

The Mekong River: Regional Planning, Sustainable Development, and Transboundary Cooperation in Southeast Asia

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Abstract

This paper offers an examination of the complex dynamics within the Mekong River Basin, a region historically intertwined with the Mekong River's abundance but now marked by a shift towards hydroelectric power as a resource.¹ Focusing on the reluctance of China—a key player in the basin—to join the Mekong Agreement, this paper uncovers the environmental and social consequences of this non-cooperation. It discusses the historical context of international environmental law related to transboundary water resources, emphasizing how China's actions challenge established principles and responsible resource management norms. Highlighting the significance of transboundary collaboration underscores the essential role it plays in ensuring the sustainable governance of shared water resources in the Mekong River Basin.

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INTRODUCTION

The Mekong River Basin is a sweeping landscape that has been deeply intertwined with the richness of its river for thousands of years. Significant economic growth in recent decades in the Mekong countries—China, Cambodia, Laos, Myanmar, Thailand, and Vietnam—has occurred because these Southeast Asian states see a new resource in the river. Not in its bountiful fisheries or in its diverse agriculture, but in its hydroelectric capacities. China has asserted itself as a strong force along the river by building eleven dams and planning more for this vital region.² As evidence of its apparent disregard for international environmental law, China has consistently refused to join the Mekong Agreement, a transboundary framework for sustainable development along the river; such inaction will shape the effectiveness of the Agreement's governance structure in the region. This paper aims to highlight the difficulties involved in transboundary water cooperation, with a specific focus on the role that the riparian countries, most notably China, play in ensuring its effectiveness.³

This paper will begin by describing the geographic region in which the Mekong Agreement and the Mekong River Commission's governance structure operate. It will then delve into the Mekong Agreement, China's reluctance to become a member, and the significant environmental and social impacts resulting from China's non-cooperation. The sections following will explore the historical context of international environmental law on transboundary cooperation and governance of shared water resources to highlight how China's actions go against these principles and disregard the norms of responsible resource management. Through this analysis, this paper aims to shed light on the importance of transboundary collaboration to ensure sustainable governance of vital and shared water resources.

[2] Brian Eyster, "Science Shows Chinese Dams Are Devastating the Mekong," *Foreign Policy*, April 22, 2020, <https://foreignpolicy.com/2020/04/22/science-shows-chinese-dams-devastating-mekong-river/>.

[3] Riparian areas are located adjacent to a watercourse such as a river or stream.



Figure 1: The Mekong River runs through China, Myanmar, Laos, Thailand, Cambodia, and Vietnam (USGS).

THE MEKONG RIVER

The Mekong is a transboundary river that weaves through China, Myanmar, Laos, Thailand, Cambodia, and Vietnam, making it the longest river in Southeast Asia at approximately 3,050 miles (Figure 1).⁴ The Mekong is divided into upper and lower regions, each with its distinctive character. The Mekong's headwaters begin high in the Tibetan plateau, considered to be the Upper Mekong region that includes China. The Lower Mekong is where about three-fourths of the drainage area of the Mekong lies within Laos, Thailand, Cambodia, and Vietnam.⁵ It is estimated that approximately 40 million people in the Lower Mekong are engaged in wild capture fishery, one of many livelihoods that are en-

[4] S. Liu, et al., "Pinpointing the sources and measuring the lengths of the principal rivers of the world," *International Journal of Digital Earth* 2.1 (March 2009): 84, DOI: 10.1080/17538940902746082.

[5] Gilbert F. White, "Mekong River," *Britannica*, accessed April 7, 2022, <https://www.britannica.com/place/Mekong-River>.

tirely dependent on the rivers' health.⁶ The Mekong Basin has experienced a surge in population growth and urbanization coupled with economic development among the riparian countries. These changes have placed a significant strain on the geopolitical relationships between the countries and on the region's ability to use the water for agriculture and fishing due to increased hydropower development. The forthcoming section will touch on various conditions present in each Mekong River country while also identifying commonalities and interconnectedness across the region.

THE COUNTRIES OF THE MEKONG

CAMBODIA

Cambodia is a lower riparian country along the Mekong River Basin. It benefits greatly from the Mekong River as it provides essential nourishment for the country. Agriculture plays a significant role in the country's economy, accounting for 28% of it.⁷ The country's freshwater fisheries are "among the most productive in the world due to the presence of large floodplains around the Mekong River."⁸ Given that nearly 86% of its territorial boundary lies within the basin, Cambodia arguably has the most to lose from unregulated development of the river, which results in destructive downstream impacts on the country's floodplain and aquatic production.⁹ Research has shown that the Cambodian people oppose dam projects primarily due to the transboundary ecological and social impacts felt by people living here.¹⁰

As population growth and urbanization place more energy demands on the region, the need for hydropower will only increase. For this reason,

[6] Mekong River Commission, "State of the Basin Report," 49, last modified April 2010, <https://www.mrcmekong.org/assets/Publications/basin-reports/MRC-SOB-report-2010full-report.pdf>.

[7] WWF, "Mekong River in the Economy," 93.

[8] *Ibid.*, 93.

[9] *Ibid.*, 9.

[10] Akarath Soukhaphon, Ian G. Baird, and Zeb S. Hogan, "The Impacts of Hydropower Dams in the Mekong River Basin: A Review," *Water* 13.265 (2021): 3, <https://doi.org/10.3390/w13030265>.

Cambodia will likely depend on China—its largest trading partner and benefactor—for economic assistance and foreign investment. However, the dams along the Mekong River are a double-edged sword for Cambodia. In 2018, Cambodia’s electrification rate stood at 60%, and 50% of the country’s rural population lacked readily accessible electricity.¹¹ The proposed Sambor dam in Cambodia has the potential to generate more electricity than the entire current consumption of the country.¹² Yet, according to a Cambodian government-commissioned report by the Natural Heritage Institute—an American watchdog that monitors the world’s major river basins—the Sambor could “literally kill the Mekong River and devastate Cambodia’s economy.”¹³ Cambodia needs energy, but the country also needs to maintain the seasonality of the river to protect the productivity of its floodplains and the identity of its people.¹⁴

VIETNAM

The Mekong River Delta covers a relatively small portion of Vietnam that starts in Phnom Penh where the river divides into the Mekong and the Bassac.¹⁵ Despite having access to a smaller fraction of the delta, rice growers in Vietnam depend on the fertile soil in this region that is a by-product of the river.¹⁶ 27% of Vietnam’s GDP stems from the production of rice, fruit, and fish in the Mekong River Delta.¹⁷ Vietnam accounts for an estimated 42% of the Mekong’s irrigation-equipped land, and the river supports many Vietnamese subsistence farmers and fishers.^{18, 19}

[11] Soukhaphon, Baird, and Hogan, “The Impacts of Hydropower Dams in the Mekong River Basin,” 3

[12] Beech, “Our River Was Like a God.”

[13] *Ibid.*

[14] Michael Sullivan, “‘I Will Lose My Identity:’ Cambodian Villagers Face Displacement By Mekong Dam,” *NPR*, August 26, 2017, <https://www.npr.org/sections/parallels/2017/08/26/546036670/i-will-lose-my-identity-cambodian-villagers-face-displacement-by-mekong-dam>.

[15] White, “Mekong River.”

[16] WWF, “Mekong River in the Economy,” 61.

[17] *Ibid.*

[18] *Ibid.*, 47.

[19] *Ibid.*, 60-64.

Sediment has flowed from Yunnan province in China to Vietnam for thousands of years and is critical for the aforementioned agricultural activities related to the delta. Threatening this flow is China's plans to build more dams on the Lower Mekong.^{20, 21} The release of hydropower upstream has already created an unpredictable pattern of water flow for Vietnam, causing saltwater intrusion, decreasing the ability to navigate the delta, and weakening the functioning of ecosystems.²² In 2020, millions of Vietnamese people lost access to fresh water after China's dams blocked an unprecedented amount of water from entering the lower Mekong for six months in 2019.²³ Though Vietnam has dealt with negative consequences from Chinese dams, in 2019 the country joined Laos in promoting one of the largest dams yet on the lower Mekong.²⁴ Vietnam's recent decision to support the construction of a dam on the Mekong River marks a departure from their previous stance of defending the river delta which they had held for almost two decades.²⁵ This shift highlights the intense geopolitical tensions over the control of water flow, hydropower investment, and sovereignty.

LAOS

Laos, a geologically diverse country, is bordered by Myanmar and China to the northwest, Vietnam to the east, Cambodia to the southeast, and Thailand to the west and southwest.²⁶ It is the only landlocked country in Southeast Asia, and it lies almost entirely within the lower Mekong basin. Laos has strongly pursued hydropower to meet local energy needs and to export to neighboring Thailand and Vietnam; China is a major

[20] Fawthrop, "Did Vietnam Just Doom the Mekong?" *The Diplomat*, November 26, 2019, <https://thediplomat.com/2019/11/did-vietnam-just-doom-the-mekong/>.

[21] WWF, "Mekong River in the Economy," 9.

[22] *Ibid.*

[23] Eyler, "Science Shows Chinese Dams Are Devastating the Mekong."

[24] Tyler Roney and Piyaporn Wongruang, "Impending Luang Prabang dam sparks Unesco heritage impact assessment," *The Third Pole*, June 28, 2021, <https://www.thethirdpole.net/en/energy/luang-prabang-dam-raises-unesco-concerns/>.

