity exports to Eastern Provinces and South-East Asian neighbors (especially Thailand and Vietnam). While the first dams were constructed in the 1980s (starting with the Manwan Dam in 1984, operational in 1993), hydropower activities increased enormously in recent years. In addition, China invests in other Mekong riparians' hydropower facilities (particularly Myanmar, Laos and Cambodia).

Due to its powerful upstream position, China's salience and vulnerability to the river are relatively low. The country therefore has little interest in engaging in regional river basin management efforts, especially if the latter imply the establishment of binding principles – a policy the Chinese government opposes altogether. This

has become obvious when China was one of only three states rejecting the 1997 UN Convention on the Non-Navigational Use of Transboundary Watercourses. Still, China has increased its engagement in Mekong-related cooperation in an informal and market-driven form. As such, China is increasingly involved in the GMS not only as a participant but also as a donor. China has become an important investor in other Mekong riparian countries, particularly in Laos, where it invests in the Nam Mang III Dam and is willing to provide financial guarantees for the Nam Theun II Project in case of the World Bank pulling out.

Overall, the Chinese policy towards the other Mekong riparians is not focused solely on natural resources, but is embedded in a more general foreign policy strategy, being more cooperative than a pure focus on the river and its resources might suggest. Therefore, the Chinese position towards downstream Mekong riparians can only be understood in the context of the country's general foreign policy strategy and its increasing rapprochement towards its South-East Asian neighbors, namely in order to (re-)establish its regional hegemony and its economic relations (Hilpert et.al., 2005, pp. 31-35; Shambaugh, 2005; Möller, 2006). Since China opposes any form of binding rules that would restrict its river development, but has realized the benefits of good relations with its neighboring countries and with river basin management initiatives, the future balance of China's resources needs and the importance it attributes to its relations with neighboring states will, therefore, be decisive for the Mekong's future development.

2.1.2. Myanmar

The Mekong is only a border river for Myanmar with Laos for approximately 200 km. So far, the country has shown little interest in developing its stretch of the river and, in fact, lacks the capacity to undertake any major development projects. Nevertheless, the country's large hydropower potential on the Mekong has received the interest of political leaders and external investors, particularly from China and Thailand. First efforts have been undertaken to develop Myanmar's hydropower potential, mainly as a source of income for the internationally isolated military government. In 2002, the Department of Hydroelectric Power was established within the Ministry of Energy which has so far identified 268 potential sites for dams (Graecen & Palettu,

2007, p. 105). In 1997 and 2005, Myanmar signed Memorandums of Understanding with Thailand on the potential export of electricity. In the coming years, large-scale projects might be set up, which would affect both downstream riparians as well as the Myanmar population, namely since the government has been known for violently relocating local communities without any compensation.

Being internationally isolated, Myanmar does not play an important role in regional cooperation. However, the country depends on China's development aid and economic cooperation (especially in the area of gems and timber exploitation). Therefore, it has "approached the rank of a Sino satellite" (Stoett, 2005, p. 17) and is unlikely to oppose any Chinese development projects or to join further downstream states' efforts in establishing regional mechanisms to restrict unilateral resource exploitation.

2.1.3. Laos

Laos is one of the least developed countries in the region and – with 95 percent of its territory in the Mekong basin – largely depends on the Mekong. Fishery and agriculture account for more than 52 percent of the country's GDP, contribute more than 40 percent to its foreign currency income and provide employment opportunities for more than 85 percent of the population (Öjendal, 2000, p. 134; Molle, 2007, p. 13). The government therefore aims to develop so far non-existent irrigation schemes and using the river's water for potentially increasing industrial and household demands. In addition, land-locked Laos relies on the Mekong as an axis of transport.

