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Transboundary River Basin Governance: A Case of the Mekong River Basin

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Abstract

Conflict and cooperation are key governance challenges in transboundary river basin governance, especially in the Mekong River Basin. Hydropower dams have been at the center of such a conflict and cooperation that are useful metrics to assess the level and intensity of conflict and cooperation in transboundary river basin governance. This study examines transboundary river basin cooperation in the Mekong through the lens of hydropower dam projects. It uses a literature review and a case study of the Lower Sasan 2 (LS2) Dam to analyze the conflict and cooperation in the Mekong region, from the era of the US influence in the Cold War, the post-Cold War period, and the present-day with the rise of China. It concludes that Mekong river basin cooperation has evolved as a result of external influences and internal competition by riparian states over Mekong resources. The LS2 was identified in 1961 by US-supported hydropower studies and then by the GMS/ADB in 1998, but left unattended until 2007 when Vietnam signed an agreement with Cambodia to undertake a feasibility study in 2008. It took 16 years to get the LS2 built by a Chinese company in 2014 and completed it in 2017. Through the process, the states, powerful external actors, financial institutions, and private sector actors have politicized the LS2 studies, design, and construction. Cambodia, as a weak downstream state, has had to and must continue to position itself strategically in its relationships with these hydro-hegemony to compete for hydropower dam projects and protect its interests. The rise of China has induced the changing relationship between riparian states. Many hydropower dams were built with Chinese funding. Cambodia has also enjoyed its close ties with China, and the building of the LS2 dam by a Chinese company contributes to changing its positions in the Mekong cooperation but suffers environmental and social impacts.

Keywords: transboundary water governance, asymmetric power, hydro-hegemony, hydropower dam, climate change, regional cooperation

1. Introduction

Conflict and cooperation have long been a key governance challenge in transboundary river basin governance. Hydropower dam projects have been at the centre of transboundary river basin cooperation but also the centre of conflicts. These projects have been utilized by riparian states to control water flow and other river resources within their territories, sometimes to the detriment of neighboring states.

Therefore, hydropower dam projects are useful indicators for assessing the level and intensity of conflicts and cooperation in transboundary river basin governance. Thus, the purpose of this study is to examine the transboundary river basin cooperation in the Mekong through the lens of hydropower dam projects. The methodology used consists of a literature review and a case study of the Lower Sesan 2 (LS2) Dam in the Lower Mekong River Basin in Cambodia to explore the dynamics of riparian cooperation and conflict in the Mekong.

2. The Mekong River

The Mekong River is the tenth largest river in the world. The basin of the Mekong River drains a total land area of 795,000 km² from China's Qinghai-Tibet Plateau to the Mekong Delta. The Mekong River is the twelfth longest river in the world, flowing approximately 4,909 km through three provinces of China, continuing into Myanmar, Laos, Thailand, Cambodia, and Vietnam before entering into the South China Sea. It originates in the northeastern rim of the Tibetan Plateau situated about 5,000 m above sea level. In China, the Mekong River is called the Lancang River, flowing over 2,200 km. At the end of China's border, the altitude of the Mekong River has dropped to about 400 m above sea level, and it then flows for 2,709 km through Myanmar, Laos, Thailand, Cambodia, and Vietnam [1].

The Sesan, Srepok, and Sekong (3S) rivers form the largest tributaries of the Mekong River, located at the corners of Cambodia, Laos, and Vietnam (see **Figure 1**). It is the second-largest sub-basin of the Mekong River system [2, 3], covering an area of about 78,579 km², accounting for about ten percent of the entire Mekong Basin, and spanning the three countries of Laos (29 percent), Cambodia (33 percent), and Vietnam (38 percent) [4]. The Sesan and Srepok rivers originate in the Central Highlands of Vietnam, flowing from Vietnam to Cambodia over a distance of 462 km and 425 km respectively, and meet the Sekong River in Stung Treng Province in Cambodia [3]. The Sekong River originates in the Central Highlands of Vietnam, flowing through Laos and then in Cambodia, where it joins the Mekong River in Stung Treng Province.

The Mekong is home to about 260 million people who are living dependent on the rivers, its water, and other natural resources. About 60 million people live in the Lower Mekong Basin (which does not include China or Myanmar), of which about 3.59 million people live in the 3S basin. Vietnam's population in the 3S basin constitutes 86% of the 3S population. About 60% of the Mekong basin's population relies on agriculture, and 70% of the water diverted from the Mekong each year is used for irrigation, with irrigated land covering 27% of the basin. The Mekong's industrial uses include its potential as a transportation corridor between and inside riparian countries, in particular for the rapidly growing China-ASEAN (Association of Southeast Asian Nations) trade [5].

Capture fisheries make up the largest contribution to the Mekong's fishery, contributing to 2 million tons a year. The 3S River Basin is also rich in fisheries [6]. Fisheries account for nearly 6–9% of Cambodia's GDP and 7% of Laos's GDP. However, the Mekong fishery sectors in Thailand and Vietnam add well over USD 750 million to each of these countries' GDPs per year, although it is less significant to its national economies [7].

The Mekong River Basin has the potential to generate 30,000 megawatts (MW) of hydropower, with only 4,450 exploited as of 2012, of which only 1,600 of that is accounted for the Lower Mekong Basin. The 3S River Basin of the lower Mekong is a potential region for significant hydropower development, with estimated outputs at approximately 6,400 MW [8], mostly in Vietnam and Laos [9]. Hydropower



Figure 1.
Map of the studied areas.

development in the 3S Basin, consisting of individual dams and cascade dams, is rapidly increasing, particularly in Vietnam and Laos, following the pace of economic growth and a need for increased security in the production of electricity.

The LS2 Dam sits at the intersection of two international tributaries of the Mekong River—the Sesan and Srepok River. This chapter explores conflicts and cooperation in an international river basin. First, it examines hydro-hegemony in transboundary river basin management by analyzing the history and politics surrounding the development of the hydropower dams in the Mekong region. Secondly, it looks in depth at the case of the LS2 Dam hydropower project concerning the involvement of the US in Lower Mekong riparian politics and at its importance within the Greater Mekong Sub-region (GMS) and the Cambodia-Laos-Vietnam Development Triangle. Third, it analyzes the role of China in the Mekong and its involvement in hydropower dam development in the Mekong, especially how it is competing with Vietnam to take control of the LS2 Dam. Additionally, the Chapter details the construction of the LS2 Dam by a Chinese developer. It also explores the impacts of hydropower dam construction on local communities and how they respond to Chinese hydropower projects to attempt to protect their livelihoods. Finally, it concludes and makes recommendations regarding how to improve

transboundary water governance in the 3S Basin. Further, the findings presented in this manuscript make valuable contributions to the research regarding the impacts of hydro-hegemonies in transboundary river basin governance as well as the growing literature on power and politics in influencing international water relations and shared transboundary discourse.