[25] Fawthrop, "Did Vietnam Just Doom the Mekong?"

[26] Arthur J. Dommen, "Laos," *Britannica*, accessed April 5, 2022, <https://www.britannica.com/place/Laos>.

player in Laos' ambitious hydropower plans.²⁷ As of September 2021, Laos had 78 dams in operation and, in partnership with the Chinese government and entrepreneurs through the Belt and Road Initiative, the Laotian Government has approved over 246 other hydroelectric projects.²⁸ Heavily indebted, Laos stands at "a high risk of collapsing under the weight of its debt to China, leaving it dangerously susceptible to influence from Beijing."²⁹ In addition, according to environmentalists, the dams are also damaging the Mekong River Basin's fragile ecosystem. Existing dams have affected downstream fishermen and farmers by disrupting fish migration patterns and blocking water and vital sediment flows needed to refresh farmland.³⁰ As a Laotian farmer asked a New York Times reporter, "... what power does an illiterate farmer like her have in the face of China's might?"³¹

THAILAND

Like Vietnam and Cambodia, Thailand also benefits from the Mekong River as it provides a substantial amount of nutrient-rich soil for rice cultivation. In northeast Thailand, more than "80% of the cultivated area is used for growing rice or a mix of rice and upland crops."³² Thailand intends to draw water from the river and its tributaries for irrigation and has even planned to divert some of the Mekong's water to other rivers within its territory.³³ Thailand is also eager to get more hydro-power from the Mekong, mainly through electricity-buying agreements with Laos and China because of its own limited electricity generation

[27] International Hydropower Association, "Laos," accessed April 27, 2022, <https://www.hydropower.org/country-profiles/laos>.

[28] Roseanne Gerin, "Laos Pushes Ahead With Large Dam Projects, Despite Uncertainty of Power Purchases," *Radio Free Asia*, August 9, 2021, <https://www.rfa.org/english/news/laos/dam-projects-09082021152447.html#:~:text=Laos%20has%2078%20dams%20in,to%20neighboring%20countries%2C%20primarily%20Thailand>.

[29] Citowicki, "China's Control of the Mekong."

[30] Le, "Laos and its Dams."

[31] Beech, "Our River Was Like a God."

[32] WWF, "Mekong River in the Economy," 106.

[33] Keskinen, Mehtonen, and Varis, "Transboundary cooperation vs. internal ambitions," 84.

capabilities.³⁴ However, hydropower dams have the potential to severely impact the availability of adequate sediment flowing downstream that Thailand's agricultural sector relies on.³⁵ Low levels of sediment flow, even during wet seasons, are a consequence of upstream dams that withhold water.³⁶

CHINA

This section will briefly discuss China's role in the region with further analysis to follow. The Mekong River is one of the most important rivers in Southeast Asia, spanning six countries and serving as a source of food and income for millions of people. The construction of hydropower dams along the Mekong River has raised concerns about the negative impact on the river's ecosystem, downstream communities, and the livelihoods of millions of people who depend on the river for food and income. The situation is further complicated by the role of China which has supported hydropower projects and plans to build dams on the Upper and Lower Mekong, further reducing the flow of water and sediment to downstream countries. As the most upstream country in the entire Mekong River Basin, China has control over the Upper Mekong and, as a result, its actions impact all of the countries along the Lower Mekong.

China's plans include building a cascade of several large hydropower dams in the Yunnan province, the southwesternmost province in China along the Lancang. The Chinese view dam construction positively because "during the dry season the amount of water in the river could be increased and during the rainy season flood protection improved."³⁷

[34] Gerin, "Laos Pushes Ahead With Large Dam Projects, Despite Uncertainty of Power Purchases."

[35] Soukhaphon, Baird, and Hogan, "The Impacts of Hydropower Dams in the Mekong River Basin," 5.

[36] David Solimini, 2022, "Mekong Dam Monitor at One Year: What Have We Learned?" *Stimson Center* (blog). March 3, 2022, <https://www.stimson.org/2022/mdm-one-year-findings/>.

[37] Keskinen, Mehtonen, and Varis, "Transboundary cooperation vs. internal ambitions" 93.

Due to this belief, China has largely failed to acknowledge the serious environmental and social impacts of its projects on countries downstream.³⁸ China has also refrained from committing to even the most basic Mekong River Commission (MRC) customary international law responsibilities by not consistently sharing detailed information on its plans.³⁹ This lack of cooperation has proven to be a source of contention for downstream nations.⁴⁰ In 2020, Chinese Prime Minister Li Keqiang stated the country would share more water management data from its portion of the Mekong River with its neighbors in Southeast Asia.⁴¹ However, that statement is yet to be backed by legitimate information sharing.⁴²

Controlling the flow of the Mekong via its dams is a way in which China exerts influence over the region; dams that are located upstream tend to control water levels downstream. Water is considered a “sovereign commodity rather than a shared resource to be made available in an equitable manner.”⁴³ The need for economic development and energy security is struggling to be balanced with the need to protect the river’s ecosystem and the livelihoods surrounding agriculture and fisheries.

The upcoming sections aim to provide an analysis of the governance structure in the Mekong River Basin and the reasons for China not being a member of the Mekong Agreement, a dynamic and legally binding framework for managing the resources and development in the basin. These sections will also emphasize the presence of international environmental law governing complex river issues to depict how China’s reluctance fits in with other views of cooperation for sustainable devel-

[38] Einhorn, “A Water Fight Like No Other.”

[39] “If China Won’t Build Fewer Dams, It Could at Least Share Information,” *The Economist*, May 14, 2020, <https://www.economist.com/leaders/2020/05/14/if-china-wont-build-fewer-dams-it-could-at-least-share-information>.

[40] Citowicki, “China’s Control of the Mekong.”

[41] Reuters, “China pledges Mekong River data-sharing, details unclear,” *Reuters*, August 24, 2020, <https://www.reuters.com/article/us-mekong-river/china-pledges-mekong-river-data-sharing-details-unclear-idUSKBN25K0Y5>.

[42] Ibid.

[43] Eyler and Weatherby, “New Evidence.”

opment. By discussing these topics, the complex legal, political, and environmental issues surrounding the management of the Mekong River Basin—critical to the well-being of millions of people in the region—can be better understood.

HISTORICAL GOVERNANCE OF TRANSBOUNDARY WATER RESOURCES

Previous cases in international environmental law have illustrated the challenges and opportunities posed by shared water resources that underlie and support the foundations of the Mekong Agreement. International law is a crucial framework that establishes rules and principles governing relations between states and other international actors and provides a framework for cooperation, stability, and justice. By comparing and analyzing past international legal cases and conventions, it is evident that international environmental law recognizes the importance of sustainable development and imposes obligations on states to utilize resources reasonably and equitably, avoid causing significant harm, and notify and consult affected parties and the public. These values offer important governance structures for countries dealing with complex issues, such as the development along the Mekong River.

The UN Watercourses Convention, to begin with, is an international treaty adopted in 1997 to regulate the use and conservation of water resources that cross international boundaries. It requires member states to inform other states about their planned uses allows time for objections, and emphasizes equitable and reasonable utilization of international watercourses. Despite challenges in its implementation, the Convention highlights the need for cooperation and sustainable management of shared water resources.⁴⁴

[44] The UN Watercourses Convention has been ratified or signed by only 37 states, and remains outside the scope of most countries. Among the Mekong countries, only Vietnam has ratified it, while China, one of the charter members of the United Nations and a permanent member of its Security Council, voted against its ratification due to concerns about provisions on dispute settlement. However, China has expressed support for many of the norms included in the Convention, particularly the principle of equitable and reasonable use.

The Espoo Convention, an international treaty adopted in 1991 under the UNECE, established specific requirements and procedures for transboundary environmental impact assessments (EIAs), including monitoring compliance by its signatories.⁴⁵ Parties to the convention have the right to participate in consultations and find consensus, and the convention aims to support efficient public participation during EIAs where the impacts extend beyond national boundaries.

In the context of pivotal international law cases, in Central Europe, the Danube River is a transboundary river between Slovakia and Hungary. A 1977 treaty signed in Budapest between Slovakia and Hungary was meant to develop sections of the Danube River, a shared watercourse, for hydroelectricity and other purposes, but Hungary suspended work on the project while Czechoslovakia began an alternative project.⁴⁶ The International Court of Justice's 1997 decision endorsed the theory of equitable and reasonable utilization of natural resources—now universally accepted as the cardinal rule of international water law—recognizing the need to reconcile economic development and the protection of the environment with the objective of sustainable development. The court established that there exists in international environmental law the obligation of states to ensure that activities within their jurisdiction respect the environment of other states.⁴⁷

In regards to the duties to inform, the Pulp Mills case decided in 2010, was a dispute between Argentina and Uruguay regarding Uruguay's construction of two pulp mills on the Uruguay River. The case centered on a state's procedural obligations when activities within its jurisdiction threaten to damage another state.⁴⁸ According to Dr. Allen Springer in

[45] "Convention on Environmental Impact Assessment in a Transboundary Context," open for signature February 25, 1991, *United Nations Treaty Series* 1989, https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-4&chapter=27&clang=_en.

[46] "Gabcikovo-Nagymaros Project (Hungary/Slovakia)," *Judgement, I.C.J. Reports* 1997, 7 (Judgment of September 25, 1997).

[47] *Ibid.*, 7.

