



I do not worry, I live in the Mekong Delta

Exploring local farmers' understanding of hydrosocial relations in Thanh My Tay commune, Vietnam

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Abstract

The Mekong River is affected by changing water dynamics due to climate change and human activity, such as upstream hydropower development. How this affects farmers is highly relevant, especially in river deltas such as the Mekong Delta, where the relationship between humans and water is highly prevalent. Based on this knowledge, this study aims to build an understanding of how changing water dynamics affect agricultural practices and social structures in the rural commune of Thanh My Tay, Mekong Delta, Vietnam. The study employs the hydrosocial relations framework to apply an understanding of water flow as both socially and naturally constructed. The study further uses social capital as a relevant complement to the hydrosocial framework since changing water dynamics are closely linked to social structures. Understanding social relationships, therefore, provides this study with further insights into the relationship to water. Based on 15 semi-structured interviews with farmers in Thanh My Tay, our findings show how both water dynamics and social relations have a significant influence on farmers' agricultural practices in Thanh My Tay. Water and society shape and are shaped by one another, and can, when interlinked, be a way to understand the complex hydrosocial relations. We found that although informants experienced changing water dynamics, this was not seen as problematic but rather as a natural event of life in the commune. We argue that changes in hydrosocial relations are something that has become normalised in Thanh My Tay to the extent that living with the changing water regime is not seen as a challenge, but rather something normal and natural. Additionally, our findings show how collaboration among farmers is present in their agricultural practices, and the farmers are dependent on one another, and how water dynamics is one prerequisite that makes it so.

Keywords: Vietnam, Mekong Delta, Hydrosocial relations, Social capital, Agriculture.

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Foreword

We started our journey from Long Xuyen at 6 am, where we got picked up by our translator and assistant student. Who would drive us with their motorbikes to the commune of Thanh My Tay, where we would conduct our interviews with the farmers. The journey took around one and a half hours, and even though we both were tired from waking up so early, the uncomfortable seat on the motorbike and all the honking kept us awake. We stopped on the way to buy breakfast and coffee, and then started driving out of the bustling city that had just started to wake. As we drove, we encountered the morning rush of workers on motorbikes, heading into the city for work. We were amazed by the Vietnamese people's ability to transport everything on the motorbikes and how many people could fit. Street vendors stood along the road selling food or the harvest for the day, and people stopped to buy their breakfast. The road travelled parallel with the river, where boats were transporting goods, and were fully loaded with rice, as it was the middle of the harvest season. As we started to approach Thanh My Tay rice fields surrounded us on both sides, and we could see the farmers out working on the fields. We could feel the heat from the sun that had started to warm up the air, although the flowers from the lotus fields had not yet welcomed the sun, displaying that it was still early morning. Arriving in the commune, we were met by a member of the commune leaders and by a welcoming smile from our local guide. It was now time to head out in the commune to start our first day of interviews and collect our material. We got up on the bikes again, along with our team for the day, looked at each other and said all we do is win, let's begin!



Figure 1. Driving to the field, Thanh My Tay. Evelina Porling (2026).

1. Introduction

In the Tibetan mountains, the Mekong River starts its journey. It flows into six different countries: China, Myanmar, Thailand, Laos, Cambodia, and finally ends its long journey in the Delta in Vietnam, travelling a distance of 5,000 km (Mekong River Commission 2026a). The river spreads out like the blood vessels in the human body, branching into small rivers, lakes, and streams across the landscape. Providing water for crops, creating life and a home for living organisms, and the livelihood of about 65 million people who are dependent on its water (ibid). The river functions as a road, a connection between countries, and creates transboundary water issues that lead to power dynamics and geopolitical tension based on its natural resources. It is often described both as an obstacle and a resource for the local livelihoods, as floods have repeatedly been a cause for the destruction of fields, infrastructure, and lost lives. However, the floods contribute nutritious alluvium, which allows the soil to remain fertile, making it a suitable place for agricultural production (Tran 2010). Due to the construction of the dyke system in the Mekong Delta these agricultural systems have undergone changes that have enabled the farmers to intensify their production. The Mekong River is currently experiencing changes in its water regime due to climate change and human activity, for instance, upstream hydropower development (Mekong River Commission 2026b). These changes raise questions regarding local perspectives and how they are affected by the changing water dynamics, and what effect it has on their agricultural practices. It is therefore important to understand how it affects the people living in the presence of these changing water dynamics, as well as the importance of social relations in connection to the importance of water. The Mekong River's importance to so many and the effects the changing water dynamic has for the people living close to it, therefore, makes it highly relevant to examine. To do that, we travelled to the commune of Thanh My Tay, in the Mekong Delta, Vietnam, to get a better understanding of how hydrosocial relations affect farmers.