Hydropower is by far the most important Mekong resource Laos is interested in. Electricity is one of the main export goods – particularly to Thailand, which already imports 2 percent of its total electricity from Laos and has signed new treaties guaranteeing electricity supply at least until 2017 (Graecen & Palettu, 2007, p. 86). According to this strategy, the Lao government is engaged in further developing large-scale projects. To become the "battery of Southeast Asia", existing hydropower facilities (the Nam Ngum, Xeset, Theun Hinboun, Hoay Ho and Nam Leuk Dams) will be complemented by more dams, with at least 28 projects being planned until 2010, seven of them directly on the mainstream (Gajaseni, Heal, & Edwards-Jones, 2006, pp. 53-55; Herling, 2006, p. 23; Middleton, Garcia, & Foran, 2009, pp. 31-36). Along with increa-

sing activity in the hydropower sector, new investors from Thailand, China, Russia, Vietnam and Malaysia push into Laos. For example, Chinese companies are currently involved in two hydropower projects under construction, Vietnamese companies participate in feasibility studies on the Luang Prabang Dam and a Malaysian company signed an agreement for project development on the Don Sahong Dam. Since Laos fears dependency from Thailand, it welcomes new investors as yet another means to counter dependency besides the diversification of exports towards China and Vietnam.

Such projects are likely to create various adverse effects on more downstream Lao regions (which already suffer from the effects of Chinese dams) and on Cambodia and Vietnam. This has also called the attention of NGOs (most recently against the Nam Theun II Project), with large protests leading as far as international donors reconsidering their engagement in the projects, which has traditionally been very high and has helped the country to justify its intensive river development projects regionally and internationally.

Since Laos is characterized by an abundance of unexploited water resources and a large contribution to the river's flow, it has a crucial position in the Mekong's future development. Its position towards regional structures is ambiguous: While it is likely to be negatively affected by Chinese developments on the Mekong, it depends on its own hydropower projects for socioeconomic development and is therefore unlikely to join any efforts to regulate the river's use in a more binding way. Laos acknowledges the importance of regional cooperation mechanisms – particularly for their financial contribution to development projects and their role in increasing regional trade and development – but is neither completely willing nor capable to comply with their requirements.

2.1.4. Thailand

Although one third of the country is situated in the MRB, the Mekong has – other than the Chao Praya – never played an important role in the country's history. Only recently, the Mekong's great potential for developing the country's dry and underdeveloped Northeast and for guaranteeing water supply to Bangkok has been realized: Large irrigation projects in the Isaan Region and initiatives to transfer water

to Bangkok have been designed in the last years. Yet, political and economic turmoil has prevented implementation so far. Once political stability and economic growth will return to the country, there could be a renaissance of those plans, increasing conflict potential in the region. Furthermore, Thailand needs to ensure its growing demand for electricity (expected to double until 2021; Middleton et.al., 2009, p. 24). Since domestic hydropower opportunities have either been already exploited or massive protests from the civil society impede further developments, Thailand is interested in supporting the development of hydropower facilities in neighboring countries, especially in Laos and China. With both countries Memorandums of Understanding have been signed on electricity trade.

Moreover, Thailand is interested in increasing its trade and investment ties with neighboring countries by using the Mekong as its "gate to Indochina": In the search for new markets for Thai export products, new sources for natural resources, new opportunities for Thai border towns in the country's Northern part and new investment opportunities for Thai companies, Thailand actively promotes further economic integration among riparians (Masviriyakul, 2004, pp. 308-310). This is mainly done through infrastructure development (i.e. funding of Mekong bridges and the improvement of roads and ports) in neighboring countries. However, recent economic and political instabilities have slowed down Thai engagement.

Economic integration, together with security cooperation, is, thus, the main interest of Thailand, making issues beyond the river the most likely to push Thailand towards a more cooperative behavior. However, Thailand has little interest to further institutionalize regional cooperation, especially if they established more binding water use principles or even veto rights for downstream countries. In this context, Thailand favors the integration of China into regional institutions, hoping to build coalitions against potential efforts of downstream countries to prevent large-scale development upstream.