[48] "Pulp Mills on the River Uruguay (Argentina v. Uruguay)," *International Court of Justice*, accessed April 6, 2022, <https://www.icj-cij.org/en/case/135>.

his book, *Cases of Conflict*, during the Court's deliberations, "...three distinct procedural obligations [emerged], the duty to inform, the duty to notify, and the duty to negotiate in good faith with a state that might be affected detrimentally by a proposed project."⁴⁹ The court emphasized the significance of notifying other states about new projects or activities that may have transboundary impacts and has connected this notification requirement to the customary obligation of due diligence to prevent significant harm.⁵⁰

The aforementioned cases and conventions showcase the difficulties involved with managing transboundary river systems as well as the importance of international frameworks for doing so. Adherence to international law fosters a sense of predictability and consistency, allowing states to build trust and work together toward common goals and preventing the arbitrary exercise of power by states.⁵¹ In the context of this paper, the Mekong River flows through six different countries, each with its own set of laws and regulations. Underpinning the structure that has governed them for close to thirty years is a viable institutional framework for regional governance in an international context that harbors the same values as the crucial cases and conventions.

THE MEKONG RIVER COMMISSION AND THE MEKONG AGREEMENT

The Mekong River Commission (MRC), governed by the Mekong Agreement, is a cooperative mechanism for MRC Member Countries to work together to manage the river in a way that is mutually beneficial and sustainable for all parties. Regional cooperation in the Mekong River began in 1957, making it "one of the first transboundary rivers gov-

[49] *Springer, Cases of Conflict*, 210.

[50] McIntyre, O. 2010, "The Proceduralisation and Growing Maturity of International Water Law: Case Concerning Pulp Mills on the River Uruguay (Argentina v Uruguay), International Court of Justice, 20 April 2010," *Journal of Environmental Law* 22.3: 475, <https://doi.org/10.1093/jel/eqq019>.

[51] Monica Hakimi, 2020, "Why Should We Care About International Law?" *Michigan Law Review*, 118.6: 1283. <https://doi.org/10.36644/mlr.118.6.why>.

erned by an international river body.”⁵² At this time, the Mekong River was not yet considered to be tamed and countries were eager about the economic potential of “hydropower, irrigation and flood control development” in the region.⁵³ That same year, the Committee for Coordination of Investigations on the Lower Mekong River Basin—often referred to as the Mekong Committee—was sponsored by the United Nations and included membership by Cambodia, Laos, Thailand, and Vietnam.⁵⁴ According to the Mekong River Commission, “it was the largest single development project the United Nations had undertaken; no international river body had ever attempted to take on such encompassing responsibilities for financing, management, and maintenance of water resources.”⁵⁵ In 1995, Laos, Thailand, Cambodia, and Vietnam established the Mekong River Commission by signing the Agreement on Cooperation for Sustainable Development of the Mekong River Basin (also known as the Mekong Agreement) to jointly manage and coordinate the use of the Mekong.⁵⁶ The Mekong Agreement started a new era of cooperation in the Lower Mekong Basin with research and knowledge sharing for sustainable management at the forefront.

Articles 1-10 under Chapter III, “Objectives and Principles of Cooperation,” involve commitments and agreements to protect the ecological balance, respect the territorial integrity and sovereign equality, avoid, minimize, and mitigate harmful effects, ensure notification, prior consultation, and prior agreement, and maintain freedom of navigation.⁵⁷ Member Countries—signatories of the Mekong Agreement—acknowledged that the development of the basin must be carried out reasonably and equitably and underscored the importance of balancing the

[52] “History,” Mekong River Commission, accessed April 7, 2022, <https://www.mrcmekong.org/about/mrc/history/>.

[53] *Ibid.*

[54] *Ibid.*

[55] *Ibid.*

[56] *Ibid.*

[57] Mekong River Commission, “Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin,” April 5, 1995: 3-5, <https://www.mrcmekong.org/assets/Publications/policies/agreement-Apr95.pdf>.

need for development with the conservation and protection of the river system.⁵⁸ Chapter IV of the Agreement outlines the institutional frameworks within the Agreement, such as the structure, rules of procedure, the establishment of various councils, and rules for leadership positions.⁵⁹

The purpose of the Mekong Agreement Procedures is to give effect to some of the previously mentioned commitments made by the Member Countries. The Procedures collectively provide the Member Countries with the necessary data, tools, and information to address their concerns, limit harmful effects, and monitor the Mekong River Basin while planning their development. The core procedures of the Mekong Agreement include:

1. **Information Sharing and Management:** The Procedures for Data and Information Exchange and Sharing (PDIES) sets up a structure for MRC Member Countries to collaborate in sharing and exchanging data related to “water resources, topography, agriculture, navigation, flood management, ecology.”⁶⁰ PDIES supports the commitment to share data and information.
2. **Consultation on infrastructure projects:** The Procedures for Notification, Prior Consultation, and Agreement (PNPCA) allows for MRC Member Countries to thoroughly weigh the advantages and disadvantages of any proposed project along the river. If a member country plans to implement a project, it must inform the other countries.⁶¹ PNPCA supports the commitment to notify, prior consultation, and agreement on proposed water uses, and the reasonable and equitable use of the waters of the Mekong River System.

[58] Handbook, 12 <https://www.mrcmekong.org/assets/Publications/95MA-Hb.pdf>

[59] Mekong Agreement, 5-9.

[60] “Procedures for Data and Information Exchange and Sharing,” Mekong River Commission, 2-3, accessed April 26, 2022, <https://www.mrcmekong.org/assets/Publications/policies/Procedures-Data-Info-Exchange-n-Sharing.pdf>.

[61] “Procedures,” Mekong River Commission, accessed April 26, 2022, <https://www.mrcmekong.org/about/mrc/procedures/>.

3. Water use monitoring: The PWUM (Procedures for Water Use Monitoring) is designed to enable effective water management. The PWUM framework recognizes “that reasonable use of water resources is impossible if water uses are not monitored.”⁶² The MRC data portal provides real-time “information on river, flood, water quality, fisheries, environmental health, and drought monitoring and forecasting.”⁶³ PWUM supports the commitment to share data and information.

4. Maintenance of flows: The goal of the Procedures for Maintenance of Flows on the Mainstream (PMFM) is to work together to sustain acceptable water flows for all riparian countries on the Mekong River. The objective is to enhance the various uses of the river while reducing the adverse effects.⁶⁴ PMFM supports the commitment to maintain minimum monthly flows in the mainstream.

5. Water quality: The Procedures for Water Quality (PWQ) ensures that the Mekong River Basin maintains a suitable water quality that promotes sustainable development by safeguarding the riverine ecosystems and communities via river quality monitoring and preparing for emergencies.⁶⁵ PWQ supports the commitment to share data and information and to warn potentially affected Member Countries of emergencies.

The Mekong Agreement provides a comprehensive framework for cooperation among the Member Countries to manage and protect the Mekong River Basin’s resources. Members, to some extent, understand the importance of regional stability and security for their well-being, as well as the economic benefits that can be gained through regional

[62] “Procedures for the Maintenance of Flows on the Mainstream,” Mekong River Commission, 3, accessed April 26, 2022, <https://www.mrcmekong.org/assets/Publications/policies/Procedures-Maintenance-Flows.pdf>.

[63] “MRC Data and Information Services,” Mekong River Commission, accessed April 27, 2022, <https://portal.mrcmekong.org/map-service>.

[64] Mekong River Commission, “Procedures.”

[65] “Procedures for Water Quality,” Mekong River Commission, 3, accessed April 27, 2022, <https://www.mrcmekong.org/assets/Publications/policies/Procedures-for-Water-Quality-council-approved260111.pdf>.

cooperation.⁶⁶ Under the Mekong Agreement, Member Countries have had a platform to address shared challenges related to water resource management, environmental protection, and sustainable development. It has facilitated open communication, information sharing, and joint decision-making processes.⁶⁷ According to Susanne Schmeier and Birgit Vogel in *Riverine Ecosystem Management: Science for Governing Towards a Sustainable Future*, joint river basin management, put into the context of the Mekong River, is a crucial approach for achieving cooperative benefits in water resource management because it helps establish shared visions and objectives among riparian states.⁶⁸ Key water issues are identified and addressed collectively, including potential transboundary impacts and sources of conflict.⁶⁹ Additionally, joint management enables monitoring, data sharing, and the establishment of a transparent platform for all involved states and stakeholders.⁷⁰ Specifically, the Joint Committee of the Mekong Agreement serves as a framework to establish a certain level of trust and cooperation. Through the Joint Committee, the highest decision-making body of the MRC and consisting of representatives from Cambodia, Laos, Thailand, and Vietnam, Member Countries have regular meetings to discuss and address various issues related to the Mekong River's management and development.⁷¹ During these meetings, representatives share data and information on water flow, sedimentation, and other relevant factors to facilitate

[66] Jeffrey W. Jacobs, 2002, "The Mekong River Commission: Transboundary Water Resources Planning and Regional Security," *The Geographical Journal* 168 (4): 360-362, <https://doi.org/10.1111/j.0016-7398.2002.00061.x>.

[67] Susanne Schmeier and Birgit Vogel, 2018, "Ensuring Long-Term Cooperation Over Transboundary Water Resources Through Joint River Basin Management," In *Riverine Ecosystem Management: Science for Governing Towards a Sustainable Future*, edited by Stefan Schmutz and Jan Sendzimir, 353-354, *Aquatic Ecology Series*, Cham: Springer International Publishing, https://doi.org/10.1007/978-3-319-73250-3_18.