1.1 Purpose and research question

This study aims to contribute to a better understanding of how water can be understood both as a physical and social process, and the implications of this for farmers living close to a changing water resource. To do this, the study will examine rice farmers in Thanh My Tay and their understanding of the connection between the Mekong River, their social relations, and their agricultural practices. The focus on agricultural practices for understanding the human-water relationship will be used to capture the implications that this relationship has for farmers. For this purpose, we have formulated two main research questions and two sub-questions as follows:

- How are changing hydrosocial relations in Thanh My Tay understood by local farmers? How does it shape their agricultural practices?
 - How do farmers view local water dynamics in Thanh My Tay in relation to their agricultural practices?
 - What importance does social capital have for shaping hydrosocial relations relating to agriculture in Thanh My Tay?

2. Background

2.1 The Mekong Delta

The final downstream portion of the Mekong River, the geographical location in which this study will take place, is called the Mekong Delta (Ribero & Gianluca 2024). Located in the southern tip of Vietnam, it is one of the largest and most biodiverse deltaic regions in the world, covering an area of about 21, 485 square miles. The landscape here is characterised by a continuous network of rivers and wetlands (ibid). The region's two seasons, dry and rainy, shape the area covered by water (Tran 2021). During the dry season, November to April, the water level in the river is lower (ibid). During the rainy season, the water flow is stronger, and floods commonly occur (Thanh et al. 2020). These floods can cause harm to the delta's population and agricultural production, as extreme floods have been known to damage crops and infrastructure. At the same time, the production has been developed in coexistence with floods. The rivers are a major source of fresh water for the local population, and the inundation of fields provides nutritious sediment, making them well-suited for rice production (ibid). Currently, Vietnam is one of the countries most vulnerable to climate change, and the Mekong Delta is experiencing major environmental challenges. The rising sea level, salinity intrusion, prolonged droughts, and unpredictable floods all reshape the way people live in the region (ibid).

The delta is commonly described as Vietnam's largest rice bowl (Le Coq et al. 2001). Considering that Vietnam is the world's second-largest rice exporter, this is a noteworthy achievement (Vietnam Law & Legal Forum 2025). The production of rice has had significance to the region throughout history, as it has been one of the most important local food sources for generations (Le Coq et al. 2001). In modern times, rice production remains a crucial aspect of the livelihoods in the delta, as the region produces more than half of Vietnam's total rice production (Tran et al. 2021), and a majority of its citizens are farmers (Thanh et al. 2020). Beyond being a large producer of rice, the delta also produces the majority of Vietnam's seafood and fruit, making it crucial for the national food security (Ministry of Agriculture and Environment of the Socialist Republic of Vietnam 2025).

2.2 Dyke Systems

When researching hydrosocial relations in the Mekong Delta, it is important to understand the physical conditions affecting the water dynamics. One such prevalent condition is the dyke systems that are being built in some areas of the Mekong Delta. The Mekong Delta has three crop seasons, where two are used for crop production, and the third one is when the land is flooded. In order to have agricultural production during the third season and to protect the crops from sudden floods, dyke systems have been built in some areas in the Delta. The land located inside the dyke system can be used to grow produce in all three seasons due to the

dyke system protecting your land from flooding, while the land outside can only utilise two seasons for crop production (Thanh 2020).

The building of dyke systems in An Giang province was intensified in 2011 and was built to have a coverage of about 1,431 km² (Thanh 2020). Currently, there are two different kinds of dyke systems: low dyke systems and high dyke systems. Low dyke systems are built to protect the rice harvest of the summer crops, which allow flood overflows and inundation during the third season. The high dyke systems are built to prevent the larger annual floods and make it possible to intensify the production over three seasons. Following the national renovation policy from 1986 to 2015 rice production has been intensified, especially in An Giang province, with the expansion of the dyke system that enabled triple rice cropping. Since then, the area in An Giang with triple rice cultivation has grown from 2591 ha to 150, 000 ha (Tran et al. 2020). However, it is questionable if three seasons is a sustainable livelihood option for the farmers in the Mekong Delta in the long run (ibid). The expansion of three seasons has had both social and environmental consequences for the province of An Giang. For example, previously flood-prone areas have earlier been important for open-access fishing as a source of income for the poor. When these areas are diminished by the dykesystem, it has affected the poor, especially as there has also been a declining labour demand due to mechanisation. Lastly, the three crop seasons have harmful effects on the environment regarding soil fertility, as the floods no longer come with nutritious sediment to the fields (ibid).