3. Conceptual framework: conflicts and cooperation in transboundary river basin governance

There are 261 international river basins around the world, where the water and other riparian resources from one river basin is shared by two or more countries. International rivers may be managed for multiple uses such as hydropower development, food production, industrial development, municipal water supplies, recreation, or a combination of these. Different user groups in different countries with different objectives often have difficulty in arriving at a common agreement regarding quantity, quality, and water distribution [10]. The increasing competition for limited freshwater resources along international rivers could escalate interstate conflicts. Thus, the international river basin is a source of a potential interstate conflict, particularly when it comes to negotiating the sharing of water between upstream and downstream states. Water conflicts can be further divided into problems of water quality, water quantity, and ecosystem issues [11, 12]. However, the costs of armed conflict over a shared river far outweigh the benefits of potential victory [13]. So, rather than going to war over water, co-riparian states often choose to cooperate and share river resources and benefits. Globally, Wolf [10] found no water wars within the 261 international river basins across the globe. In the Mekong River Basin, several studies have identified no major conflicts and riparian states within the region cooperate to manage and share the benefits from the Mekong River, despite interstate tensions due to the building of large-scale dams [14, 15]. Nonetheless, the absence of war does not mean the absence of conflict [16]. Indeed, cooperation is reached through a process of dialog, negotiation, discussion, and opposition. Some of these tensions co-exist to the point that they are too complex to be categorized as either conflict or cooperation. These complex tensions within transboundary riparian governance are best understood as water-related interactions rather than as cooperation or conflict [17].

Water-related interactions among many different actors have been driven by power asymmetries that influence decision-making and water allocation among riparians, and thus, it is difficult to represent the variations in these relations over time and through changing economic and political dynamics [18]. Zeitoun and Warner [16] provide a framework to analyze power asymmetry within transboundary river basin cooperation. From the existence of power asymmetries that drive water interactions, it can be seen that an arrangement understood as “cooperative” from a hydro-hegemon’s perspective may conceal an inequitable status quo. The weaker states in such an arrangement may have agreed to cooperate for tactical reasons, unrelated to the immediate water issues at hand, and, therefore, the degree to which this arrangement is truly “cooperative” should be questioned [18]. Stable situations of shared control may camouflage unjust outcomes for marginalized stakeholders [16]. The blind pursuit of “cooperation” can, therefore, be as detrimental to the equitable resolution of transboundary water issues as absolute conflict. Furthermore, cooperation between riparian states regarding transboundary water management traditionally has been seen and interpreted as infringing on the sovereignty of riparian states [19]. Hydro-hegemony in transboundary river basin cooperation has often been challenged by counter-hegemony [20].

Zeitoun and Warner [16] describe counter-hegemony as the various strategic responses employed by states sharing the international rivers against perceived negative forms of hydro-hegemony to improve their situation vis-à-vis the hegemon. These strategies could include recourse to ethical arguments and international law, de-securitization, issue linkage, economic development, alternative funding sources, negotiation, and generation of positive-sum outcomes [16]. Dinar [21] introduces side-payment and cost-sharing in international river basin governance as examples of ways to counterbalance the asymmetric geographical relationship between downstream and upstream states. On the other hand, Zawahri [22] points out that third-party involvement in transboundary river basin interactions can leverage the power of riparian states to encourage exploitation of river basin resources, and demonstrates that side-payments from third-party actors such as international organizations, bilateral aid, and non-governmental organizations (NGOs) could reinforce the hydro-hegemon status of riparian states by boosting their capacity for exploitation.

The employment of counter-hegemonic strategies has increased in the past few decades due to the rise of democratization in the post-Cold War era, which has empowered an increasing number of people in different states across the globe to exercise supreme political authority over a geographical region. The post-Cold War era of democratization and globalization has also seen a proliferation of non-state domestic actors influencing national decision-making, including foreign policy. Along these lines, Nicola Pratt [23] has described the rise of civil society as a force for political change, social awareness, and local resistance as a type of counter-hegemony through which challenges to hydropower dam projects by riparian states, including hydro-hegemons, have been made in places such as Thailand and some countries in Europe [24].

Hirsch [25] views the hydro-hegemony in the international shared water as a form of geopolitics. The World's geopolitics has changed after the Cold War, transforming the global geopolitics, particularly the hydro-hegemony, into a more complex set of inter-state relations. The rise of China has resulted in changing inter-state relations and the hydro-hegemonic practices in the Mekong. The region has been re-arranging into overlapping blocs, such as ASEAN, ASEAN Economic Community (AEC), MRC, the GMS, and the Lancang-Mekong Cooperation in the Mekong Region. The economic rise of China and its concomitant increase in demand for energy and water resources [26]. Burgos and Sophal [27] compare the rise of China to the hungry dragon that would need more resources to feed themselves, and so has looked into its neighboring countries to exploit those resources for its domestic needs. Liebman [28] argues that China has trickled down its hegemonies to its neighbors beyond the Mekong river and water resources, but to extract other resources such as mining, oils, timbers, and agriculture, pursuing its interests regardless of how these affect its downstream neighbors. However, these sometimes challenge the existing hydro-hegemonic structures in the Lower Mekong Basin and sometimes leverage the counter-hegemonies.

4. Methodology

This chapter uses the conceptual discussion above, based on the relevant literature, to analyze conflicts and cooperation in the Mekong River Basin. Based on this conceptual approach, it examines how the rise of China, as well as global and regional changes, have affected transboundary river cooperation in the Mekong. In addition to the conceptual framework based on the existing literature, a field study was carried out in two phases. The first phase was conducted between July 2013 and

July 2014, before the construction of the LS2 Dam. The second phase was carried out between January 2016 and May 2017, during the construction of the dam.

Both primary and secondary data were collected to address the research issues and questions presented. Secondary data was collected from various archival sources at the national, provincial, and local levels. Primary data was collected from the study areas through semi-structured interviews with national and community-level stakeholders in addition to focusing group discussions (FGDs).

