

## Abstract

Local people living along the Mun River and its tributaries, have a deep connection to this fresh water ecosystem and have longstanding knowledge, practices and norms that are critical to their fishing livelihoods. However due to the rapid development of hydropower in the Mekong Basin, fishing livelihoods are becoming increasingly complicated by environmental impacts. Many households and communities are thus diversifying their livelihoods in an effort to adapt to the associated ecological and socio-economic changes in their regions. There is a large literature on the impacts of hydroelectric development in the region, however, there has been limited research on diversifications and how they vary spatially; there has also been little research focused on community-based resource management including roles and use and how they have changed in the context of hydroelectric development. To address these gaps an exploratory case study was carried out in the nine communities of Baan Hua, Hew #11, Baan Hua Hew #4, Baan Na Choom Chon, Baan Huay Mak Tai, Baan Kho Tai, Baan Don Sumran, Baan Wangsabang Tai, Baan Thalat and Baan Doom Yai in the Mun and Sebok river areas since the implementation of the Pak Mun Dam.

Twenty-six semi-structured interviews were conducted in this area in an effort to better understand historical fishing practices and diversifications in livelihoods that have taken place over the last two decades. Additionally, an examination of the rules and practices of these communities are taken into account. To better understand how households and communities are coping with changes in their livelihoods and local aquatic ecosystems, research was also carried out to learn more about rules in use; specifically, what kinds of rules and practices have been developed to ensure both social and ecological sustainability? This research, therefore, has been conducted in the hopes of providing useful and important details about community diversifications and experiences, as well as potentially contribute to the literature needed to address the lack of Local Ecological Knowledge in terms of policy change in this region.



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# **Diversification of Livelihoods in a Region Impacted by Hydroelectric Development:** A Case Study in the Lower Mekong (Mun River/Sebok River) Amabel D'Souza MSc.<sup>1</sup> Dr. Brenda Parlee<sup>2</sup>

# Methodology

A case study method of inquiry was determined to be the best approach for addressing the research questions. The research was also carried out in each of the villages rather than in a central setting. All but the relocated communities are located on the Mun or Sebok river. By doing place-based interviews in each of the communities, it was not only possible to hear the voices of individual fishers but to experience and observe many aspects of the fishing livelihoods discussed in each interview.

#### Semi-Structured Interviews: **\*** 26

Interviewees ✤ Ages 18 – 77

- ✤ 30 45 Mins
- Flexible Interview
- Structure Audio Recorded
- with Consent



Figure 1: Map of Research Area and Nine Communities Adapted from: Jutagate et al.,



The most common themes are less sharing of fishers' knowledge, rural-tourban migration, rice farming, education and laboring. It also appears that there is a difference in diversifications based on the locations of the communities. For example, those in Baan Huay Mak Tai appear to have less ways of diversifying due to their location. Practices such as rice farming, farming other crops and fish ponds are mostly unavailable, and therefore rural-to-urban migration and laboring is more likely to take place. Fishing is a critical dimension of the livelihoods of people of the Mekong River Basin. In the Mun River and Sebok river regions, which have been impacted by the development of the PMD for more than two decades, many aspects of fishing practices are changing and other resources and opportunities for livelihood diversification are becoming increasingly important. However, the patterns of diversification on unique, depending on their location and the ecological and socio-economic position.



#### **Chapter 3: FISHING LIVELIHOODS AND DIVERSIFICATIONS IN THE MEKONG RIVER BASIN IN THE CONTEXT OF THE PAK MUN**

#### Chapter 3 is organized as follows:



### Chapter 4: COMMUNITY BASED MANAGEMENT AND FISHING LIVELIHOODS IN THE MUN RIVER REGION OF THAILAND

#### Chapter 4 examines the following norms/governance implemented by the interviewed communities:

Table 4.3: Norms and Governance implemented by Baan Don Sumran, Baan Huay Mak Tai, Baan Wangsabang Tai, Baan Thalat, Baan Doom Yai, Baan Na Choom Chon, Baan Hua Hew #4, Baan Hua Hew #11 and Baan Kho Tai.



This chapter has highlighted several key contributions around the flexibility and adaptiveness of fishing livelihoods in the context of the Mun river hydro project. Local people are already employing their own management practices, and perhaps if taken more seriously by centralized governing bodies, they can have more agency in management

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All of the interviewees expressed that the Pak Mun Dam had changed their livelihoods and throughout the years they have diversified in order to survive (Chapter 3). Chapter 3 outlines the different livelihood diversifications being practiced by interviewees living in the Lower Reservoir, Upper Reservoir, Sebok Tributary and Relocated communities of the Mun River. These diversifications exist because people have to cope with the stress of the Pak Mun Dam and issues arising from its development. It is enlightening to see what people are doing now, and how these diversifications have changed their way-of-life. Chapter 4 examines local rules, practices and governance from the nine communities after the PMD. In doing so the hope is to contribute to the literature and highlight key ideas about local communities being flexible and able to diversify. The literature on CBRM suggests that flexible norms and practices are necessary to ensure sustainability (Tompkins 2004). The discussion in both Chapter 3 and 4 provides a comparative analysis of the nine communities, as well as discussion over why these changes are occurring.

The thesis may encourage researchers, academics, government bodies and others, think more holistically about the impacts of dams and the importance of learning from the knowledge of peoples most affected by these projects. See D'Souza (2019) for more information.

# **Acknowledgements/References**

Special Thanks to the Communities of Baan Don Sumran, Baan Huay Mak Tai, Baan Doom Yai, Baan Thalat, Baan Na Choom Chon, Baan Hua Hew #11, Baan Hua He1 #4, Baan Kho Tai and Baan Wangsabang Tai. Dr. Brenda Parlee, Dr. Kanokwan Manorom, Dr. Ian Baird, Ploy Nomai, Sirisak Gaja-Svasti, Gai Krongyuta and Archara Simlee.

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