Figure 2. Dyke in a jackfruit farm, Thanh My Tay. Evelina Porling (2026).

2.3 Thanh My Tay

Due to our very limited access to official data concerning Thanh My Tay, the following part will be based partly on our own observations of the commune, as well as verbal sources and estimates.

The commune of Thanh My Tay is located close to the border with Cambodia in An Giang province, Vietnam, in the Long Xuyen quadrangle. The commune used to consist of the smaller communes Dao Huu Canh, O Long Vi, and Thanh My Tay, but was merged into one commune of Thanh My Tay in 2025. The total area of the commune is 162.08 km², and the population is about 6,485 people (TỉnhThànhVN 2026). Most people's livelihood in the commune is from farming, as the natural environment of the Mekong Delta makes the land suitable for rice production. Some cultivated land is protected by the dyke system, making it possible to produce crops in all three seasons, while other land lies outside the dykes in flood-prone areas. Like so many other places in the Mekong Delta, the major crop produced here has traditionally been rice. Today, because of the dyke system, it is suitable to have other crops on protected land, but because of a governmental policy aiming to ensure national food security, it is strictly encouraged to keep only producing rice in the commune. All other type of production we came across during our time here was established before this policy was implemented.

3. Methodology

3.1 Research selection and delimitation

The study's geographical location was selected with assistance from our contact person from the Department of Rural Development at An Giang University, with whom we got in contact through our supervisor in Sweden. We aimed for a study area in the Mekong Delta with both rice farming and more diversified production with fruit trees and three crop seasons. This enables us to look at hydrosocial relations connected to different kinds of agricultural practices, which makes our study more comprehensive and not restricted to one single production method. To fulfil this prerequisite, our contact suggested finding a commune with agricultural production with both two crop seasons outside the dyke system and three seasons inside the dyke. Based on our contacts' greater understanding of the local context, the commune of Thanh My Tay was suggested for our initial research interests and to develop a research topic relevant to the area. Thanh My Tay commune was selected partly because the commune has experience with flood regimes and faces risks due to the changes in its relationship with floods and drought, which makes it relevant to examine hydrosocial relations. The location of the commune was also important to us, as it was located at a decent distance from Long Xuyen and An Giang University, which worked as our base during our field study.

Although ideas and knowledge from our contact person at An Giang University assisted us in the process of developing this study, this study is independent from this contact person. Additionally, this small-scale study is not meant to be generalisable but rather to give a deeper context-bound knowledge of water regimes' influence on agricultural livelihoods in Thanh My Tay commune. The knowledge generated is meant to contribute to an increased understanding of similar contexts.

3.2 Interviews

3.2.1 Informants

To assemble material for the study, 15 interviews were conducted with landowning farmers with rice production in Thanh My Tay commune, An Giang province, during a period of 2 weeks in April 2026. The informants were chosen with the help of the deputy village leader, who was also our local guide. Informants were chosen based on our interest in interviewing farmers with production both inside and outside the dyke system. The informants were from landowning households aged between 35 and 78 years old, and were all men except for one woman. During some of the interviews, women from households were present. Some did not want to participate, while others joined in and added to the main informant's answer. All households participating had rice farming as their primary income, while some had other produce, such as jackfruit or combined fish rice farming.

One of the informants appeared as particularly significant to our collected material, as he differentiated himself from other informants in his social relationships and farming production. For this reason, he is identified as a key informant in this study. The informant stood out from other farmers, particularly in the way that he was the deputy village leader and our village guide. He showed us around during our time in Thanh My Tay and provided us with information regarding the area and agricultural production.

Beyond the 15 interviews with farmer households, one interview with representatives from the commune leaders in Thanh My Tay was conducted. This interview functioned as both a necessary bureaucratic step to introduce ourselves to the commune and as a complement to our other material, with more formal general knowledge regarding the commune as a whole.

