CHAPTER I

INTRODUCTION

1.1 Background

The struggle to acquire and secure resources, whether tangible or symbolic, has always played a crucial role in the formation and development of societies and politics. The power struggle over territories and the resources that lie beneath them has triggered conflicts, prompted the development of societies, and even created new ones, but it has also resulted in significant damage to governments, to the point where strong political entities have ceased to exist and impacting the people of the states, both directly and indirectly. In addition, the magnitude and frequency of conflict for natural resources has increased at an unprecedented rate as the human population and the number of nation-states has risen.[1] State governments face a tough challenge in managing and governing water resources as it is not constrained by state borders, institutional classification, or legal nomenclature. In transboundary rivers, there are further national security, territoriality, and monopolistic concerns to contemplate.[2] As transboundary rivers flow through the territory of numerous nation-states, the quantitative and qualitative use of water in one state affects the use of water in other states, particularly

[1] Shavkat Kasymov, "WATER RESOURCE DISPUTES: CONFLICT AND COOPERATION IN DRAINAGE BASINS," *International Journal on World Peace* 28, no. 3 (2011): 81.

[2] Jessica Williams, "Stagnant Rivers: Transboundary Water Security in South and Southeast Asia," *Water* 10, no. 12 (December 10, 2018): 1819, https://doi.org/10.3390/w10121819.

downstream. Rivers can become a cause of controversy, discontent, and even conflict when the interests of one state are not taken into account by adjacent riparian states.[3]

The case of the transboundary river dispute between China and the Mekong Riparian States regarding hydropower dam projects in the Mekong River Basin exemplifies this issue. The Mekong River is Southeast Asia's largest river basin, with six states sharing it. Both a sub-watershed and a biogeographic region segregate the basin, which is divided into the Upper Mekong Basin and the Lower Mekong Basin. The Upper Mekong Basin is in China's Yunnan province and the eastern part of Myanmar. Lao PDR, Thailand, Cambodia, and Vietnam are all part of the Lower Mekong Basin (LMB).[4] The Mekong basin has been intended for utilization since the 1960s, as it has considerable hydroelectric potential. However, large-scale contemporary projects have been hampered by financial and political challenges. Nonetheless, due to the region's rising energy demands, interest in hydro-development projects in the Mekong basin has been reignited, particularly since the mid-2000s.[5]

China's economic development is currently hampered by an energy shortage, and resolving the problem effectively, sustainably, and long-term is critical to the country's

[3] Kasymov, "WATER RESOURCE DISPUTES: CONFLICT AND COOPERATION IN DRAINAGE BASINS," 82–83.

[4] Matthias Finger, Ludivine Tamiotti, and Jeremy Allouche, *The Multi-Governance of Water : Four Case Studies*, SUNY Series in Global Politics (Albany: SUNY Press, 2006), 44, https://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=148013&site=ehost-live.

[5] "Dam Projects and Disputes in the Mekong River Basin | Climate-Diplomacy," accessed September 18, 2021, https://climate-diplomacy.org/case-studies/dam-projects-and-disputes-mekong-river-basin.

proactive, long-term development.[6] Considering hydropower is widely seen as a "cleaner" and more affordable alternative energy source, China has launched a series of ambitious hydropower dam projects to accommodate the rising energy demands of its fast-growing population and industries.[7] China has completed eleven hydropower dams on its portion of the Mekong, eight of them in the Upper Basin, *Lancang*, with plans to build several more. These dams have the capacity to store about 47 billion cubic meters of water and generate over 21,000 megawatts of electricity.[8]

As upstream-downstream dynamics have become a contentious issue, fears of dam-induced ecological depletion have grown among downstream riparian states, which have suffered riverbank erosion and declining fish stocks.[9] It will have repercussions in the long run, especially on the Lower Riparian States. Seasonal changes and fluctuation in the water levels were once common. Dams, on the other hand, cause this natural cycle to be disrupted by releasing water from reservoirs in response to electrical demand. As a result, downstream flows have become much less predictable, and causing a significant decrease in variations between the wet and dry seasons in the

[6] XiaoLin Chang, Xinghong Liu, and Wei Zhou, "Hydropower in China at Present and Its Further Development," *Energy* 35, no. 11 (November 2010): 4400–4406, https://doi.org/10.1016/j.energy.2009.06.051.

[7] Pichamon Yeophantong, "China's Lancang Dam Cascade and Transnational Activism in the Mekong Region," *Asian Survey* 54, no. 4 (August 1, 2014): 700–701, https://doi.org/10.1525/as.2014.54.4.700.