Fifty semi-structured interviews were conducted in the first phase and 25 semi-structured interviews were conducted in the second phase. Key stakeholders were purposely selected for interviews based on the time and resources available, including NGOs that worked to support dam-affected communities, representatives from the provincial departments of the Ministries of Agriculture, Forestry and Fisheries (MAFF) and Water Resources and Meteorology (MOWRAM) as well as commune council members in Stung Treng Province.

Two FGDs were organized in old Kbal Romeas village—a men's group and a women's group, each participated in by nine villagers. One FGD was conducted in the old Srae Kor Muoy and Pir villages with six women and five men who had not left their villages. The interviews focused on water management, the impacts of dams on rivers and livelihoods, construction of the LS2 Dam (**Figure 1**), compensation, resettlement, the role of NGOs and local government, the intervention of national government as well as support programs for dam-affected communities.

5. Conflicts and cooperation in the lower Mekong River basin

Cooperation in the Mekong River Basin has evolved and has been driven by geography, geopolitics, hydro-hegemony, and national interests. After the independence of Indochina states in the early 50s, Cambodia, Laos, South Vietnam, and Thailand joined the capitalist sphere led by the US, while North Vietnam joined the communist bloc with China, led by the USSR. In the early 60s, the USSR continued to influence China and North Vietnam to form the communist blocs in the Mekong region. These made the US and its allies uneasy about losing other Mekong countries to the communists. To prevent this to happen, the US and its allies made a concerted effort to curtail communist influence in the Mekong region [29–31].

Consequently, the Mekong River was strategically employed by the US to counter Communist influences. The US strategy employed the two fronts of transboundary cooperation regarding riparian management as well as modernization and development initiatives to harness the economic potential of the Mekong and its tributaries. Hydropower dams, especially, were considered symbols of modernization, generating hydroelectricity to fuel economic development in the region as a means of reducing or containing the influence of communism [30, 31]. In 1957, with US support, four countries, Cambodia, Laos, South Vietnam, and Thailand established the Mekong Committee (MC). China was not invited to join the MC, as it was not interesting and the MC was specifically established to counter China's power in the region. At that time, China was also not a member of the UN [32].

Between 1957 and 1970s, the US provided technical and financial support for the MC to establish a planning framework for the construction of a series of large dams in the Mekong Basin [33]. The riparian states in the MC were enthusiastic about the planned development of hydropower dams in the Mekong and 3S Basins. After the establishment in 1957, MC undertook a reconnaissance survey of the major tributaries of the Mekong Lower Basin between 1959 and 1960, and the findings published in a report entitled Comprehensive Reconnaissance Report on the Major Tributaries

of the Lower Mekong Basin in September 1961, in which numbers of hydropower development projects were proposed to the MC.

The US-Vietnam war in the 1960s and 70s resulted in all of Indochina becoming part of the communist sphere in 1975. The MC was dismantled in 1975, and the development in the Mekong Region slowed to a crawl. However, in 1978, Laos, Vietnam, and Thailand established the Interim Mekong Committee (IMC) to facilitate regional cooperation without Cambodia due to the Khmer Rouge's refusal to establish regional or international ties. However, the work of the IMC was seriously hampered by the absence of Cambodia. In January 1979, Vietnam invaded Cambodia, overthrew the Khmer Rouge, and installed a new government [34]. With Laos and Cambodia as communist allies, Vietnam became a powerful hegemon in the Mekong region and pushed Cambodia to join the IMC. However, Thailand refused to recognize Cambodia's Vietnam-backed government and therefore denied Cambodia's entry into the IMC as Thailand was concerned that the Communist Indochinese states would collectively oppose Thailand's plans to divert water from the Mekong River [31].

In 1988, Thailand changed its regional policy to transform the Mekong Region from 'battlefields' into 'marketplaces' and worked to speed up the process of both regional reconciliation and enhanced opportunities for hydropower dam development. The Paris Peace Accord in 1991 ended Cambodia's international isolation and Cambodia was admitted to the IMC.

In 1992, the Asian Development Bank (ADB) initiated the Greater Mekong Subregion (GMS) cooperation, involving six Mekong region countries to boost regional cooperation, economic and infrastructure development, cross-border trade as well as encourage economically productive uses of untapped natural resources. Specifically, the GMS aims to promote large infrastructure projects in addition to facilitating connectivity among these states, especially increasing the flow of goods, investment capital, and people across borders. Unlike the MRC, China and Myanmar are also members of the GMS [35, 36]. Since the founding of the GMS, the ADB has implemented more than 100 cooperative projects in infrastructure, energy, telecommunications, trade, tourism, and the environment in its efforts to foster multilateral cooperation and development [26].

In 1995, the UN facilitated the establishment of the Mekong River Commission (MRC) and in April of that year, four lower Mekong countries – Cambodia, Laos, Vietnam, and Thailand – signed the Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin [37]. The Agreement provides a legal mandate for the MRC to coordinate riparian activities in the Lower Mekong Region in developing and managing the Mekong River Basin. In late 1996, after the establishment of the MRC, less populated areas along the tributaries were being looked at for new hydropower projects [38].

Nevertheless, the connections between the US and the ADB/GMS have leveraged the power relations of the states in the Mekong and 3S regions [39]. In return, Vietnam has sought to work with Laos and Cambodia in establishing the Cambodia-Laos-Vietnam Development Triangle (CLV) in 1999 to maintain its influence as well as to compete with China and other non-hydro-hegemons. The Cambodia-Laos-Vietnam Development Triangle Areas (CLV-DTA) was set up by the Prime Ministers of three countries; focusing on security, external affairs, transportation, industry, agriculture, trade and investment, social areas, and environmental protection; covering 13 provinces—5 in Vietnam, 4 in Laos and 4 in Cambodia. The CLV-DTA covers various sectors and priority areas: transport, energy, telecommunications, irrigation and water supply, agriculture, tourism, industry, education and health, environmental protection and land management, security, and defense as well as trade and investment; aiming at promoting economic growth and encouraging the development cooperation between neighboring countries. The 2004 master plan of

CLV-DTA drew on the three countries' plans to develop hydropower and increase power-sharing between its neighbors, stating that the three countries will join their efforts and cooperate in hydropower development. The Vietnamese side can assist the Cambodian and Laos in the triangle area to prepare the technical design for and build small- and medium-scale hydropower projects [40].