3.2.2 Conducting the interviews

All interviews conducted were semi-structured. This method allows the interviews to be based on an interview guide, while still leaving the interviews open to changes and flexibility, allowing additional questions to the informant during the interview based on the findings (Alvehus et al. 2025). Since rural life in the Mekong Delta is a new context for us, the method of semi-structured interviews is of great value for our study. It was important to employ a method that could be adapted as the process progressed.

The interviews were conducted in the commune of Thanh My Tay in the farmers' houses or at their local coffee shop. This was to create a comfortable environment for everyone involved, and as we visited during the hottest month of April, we all needed shade from the sun during the warmest hours. Visiting their homes allowed us to see the village as well as get a glimpse of their life. All the interviews were done with the help of our translator, who spoke Vietnamese and English. We asked questions that he translated to the farmers in Vietnamese and then translated back to us. Additionally, we also had a student with us from the Department of Rural Development at An Giang University, taking notes. The student had more agricultural knowledge, and he also contributed to the interviews and could explain the material to our translator if there were any difficulties. Furthermore, we had the local guide with us during the interviews and a representative from the commune leadership. When interviewing, it was also common that the women or neighbours would join the discussion, sometimes adding more information.

3.3 Collaboration between authors

During the field study, both authors took turns asking the questions during the interviews. One person was in charge of the interview while the other took notes, and then in the next interview, we switched. During the interview, we made sure to check on one another to see if the other person wanted to add something or had any questions. All of the interviews were recorded with the consent of the farmers, except for one interview with an informant, and the one conducted with the

representatives from the commune leaders. This material was later transcribed manually by us, and we transcribed the interviews we had taken notes on. Later, we read the others' transcriptions. From there, we discussed the material and findings and categorised the material together into themes that in different ways answered our research topic. The collaboration between us authors has been well-linked together, and dialogue on what to write has been going on continuously. We have parts where one author has been more responsible, but all parts are edited by both authors. The study has not been written with the help of any AI support, only the use of Grammarly to provide aid in grammar use and corrections.

3.4 Research limitations

Due to the limited time of the study, it was suitable to limit our research to the commune of Thanh My Tay. There were several bureaucratic obstacles that limited our study. Firstly, we were not allowed to stay overnight in the commune, which meant that we had to travel to and from the commune every day on a motorbike for 3 hours total. This meant that our schedule had to be planned according to the hours when it was possible to drive due to the extreme heat. Secondly, we had to prepare paperwork in order to get permission to do a field study in the commune and to interview the farmers. A schedule and a plan of our study had to be sent beforehand to the commune and be approved. This was done with the help of our contact from An Giang University, who was in touch with the commune leaders of Thanh My Tay. Originally, the intention was to conduct 20 interviews in two different villages, 10 in each village, over the duration of 2 weeks. This is to gain a broader perspective and identify similarities and differences among the villages, helping us develop a more comprehensive understanding of the commune and its current situation. But due to a misunderstanding in communication regarding the time plan and bureaucratic reasons, we were not allowed to do more than 15 interviews in the commune, and the time was shortened due to a local festival taking place, where representatives from the commune were not available to assist us. Updating the time plan and the required documents would take time that we did not have in the limited timeframe of the thesis; we therefore had to continue with 15 interviews and limit the study to one village.

Using a translator can be discussed as a limitation for the validity of the study as it complicates the process of ensuring that the study researches its intended purpose. During the interviews, language and cultural barriers hindered our understanding of informants' answers. The majority of conversations were not directly translated to us, which meant that the answers and material we got were restricted. The language barrier also meant that we sometimes did not get the answers we needed, as the informants misunderstood the question or made their own interpretation. There were several occasions when things that are seen as normal to the farmers are unfamiliar to us, sometimes leading to difficulties in understanding each other. Although difficulties arose, our translator, as well as our assistant student, tried their best to explain and translate the informants' answers to us so we could get a better understanding of the context. We want to be clear that the citation used from the

farmers in this study, hence, is not a verbatim citation of the farmers' words, but a comprehension of what was said, accomplished by our translator.

Another limitation that we had to face was that we could not ask everything freely. Our interview guide had to be approved by the local authorities. A representative from the commune was present during all of our interviews and stopped us from asking about sensitive subjects, such as information about the local authorities. This imposed limitations on what material we could access and could possibly also have affected the informant's willingness to speak freely. For example, information regarding the local authorities and perceptions about their policies was seen as highly sensitive, and we were told not to ask too many questions about these topics.