[68] Schmeier and Vogel, "Ensuring Long-Term Cooperation Over Transboundary Water Resources Through Joint River Basin Management," 366.

[69] *Ibid.*

[70] Schmeier and Vogel, "Ensuring Long-Term Cooperation Over Transboundary Water Resources Through Joint River Basin Management," 366.

[71] "About the Mekong River Commission," accessed May 14, 2023, http://archive.iwlearn.net/mrcmekong.org/about_mrc.htm#JC.

informed decision-making.⁷² They also discuss policies and strategies for sustainable water resource management, considering the social, economic, and environmental aspects of the basin.⁷³

One specific example of how the Mekong Agreement has facilitated discussions on shared challenges by utilizing the Procedures for Notification, Prior Consultation and Agreement (PNPCA) and the Joint Committee is the case of the Xayaburi Dam.⁷⁴ The Xayaburi Dam, situated in northwest Laos, adjacent to Thailand's Nan Province, began operations as a hydropower project on the Mekong River in 2019.⁷⁵ Through the consultation process facilitated by the Mekong Agreement, the concerns of Cambodia and Vietnam were taken into consideration before the construction and operation of the dam.⁷⁶ This process allowed for open dialogue and information sharing among the Mekong states and provided a platform for discussing the potential impacts of the dam and exploring alternative options to minimize adverse effects.⁷⁷ The PNPCA and Joint Committee processes within the MRC and established by the Mekong Agreement have allowed Member Countries to have a say in the development projects and activities that may have transboundary

[72] Mekong River Commission, n.d., "MRC Joint Committee Takes Action on Accountability, Water-Usage Monitoring," accessed May 12, 2023. <https://www.mrcmekong.org/news-and-events/news/pr-28042022/>.

[73] Sergio Villamayor-Tomas, Mikayel Avagyan, Marit Firlus, Georg Helbing, and Margarita Kabakova, "Hydropower vs. Fisheries Conservation: A Test of Institutional Design Principles for Common-Pool Resource Management in the Lower Mekong Basin Social-Ecological System," *Ecology and Society* 21.1 (2016), <http://www.jstor.org/stable/26270318>.

[74] Mekong River Commission, n.d., "Lower Mekong Countries Take Prior Consultation on Xayaburi Project to Ministerial Level," accessed May 14, 2023, <https://www.mrcmekong.org/news-and-events/news/lower-mekong-countries-take-prior-consultation-on-xayaburi-project-to-ministerial-level/>.

[75] "Xayaburi Dam" n.d., EarthRights International, accessed May 17, 2023, <https://earthrights.org/what-we-do/mega-projects/xayaburi-dam/>.

[76] Mekong River Commission, "Lower Mekong Countries Take Prior Consultation on Xayaburi Project to Ministerial Level."

[77] Mekong River Commission, n.d., "Xayaburi Hydropower Project," accessed May 14, 2023, <https://www.mrcmekong.org/news-and-events/consultations/pnpca-prior-consultations/xayaburi-hydropower-project/>.

implications; this shared decision-making approach ensures that the concerns and interests of all states are taken into account.

By entering into agreements, facilitated or inspired by the Mekong Agreement, and therefore sacrificing some sovereignty, Member Countries aim to enhance trade, investment, and economic growth by tapping into the potential of a larger market and shared resources.⁷⁸ Cambodia and Vietnam, for example, have signed a treaty to enhance navigation and access to the Mekong waterways between the two countries. The Treaty on Waterway Transportation reduces cross-border navigation restrictions and aims to facilitate regional and international trade by streamlining customs and immigration procedures.⁷⁹ The treaty, which MRC helped facilitate, marked a significant step towards improving waterborne transport in the Mekong Region and is expected to generate trade revenue by opening up new opportunities for cargo and passenger transport across borders.⁸⁰ It will also promote river traffic safety, regulate the transportation of dangerous goods, contribute to the reduction of greenhouse gas emissions compared to land-based transport, and standardize rules and regulations.⁸¹

The Mekong Agreement is not without its shortcomings. Transboundary river basin management faces several challenges, including differences in national interests, infrastructure projects that neglect transboundary effects, and conflicts over the binding nature of agreements.⁸² These factors hinder effective cooperation and pose obstacles to sustain-

[78] Josefin Gooch, 2005, "The Mekong Agreement In light of International Principles Relating to Sustainable Use of Transboundary Watercourses," Master's thesis, *University of Lund*, 36, 45.

[79] Mekong River Commission, n.d., "Cambodia and Viet Nam Formally Open-up Cross-Border River Trade on the Mekong," accessed May 14, 2023. <https://www.mrc-mekong.org/news-and-events/news/cambodia-and-viet-nam-formally-open-up-cross-border-river-trade-on-the-mekong/>.

[80] Ibid.

[81] Ibid.

[82] Schmeier and Vogel, "Ensuring Long-Term Cooperation Over Transboundary Water Resources Through Joint River Basin Management," 367.

able water resource management across borders.⁸³ Schmeier and Vogel observe that there can be varying perceptions of the outcomes and conclusions from the consultation processes among the involved countries in the Mekong Agreement.⁸⁴ These differences stem from unclear expectations and differing viewpoints, with downstream states viewing these processes as a way to voice their veto, while upstream conditions are wary of interference in their water development activities.⁸⁵

THE IMPLICATIONS OF CHINA'S RELUCTANCY FOR SUSTAINABLE WATER RESOURCE MANAGEMENT

Despite the benefits (alongside its shortcomings) that membership in the MRC offers as well as the precedents in international environmental law, China, a vital regional actor, has opted to participate in the MRC only as a dialogue partner rather than becoming a full member.⁸⁶ This decision limits the effectiveness of the MRC in managing the Mekong River Basin, as China plays a significant role in the region's water resources management, as discussed previously, particularly in terms of hydropower development and transboundary water governance. For this reason, the Mekong Agreement has been described as "weak, allowing the Member Countries to interpret it as they like or even just to sideline it,"⁸⁷ There have been major concerns over China's control of some of the region's biggest waterways that have provided irrigation, transport, and life for millennia for much of Southeast Asia.⁸⁸ Many fear that China's ability to control the Mekong's flow will tilt geopolitical control of the region in its favor, and a worst-case scenario, China could "use its dams to weaponize water" as reported by Brahma Chellaney for Project Syndicate, an international media organization that publishes commen-

[83] Ibid.

[84] Ibid, 366.

[85] Ibid, 366.

[86] Mekong River Commission, "History."

[87] Keskinen, Mehtonen, and Varis, "International water security," 90.

[88] Bruce Einhorn, "A Water Fight Like No Other May Be Brewing Over Asia's Rivers," *Bloomberg*, October 31, 2016, <https://www.bloomberg.com/news/features/2016-11-01/a-waterfight-like-no-other-may-be-brewing-over-asia-s-rivers>.

tary and analysis on a variety of global topics.⁸⁹

For example, while the framework of the Mekong Agreement provided the prior consultation process required for all mainstream dams, including the Xayaburi Dam, China's decision to bypass this process as a non-member influenced how the Laotian government sees development on a shared watercourse. Laos "sees no reason why it should hold back on developing a shared river when an upstream country is already doing so," according to Philip Hirsch for the *Asia-Pacific Journal* back in 2011.⁹⁰ The Vietnamese government has also warned that projects like Xayaburi risk regional conflict, and the dam encountered significant pushback from environmentalists and human rights organizations.⁹¹ Following the construction of the dam, the river has exhibited clear blue waters downstream, but clear blue is not a positive sign.⁹² Devoid of essential nutrients and sediments necessary for the sustenance of aquatic life, the dam has had detrimental effects on fisheries, thereby posing challenges to food security in the downstream regions.⁹³ Despite this, Laos' aspirations to continue building dams on the mainstream have not faltered; China and Laos wish the upper Mekong was a national commodity rather than a shared watercourse and crucial, regional resource.⁹⁴ China's lack of full cooperation with the MRC has harmed the effectiveness of the organization by influencing other regional states, like Laos, to operate against the Mekong Agreement. Unlike China, Laos is a member of the MRC and "needs to temper expressions of sovereignty over the river within its borders with an adherence to procedures for prior consultation agreed to for projects with potential transboundary impacts,"

[89] Brahma Chellaney, "Damming the Mekong Basin to Environmental Hell," *Project Syndicate*, August 2, 2019, <https://www.project-syndicate.org/commentary/china-dams-mekong-basin-exacerbate-drought-by-brahma-chellaney-2019-08>.

[90] Philip Hirsch, "China and the cascading geopolitics of Lower Mekong Dams," *The Asia-Pacific Journal* 20.2 (May 2011): 2.

[91] EarthRights International, "Xayaburi Dam."

[92] Soukhaphon, Baird, and Hogan, "The Impacts of Hydropower Dams in the Mekong River Basin," 11.

[93] Soukhaphon, Baird, and Hogan, "The Impacts of Hydropower Dams in the Mekong River Basin," 11.