After the Cold War ended in 1989, global geopolitics shifted from a "bi-polar" (communist and capitalist) focus toward regionalism. China has begun to revise its foreign policies and institutional arrangements toward those that promote regional economic cooperation [41, 42]. In 1992, China joined the GMS as a member [35, 36]. Furthermore, in March 2016, China founded the Lancang-Mekong Cooperation, involving six other Mekong countries, to form a new cooperation framework. Following that, China has built more than 50 large-scale dams (over 50 MW) in Lower Mekong countries: 30 in Myanmar, 14 in Lao PDR, seven in Cambodia, and three in Vietnam [43]. China has built strong diplomatic and economic ties with Cambodia. These have contributed to the surge in Chinese investment in Cambodia. In 2016 alone, Chinese investment capital in Cambodia amounted to USD1.05 billion mainly in the areas of textiles, hydropower, rice milling, rubber production and processing, mining, and construction. By the end of 2017, China had invested USD12.6 billion in Cambodia. About 50 percent of Cambodian land concessions granted since 1994 (4.6 million hectares) are in the hands of 107 Chinese firms [44]. Some 23 Chinese firms are exploring mineral resources in the Kingdom of Wonder. China invested over USD1.6 billion to build seven hydropower projects between 2005 and 2015 and more are planned for the near future [43]. Five of the Cambodian hydropower dams, with a total capacity of 915 MW, were financed by Chinese investors and built in the coastal regions, including Kamchay, Stung Tatay, Stung Atay, Lower Stung Russey Chrum, Stung Cheay Areng, as well as one in the Mekong region, the LS2 [45–47].

6. Revisiting the Mekong River cooperation through the lower Sesan 2 dam

The conflicts and cooperation in the Mekong River Basin could be revealed through the case of the Lower Sesan 2 (LS2) dam in Cambodia. It politically involves the world power, regional power, sub-regional power, and riparian states in the process of identification, design, planning, construction, and operation of the LS2 Dam over a long period. These processes bind state, private sectors; quasi-state owned corporations, and international financing institutions together in a complex politics of regional cooperation that cut across the 3S River and cultural-ecological landscapes of ethnic groups in the north-eastern region in Cambodia.

6.1 The politics of the lower Sesan 2 dam—The US planted, the GMS planned, and the Chinese harvested the fruit

The LS2 dam was produced out of the US's hydropower planning framework, a US strategy to contain the communist influence in the Mekong Region. It was identified in a reconnaissance survey on the major tributaries of the Mekong Lower Basin in September 1961, four years after the MC established (See **Table 1**). Following that, in the 1970s, the MC reviewed the hydropower projects and identified 180 dams on the tributaries of the Mekong River, including sixteen hydropower development sites on the Se San River Basin—5 projects in Cambodia, 10 in Vietnam, and one international project; and fifteen sites in the Sre Pok River Basin—5 sites in Cambodia, 9 in Vietnam and one international project. The LS2 Project was not included [48].

Project	The Mekong reconnaissance study 1961	Mekong Secretariat 1970	WATCO 1984	SKSSNT (Halcrow) 1998	SWECO 1999
Lower Srepok 2	Indicated	No	No	Yes	n/a
Lower Sesan 2	Indicated	No	No	Yes	n/a
Sesan 4	Yes	Yes (Upper Sesan 4 only)	Yes (Upper Sesan 4 only)	Yes	Yes
Sesan 3	Yes	Yes (Lower Sesan 3 only)	Yes (Lower Sesan 3 only)	No	Yes
Upper Kontum	Indicated	Yes (Kontum area)	Yes (Kontum)	Yes	Yes
Xe Kaman	No	Yes (Xe Kaman 1,2,3,4)	Yes (Xe Kaman 1,2,3,4)	Yes	n/a
Nam Kong 1	No	Yes (Nam Kong 1,2&3)	Yes (Nam Kong 1,2&3)	Yes	n/a

Source: [51].

Table 1.
Major hydropower projects in the 3S river basin and the identification of the LS2.

However, Cambodia did not support the US plans to construct a series of large dams in the Mekong and so, refused to accept it's given the assertion of US influence and dominance in the planning process. In 1965, Cambodia ended its relationship with the US. In return, the US supported the military coup in Cambodia in the 1970s, but the country fell into the Indochina War led to the Khmer Rouge occupation in 1975 and the killing field between 1975 and 1978. In 1979, Vietnam overthrew the Khmer Rouge and controlled Cambodia until the 1989s. The hydropower plans, including the LS2 Project, were abandoned as a result [48].

The UN-supported election in 1993 resulted in opening up Cambodia to regional and international integrations. In 1992, the GMS was established and Cambodia joined it as a member. In the early 1990s, the GMS funded two major preliminary technical and economic feasibility studies for hydropower projects in the region. The first study, undertaken in 1994, provided an initial inventory of potential hydropower projects in the Mekong region. The second study, begun in 1998, specifically focused on the feasibility of hydropower projects in the Sekong, Sesan, and Nam Thoeun River Basins (SKSSNT). The SKSSNT study was completed in two phases and analyzed 37 potential hydropower sites in the three basins. The 11 highest-ranked projects were then selected (See **Table 1**),¹ from which six dams, were selected for further study: the Sesan 3 and Thoung Kontum in Vietnam, the Lower Srepok 2 and Sesan 4 in Cambodia, and the Xe Kaman 3 and Nam Kong 1 in Lao PDR.² These proposed projects were formally prioritized largely because of their high potential for electricity generation and because their economic and financial benefits were more favorable than other proposed projects [49, 50].

¹ WATCO is a Dutch Consulting group, who specialized in hydropower development and water resources management.

² SWECO is a Sweden's leading consulting engineering company and the group employs 2,300 people with 40 offices in Sweden and 10 others worldwide. The SWECO Group covers a wide range of work in addition to hydropower

The Lower Sesan 2 and Lower Srepok 2 projects in Cambodia were not originally included in the list of proposed projects (**Table 2**) for economic reasons. A subsequent listing politically moved these schemes to the 7th and 8th positions, respectively. Large differences in feasibility and expected economic benefits existed between the projects on the list. The addition of two Cambodian projects to the list was motivated by the fact that projections were almost profitable and that its economic standing was only slightly below the other 11 projects. In pushing the idea of two sites in Cambodia, the study suggested an alternative dam site for the Lower Sesan 2; eventually, that proposal proved uncompetitive and was ranked with lower economic value than the existing projects. Despite this, the original Lower Sesan 2 still appears among the six priority schemes. Reportedly, the addition of the Cambodian projects to the priority list was due to political pressure rather than economic feasibility. Two different locations were proposed for the Lower Sesan 2 [35, 50], although the economic feasibility of the remaining proposal has also been questioned, and it is still included as a priority project in the SKSSNT study, possibly due to the pressure to include two priority dams for each of three countries.