We presume that the above-discussed limitation is connected to our status as foreigners when conducting research. We assume that the local authorities were hesitant in sharing this material, as we were researchers coming from abroad, and they did not know in what way we would use the material or if there was a risk that we would misleadingly portray them. When reworking this study, it is therefore important to consider that these prerequisites could have influenced the information given by the participants. It is possible that sensitive information was withheld because of the presence of these persons. As a result, the hesitant approach toward us limited us from both exploring the commune and getting access to official documents and statistics necessary for our study.

3.5 Ethics and reflexivity

The Swedish Research Council has designed four main ethical principles that need to be considered when conducting research in the fields of social science and humanities (Alvehus et al. 2025). The principle of information states that the researcher should inform participants about the aim of the study. The principle of consent emphasises the importance of participants' right to decide over their participation in the study. The principle of confidentiality implies that all data regarding participants should be kept with the greatest possible confidentiality in a way that no unauthorised persons can access them. The final principle of utilisation highlights that all data concerning individuals should only be used for research purposes (Alvehus et al. 2025).

When conducting our study, all of the above-mentioned ethical principles have been considered. With the help of our translator, we conveyed the aim of the study to all participants and informed them of their right to decide over their own participation. After establishing oral consent of participation, we further ensured their consent by asking the following questions:

- Is it okay that we record the interview?
- Is it okay that we take notes during the interview?
- Is it okay that we include details such as approximate age, gender, the crops you produce, and whether your farm is inside or outside the dyke system in the published study?

These three questions aimed to further inform the participant of their right over their participation, as we discovered that this may be seen as a foreign and highly formal concept to some.

4. Theoretical concepts

In the following section, we present the theoretical concepts that will be used in this research to analyse hydrosocial relations in Thanh My Tay. Firstly, the theoretical concept of hydrosocial relations will be presented and later used in the study as a framework to analyse the informants' relation to and perception of changing water dynamics. Secondly, the social capital framework will be described and used in the study to create an understanding of the informant's social relationships. The use of social capital is a relevant complement to the hydrosocial framework since changing water dynamics are closely linked to social structures. Understanding social relationships can therefore provide this study with further insights into the relationship to water.

4.1 The hydrosocial framework

The term hydrosocial relations is used to understand the relationship between water and humans, which in this study will be concretised by focusing on the shaping of agricultural practices. We will use two concepts to explain hydrosocial relations: the first is hydrosocial cycles, based on Swyngedouw's (2009) research, which holds that water is a physical and social process associating society and nature. The latter concept, hydrosocial rupture, is here based on the studies of Miller et al. (2021) and Tran et al. (2025), and has similar premises as the first concept, with the relevant exception that it emphasises the disruption of human-water relationships.

4.1.1 Hydrosocial cycles

Swyngedouw (2009) presents that hydrosocial research imagines the motion of the water as a physical and social process that is combined. It is a hybridised socio-natural flow that brings together society and nature inseparably (Swyngedouw 2009).

The management and use of water in society reshape and co-determine each other all the time, in combination with the transformation of the water's natural flow. They shape and produce defined hydrosocial cycles between the local water cycles and the global hydrological patterns. Hydraulic environments are described as socio-physical constructions that are produced in terms of the social content and the physical environmental qualities. Swyngedouw (2009), therefore, argues that there is nothing unnatural about constructed environments such as hydraulic infrastructures. These produced environments are the results of socio-biophysical processes.

Socio-ecological conditions, such as agricultural systems, are sustained and organised by a combination of social processes, like capital/labour and metabolic-ecological processes, which can have both positive and negative effects on the environment and society. Physical and social environmental qualities can have positive outcomes for some people and places, and at the same time bring negative

effects elsewhere. Swyngedouw (2009) draws on the conclusion that the processes of socio-environmental change are never socially or ecologically neutral (Swyngedouw 2009).

Connecting this to our study, we can use this framework and ideas to understand the linkage between the changing water dynamics in Thanh My Tay, such as floods, droughts, and the dyke system, and how it has shaped the way of life in the commune.

4.1.2 Hydrosocial rupture

Hydrosocial rupture refers to situations where anthropogenic alteration of human-water relations causes changes in existing relationships between humans and water in a disruptive way (Miller et al. 2021). The existing human-water relationship is hence broken or disturbed, which this framework describes as rupture. The framework highlights specific sources for rupture, for example, climate change and hydropower are both seen as causes of hydrosocial rupture (Tran et al 2025).