2.1.5. Cambodia

With more than 85 percent of its territory in the Mekong Basin, Cambodia is one of the most vulnerable countries. The river and its resources are not only decisive for the living of riparian communities, but also provide development opportunities

for the entire country, which is still struggling with the consequences of war, the reestablishment of a democratic system, and a high dependence on external aid. Agriculture is the country's main economic sector – accounting for more than 50% percent of its GDP and employing more than 90 percent of the population – with the Mekong and the Tonle Sap providing most of the water. As irrigation systems are largely missing or have been destroyed in years of conflict, the Cambodian government aims at developing new irrigation schemes in the next years. In addition, fishery is important for the food security of local communities as well as for exports. Moreover, the Mekong is an important transport route in a country with an insufficient road. In addition, the development of tourism – regarded as one of the main new sources of income – largely draws from the Mekong. Cambodia also aims to develop its own hydropower facilities, although its capacities are relatively limited and largely found on Mekong tributaries. While the most important project, the Sambor Falls Dam, financed by Thai, Malaysian and Chinese investors, has received much attention, most other projects are likely to focus on domestic supply only, thus being relatively small in scale (Graecen & Palettu, 2007, p. 110).

Overall, Cambodia's dependence on the river explains its large interest in sustainable river development, with regional cooperation structures being perceived as helpful. Moreover, the Cambodian government hopes to further integrate the country in regional cooperation structures which might foster the economic development or even provide financial and technical resources for development projects. Cambodia fosters the establishment of more directly river-related cooperation initiatives within the MRC, for example by hosting the MRC Flood Management and Mitigation Program's Regional Flood Centre and the MRC Fisheries Program. Still, Cambodia lacks the means and capacities to actively engage in the promotion of joint river basin management or to even push for more binding rules.

2.1.6. Vietnam

As the most downstream riparian, Vietnam is extremely vulnerable to upstream river development activities. And although only 20 percent of the country lie within the Mekong Basin, it is of great importance for Vietnam's overall development. While only 25 percent of the population lives in the Mekong Basin, the region produces

50 percent of all the country's agricultural products, including 80 percent of the country's rice crops and 90 percent of its rice exports, and contributes 50 percent to its seafood exports (Backer, 2007, p. 43). In order to do so, it is dependent on sufficient water flow from upstream to guarantee irrigation and to prevent salinity intrusion from the South China Sea. Additionally, severe floods have caused significant damage in recent years and are likely to worsen as a consequence of global climate change, requiring elaborated flood monitoring and management.

Therefore, Vietnam has a high interest in regional river basin management, particularly through data exchange, joint flood protection and the establishment of binding rules on water quantity and quality. Additionally, Vietnam perceives regional cooperation initiatives as means of its regional foreign policy strategy, focusing on increased regional integration in political and economic terms. On the other hand, Vietnam also has an interest in developing further hydropower facilities (in addition to the already existing Drayling and Yali Dams on Mekong tributaries), especially to provide electricity to the economically growing region around Ho Chi Minh City. Since the country's electricity demand will quadruple until 2015 (Middleton et. al., 2009, p. 24), the Prime Minister announced in the National Strategy for Electricity in 2004 (Vietnamese Prime Minister's Decision 677/2004/QD-TTG; see Dan Sinh Nguyen Vo, 2008), that Vietnam will further increase its hydropower capacity from 39 percent in 2006 to 62 percent in 2020. Therefore, another 17 projects are currently in the planning stage. Most of them are likely to affect Cambodia, which lies downstream to the Vietnamese Central Highlands. Along with other investors, the Asian Development Bank (ADB) and the World Bank have made important contributions to those projects. Besides dams in the Central Highland, Vietnam also finances and builds projects in Laos and Cambodia which, besides the long-term supply of electricity, are also thought to increase the competitiveness of Vietnamese construction companies. Moreover, Vietnam buys electricity from Chinese Mekong hydropower plants, only being possible through the second Power Grid developed through the GMS (Hensengerth, 2008, p. 117). However, in doing so, Vietnam indirectly supports projects it suffers from.