[94] Keskinen, Mehtonen, and Varis, "International water security," 84.

according to Hirsch.⁹⁵

A powerful essay from *The Economist* titled “The Mekong” puts into words the gravity of the situation on the river: “Downriver countries intend to build another 11 large dams on the Mekong, with dozens more planned for its tributaries. In 20 years the Mekong could be dammed from Tibet to just above Phnom Penh... In no other large river basin in the world is the planned rate of growth of hydropower as great.”⁹⁶ As a regional superpower with a historical disinclination towards cooperation, China has constructed at least eleven dams along the mainstream of the river over the course of twenty-six years.⁹⁷ Hundreds more are planned or under construction in both the upper and lower regions.⁹⁸ The rules of international environmental law that are outlined in the Mekong Agreement and around the world have not guided Chinese practice along the river.⁹⁹

Hydropower is extremely valuable to the Lower Mekong countries as a source of energy, income, and foreign investment; energy demand is expected to increase by 6-7% each year in the Lower Mekong Basin.¹⁰⁰ Between 2005 and 2015, electricity generation from Lower Mekong Basin hydropower increased from 9.3 GWh to 32.4 GWh.¹⁰¹ According to the

[95] Hirsch, “China and the cascading geopolitics of Lower Mekong Dams,” 2.

[96] “Requiem for a river: Can one of the world’s great waterways survive its development?” *The Economist*, accessed April 5, 2022, <https://www.economist.com/news/essays/21689225-can-one-world-s-great-waterways-survive-its-development>.

[97] Brian Eyler and Courtney Weatherby, “New Evidence: How China Turned off the Tap on the Mekong River,” *The Stimson Center*, April 13, 2020, <https://stimson.org/2020/new-evidence-how-china-turned-off-the-mekong-tap/>.

[98] Carolyn Cowan, “As Hydropower Dams Quell the Mekong’s Life Force, What Are the Costs?” *Mongabay Environmental News*, March 29, 2023, <https://news.mongabay.com/2023/03/as-hydropower-dams-quell-the-mekongs-life-force-what-are-the-costs/>.

[99] Pichamon Yeophantong, “China’s Lancang Dam Cascade and Transnational Activism in the Mekong Region: Who’s Got the Power?” *Asian Survey* 54.4 (2014): 702, <https://doi.org/10.1525/as.2014.54.4.700>.

[100] “Hydropower,” Mekong River Commission, accessed April 7, 2022, <https://www.mrcmekong.org/our-work/topics/hydropower/>.

[101] Basin Development Strategy for the Mekong River Basin: 2021 - 2030,” Mekong River Commission, 26, last modified March 4, 2020, <https://www.mrcmekong.org/as->

Mekong River Commission, as of 2019, there are 89 hydropower projects in the lower basin. There are currently two hydropower dams located in Cambodia, with a total installed capacity of 401 MW. In Laos, there are 65 dams with an installed capacity of 8,033 MW, while in Thailand, there are seven dams with an installed capacity of 1,245 MW. Vietnam has 14 dams with a total installed capacity of 2,607 MW.¹⁰² By 2040, hydropower is estimated to generate more than 30,000 MW, and economic gains from hydropower development are expected to rise to as much as 160 billion USD by 2040, according to the Mekong River Commission.¹⁰³ Important economic benefits are being derived in hydropower development, but there exist significant worries about the social implications and the negative impacts of the dams on the natural environment.

China's record impoundment of the basin's water has caused erratic changes to the basin. These include disrupting the natural cycle of the river, which results in the blocking of sediment needed for agriculture. A survey by the Mekong River Commission found that if all of the dams planned for the Mekong network go forward, 97% of the sediment that once flowed to the river's mouth could be blocked by 2040, starving the land of nutrients needed for agriculture.¹⁰⁴ Changes in sediment flow at the coast will have adverse effects, such as a reduction in sediment to support mangroves, the loss of historical Cau Mau tip growth, and minor sediment accumulation in other areas. These shifts will lead to the subaqueous delta becoming steeper, worsening coastal erosion, and requiring additional protective measures.¹⁰⁵

sets/RSF9/Day-2/Draft-BDS-2021-2030-and-SP-2021-2025-5-Mar-2020-for-distribution_clean.pdf.

[102] Mekong River Commission, "Hydropower."

[103] Mekong River Commission, "Basin Development Strategy," 35.

[104] "Modeling the Impacts of Climate Change and Development Infrastructure on Mekong Flow, Sediment Regimes and Water Quality," *Mekong River Commission*, 26, last modified January 2018, <https://www.mrcmekong.org/assets/Publications/Council-Study/Council-study-Reports-discipline/001CS-Modelling-Summary-Vol1-DraftFinal.pdf>.

[105] MRC, "Modeling the Impacts of Climate Change and Development Infrastructure on Mekong Flow, Sediment Regimes and Water Quality," 78.

Despite normal rainfall, changes in flow and reduced siltation are causing saltwater intrusion into the Mekong Delta.¹⁰⁶ Although increased drought (even during wet seasons) and low river flows experienced in the lower basin during 2019-2021 were partially caused by the severe deficiency of rainfall, the dam restrictions imposed during this period played a significant role in further worsening the drought conditions and impeding the wet season flow.¹⁰⁷ Less water in the rainy season produces smaller floodplains with less sediment deposited in them, depleting the once-rich soil and leaving millions unable to grow food on the riverbanks.¹⁰⁸

Hydropower development on the Mekong River will also continue to aggravate food insecurity and poverty by negatively impacting migratory fish patterns. The Jinghong Dam on the Lancang is the lowest on the river system and the closest to northern Thailand. The dam has caused huge fluctuations in river levels and disrupted migratory patterns of fish.¹⁰⁹ Narit Art-Harn, a representative of locals in Thailand, explained that the “extremely low level of water is killing these fish because it is preventing them from entering tributaries to lay eggs in flooded forests and swamps, which means an entire generation of fish will vanish.”¹¹⁰ Like many other environmental issues, the costs of such ecological changes in the basin are placed on the poorest residents.¹¹¹ The catch from the Mekong River is crucial for the livelihoods, nutrition,

[106] The Economist, “If China won’t build fewer dams, it could at least share information.”

[107] Solimini, “Mekong Dam Monitor at One Year: What Have We Learned?”

[108] Chellaney, “Damming the Mekong Basin to Environmental Hell.”

[109] Patrick J. Dugan, Chris Barlow, Angelo A. Agostinho, Eric Baran, Glenn F. Cada, Daqing Chen, Ian G. Cowx, et al., 2010, “Fish Migration, Dams, and Loss of Ecosystem Services in the Mekong Basin,” *Ambio* 39.4: 344–48, <https://doi.org/10.1007/s13280-010-0036-1>.

[110] Pratch Rujivanarom, “Aquatic life faces extinction as upstream dams leave Mekong River dry,” *The Nation: Thailand*, July 19, 2019, <https://www.nationthailand.com/news/30373286>.

[111] Christopher G. Baker, “Dams, Power And Security In The Mekong: A Non-Traditional Security Assessment Of Hydro-Development In The Mekong River Basin,” *S. Rajaratnam School of International Studies*, 2012, 15, <http://www.jstor.org/stable/res-rep17193>.

and food security of millions of people, particularly in the lower basin, where it accounts for 47-80% of total animal protein consumed and has an annual consumption rate of 29-39 kg per capita.¹¹²

The reduction of sediment and nutrients has a significant impact on coastal fisheries. According to modeling projections by the MRC, the impact is expected to decrease total fisheries by approximately 50% and cause a large collapse of those directly supported by it.¹¹³ Aside from the loss of food sources due to decreased migrations of fish, villagers residing along the river have been forced to evacuate.¹¹⁴ The Lower Sesan 2 dam, which is Cambodia's biggest hydroelectric dam with a capacity of 400 megawatts, commenced operations in 2018, providing almost 80% of the power supply for the capital, Phnom Penh.¹¹⁵ However, to make this project possible, 34,000 hectares of forested land were inundated, leading to the displacement of around 2,700 households from seven riverside villages, dealing a severe setback to the customs of the Bunong indigenous people who reside in the forest.¹¹⁶

Communication and transparency between China and other Mekong countries have also been limited. In 2020 China supplied its flood season water level and rainfall data from only two of its stations on the upper Mekong despite efforts by the MRC to acquire dry season data from China.¹¹⁷ China has also been hesitant to make a formal commitment to limit its dam construction or ensure that the countries downstream

[112] Dugan, et. al., "Fish Migration, Dams, and Loss of Ecosystem Services in the Mekong Basin," 345.

[113] MRC, "Modeling the Impacts of Climate Change and Development Infrastructure on Mekong Flow, Sediment Regimes and Water Quality," 77.

[114] Sangeetha Amarthalingam and Say Tola, "Indigenous People Struggle after Being Displaced by Lower Sesan 2 Dam," *The Third Pole* (blog), June 16, 2021, <https://www.thethirdpole.net/en/energy/cambodians-struggle-after-being-displaced-by-lower-sesan-2/>.

[115] Amarthalingam and Say Tola, "Indigenous People Struggle."

[116] Amarthalingam and Say Tola, "Indigenous People Struggle."

[117] Reuters, "Mekong River Groups Urge China to Show Transparency after Dam Report," April 15, 2020, <https://www.reuters.com/article/us-mekong-river-idUSKCN2IX-ILG>.

receive a minimum amount of water.¹¹⁸ By failing to uphold standards in international environmental law—standards that are present within its region—China has caused harm to the Mekong River Basin and its people. The construction of dams without prior regional planning efforts has led to the alteration of the river's flow and sediment transport, which has affected fish migration, aquatic biodiversity, and the livelihoods of communities dependent on the river. Additionally, the lack of consultation and transparency has led to mistrust and tensions between China and the downstream countries, hindering international cooperation and efforts to address the challenges facing the Mekong River Basin.