Vietnam takes the GMS/ADB hydropower plan forward. During the second Summit of CLV-DTA in 2003, Vietnam signed the MOU on feasibility studies for three hydropower plants of Lower Se San 1/Se San 5 with a capacity of 90 MW

Project	Economic preparedness, local planning, Score Maximum 52%	Social Score Maximum 25%	Environmental score maximum	Total Score Maximum 100%	Comment
Sesan 3	40.7	23.8	16.6	81	
Xe Katam	33.5	24.8	21.6	79.8	MOU
Sesan 4	37.2	16.5	17.7	71.5	
Houay L.G	29.1	24.3	14.3	67.6	
Upper Kontum	35.1	16.5	15.9	67.4	
Nam Thoeun 1	41.1	15.8	10.6	67.4	MOU
Lower Srepok 2	21.1	23.8	16.8	61.5	
Lower Sesan 2	19.9	20.5	16.3	56.7	
Xe Kam 3	23.5	11.5	20.9	55.9	
Nam Kong 1	21	16	15.9	52.9	
Xe Kam 1	29.3	13.3	9.4	52	MOU
Se Kong 4	27.3	14	7.6	48.9	
Se Kong 5	21.8	12.3	10.8	44.8	

Source: [51].
MOU = Memorandum of Understanding.

Table 2.
Hydropower project in the Sekong, Sesan, and Nam Thoeun River basins.

located on the border of the two countries, Lower Se San 2 with an electricity generating capacity of 400 MW in the lower basin of Se San river and Stung Treng hydropower plant with capacity of 980 MW. Vietnam agreed with Cambodia to build the LS2 Project during the five years from 2012–2017 in addition to completing the Lower Sesan 1/5 (LS1/5), LS2, LS3, Prek Leang 1, and Prek Leang 2 projects between 2015 and 2020 [2, 40]. As part of the CLV, Electricité du Viet Nam (EVN), Vietnam's electric power utility company, signed a memorandum of understanding with the Cambodian government to connect the LS2 and LS1/5 projects to the Cambodian and Vietnamese power grids [52]. The agreement between Cambodia and Vietnam on the LS2 project said that about 50 percent of electricity generated from the LS2 project would be sold in Cambodia and the remaining would be exported to Vietnam, as the power grid in Cambodia beyond the northeastern provinces remains undeveloped and electricity demand in northeast Cambodia is far less than what the LS2 could produce [44].

The LS2 Project was finally selected by China among seven hydropower projects to be built in the Mekong River in Cambodia. China's investment in the LS2 dam in Cambodia serves as a placeholder for larger political and economic issues that are not necessarily energy security or profit-driven. The individual projects, the LS2 Project, do not necessarily need to be profitable to be approved, but rather contribute to magnificent relationship goals between Cambodia and China and their political and economic strategies [43]. On the one hand, Cambodia occupies a unique geographical location in the Mekong and Southeast Asia. Through this relationship with Cambodia, it is strategically important for China to exert greater influence in Southeast Asia and to counterbalance the power of the US in the region. The Cambodian port city of Sihanoukville is a precious "pearl" among China's "string of pearls" and access to these ports provides an excellent base for projecting maritime power into the Gulf of Thailand and the Straits of Malacca [53].

6.2 The conflict and cooperation between China and Vietnam over the building of the lower Sesan 2 (LS2) dam

The building of the LS2 project, though planned, did not happen between the late 90s and early 2000s due to a lack of funding. Vietnam is concerned about China's trickle-down hegemony into the LS2 project and the rest of the 3S region and grabs the economic opportunities to tackle the LS2 project, fulfilling its CLV panning framework. On 15 June 2007, the Royal Government of Cambodia (RGC), represented by the Ministry of Mines and Energy (MME), granted permission for Electricité du Viet Nam (EVN) to conduct a detailed feasibility study for the LS2 project. In 2008, EVN hired Vietnamese and Cambodian consulting companies to conduct feasibility studies, including social and environmental impact assessments [54, 55].

The feasibility study was completed in late 2008. Many concerns were raised about the possible negative impacts of the LS2 project and so, Cambodia's Ministry of Environment delayed approving the project, but requested more studies, particularly on fisheries. In response, the Prime Minister of Vietnam, Nguyễn Tấn Dũng, publicly requested in November 2010 that Prime Minister Hun Sen of Cambodia to speed up the project's approval. The approval came shortly after that request by RGC. As a result, Vietnam's Ministry of Planning and Investment licensed EVN in January 2011 to make a USD816 million investment in the project. The LS2 project was a joint venture between an EVN subsidiary, the EVN International Joint Stock Company, and Cambodia's Royal Group, which together incorporated the Cambodia–Vietnam Hydropower Company as the project owner.

In return, Vietnam was concerned about the high cost of building the LS2 project and so, the EVN looked for a joint venture with private investors. Finally, in

January 2011, the Royal Group of Cambodia agreed to shoulder 49 percent of the project cost, although technically, it has no previous experience in energy development. But it was rumored that Prime Minister Hun Sen personally asked the Royal Group to invest in the project as it had close political ties to Hun Sen. Nevertheless, the project was also economically attractive to the Royal Group as the LS2 site was covered by huge forest areas, which had the potential to generate millions of dollars in timber sales. However, the EVN wanted to withdraw completely from the project, which they finally took about two months before the approval of the project on November 2, 2012, by the Cabinet of the Royal Government of Cambodia, despite the funding commitment of about 50% from the Royal Group.

The uncertainty of the EVN opens up the opportunity for China's Huaneng Group, whose subsidiary Hydrolancang International Energy, to grab the economic opportunity to invest in the LS2 dam and eventually replaced the EVN in the joint venture. The entry of the Chinese into the project meant that Chinese banks provided the capital needed to proceed with the project. The Council of Ministers of the Kingdom of Cambodia approved the LS2 project with a capacity of 400 megawatts (MW), to be built by China's Huaneng Group and the Royal Group on 26 November 2012 [56].