The high dependence of most riparian states and the importance of the river and its resources for their socioeconomic development and, thus, for their overall national security has turned the Mekong into a central issue of regional politics – far

beyond river basin management. Hence, "the Mekong is an inescapable variable in

Table 1: Riparian interests

Country	Main interests in river development	Strategic position on the river	Foreign policy strategy towards the region/Mekong
China	• Development of Yunnan Province (Western Regional Development Plan) • Hydropower generation (cascade on mainstream and tributaries) • Improvement of river navigability (navigation between Simao and Luang Prabang)	Low salience/ upstream hegemon	Strategy of „peaceful development", integration into regional cooperation networks for economic benefits (but no willingness to surrender to supra-national decisions), problematic relations to Vietnam, rather good relations to Thailand
Myanmar	• Hydropower generation (sale to Thailand and China), but not yet developed	Low salience/ weak/ low capacity	International isolation under military government, no interest in integration into regional networks
Laos	• Hydropower generation (for sale to Thailand, China and Vietnam) • Integration into region (through infrastructure, growth triangles) with help of regional bodies • Fishery/irrigation potential of Mekong decisive for population and development	High salience/ low capacity	Integration into regional cooperation network that provides major economic benefits (but still limited opening), traditionally good relations with Vietnam, strong relations to Cambodia, improving relations to China, conflictive relations with Thailand
Thailand	• Water diversion for irrigation/ agriculture, water supply in Bangkok • Hydropower generation and purchase of electricity (from Laos) • Avoiding major environmental degradation	Limited salience/ midstream power	Good relations with neighbors and strong ASEAN (but, foreign policy disrupted due to recent domestic political developments), favorable perception of China, tight relations to Myanmar, complicated relations with Cambodia, Laos, and Vietnam
Cambodia	• Maintenance of water flow and water level in Tonle Sap Region guaranteeing fishery, agriculture, navigation, etc. • Hydropower (with aim to export to Thailand and to substitute oil imports), but not yet developed	High salience/ low capacity	Integration into regional cooperation networks for the country's socioeconomic development/reconstruction after civil war; however, difficult relations to Vietnam and Thailand
Vietnam	• Hydropower generation in Upper Highlands on Mekong tributaries • Irrigation in Mekong Delta (including avoiding saltwater intrusion) and aquaculture	High salience/ downstream power	Regional cooperation in economic terms/integration into ASEAN (balance Chinese influence), difficult relations with China (and Cambodia), strong relations with Laos, competition with Thailand over regional Lower Mekong hegemony

Source: Own Compilation

the foreign policy planning of all Southeast Asian countries" (Stoett, 2005, p. 169). Existing and emerging collective action problems in the river basin are, therefore, often thought to lead to conflicts among riparian states. This will be elaborated in the following chapter.

2.2. Conflict or Cooperation

As the previous sections have demonstrated, the MRB is characterized by a complex structure of interests and strategies. Therefore, international collective action problems are present, which – according to proponents of environmental security and water-war concepts – can lead to conflicts among riparian states. The specific upstream-downstream structure, with China as an upstream hegemon, tends to intensify existing problems, since upstream unilateral development projects are difficult to obviate. Moreover, the fact that competition for resources is not related to geophysical scarcity but rather to geopolitical and socioeconomic scarcities (that is, situations in which the opportunities of use of otherwise abundant resources by further downstream states are significantly reduced due to political power constellations and/or unequally distributed developments; Gleick, 1996, p. 6) tends to increase the conflict-conduciveness of river-related collective action problems.

The development of hydropower projects, one of the most contested issues in the basin, illustrates this perfectly: With a capacity of 200,000 million KW/year in the Lower Mekong Basin and 300,000 million KW/year in China (Dinar, Dinar, McCaffrey, & McKinney, 2007, p. 237), hydropower provides great development opportunities for the region. Especially upstream countries are interested in exploiting this potential for their development. On the other hand, the development of large hydropower projects has severe impacts on the river. As the Manwan and Dachaoshan Dams in China have already made clear, large dams can affect the river's flow, reduce the availability of water for irrigation and the content of sediments, cause severe floods and droughts, and negatively impact on fish populations. Especially downstream states are affected, potentially being restricted in their development opportunities and, hence, their national security perception.