One characteristic of hydrosocial rupture is that it is a cross-boundary concept (Miller et al. 2021). Recent models have shown how rupture of current water regimes seldom has consequences limited to the area in which the change is made. In agreement with Swyngedouw's (2009) work on hydrosocial cycles, hydrosocial rupture can have positive effects in one area, although it often has negative consequences, such as displacement of local knowledge, hindrance to rural livelihoods, and degradation of food security, in others (Miller et al. 2021). These cascading consequences make hydrosocial rupture into a transboundary concept that links individuals, communities, and ecosystems that would otherwise not be spatially connected. Therefore, ruptured hydrosocial relations are only limitedly understood in geographically limited areas (ibid).

The same models have also shown how the people physically closest to the water resource, usually rural communities, commonly tend to bear the greatest socioeconomic burden of hydrosocial rupture connected to capital-intensive development, while higher-level actors benefit (Miller et al. 2021). Hydrosocial rupture created from these power asymmetries shapes a perpetual uncertainty that becomes the new normal in rural communities' relationship to water. This relationship is not always clear to the affected communities, as shown in previous studies, have connected the rupture they experience to local conflicts or natural circumstances rather than to hydraulic infrastructure and power imbalances (ibid).

River deltas, such as the Mekong Delta, have been argued to be hotspots for hydrosocial rupture (Tran et al. 2025). It is therefore relevant to include hydrosocial rupture when building an understanding of hydrosocial relations in Thanh My Tay. It is especially useful to showcase the informants' own descriptions of changes in water dynamics and whether they describe it along the lines of rupture or not.

4.2 Social capital

When applying the hydrosocial framework's understanding of human-water relationships as both a physical and social process, it becomes relevant to further discuss social processes and their linkages to water dynamics. Our study has done this by discussing the importance of social connections for agricultural practices through the theoretical lens of social capital. There are many different understandings of social capital. To make the framework less comprehensive and to better fit our study, we have limited this to two categorisations of social capital that will be defined below.

4.2.1 Colemans' three forms of capital

Coleman (1988) presents three forms of social capital that all build on the basic understanding of social capital as defined by its functions, meaning that it is accumulated in the structure of relations between individuals and organisations and promotes action. Compared to physical and human capital, social capital is intangible as it exists in the relations between people (ibid).

The first definition of social capital is based on obligations, expectations and trustworthiness of structures (Coleman 1988). The concept is based on the idea that if someone does something for you, the person expects you to reciprocate the gesture or service. As a result, this puts you under an obligation, and the other person creates an expectation of you returning the service. The form of social capital depends on the trustworthiness of the social environment and whether the gestures will be repaid (ibid).

The second definition of social capital relates to information channels. Information is crucial in providing a basis for action (Coleman 1988). The use of social capital in the form of relations or networks can help gain knowledge and access information that would otherwise be time-consuming to find or difficult to access (ibid).

The last definition targets norms and effective sanctions (Coleman 1988). According to Coleman (1988), norms can comprise a powerful social capital in the sense that they can facilitate characteristics in relationships. While norms often benefit some in facilitating social capital, they limit others. By rewarding selective types of behaviours or characteristics in relationships, norms redirect, hence limit, energy from others. A consequence of this is that norms can reduce innovativeness (ibid).

4.2.2 Bonding and bridging social capital

The following theoretical framework is based on Putnam's work on social capital, specifically his description of social capital as bridging or bonding. In this study, we will use the synthesised research based on Claridge (2018).

Bonding and bridging describe two different forms of social capital, which differ in the types of relationships that they describe (Claridge 2018). Bonding social capital refers to connections *within* a social group or community. It describes relationships in a group with high levels of similarity, for example, regarding demographic characteristics, attitudes, available information, and resources. Typical examples of relationships that can be described as bonding social capital are relations between close friends, family members, and neighbours. Bridging social capital, on the other hand, refers to the connections *between* groups or communities. It describes relations between subjects who are different, for example, regarding skills, knowledge, and information. Bridging relations are typically built on less frequent interactions that require a lower degree of trust compared to bonding relations. This makes bridging connections more flexible in the sense that they can easily be rearranged (ibid).