In late November 2012, Hydrolancang International Energy Co. (HIE), a subsidiary of China Huaneng Group signed a memorandum of understanding with the Royal Group for an "initial two-year cash injection" into the LS2 project [57]. Since that time, the project developer has been Hydropower Lower Sesan 2, a joint venture between the Royal Group and HIE, which together own 90 percent of the stakes. The LS2 dam has a 45-year concession period that includes five years for construction. The new arrangement led to a revision regarding sharing investment costs. The joint venture directly financed 30 percent of the project with the remaining 70 percent financed by an undisclosed bank loan. HIE provided the largest share (51 percent) of the project's costs, while the Royal Group reduced its share from 49 percent to 39 percent. The EVN eventually decided to purchase the remaining 10 percent of shares. Finally, the joint venture created the Hydropower Lower Sesan 2 Co. Ltd. to construct the LS2 Dam [58].

The dam was built by Hydro Power Lower Sesan 2 Co. Ltd. at an estimated cost of USD816 million [59]. The LS2 Dam is located near the confluence of the Sesan and Srepok rivers, about 1.5 km downstream from where the Sesan meets the Srepok and 25 km from the confluence with the Mekong mainstream. Clearing of the reservoir area for the LS2 dam began in March 2013. The resettlement and compensation plan was published in January 2014. The construction of the LS2 dam began in February 2014 and was completed in 2017. Prime Minister Hun Sen presided over the ceremonial opening of the LS2 dam on 25 September 2017. At full capacity, the LS2 dam will generate 400 MW of electricity. Moreover, it will reduce the country's reliance on imported electricity from Thailand, Laos, and Vietnam, lower electricity tariffs, and stimulate industrial development. The LS2 dam is the first large dam on the Cambodian section of the 3S rivers [55].

6.3 Ecological, biophysical and environmental impacts

The landscapes of the 3S Rivers consist of biophysical and spiritual landscapes. The biophysical landscape comprises of rich river ecology, the Sesan, and Srepok Rivers, with water flow and fish in rivers. Along the riverbank, forests cover huge areas and communities settled on the riverbanks. Forest and rivers are homes to terrestrial wildlife and aquatic animals. The area is rich in biodiversity. However, villagers believe that forests and rivers are homes to spirits known as 'neak ta' [60]. Four different types of spiritual landscapes have existed in the areas—(1) the

land spirit (neak ta), (2) the forest spirit (prey neak ta); and (3) water/river spirit (neakta krahamkor) and (4) ancestral burial grounds. Villagers argue that these spirits protect them, bring them happiness and harmonies, and provide them with good businesses and agricultural activities, and protect them when they travel on the river. Villagers pay respects to their respective spirits day, night, and year.

The LS2 dam removes the river landscape and replaces it with a concrete structure, blocking the river flow and fish migration and dividing the river system into the upstream and the downstream areas of the dam. The upstream area creates a huge reservoir, covering an area of 340 km² and the downstream area is characterized by the increased water flow throughout the year. The construction of the LS2 dam led to the clearance of 33,564 ha of forest and destruction of biodiversity, of which about 350 ha were evergreen forest, some 5073 ha semi-evergreen forest, and 27,711 ha deciduous forest. Matthews and Motta [43] state: “in the Lower Sesan 2, where reservoir clearing began inside the concession area before dam designs were even approved. The tree clearing at the Lower Sesan 2 was also illegal as it extended well beyond the borders defined in the concession agreement. Many speculate that the central government and the State-Owned Enterprises (SOEs) are signing dam concession agreements to access the valuable timber reserves”. On 6th June 2016, an article in the Cambodia Daily calls the LS2 dam a means of laundering illegal timber.

Some 329 fish species used to live in the 3S river systems –133 species reside in the Sesan river, 213 species in the Sekong River, and 240 species in Srepok River [61]. At least 41 migratory fish species are commonly caught by fishermen in the Sesan River, and these migratory species represent 60% of the fishermen’s total catch. The Yali Dam in Vietnam alone would reduce fish populations and fish yields by 70% [62]. The LS2 dam has modified the river ecology, disconnecting the upstream with the downstream, destroying the fish habitats and migratory routes of fish, and changing river flow between the dry and wet season. The scientist predicts that the LS2 dam is likely to have the most significant impact on fish biomass levels, which are expected to drop by 9.3% basin-wide, amounting to approximately 200,000 tons of fish each year and further affecting fisheries productivity levels in the Sesan and Srepok river basins [63].

In Srae Kor commune, about 2031 ha of community forestry established in 2013 by the Ministry of Agriculture, Forestry and Fisheries along the Sesan River were cleared by the Hydro Power Lower Sesan 2 Co. Ltd. Inside the area, about 280 ha of prey neak ta or ‘forest spirit’ that were protected and sacred to villagers for a long time were destroyed on short notice in late 2014 and early 2015. Four burial grounds of about 50 ha each, two located along the Sesan and the other two about 300 m from the river, were removed by the company, which paid compensation of USD150–160 for each grave. Furthermore, about 1248 ha of ‘wet ricefield’ and 57 ha of upland ricefields were lost to dam construction.

In Kbal Romeas commune, the government granted an economic land concession to Anmady Investment Group for planting rubber, covering about 3000 ha in the north-east part of the commune, denying villagers access to forest resources and agriculture. Furthermore, the Hydro Power Lower Sesan 2 Co. cleared the lands used by villagers for wet rice, covering 620 ha. In Kbal Romeas village, clearance by the company destroyed ‘three burial places’ covering about 60 ha, 348 ha of the forest spirits, 358 ha of upland fields, a health center, and 232 ha of rice paddies. The compensation covered only the burial land, rice field, and housing.

Neakta Krahamkor is a water/river spirit, the ancient spirit with a red neck, who protects the river and the villagers who depend on it. Villagers gather annually and begin a traditional ritual, offering incense, a bowl of rice, and a pig’s head, requesting their pleas and protection. This practice has happened since the early 1900s when a Chinese merchant was rewarded with a successful journey up the river when

he paid his respects to the spirit with the red neck. At present, this site has been lost to LS2, an indication that the life of people will be ruined as the protector has disappeared.

6.4 Local resistance to the LS2 dam

Six villages, namely Srae Kor Muoy, Pir, Kbal Romeas, Srae Sranok, and Phluk, were submerged in the reservoir. About 846 families were directly affected by the LS2 dam and a further 15 villages downstream, home to 3,794 families, and a population of 19,066 were indirectly affected. About 70 other villages situated along the Sesan and Srepok upstream of the dam, home to 6,387 households and a total population of 32,864, were also expected to be negatively affected by the project [55].