Moreover, other factors can further increase the likelihood of conflict in shared basins. Among them, economic asymmetries and problematic relations between ri-

parian states in issues other than water have a particularly high likelihood of adding fuel to existing flames (Wolf, 2006, p. 25). Although all riparian states (with the exception of Myanmar) have experienced exceptionally high GDP growth rates in the last years, ranging from 4.8 percent in Thailand to 13 percent in China in 2007, their levels of development differ highly. Despite Thailand's suffering from an economic downturn in the last decade, it is still the most advanced country with a GDP per capita of 3,400 USD in 2007 and a high level of human development. Cambodia and Laos, on the other hand, recently experienced high growth rates, but still lack basic human development. Vietnam managed to translate its high growth rates into a broader development and the reduction of poverty, nevertheless, far more has to be done. Similar findings hold true for Yunnan, which – despite the enormous growth rates of China – still struggles with various insufficiencies in terms of development, not least due to its relative marginalization in China (World Bank, 2009). Moreover, those countries compete on international markets, with economic competition outnumbering complementarities among them.

In addition, relations between the different riparian states are often problematic. Rooted in the 1000-year long Chinese occupation of Vietnam and ideological differences related to the Sino-Soviet conflict in the 1960s and 1970s and the Chinese support to Cambodian Khmer Rouge during the Vietnamese occupation of Cambodia 1979 to 1989, Vietnam remains suspicious of any Chinese attempts to re-establish regional hegemony. Although all land border issues could be solved in 2008, disputed territories in the Gulf of Tonkin and the South China Sea remain a major challenge. Still, China is increasingly interested in good relations to its South-East Asian neighbors and has recognized Vietnam as a key player. Vietnam also has complicated relations to Cambodia, mainly due to the Vietnamese occupation and the increasing Vietnamese influence in Cambodia. However, significant improvements could be made in recent years, particularly due to increased economic cooperation and a joint perception of being the Mekong's most downstream states. Vietnam and Thailand, being old rivals in the region and having experienced major conflicts in the 1970s and 1980s, mainly following the Vietnamese invasion in Cambodia and the Thai support to the Khmer Rouge, have different perceptions concerning the regional order in mainland South-East Asia, occasionally producing irritations in their relations (Hensengerth, 2008). The very different positions on the Mekong's development are likely to deterio-

rate this problem, possibly leading to "the most intense rivalry" in the Mekong Basin (Dinar et. al., 2007, p. 239). Another major conflict line is found between Thailand and Laos. Following historic confrontations due to the Thai support to the US while Laos was following a Communist way, relations between the two countries today are characterized by unresolved border issues (despite the establishment of a border commission in 1997) that have led to occasional outbreaks of violence (with a short war erupting in the 1980s on border and refugee issues). Moreover, the increasing Lao economic dependence on Thailand has become an issue of conflict, particularly as Thailand largely benefits from the purchase of natural resources and electricity from Laos. Unresolved border issues also characterize the relations between Thailand and Cambodia, particularly in the Northwest of Cambodia where borders remain contested despite the establishment of a border commission in 2000. This led to occasional outbreaks of violence, particularly in the area of the Preah Vihear Temple, where gunfire was exchanged in 2008. Additionally, Thai business communities have been regularly accused to be involved in the (illegal) exploitation of natural resources and the promotion of gambling and sex labor in Cambodia. Relations imploded in 2003, when Cambodian demonstrators attacked the Thai embassy and Thai businesses in Phnom Penh.

Despite those adverse circumstances cooperation prevailed in the last decades. Not only did the number of interactions among the Mekong's riparian states increase in general, but cooperative events also increased far more than conflictive ones, the latter only showing a very low level of conflict, usually in the form of verbally expressed disagreement (see Table 2). Thus, cooperation has clearly dominated the MRB.

Similar to what general findings on water conflict and cooperation suggest (Wolf, 1998; Wolf et. al., 2003), water has helped to provide incentives for cooperation even in times of hostile relations between riparian states (for example, cooperation on electricity export from Laos to Thailand prevailed despite ideological differences in the 1970s and 1980s). With institutional capacity in a river basin being a decisive variable for turning water-related collective action problems into conflict or cooperation (Wolf et. al., 2003, p. 43), regional organizations have played a decisive role.