China's decision not to join the Mekong Agreement can be attributed to several factors. Firstly, China prefers bilateral negotiations with each of the Mekong countries because it allows China to negotiate on a case-by-case basis and potentially gain more leverage over each country individually. By negotiating bilaterally, China can potentially avoid criticism and opposition from other countries in the region.¹¹⁹ China is also hesitant to join the agreement due to the increased transparency, public participation, and obligations in decision-making processes the Mekong Agreement would require, potentially subjecting its actions in the region to greater scrutiny.¹²⁰ The geopolitical tensions in the Mekong region are very present; China views its participation in a binding treaty or legal framework as a threat to its national sovereignty and territorial integrity.¹²¹ Lastly, some experts posit that China views the Me-

[118] The Economist, "If China won't build fewer dams, it could at least share information."

[119] Yunxia Song and John Wong, 2011, "The Limits of Chinese Multilateralism: China's Bilateral Approach to Regional Economic Cooperation in Asia," *Asian Survey* 51.4: 679-702.

[120] Philip Hirsch and Kurt Mørck Jensen, "National Interests and Transboundary Water Governance in the Mekong," May 2006, 95, http://mekongwaterforum.org/sites/default/files/Hirsch_Jensen_2006_national_interests_and_transboundary_water_governance.pdf.

[121] It is important to note that there are many examples of successful multilateral agreements and treaties between and inspired by Southeast Asian countries, including China, and the rest of the world: ASEAN Free Trade Area (AFTA), Trans-Pacific Partnership (TPP), the Paris Agreement, and the United Nations Convention on the Law of

kong Agreement as a tool of external influence in the region due to the agreement's emphasis on joint development and ecological protection, similar to existing treaties and conventions on international water law that originated in non-Asian countries, leading to a reluctance to participate. China has a long-standing wariness of foreign interference in the region and sees the Mekong Agreement as potentially impeding its ability to pursue its interests in the Mekong basin.¹²² The unwillingness to cooperate with the Mekong River Commission and join the Mekong Agreement limits the effectiveness of a crucial governance framework that seeks to support sustainable development in the region without sacrificing the ecological health of the river system.

A PATH FORWARD

Despite China's apparent reluctance to participate, there exist various reasons that could motivate China to do so. China's membership would demonstrate its commitment to international norms and principles and promote trust and goodwill with other countries while counterbalancing international concerns about its growing influence in the region. The superpower could then benefit from increased trade, investment, and technical assistance opportunities from other countries and international organizations. The MRC would also provide a platform for China to address its concerns and work collaboratively to ensure that its investments are sustainable and responsible and that countries do not seek to assert their independence at its expense. If China were to become a member, it would enhance the MRC's ability to effectively govern water resources as their membership would encourage greater participation, more effective consultation, increased transparency, and a stronger ability to plan the basin's future.

The Mekong River is facing a pivotal moment. For almost three decades, China has been building dams along the Upper Mekong River and has

the Sea (UNCLOS).

[122] Aun Chhengpor, 2019, "Mekong Region Grows More Important to China-US Relations," *VOA*, June 22, 2019, https://www.voanews.com/a/east-asia_mekong-region-grows-more-important-china-us-relations/6170466.html.

plans for dozens more in the entire basin. The MRC has come under increasing criticism over the past decade for its inability to prevent unchecked hydropower development along the Mekong mainstream and tributaries.¹²³ Despite being essential for the economic development of the countries involved, water development projects like the construction of large hydropower dams have had and will continue to have harmful effects on ecosystems and the livelihoods of millions of people. China's lack of membership has significant environmental and social impacts on the region. By examining China's reasons for not becoming a member using the greater context of international environmental law, policymakers and stakeholders can identify potential challenges to cooperation and develop strategies to address these challenges.

The achievement of sustainable development entails the intricate coordination of multiple actors across diverse sectors that utilize the river in a plethora of ways. The international community has emphasized transboundary collaboration and implementing robust regulatory and enforcement mechanisms for ensuring the equitable utilization of shared water resources, which China has repeatedly neglected. There are fewer better words to describe the effects of China's actions than those of Brahma Chellaney from Project Syndicate: "Dams tend to create winners upstream, where people gain greater access to water and hydropower, and losers downstream. In the Mekong region, the losers far outnumber the winners in the short run. In the long run, environmental destruction ensures that there are no winners at all."¹²⁴ Actions that occur on a transboundary river are not siloed events. China's non-membership to the Mekong Agreement and its neglect of international frameworks for shared water resource management has resulted in and will continue to cause, severe environmental, economic, and social problems that will ripple through the entire Mekong River region.

[123] Jorge Sotullo, "The Mekong River: geopolitics over development, hydropower and the environment," study, *Policy Department for External Relations, European Parliament* (November 2019): 51, [https://www.europarl.europa.eu/RegData/etudes/STUD/2019/639313/EXPO_STU\(2019\)639313_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2019/639313/EXPO_STU(2019)639313_EN.pdf).

[124] Chellaney, "Damming the Mekong Basin to Environmental Hell."

BIBLIOGRAPHY

“About the Mekong River Commission,” accessed May 14, 2023, http://archive.iwlearn.net/mrcmekong.org/about_mrc.htm#JC.

Amarthalingam, Sangeetha and Say Tola. “Indigenous People Struggle after Being Displaced by Lower Sesan 2 Dam.” *The Third Pole* (blog). June 16, 2021. <https://www.thethirdpole.net/en/energy/cambodians-struggle-after-being-displaced-by-lower-sesan-2/>.

Backer, Ellen. 2006. “Paper Tiger Meets White Elephant? An Analysis of the Effectiveness of the Mekong River Regime,” Accessed April 25, 2022. https://www.researchgate.net/publication/265155782_Paper_Tiger_Meets_White_Elephant_An_Analysis_of_the_Effectiveness_of_the_Mekong_River_Regime.

Bainbridge, Amy and Supattra Vimonsuk. “China’s Mekong River dams are generating renewable energy but are costing locals their livelihoods.” *ABC News*, January 19, 2020. <https://www.abc.net.au/news/2020-01-20/china-mekong-river-plan-creates-renewable-energy-but-costs-jobs/11872640>.

Baker, Christopher G. “Dams, Power And Security In The Mekong: A Non-Traditional Security Assessment Of Hydro-Development In The Mekong River Basin.” S. Rajaratnam School of International Studies, 2012. <http://www.jstor.org/stable/resrep17193>.

Beech, Hannah. “Our River Was Like a God’: How Dams and China’s Might Imperil the Mekong.” *The New York Times*. October. 12, 2019. <https://www.nytimes.com/2019/10/12/world/asia/mekong-river-dams-china.html>.

Britannica. “Uruguay River.” Accessed March 10, 2022. <https://www.britannica.com/place/Uruguay-River>.

Center for Climate and Energy Solutions. 2015. “China’s Contribution to the Paris Climate Agreement.” Accessed April 23, 2023. <https://www.c2es.org/wp-content/uploads/2015/07/chinas-contribution-paris-climate-agreement.pdf>.

Chellaney, Brahma. “Damming the Mekong Basin to Environmental Hell.” *Project Syndicate*, August 2, 2019. <https://www.project-syndicate.org/commentary/china-dams-mekong-basin-exacerbate-drought-by-brahma-chellaney-2019-08>.

Chhengpor, Aun. 2019. “Mekong Region Grows More Important to China-US Relations.” *VOA*. June 22, 2019. https://www.voanews.com/a/east-asia_mekong-region-grows-more-important-china-us-relations/6170466.html.

Citowicki, Philip. “China’s Control of the Mekong.” *The Diplomat*, May 8, 2020. <https://thediplomat.com/2020/05/chinas-control-of-the-mekong/>.

Commission (MRC), Mekong River. n.d. “Laos Urged to Better Assess Impacts, Provide Effective Mitigation Measures, as Luang Prabang Dam Moves Forwards.” Accessed April 26, 2023. <https://www.mrcmekong.org/news-and-events/news/pr-luang-prabang-hpp-20200701/>.

“Convention on Environmental Impact Assessment in a Transboundary Context.” Entry into force: September 10, 1997. United Nations Treaty Collection. https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-4&chapter=27&clang=_en.

“Convention on the Law of the Non-Navigational Uses of International Watercourses.” Entry into force: August 17, 2014. United Nations Treaty Collection. https://treaties.un.org/Pages/ViewDetails.aspx?src=IND&mtdsg_no=XXVII-12&chapter=27&clang=_en.

Cowan, Carolyn. “As Hydropower Dams Quell the Mekong’s Life Force, What Are the Costs?” *Mongabay Environmental News*, March 29, 2023. <https://news.mongabay.com/2023/03/as-hydropower-dams-quell-the-mekongs-life-force-what-are-the-costs/>.

Dommen, Arthur J. “Laos.” *Britannica*. Accessed April 5, 2022. <https://www.britannica.com/place/Laos>.

Dugan, Patrick J., Chris Barlow, Angelo A. Agostinho, Eric Baran, Glenn F. Cada, Daqing Chen, Ian G. Cowx, et al. 2010. “Fish Migration, Dams, and Loss of Ecosystem Services in the Mekong Basin.” *Ambio* 39 (4): 344–48. <https://doi.org/10.1007/s13280-010-0036-1>.

EarthRights International. “Xayaburi Dam” n.d. Accessed May 17, 2023. <https://earthrights.org/what-we-do/mega-projects/xayaburi-dam/>.