[8] Mervyn Piesse, "Chinese Intentions Towards the Mekong River and Mainland South-East Asia," *Future Directions International* (blog), July 16, 2020, https://www.futuredirections.org.au/publication/chinese-intentions-towards-the-mekong-river-and-mainland-south-east-asia/.

[9] Yeophantong, "China's Lancang Dam Cascade and Transnational Activism in the Mekong Region," 710.

Lower Riparian States. The issue is further exacerbated by the fact that China does not consult Lower Riparian States on its hydropower dam-building projects; it also releases a massive amount of water from their reservoirs periodically with no advance notice, causing havoc downstream.[10]

In 2019, records have shown low river levels across the lower Mekong states which heavily impacted the Lower Riparian States; prompting Thailand to mobilize its military in response to a severe drought in the state's north- east region, Cambodian fishermen reporting an 80% to 90% decline in fish stocks, and an alarming lack of access to freshwater resources in some densely populated areas of the Vietnam region. Furthermore, rice production in Thailand and Vietnam, both major suppliers to regional and global rice markets, has declined dramatically due to a lack of water resources. China asserts that the regional drought is prompted by an extreme El Niño phenomenon, which has resulted in lower precipitation across the region, including parts of south-western China, and that its hydropower dams have had no implications on Mekong water levels.[11]

China has declined to join any transboundary water treaty and refuses to exchange hydrological data with downstream states, preferring to keep it a state secret altogether.[12] Identifying possible hydropower-related issues in Mekong is pointless

[10] Martin Russel, "Water Disputes in the Mekong Basin" (European Parliamentary Research Service, April 2018), https://www.europarl.europa.eu/RegData/etudes/ATAG/2018/620223/EPRS_ATA(2018)620223_EN.pdf.

[11] Piesse, "Chinese Intentions Towards the Mekong River and Mainland South-East Asia."

[12] Piesse.

without the essential resources and data to address the issue. However, China has demonstrated commitment to maintain and strengthen a diplomatic relation with the other riparian states through a project known as Mekong development: the Greater Mekong Sub-region (GMS) Economic Cooperation Program and also launching various policies.[13] Thus, international cooperation among riparian states is feasible provided the relevant parties are prepared to come together and deliberate to establish a consensus.

1.2 Research Question

Based on the information that was stated previously, I would like to discuss the importance of transboundary water dispute using the case study of Mekong River Basin Hydropower Dam Project in relation to the riparian states. The following research questions will be used in this thesis since the issue has become significant enough to be discussed:

1. How does the Hydropower Dam Project affect the water and food security in Lower Riparian States?
2. What are the efforts initiated by the Lower Riparian States to mitigate the insecurities?

1.3 Research Objective

[13] Hidetaka Yoshimatsu, "THE MEKONG REGION, REGIONAL INTEGRATION, AND POLITICAL RIVALRY AMONG ASEAN, CHINA AND JAPAN," *Asian Perspective* 34, no. 3 (2010): 88–91.

In conjunction to the research questions and the making of this thesis, the objective of this research is:

1. Explain and analyze the effect of the Hydropower Dam Project on Mekong River water and food security at the Lower Riparian States by analyzing the response and dispute resolution development among the affected states.

1.4 Research Significance

Through the case of the Mekong hydropower dam and the environmental and food security consequences for the involved states, I hope that the results of this thesis will provide insight for anyone who are interested in learning more about the relevance of transboundary water resources. Furthermore, it is hoped that this thesis will serve as a source of information for people, especially scholars seeking to understand more about transboundary water disputes as well as water and food security issues. Finally, anyone looking for sources, reading, or secondary data on the topic covered in the thesis might find it useful.

1.5 Structure of Writing

The first chapter of this thesis is created to serve as the thesis's foundation, discussing the background of the issue, research question that will be answered, as well as the objective and relevance of this thesis's research.

The second chapter of this thesis is split up into two subtopics: the literature review and the concepts. The literature review will be used to analyze the research question, which is the connection between water and food security in Mekong lower riparian states and the construction of hydropower dams. This is in relation to the theory of

neoliberalism, as well as the concepts of international organizations and non-traditional security.

The third chapter will focus on methodology, which is the method used to explain this research. It consists of the research method, data collection technique, and data analysis technique used to acquire information for this research.

The fourth chapter is the research and thesis' primary point and focus. This chapter will show all of the data that was gathered in a methodical manner and in accordance with theories and concepts in order to answer and address the thesis's research question. The conclusion and recommendation chapter, which is the fifth chapter, provides a summary of all the findings and research. The chapter will explain and emphasize the findings, as well as suggesting recommendations for further research into the impact of hydropower dam projects at Mekong River basin on the water and food security of LMB countries.