Table 2: BAR-values Mekong

Timeframe	BAR scale events in the Mekong Region															Average BAR-value
	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	
1950-1959	0	0	0	0	0	0	0	0	0	3	5	3	0	1	0	0,80
1960-1969	0	0	0	0	0	0	0	1	1	1	1	20	1	1	0	1,73
1970-1979	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0,07
1980-1989	0	0	0	0	0	0	0	0	4	0	4	4	0	0	0	0,80
1990-1999	0	0	0	0	0	1	2	3	17	28	11	12	0	2	0	5,07
2000-2008	0	0	0	0	0	0	12	1	30	2	4	8	0	0	0	3,80
All years	0	0	0	0	0	1	14	5	52	34	25	47	2	4	0	

Data provided by the TFDD Events Database.

3. Institutionalized Cooperation Efforts in the Mekong River Basin

As early as the 1950s, joint river basin management efforts developed in the MRB, particularly through initiatives of the US and UN Economic Commission for Asia and the Far East (UN-ECAFE). Although those two actors had different positions on how regional cooperation in mainland South-East Asia should look like – with the US being led by a functionalist logic of regionalism and the idea of pushing back communism, preferring a light and little institutionalized way, and UN-ECAFE opting for a more tightly knit and binding network – river basin management was seen as "one of the major means of accomplishing economic growth and social change" (Sewell & White, 1966, p. 5). In line with general development concepts of the 1950s and 1960s, the Mekong Committee (MC), founded in 1957, had the task to "promote, coordinate, supervise and control the planning and investigation of water resources development projects" (Statute of the Committee). In its early years, the MC was very active in fulfilling those high expectations, undertaking several studies on the opportunities to exploit the Mekong in order to foster growth. The Indicative Basin Plan (1970) proposed a strategy for more development projects until the year 2000. However, cooperation soon fell to the vicissitudes of regional conflicts, with institutionalized cooperation practically ending when Cambodia withdrew from the MC in 1975. Until

the early 1990s, cooperation remained mainly bilateral, focused on low political issues and pragmatic projects only. Institutionalized cooperation did not come to a renaissance until the early 1990s, when MRC and GMS were founded.

This development must also be seen in the context of a generally more cooperative regional environment, where other regional institutions, namely ASEAN and several related initiatives such as the ASEAN Regional Forum (ARF), (re-)emerged as well.

3.1. The Mekong River Commission – Intergovernmental River Basin Management

The MRC was established through the Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin, signed by Laos, Thailand, Cambodia and Vietnam in 1995. Negotiations on the agreement had been very difficult due to disagreements between Thailand and Vietnam on potential veto rights and on binding principles of water use. Only the active promotion of negotiations by the United Nations Development Program (UNDP) finally made an agreement possible (Browder, 2000; Menniken, 2006; Dinar et. al., 2007, p. 239).

The MRC consists of a Council, responsible for policy decisions on the highest level, a Joint Committee, operationalizing the Council's general strategy into specific projects, and the MRC Secretariat, providing technical and administrative services and implementing projects. Its task is

> *to promote, support, cooperate and coordinate in the development of the full potential of sustainable benefits to all riparian States and the prevention of wasteful use of MRB waters, with emphasis and preference on joint and/or basin-wide development projects and basin programs through the formulation of a basin development plan (Mekong River Commission, 1995, chap. 3, art. 2).*

Therefore, its work focuses on eight key areas, namely irrigation and drought management, navigation, hydropower, flood management, fisheries, watershed management, environment and tourism.

Despite its emphasis on key principles of water use, such as the equitable and reasonable use, the maintenance of flow in the dry season, and the exchange of information and data, the 1995 Agreement is less binding than previous rules; namely the 1957 Agreement and the 1975 Joint Declaration of the MC contained explicit veto rights and the respective prior notification principles for riparian states against

unilateral projects. Even the adoption of an 'Agreement on Data and Information Sharing' in 2001 and the 'Regulations on Prior Notification and Consultation' as well as the 'Agreement and the Regulations on Supervision of the Use of the Mekong River Water' in 2003, providing guidelines on how to manage the river according to international river basin management principles, has not been able to establish truly binding rules for the river's development. This is not least due to the fact that Thailand refused to sign them in 2004, arguing that they would be useless without Chinese participation anyway. In 2002, China and the MRC signed an agreement on technical cooperation, which became operational in 2004. It mainly deals with data sharing from two hydrological stations on the Upper Mekong, aiming at improving flood forecasting and flood protection for downstream states. So far, cooperation is taking place, albeit not satisfyingly. Data is only delivered in the dry season and China retains the right to restrict the data for strategic reasons, which, indeed, occasionally happens. Moreover, information from two stations only is not sufficient for comprehensive flow monitoring.