Einhorn, Bruce. “A Water Fight Like No Other May Be Brewing Over Asia’s Rivers.” *Bloomberg*, October 31, 2016. <https://www.bloomberg.com/news/features/2016-11-01/a-waterfight-like-no-other-may-be-brewing-over-asia-s-rivers>.

“Environmental Assessment | UNECE.” n.d. Accessed April 11, 2023. <https://unece.org/environment-policy/environmental-assessment>.

European Parliament “The Mekong River: geopolitics over development, hydropower and the environment.” Last modified November 18, 2019. [https://www.europarl.europa.eu/RegData/etudes/STUD/2019/639313/EXPO_STU\(2019\)639313_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2019/639313/EXPO_STU(2019)639313_EN.pdf).

Eyler, Brian and Courtney Weatherby. “New Evidence: How China Turned off the Tap on the Mekong River.” *The Stimson Center*, April 13, 2020. <https://stimson.org/2020/new-evidence-how-china-turned-off-the-mekong-tap/>.

Eyler, Brian. “Science Shows Chinese Dams Are Devastating the Mekong.” *Foreign Policy*, April 22, 2020. <https://foreignpolicy.com/2020/04/22/science-shows-chinese-dams-devastating-mekong-river/>.

Fawthrop, Tom. “Did Vietnam Just Doom the Mekong?” *The Diplomat*, November 26, 2019. <https://thediplomat.com/2019/11/did-vietnam-just-doom-the-mekong/>.

Gerin, Roseanne. “Laos Pushes Ahead with Large Dam Projects, Despite Uncertainty of Power Purchases.” *Radio Free Asia*, August 9, 2021. <https://www.rfa.org/english/news/laos/dam-projects-09082021152447.html#:~:text=Laos%20has%2078%20dams%20in,to%20neighboring%20countries%2C%20primarily%20Thailand>.

Gooch, Josefin. 2005. “The Mekong Agreement In Light of International Principles Relating to Sustainable Use of Transboundary Watercourses.” Master’s thesis, University of

Lund. <https://lup.lub.lu.se/student-papers/record/1557771/file/1564432.pdf>.

Hakimi, Monica. 2020. "Why Should We Care About International Law?" *Michigan Law Review*, no. 118.6: 1283. <https://doi.org/10.36644/mlr.118.6.why>.

Hirsch, Philip, and Kurt Mørck Jensen. "National Interests and Transboundary Water Governance in the Mekong." May 2006, 95. http://mekongwaterforum.org/sites/default/files/Hirsch_Jensen_2006_national_interests_and_transboundary_water_governance.pdf.

Hirsch, P. China and the cascading geopolitics of Lower Mekong Dams. *The Asia-Pacific Journal* 20, no. 2 (May 2011): 1–5.

ICJ, Hungary/Slovakia, "Gabcikovo-Nagymaros Project," ICJ Reports 1997, p. 7 (Judgment of September 25, 1997).

IMF. "The Impact of Climate Change in Southeast Asia." *IMF Finance & Development Magazine*. September 2018. <https://www.imf.org/en/Publications/fandd/issues/2018/09/southeast-asia-climate-change-and-greenhouse-gas-emissions-prakash>.

"If China Won't Build Fewer Dams, It Could at Least Share Information" *The Economist*, May 14, 2020. <https://www.economist.com/leaders/2020/05/14/if-china-wont-build-fewer-dams-it-could-at-least-share-information>.

International Centre for Environmental Management. "MRC Strategic Environmental Assessment of Hydropower on the Mekong Mainstream: Final Report." Accessed April 12, 2022. <https://www.mrcmekong.org/assets/Publications/Consultations/SEA-Hydropower/SEA-Main-Final-Report.pdf>.

International Court of Justice. "Case Concerning Pulp Mills on the River Uruguay." Last modified April 20, 2010. http://climatecasechart.com/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2010/20100420_2774_judgment.pdf.

International Court of Justice. "Pulp Mills on the River Uruguay (Argentina v. Uruguay)." Accessed April 6, 2022. <https://www.icj-cij.org/en/case/135>.

International Hydropower Association. "Laos." Accessed April 27, 2022. <https://www.hydropower.org/country-profiles/laos>.

Jacobs, Jeffrey W. 2002. "The Mekong River Commission: Transboundary Water Resources Planning and Regional Security." *The Geographical Journal* 168 (4): 354–64. <https://doi.org/10.1111/j.0016-7398.2002.00061.x>.

Johnson, Kay. "Laos issues new decree on dams aimed at minimizing harm." *Reuters*, February 25, 2021. <https://www.reuters.com/business/environment/laos-issues-new-decree-dams-aimed-minimising-harm-2021-02-25/>.

"Joint Statement on Enhancing Sustainable Development Cooperation of the Lancang-Mekong Countries." n.d. Accessed April 23, 2023. https://www.fmprc.gov.cn/mfa_eng/wjdt_665385/2649_665393/202106/t20210609_9170566.html

Keskinen, Marko, Mehtonen, K., and Olli, Varis. "Transboundary cooperation vs. internal ambitions: The role of China and Cambodia in the Mekong region." In *International water security: Domestic threats and opportunities*, edited by Nevelina I. Pachova, Mikiyasu Nakayama, Libor Jansky 79-109. Tokyo: United Nations University Press, 2008.

Keskinen, Marko. "Water management and impact assessment in the Mekong Basin: analyzing the linkages between local, national and regional levels." *Water Resources Laboratory*. Accessed April 27, 2022. <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.495.2046&rep=rep1&type=pdf>.

Kinna, Rémy, and Alistair Rieu-Clarke. "The Governance Regime of the Mekong River Basin." *Brill Research Perspectives in International Water Law* 2, 1 (2017): 1-84. DOI: <https://doi.org/10.1163/23529369-12340005>

Le, Minh-Ha. "Laos and its Dams: Southeast Asia's Battery, Built by China." *Radio Free Asia*. Accessed April 5, 2022, <https://www.rfa.org/english/news/special/china-build-laos-dams/>.

Liu, S., P. Lu, D. Liu, P. Jin & W. Wang et al. "Pinpointing the sources and measuring the lengths of the principal rivers of the world." *International Journal of Digital Earth* 2, no. 1 (March 2009): 80-87, DOI: 10.1080/17538940902746082.

Loures, Flavia, Dr. Alistair Rieu-Clarke, and Marie-Laure Vercambre. "Everything you need to know about the UN Watercourses Convention." WWF. Last modified January 2009. https://wwfeu.awsassets.panda.org/downloads/wwf_un_watercourses_brochure_for_web_july2009_en.pdf.

McIntyre, O. 2010. "The Proceduralisation and Growing Maturity of International Water Law: Case Concerning Pulp Mills on the River Uruguay (Argentina v Uruguay), International Court of Justice, 20 April 2010." *Journal of Environmental Law* 22 (3): 475–97. <https://doi.org/10.1093/jel/eqq019>.

Mekong River Commission, "Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin." April 5, 1995, <https://www.mrcmekong.org/assets/Publications/policies/agreement-Apr95.pdf>.

Mekong River Commission. "Basin Development Strategy for the Mekong River Basin: 2021 - 2030." Last modified March 4, 2020. https://www.mrcmekong.org/assets/RSF9/Day-2/Draft-BDS-2021-2030-and-SP-2021-2025-5-Mar-2020-for-distribution_clean.pdf.

Mekong River Commission n.d. "Cambodia and Viet Nam Formally Open-up Cross-Border River Trade on the Mekong." Accessed May 14, 2023. <https://www.mrcmekong.org/news-and-events/news/cambodia-and-viet-nam-formally-open-up-cross-border-river-trade-on-the-mekong/>.

Mekong River Commission. "Dialogue Partners." Accessed May 10, 2022. <https://www.mrcmekong.org/about/mrc/dialogue-partners/>.

Mekong River Commission. "Fish migrations of the Lower Mekong River Basin: implications for development, planning and environmental management." Last modified October 2002. <https://www.mrcmekong.org/assets/Publications/technical/tech-No8->

fish-migration-of-LMB.pdf.

Mekong River Commission. "History." Accessed April 7, 2022. <https://www.mrcmekong.org/about/mrc/history/>.

Mekong River Commission. "Hydropower." Accessed April 7, 2022. <https://www.mrcmekong.org/our-work/topics/hydropower/>.

Mekong River Commission. n.d. "Lower Mekong Countries Take Prior Consultation on Xayaburi Project to Ministerial Level." Accessed May 14, 2023. <https://www.mrcmekong.org/news-and-events/news/lower-mekong-countries-take-prior-consultation-on-xayaburi-project-to-ministerial-level/>.

Mekong River Commission. "Mekong River Commission." Accessed April 6, 2022. <https://www.mrcmekong.org/about/mrc/>.

Mekong River Commission. "MRC Data and Information Services." Accessed April 27, 2022. <https://portal.mrcmekong.org/map-service>.

Mekong River Commission, n.d., "MRC Joint Committee Takes Action on Accountability, Water-Usage Monitoring," accessed May 12, 2023. <https://www.mrcmekong.org/news-and-events/news/pr-28042022/>.

Mekong River Commission. "New strategy to address Mekong wide challenges near finishing line." Last modified June 12, 2020. <https://www.mrcmekong.org/news-and-events/news/bds-20200612/>.