The affected populations were relocated to four different resettlement areas, covering 4,000 ha, organized by the Project Owners. The project owners proposed the resettlement sites and the provincial government and the relocated chose the locations that best suited them. Villagers from Chrab, Srae Sranok, and Kbal Romeas chose to resettle along National Road No. 78, known locally as the ASEAN Road, linking Stung Treng and Ratanakkiri provinces. However, villagers from Srae Kor Muoy and Pir chose to resettle in the northern part of the Sesan, about 3 km from the river.

The compensation took two forms: (1) a land and housing package and (2) cash. The cash payments for loss of land were USD500 per hectare for the lowland paddy field, USD740 per hectare for garden land, and USD230 per hectare for fallow swidden [55]. The 12 families from Phluk chose the cash package [64]. As part of this package, compensation for fruit trees was very low. For a banana tree grove, for instance, compensation was only USD6. Local people said they could sell the fruit from a single banana tree for much more over the course of a year than the compensation that was provided for an entire grove.

The affected households were eligible for the land and housing package, which was to provide each displaced household with: (1) 5 ha of farmland (2) land for the housing of 1000 m², and (3) a house of 80 m². For housing, the relocated had two options: a company-built house or a lump-sum cash payment of USD 6,000 to build their own house. Two types of houses were offered – wooden and concrete. About 50 percent of resettled families opted for the wooden houses built by the company, 18 percent chose concrete houses, 20 percent chose to build their own houses and eight percent received only plots of land for housing without a house. They also received a financial package for livelihood restoration during the transition period. However, the lowland paddy soil lost in places such as Kbal Romeas and Srae Kor was of very good quality while the replacement land is not nearly as good and even this low-quality land is available only in limited amounts, often scattered over wide areas. The compensation for lost agricultural land was inappropriate and inadequate.

Interviews with many of them indicated they did not want to move, but the project owners and government required them to relocate. At the same of the studies, about 85 percent of the affected families had relocated to new resettlement sites, but about 15 percent refused to leave their villages. All villagers from Srae Sranok and Chrab villages were completely relocated to the resettlement villages organized by the project, while 126 families from Srae Kor Muoy, Pir, and Kbal Romeas refused to move and decided to stay in their houses and land in the old villages. Unlike the other displaced villagers, 12 families from Phluk were completely removed from their areas to make way for the construction of the LS2 dam (Table 3). Adding to the problem, the original plan was changed from offering five different house sizes or types to just one standard-sized house. Thus, housing compensation failed to take into account the size of the household and the number of families in a household.

Village	No. resettled families	No. agreed to relocate	%	No. refused to relocate	%
Phluk	12	12	100	0	0.00
Chrab	47	47	100	0	0.00
Srae Sranok	168	168	100	0	0.00
Kbal Romeas	142	112	78.87	30	21.13
Srae Kor 1	245	202	82.45	43	17.55
Srae Kor 2	232	179	77.16	53	22.84
Total	846	720	85.11	126	14.89

Table 3.
Number of families accepting and refusing compensation.

The reasons that families agreed to relocate included fear of negative project impacts and, importantly, promises of compensation. However, they indicated that relocation was a “no choice” option for them. Mr. Chhang Chhoeun and his wife, Ms. Chrab Veth, with four children, one married, said that he agreed to relocate to a new village and received a wooden house with a land area of 20 x 50 m, and 5 ha of agricultural land. For him and his family, this was acceptable as it is better than what he had in his old village of Kbal Romeas, where he had only 4 ha of farmland and a tiny wooden house for the entire family, including the married daughter’s family. In the new village, his married daughter has her own new house and that puts his family in a better position. Chheum Kea, a councilor of Kbal Romeas commune, decided to relocate to the resettlement village to avoid being seen as against the government project. His house in old Kbal Romeas village was about 99 m² and his kitchen was 30 m². He has three married children. In the new village, he received a two-roomed house of only 80 m², which is not big enough for all his married children. His married children did not receive their own houses because they married after the project started. Thus, he was not happy but had to move anyway. These are just two of many stories of relocation bringing both satisfaction and dissatisfaction, although many did not want to move.

Some families refused to relocate because they had built a good house in a good location in the old village, with access to rivers for water, forests for non-timber forest products, and personal religious sites, including the tombs of their parents and grandparents as well as shrines of the forest spirit that they believe provides security for their lives. The new villages cannot guarantee this same quality of life, as many project-constructed houses in the resettlement locations are smaller and made of low-quality wood. Also, many of the new sites lack access to water and drinking water because many of the hand pumps built by the companies did not work and the water quality was not acceptable. More importantly to the villagers, they would be separated from the tombs of their ancestors and the forest spirit.

The livelihoods of ethnic peoples from Srae Kor, Kbal Romeas, Phluk, and Srae Sranok are very much dependent on rivers, forest, non-timber forest products, livestock raising, and agriculture. The Sesan and Srepok rivers provide them a moderate lifestyle: river water is used for both drinking and agriculture and fish, rice, and aquatic vegetables are the main foods. The forest has for generations provided villagers with a source of food, energy, materials, and spiritual life. Land along the rivers and surrounding the villages is cultivated and rice is the main crop. According to the villagers, the rivers, water, forest, and agricultural lands are home to spirits with whom the villagers have lived well and to whom they pay respect through traditional ritual practices. Livestock raising is not only for income and food but social and traditional rituals and practices as well. The villagers in these areas believe that

any action leading to damaging rivers, forests or land angers the spirits and without a warm relationship with these spirits, they cannot look forward to a long, happy and healthy life.

Relocation to a new area means that various ethnic groups will have to adopt a new lifestyle based on markets. From a cashless tradition, ethnic groups of Lao, Phnong, and Kreung must switch to the common livelihood of buying and selling. Free collection of resources from rivers, forests, and land will be replaced by paying to obtain them. This is evident in the resettlement sites, where the relocated households now have to buy water, fish, and meat for their families, unlike before in their previous villages. Some of the relocated households have used some of the cash compensation to buy motorcycles, TVs, and other items, such as phones. In the long run, they may face a big dilemma as the cash dries up. Shortage of water, extra expenses, limited income-earning opportunities, and changing cultural practices in the new villages worry the relocated immensely. They feel uncertain about their lives and cannot predict what might happen next. They are calling on the government and the hydropower company to address these issues, but the authorities have been slow to respond.