Similar to previous institutions in the region, funding largely comes from international donors. UNDP's contributions are of particular importance. Although important for MRC's capacity, the high dependence on donor funding negatively affects ownership at the institution. In 2008, contributions from member states were only USD 0.95 million, while donors contributed more than ten times as much (MRC, 2008, p. 2). Therefore, the MRC has introduced a "riparization policy" (MRC, 2006, p. 35), aiming at substituting donor funding for its core budget (that is, all costs except for project costs) by riparian's resources until 2014. As until today, less than 10 percent of MRC's budget is funded by its member countries, this target is far too optimistic.

Altogether, MRC's contribution to sustainable river basin management and the promotion of regional cooperation, peace and security is ambiguous. It clearly has contributed to institutionalizing cooperation structures in mainland South-East Asia, particularly by providing a forum of negotiation for river-related collective action problems and by engaging in various cooperation projects, ranging from the promotion of infrastructure development to the protection of transboundary natural resources and the environment. On the other hand, it "cannot be claimed to have a decisive impact on the members' management of the basin's natural resources" (Backer, 2007, p. 44). Besides the lack of institutional capacity of the MRC, this is due to the fact that

elites in member states still lack the acknowledgement of the importance of Mekong cooperation in general (Will, 2009, p. 39). Since the implementation of policy recommendations from the MRC rests with member states and is not binding, copious achievements have been rare so far. Moreover, many "riparian member states prefer the MRC to be a rather toothless organization that identifies development projects and attracts external funds, whilst control of the development remains with the states themselves" (Backer, 2006, p. 38). As long as member states "continue to lack the will to commit to a strict regime with specified procedures to establish a flow regime" (Backer, 2007, p. 45), the MRC is unlikely to contribute to the establishment of binding principles and rules that will guarantee the river's sustainable development. Moreover, the non-participation of China in the MRC further decreases its capacities. Although China increasingly cooperates on minor issues (such as data sharing, or navigation), it remains unwilling to commit to more than its observer status.

Nevertheless, the MRC has made important contributions not only to water-related cooperation and the sustainable management of the Mekong, but also to confidence building and intensified cooperation among riparians in issue-areas other than water management.

3.2. The Greater Mekong Sub-Region – Economic Integration beyond the River

The GMS was established among all Mekong riparian states in 1992 at the Conference of Mekong Riparian States initiated by the ADB. From the very beginning on, the GMS was understood as a loosely connected group of countries linked to each other by the Mekong. Similar to the concept of sub-regional growth triangles (Masiriyakul, 2004; Kongkraew, 2004; Dosch & Hensengerth, 2005), geographic links are thought to make economic integration beneficial for all states and to foster further integration. While the MRC focuses on the sustainable development of the river, emphasizing the river as the key variable of cooperation, the GMS' approach centers around economic development and market-driven exploitation of natural resources, particularly through infrastructure development.

According to its wide and market-led concept, the GMS is organized in a loose institutional structure, consisting of the Meeting of Prime Ministers (every three years), yearly Ministerial Conferences and Working Groups (in addition, National Co-

ordination Committees manage cooperation projects within the member states). The ADB itself holds an important position within the GMS framework. It is the single most important actor in GMS cooperation, providing not only funding, administrative and technical support, but also functioning as the GMS Secretariat.

In line with its integration-centered approach, GMS focuses on the promotion of trade liberalization and FDIs, the removal of trade barriers, and the development of physical links between the participating states, led by the idea of "enhancing competitiveness through connectivity" (GMS, 2007). The Vientiane Action Plan 2008-2012 (GMS, 2008) identifies nine key sectors (transport, energy, telecommunication, agriculture, environment, tourism, human resources development, trade, investment). The Economic Corridors, linking China, Thailand and Vietnam (North-South Corridor), Myanmar, Thailand, Laos and Vietnam (East-West Corridor) and Thailand, Cambodia and Vietnam (Southern Corridor) are of particular importance, since the development of physical links is regarded as one of the most important prerequisites for economic integration.