The use of bridging and bonding is common to understand social capital and to highlight how different relations can imply different consequences depending on their nature (Claridge 2018). Bonding social capital has been described as important to *get by*, while bridging social capital helps people *get ahead*. Bonding social capital is an important source of trust, norms, information, and emotional support within a community. However, the inward-looking characteristic of bonding relationships makes them limited in what they can bring to a community. The excluding nature of bonding relationships has also proven to be harmful when existing without a sufficient complement of bridging social capital. Bridging connections is important to access resources beyond one's immediate network. They can help access new information, spark innovation, and realise new opportunities. Consequently, bridging social capital can improve economic development, while bonding social capital has no effect or a negative effect on economic outcomes. Previous studies have suggested that rural communities typically have a strong bonding but a weaker bridging social capital compared to urban communities (ibid).

5. Results and discussion

In this section, the study's findings and empirical evidence from interviews will be presented and discussed with the help of the previously introduced theoretical frameworks of hydrosocial relations and social capital. The aim is to examine the relationship between changing water dynamics and social structures to build an understanding of how changing hydrosocial relations are understood by farmers in Thanh My Tay.

We will begin by providing some information on our experiences in Thanh My Tay, which will serve as background context for the subsequent sections. After follows sections discuss the hydrosocial relations and how farmers view water dynamics in relation to their agricultural practices in Thanh My Tay. We move on to present and discuss our findings related to social capital, aiming to acknowledge the importance of social relations for the shaping of water dynamics and vice versa for farmers agricultural practices.

5.1 Life in Thanh My Tay

When arriving in Thanh My Tay, a rural commune in An Giang province, Vietnam, a gate marks the entrance. The first area we approach is the centre. Here, the commune building is located, as well as the local market, a few restaurants, and a temple. We continue our drive as most of the interviews we are conducting will be another 3 to 5-minutes away from the centre. Some of the areas we visit are protected from floods by a dyke system, while others lie in flood-prone areas. The river and dykesystem reshape the environment throughout the commune. They blend into the landscape, which consists of a patchwork of rice fields and fruit gardens. Although the terrain appears flat to us, we were informed by locals that the commune is located in the province's mountainous area. This is confirmed by three mountain tops sometimes visible in the distance in the morning, when the smoke from the burning of crop residues on fields after harvest has not yet spread, limiting the view. The province of An Giang is said to be called the fairy land by the locals, as several different religions and beliefs are practised here. This is visible when driving to the commune, as churches and various kinds of temples can be seen.

A clear sign that Thanh My Tay is located in the river delta is the many bridges we need to cross when driving in the commune. When looking at the map, the canal system can be seen in perfect lines painted in the terrain. It is by the side of these river canals that the houses in the commune are located. People live close to the river with their houses partly on stilts to keep them above water during the flooding season. A road, just outside the houses, separates the buildings from the river. The thin slice of land between the river and the road functions as either a continuation of the house, a coffee shop consisting of a few tables, or places with hammocks for people to rest. Living so close to both the river and the road, people use this space along the river almost like a living room. Neighbours walk in between the houses,

and people come and go as they like. This area becomes a place to socialise, where people spend most of their time during the dry season. While the houses in the centre of the commune are close together, their land is mostly located further away.

5.2 Hydrosocial relations in agricultural practices

From our interviews, it became clear that water shapes agricultural practices and the overall way of life in Thanh My Tay in many ways. For example, informants told us that annual floods determine the farming season, especially on land outside the dyke system, where harvests must be completed before the land floods. If one were not to follow this pattern, for example, by not harvesting before the flood, this would lead to great loss in harvest quantity and quality. Another consequence of this need to adapt to annual floods is that farmers with land outside the dyke cannot produce crops on their land during the time it is flooded. This causes the need for other types of income during this time. One farmer solved this issue by working with pesticide drones during the flooding¹, another farmer who had land both inside and outside the dyke could rely on his vegetable production inside the dyke during this time². Another example of how informants experienced water's influence on their agriculture was that if their land did not flood regularly, this would reduce the land's alluvium, which would increase the need for irrigation and fertiliser. The need for increased irrigation during such circumstances was not described as a big problem by the informants, as they experienced that they always had sufficient access to water by pumping it into their fields from the river. The increased need for fertiliser, however, worried a large majority of informants significantly, as they experienced the input as economically burdensome. We were also told that the floods determine which crops are ecologically suitable for the land. For the land outside of the dyke system with two crop rotations, rice was seen as the only suitable option for production, while the land protected by dyke systems, which floods less often, could be used for other production, such as jackfruit. These examples clearly show how Swyngedouw's (2009) description of the inseparable relationship between society and nature, and how the motion of water is both a physical and social process, is present in Thanh My Tay. The water regime influences the agricultural production and the methods used. Society, in turn, reimagines the water movement with the building of dyke systems and the way it is used for irrigation. Consequently, neither the river nor the community in Thanh My Tay would look like it does today without the other.