7. Discussion and conclusion

Cooperation among riparian states in the Mekong River Basin has evolved. As argued by scholars researching transboundary river basin governance, before the 1990s, China, the upstream state of the Mekong River Basin, had little motivation to cooperate with other Mekong riparian states [26, 28, 33]. However, contrary to arguments by scholars researching hydro-hegemonies [13, 16], cooperation in the Mekong River Basin among the four lower Mekong Countries, first through the Mekong Committee (MC) and later the Mekong River Commission (MRC), was not driven by either the upstream or downstream hegemonies, but by hegemonies from outside the Mekong region, particularly the US. The communist threat and the resulting Cold War paradoxes drove the Mekong cooperation and the four lower riparian Mekong states formed a downstream hydro-hegemony to counter China's upstream hegemony. Thus, hydropower dam theory was actualized by the lower Mekong cooperation. As a result, China and the four lower Mekong countries squabbled for many years over the management and utilization of the Mekong water resources. China utilized its upstream hegemon status on the Mekong or Lancang River to assert power over the other riparian states along the Mekong. China built many hydropower dams on the mainstream of the Mekong River in Yunnan Province, which caused severe negative social and environmental impacts downstream.

Within the Lower Mekong River Basin Cooperation, the hydro-hegemonic dynamics drive the cooperation. Riparian countries in the Lower Mekong basins cooperate to manage, utilize, and share river resources [14], but they compete in hydropower dam construction as well. For instance, as an upstream hegemon of the Lower Mekong River Basin, Laos continues to build hydropower dams and sells the electricity to Cambodia, Thailand, and Vietnam. At the same time, Thailand finances Laos' Xayaburi Dam, and Vietnam finances Cambodia's LS2 Dam. On the other hand, cooperation in the Lower Mekong River Basin is driven by collusion among riparian states as well, in which the weaker and more powerful states exploit the Mekong River in their ways according to their capacity and resources. Further, powerful and wealthy states assist the poorer and weaker state to exploit the Mekong resources on a larger scale than the weaker states would be able to manage on their own in return for a large share of the proceeds. The consequences of such overexploitation risk the sustainability of the Mekong River Basin.

The cooperation in the Mekong is also driven by external actors, such as the ADB, which has engaged China through the GM's Initiative. Along these lines, hydropower dam projects have been utilized by states and regional hegemony to effect cooperation, conflict, and competition in the region. One of these hydropower projects is the LS2 Dam. Through the GMS, the ADB leverages the hydro-hegemony, such as China and Vietnam to capitalize on the hydropower dam projects in the 3S and the Mekong basins as a strategy to compel resource exploitation, forest clearance, land grants (economic land concessions), and license issuance for agro-plantations, mineral extraction, and infrastructure development.

This chapter has detailed how the US influenced Cambodia and several other riparian states in the Mekong region to come together and first identified the LS2 as a potential hydroelectric development project. US hegemony was carried forward through the continued development of the LS2 project by the ADB/GMS, then the CLV Development Triangle, and the Chinese company. In the end, it was China that successfully competed with Vietnam for a dominant role in the LS2 project and, through this role, China has harvested the bounty from the seeds planted by the US in the 1960s.

These processes transform natural resources and public entities into vehicles for the production and accumulation of wealth for the state, private sector, and powerful political elites in each riparian state. The capital accumulation process binds the state and private interests in the so-called development processes that cut across sectoral boundaries and local communities. Those who criticize these developments are called out for being "anti-development". The impacts of these development patterns extend beyond the rivers, fisheries, and political boundaries into forests, wildlife, spiritual traditions, uplands, and mountains.

Cooperation operates as a factor within power relations, power asymmetries, hydro-hegemony as well as the interests of strong and weak hegemony, which might together be termed "riparian realpolitik". Cambodia, as a weak downstream riparian state in the Mekong, has reoriented itself several times from the 1960s through the present to adjust its interests with hegemonic interests to better its position. This has held over the course of the Kingdom's regime change from monarchy to the killing fields, to totalitarian, socialist, and finally a democratic state. Even now, Cambodia cannot escape from this type of cooperation. Rather, it continues to cooperate with riparian states in the Mekong River Basin to manage, use and share river resources, while at the same time, navigating conflicts, competing for advantage, and colluding with others to exploit the river resources. Thus, cooperation, collusion, and competition enable the riparian states in the Mekong region to extract resources, depending on the country's capacity, economic power, geography, and resource endowment. On the one hand, the smaller, weaker, and poorer countries might exploit resources in one way, while richer and more powerful states exploit these resources in others. On the other hand, cooperation can be used by powerful and rich countries to collude with poorer and weaker states to exploit resources on a larger scale than they could manage in isolation, and, in return, they share the benefits. The consequences of overexploitation of river resources might risk the sustainability of the 3S and the Mekong, thereby imperiling the future of all of these countries.

Through these processes, riparian states politicize relationships, positions, and power relations through cooperation. Within the context of riparian cooperation downstream states act as upstream states, such as Vietnam's efforts to build more dams in the 3S region in central Vietnam, and an upstream state, such as Laos, reinforces its position to build hydropower dams, regardless of opposition from Vietnam and other riparian states. At the same time, Cambodia is climbing the energy ladder, swapping its passive position as a mere complainant for that of a

dam builder, with the LS2 Dam set to begin operations soon and rapidly underway for developing the Sambo Dam. These developments are made possible because of China's presence in the region.

Cambodia is vulnerable to regional cooperation. The chapter points to three key issues as ways to counter the hegemony of individual states: the lack of jurisdiction of the MRC on the tributaries, the lack of formalized cooperation between state and non-state actors, and the inability of weak states to counter the strength of hydro-hegemony, not simply because of their weaker power but due as well to their narrower access to information. Building dams is one option for addressing these challenges and the LS2 dam proves that Cambodia can compete for water with other riparians. However, the weaponizing of water in the 3S Basin is about the competition to build dams to retain position and negotiating power in transboundary cooperation, without which Cambodian voices will not be heard.

While China financed the building of the LS2 dam and leveraged the downstream position of Cambodia to compete in the dam building in the Mekong, the Chinese dam has caused social and environmental impacts on local communities living all along the rivers of the basin. As a result, local resistance to the LS2 dam has occurred, as communities seek solutions from the dam builders and government to the problems caused by the development. Lack of experience by the government of Cambodia in addressing the impacts of the dam on local communities and the unaccountability of the Chinese dam builders to social and environmental impacts have only led to an increase in critical local resistance to Chinese dam builders. The local resistance has publicly painted the Chinese in a bad light concerning the LS2 Dam development. If China does not pay attention to improving its performances in overseas investment and development, particularly in Cambodia, local resistance to Chinese investments will increase.

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