Mekong River Commission. "Procedures." Accessed April 26, 2022. <https://www.mrcmekong.org/about/mrc/procedures/>.

Mekong River Commission. "Procedures for Data and Information Exchange and Sharing." Accessed April 26, 2022. <https://www.mrcmekong.org/assets/Publications/policies/Procedures-Data-Info-Exchange-n-Sharing.pdf>.

Mekong River Commission. "Procedures for the Maintenance of Flows on the Mainstream." Accessed April 26, 2022. <https://www.mrcmekong.org/assets/Publications/policies/Procedures-Maintenance-Flows.pdf>.

Mekong River Commission. "Procedures for Water Quality." Accessed April 27, 2022. <https://www.mrcmekong.org/assets/Publications/policies/Procedures-for-Water-Quality-council-approved260111.pdf>.

Mekong River Commission. "State of the Basin Report." Last modified April 2010, <https://www.mrcmekong.org/assets/Publications/basin-reports/MRC-SOB-report-2010full-report.pdf>.

Mekong River Commission. n.d. "Xayaburi Hydropower Project." Accessed May 14, 2023, <https://www.mrcmekong.org/news-and-events/consultations/pnpca-prior-consultations/xayaburi-hydropower-project/>.

Mekong River Commission. "1995 Mekong Agreement and Procedures." Accessed April 27, 2022, <https://www.mrcmekong.org/assets/Publications/MRC-1995-Agreement-n-procedures.pdf>.

Mekong River Commission. 2005. "Understanding the 1995 Mekong Agreement and the Five MRC Procedures." Mekong River Commission. Accessed April 26, 2023. <https://www.mrcmekong.org/assets/Publications/95MA-Hb.pdf>.

Mekong River Commission. 2023. "Guidelines for transboundary environmental impact assessment in the Lower Mekong River Basin." Vientiane: MRC Secretariat. DOI: 10.52107/mrc.aqrsbk.

Middleton, Carl, and Jeremy Allouche. "Watershed or Powershed? Critical Hydropolitics, China and the 'Lancang-Mekong Cooperation Framework,'" *The International Spectator* 51, no. 3 (October 2016): 100-117. DOI: 10.1080/03932729.2016.1209385.

"Modeling the Impacts of Climate Change and Development Infrastructure on Mekong Flow, Sediment Regimes and Water Quality." Mekong River Commission. Last modified January 2018. https://www.mrcmekong.org/assets/Publications/Council-Study/Modeling-the-impacts-of-climate-change_Council-Study.pdf.

Nations, United. n.d. "Universal Declaration of Human Rights." United Nations. United Nations. Accessed April 22, 2023. <https://www.un.org/en/about-us/universal-declaration-of-human-rights>.

Po, Sovinda and Christopher Primiano. "Lancang-Mekong Cooperation: China's Institutional Shield." *The China Story*, July 8, 2021. <https://www.thechinastory.org/lancang-mekong-cooperation-chinas-institutional-shield/>.

Reaksmey, Hul and David Boyle. "Laos Accused of Copy-Pasting Dam Impact Survey." Last modified September 20, 2018. <https://www.voanews.com/a/laos-accused-of-copy-pasting-dam-impact-survey/4579825.html>.

Reuters. "China pledges Mekong River data-sharing, details unclear." Reuters, August 24, 2020. <https://www.reuters.com/article/us-mekong-river/china-pledges-mekong-river-data-sharing-details-unclear-idUSKBN25K0Y5>.

Reuters. "Mekong River Groups Urge China to Show Transparency after Dam Report." April 15, 2020. <https://www.reuters.com/article/us-mekong-river-idUSKCN21XILG>.

Roney, Tyler. "What are the impacts of dams on the Mekong River?" *The Third Pole*, July 1, 2021. <https://www.thirdpole.net/en/energy/what-are-the-impacts-of-dams-on-the-mekong-river/#:~:text=China%20completed%20its%20first%20main-stream,planned%20and%20built%2010%20more>.

Roney, Tyler and Piyaporn Wongruang. "Impending Luang Prabang dam sparks Unesco heritage impact assessment." *The Third Pole*, June 28, 2021. <https://www.thirdpole.net/en/energy/luang-prabang-dam-raises-unesco-concerns/>.

Rujivanarom, Pratch. "Aquatic life faces extinction as upstream dams leave Mekong River dry." *The Nation: Thailand*, July 19, 2019. <https://www.nationthailand.com/news/30373286>.

Schmeier, Susanne, and Birgit Vogel. "Ensuring Long-Term Cooperation Over Transboundary Water Resources Through Joint River Basin Management." In *Riverine Ecosystem Management: Science for Governing Towards a Sustainable Future*, edited by

Stefan Schmutz and Jan Sendzimir, 347–70. Aquatic Ecology Series. Cham: Springer International Publishing, 2018. https://doi.org/10.1007/978-3-319-73250-3_18.

Shen, Wei & Xie, Lei. 2019. “Can China lead in multilateral environmental negotiations? Internal politics, self-depiction, and China’s contribution in climate change regime and Mekong governance.” *Eurasian Geography and Economics*. 59. 1-25. 10.1080/15387216.2019.1586557.

Solimini, David. 2022. “Mekong Dam Monitor at One Year: What Have We Learned? • Stimson Center.” Stimson Center (blog). March 3, 2022. <https://www.stimson.org/2022/mdm-one-year-findings/>.

Song, Yunxia and John Wong. 2011. “The Limits of Chinese Multilateralism: China’s Bilateral Approach to Regional Economic Cooperation in Asia.” *Asian Survey* 51 (4): 679-702.

Soukhaphon, Akarath, Ian G. Baird, and Zeb S. Hogan. “The Impacts of Hydropower Dams in the Mekong River Basin: A Review.” *Water* 13, no. 265 (2021): 1-18. <https://doi.org/10.3390/w13030265>.

Spain v. France, Reports of International Arbitral Awards, Vol. 12 (1957), p. 281 (Judgment of November 11, 1957).

Springer, Allen. *Cases of Conflict: Transboundary Disputes and the Development of International Environmental Law*. Toronto: University of Toronto Press, 2016.

Sullivan, Michael. “‘I Will Lose My Identity’: Cambodian Villagers Face Displacement by Mekong Dam.” NPR, August 26, 2017. <https://www.npr.org/sections/parallels/2017/08/26/546036670/i-will-lose-my-identity-cambodian-villagers-face-displacement-by-mekong-dam>.

“Territorial Integrity.” n.d. CSCE. Accessed April 22, 2023. <https://www.csce.gov/issue/territorial-integrity>.

The Economist. “Requiem for a river: Can one of the world’s great waterways survive its development?” Accessed April 5, 2022. <https://www.economist.com/news/essays/21689225-can-one-world-s-great-waterways-survive-its-development>.

UNECE Convention on Environmental Impact Assessment in a Transboundary Context. “The Espoo Convention.” Accessed April 15, 2022, <https://www.osce.org/files/f/documents/4/5/488110.pdf>.

UNEP. “Lake Lanoux Arbitration (France v. Spain).” Accessed April 6, 2022. <https://www.ecolex.org/details/court-decision/lake-lanoux-arbitration-france-v-spain-b09cb956-2cb5-479e-ba3a-bbfd4f7b68fc/>.

United Nations. “Convention on the Law of the Non-navigational Uses of International Watercourses.” Last modified 2014. https://legal.un.org/ilc/texts/instruments/english/conventions/8_3_1997.pdf.

U.S. Embassy and Consulate in Vietnam. “Mekong-U.S. Partnership Joint Ministerial Statement.” U.S. Embassy & Consulate in Vietnam. September 11, 2020. <https://vn.usem->

bassy.gov/mekong-u-s-partnership-joint-ministerial-statement/.

Villamayor-Tomas, Sergio, Mikayel Avagyan, Marit Firlus, Georg Helbing, and Margarita Kabakova. "Hydropower vs. Fisheries Conservation: A Test of Institutional Design Principles for Common-Pool Resource Management in the Lower Mekong Basin Social-Ecological System." *Ecology and Society* 21, no. 1 (2016). <http://www.jstor.org/stable/26270318>.

White, Gilbert F. "Mekong River." *Britannica*. Accessed April 7, 2022. <https://www.britannica.com/place/Mekong-River>.

Wouters, Patricia. "Considering China's approach to the UN Watercourses Convention – Time to revisit?" *International Water Law Project Blog*. Accessed April 27, 2022. <https://www.internationalwaterlaw.org/blog/2014/07/28/professor-patricia-wouters-considering-chinas-approach-to-the-un-watercourses-convention-time-to-revisit/#:~:text=China's%20position%20regarding%20the%20UNWC&text=First%2C%20it%20failed%20to%20reflect,sovereignty%20of%20a%20watercourse%20State>.

WWF. "Making More Fish in the Mekong." Accessed April 12, 2022. <https://www.wwf.org.uk/what-we-do/projects/making-more-fish-mekong#:~:text=The%20Mekong%20river%20basin%2C%20which,the%20world's%20freshwater%20fish%20catch>.

WWF. "Mekong River in the Economy." Last modified November 2016. http://d2ouvy59p0dg6k.cloudfront.net/downloads/mekong_river_in_the_economy_final.pdf.

Yeophantong, Pichamon. "China's Lancang Dam Cascade and Transnational Activism in the Mekong Region: Who's Got the Power?" *Asian Survey* 54, no. 4 (2014): 700–724. <https://doi.org/10.1525/as.2014.54.4.700>.