In recent years, especially since the 10th GMS Summit in Phnom Penh 2002, which reemphasized GMS' commitment to fostering regional cooperation and proposed the Greater Mekong Subregion Strategic Framework 2002-2012, the GMS has expanded in its projects, covering more issue-areas (such as energy, biodiversity, health, transnational crime, flood and drought management, and human resources development). GMS is increasingly turning towards non-traditional security threats in the region, acknowledging that they can have severe negative effects on the socioeconomic development of Mekong riparians.

Overall, "the wide range of cooperation efforts as part of the GMS and related intergovernmental activities has had an impact on fostering subregional peace and stability" (Dosch, 2007, p. 134). GMS projects can be perceived as "multi-dimensional confidence-building measures" (Dosch & Hensengerth, 2005, p. 272). Particularly the integration of China into Mekong-related cooperation and the high relevance China attaches to the GMS, the GMS thus being „a core element of Beijing's policy outlook" (Dosch & Vuving, 2008, p. 15), has allowed to establish a basin-wide cooperation structure. On the other hand, the GMS could not (yet) achieve all its goals and even in its core focus area, the promotion of regional economic integration, results remain small. For example, trade between the Chinese province of Yunnan and other

GMS states has decreased despite major infrastructure and trade promotion projects, while trade between Yunnan and non-GMS states significantly increased in the 1990s (Poncet, 2006). Especially less developed countries such as Cambodia and Laos do not benefit from economic integration as much as they expected. Moreover, the GMS deals with a large number of planning and implementation problems: The development of joint projects only requires the participation of at least two states, with other countries not even being asked for their approval – a practice likely to worsen collective action problems related to river-basin development, particularly in the hydropower sector, instead of enhancing security in the region. However, GMS' contribution to a more cooperative environment in mainland South-East Asia – and particularly its potential to improve this further – should not be neglected.

4. Conclusion

Overall, conflict and cooperation in the MRB revolves around three different, yet interdependent issues: the exploitation of natural resources, the protection of the river basin, and the promotion of economic integration.

The main contribution of institutionalized cooperation efforts in the Mekong Region has been the creation of a stable and peaceful environment in which collective action problems related to the river can be peacefully mitigated. The establishment of cooperative projects on the river and beyond – ranging from joint flood protection mechanisms to the active promotion of cross-border trade and investments – has led to growing interdependence among riparian states. As TFDD Events data shows, conflictive actions have decreased compared to cooperative ones and average BAR-values did significantly increase in the 1990s in the context of the establishment of institutions (see Table 2). Institutionalized mechanisms have made an important contribution to mitigating conflicts, even in the context of otherwise complicated relations between riparian states. Furthermore, water-related issues have helped to generate cooperation in issue-areas beyond the river as well, starting with infrastructure developments and environmental protection, increasingly spilling over to economic and even political cooperation.

Although significantly contributing to regional security, neither MRC nor GMS can (yet) be perceived as a security community in the proper sense of the term, since

unresolved conflicts persist in the region and existing cooperation remains at a low level and riparian states are not integrated in a tightly knit net of security-related interdependencies. MRC's and GMS' contribution to the establishment of regionalization building blocks can, however, be perceived as important contributions to an improvement of regional security in the Mekong River Basin, even beyond the issue-area of river basin management. Generally speaking, it can be summarized that MRC and GMS did, indeed, contribute to a large extent to the resolution of water-related conflicts and the promotion of regional cooperation beyond the Mekong River itself, thus contributing to the overall security in mainland South-East Asia. However, several improvements need to be achieved to not only enhance regional cooperation and generate cooperation benefits, but to also make cooperation more effective – thus establishing a resilient framework of cooperation that is able to sustainably enhance the overall security in the region both for riparian states as well as for riparian communities.

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