Notably, the dependence on rice production can be clearly linked to the hydrosocial relations established in Thanh My Tay. As mentioned above, the informants with land outside the dyke system adapted their choice of crop to the flooding of their land, which we have demonstrated above is an expression of hydrosocial relations. However, another topical factor that needs to be considered when discussing the strategy of only producing rice is the government policy. The policy states that

¹ Interview Rice farmer outside the dyke system, Thanh My Tay, Vietnam (2026).

² Interview Rice and vegetable farmer inside and outside the dyke system, Thanh My Tay, Vietnam (2026).

agricultural production in Thanh My Tay should focus on producing rice, and that other crops for production are only allowed if they were established before the policy. Some informants discussed this policy during our interviews, but others did not. Nevertheless, we believe that all informant was effected by the policy in their choice of crop, and the cause of not mentioning it during the interviews could be the presence of the representative from local authorities. Although the implementation of the policy could be interpreted as undermining the argument of water's importance for the choice of crop, it could also be understood as interlinked. We speculate that the formation of the policy possibly has taken the local water regime into account and that it is therefore not necessary to separate the policy from the reasoning made with the hydrosocial framework. If this understanding is applied, the policy can be used as an example of how hydrosocial changes are never socially or ecologically neutral, as stated by Swyngedouw (2009). When making this connection, it is relevant to understand that rice has historically been the major crop for production in the Mekong Delta. Currently, because of the dyke system, diversified production is possible but relatively new. The policy in the commune is therefore holding on to traditional practices that are suitable for the hydrologic environment and can consequently be interpreted as a part of hydrosocial relations in Thanh My Tay.

5.3 Normalisations of changing hydrosocial relations

One thing that struck us as thought-provoking when conducting the interviews with farmers' households in Thanh My Tay was that the consequences of changing water dynamics, shown by effects of flood and drought and the dyke system, seemed to be of little concern for the farmers.

With the hydrosocial rupture framework in mind, stating that river deltas are hotspots for disruptive alteration in human-water relationships (Tran et al. 2025) and that the people closest to the water resource commonly bear the greatest socioeconomic burden of hydrosocial rupture (Miller et al. 2021), we expected to easily encounter a great deal of challenges connected to water and agricultural practices during our field study. But when asking straightforward questions about challenges connected to irrigation, flooding, drought, and the dyke system, a common response from the majority of informants was that there was none. On the question about whether one informant worried about his access to water changing, he answered:

No, I do not worry about water, I live in the Mekong Delta.³

This answer did not seem to match the theoretical framework by Tran et al. (2025), calling river deltas hotspots for hydrosocial rupture.

When asking about the changing water regime, we got information that there was a change. For example, several informants experienced severe drought seasons,

³ Interview Rice-fish farmer inside and outside the dyke system, Thanh My Tay, Vietnam (2026).

which consequently had them increase irrigation. Another consequence of the more prominent drought was challenges accessing buyers since the low water level in the river caused their boats to get stuck in the canal. But again, the unproblematic way our informants described this seemed not to match our previous conception that the regime of the river plays a central role in many of the area's challenges. One informant said that he does not worry about changes in the water regime because it is a natural process, it is normal⁴. Another said he does not need a plan for the increasing droughts because it is a natural process⁵. This continuous reference to “the natural” and “the normal” turned out to be an important insight into what life is like as a farmer in Thanh My Tay. We speculate that these statements could be interpreted as a confirmation of Miller et al’s (2021) work, which states that social rupture can cause a perpetual uncertainty that becomes normalised for the people subjected to it. When applying this conclusion to the answers we got in Thanh My Tay, it explains that changes in hydrosocial relations are something that has become normalised here to the extent that living with the changing water regime is not seen as a challenge but rather something normal and natural.

Swyngedouw's (2009) framework on hydrosocial cycles can add to our understanding of informants' experiences of hydrosocial change by adding the idea that there is nothing unnatural about constructed environments such as hydraulic infrastructures, since human-water relationships are always shaped by social structures (ibid). This description aligns with the informant's description of hydrosocial change as normal and natural, and could be a part of the explanation for how it is experienced as unproblematic and not along the lines of hydrosocial rupture by them. Yet, we need to keep in mind that there is possibly more to the explanation than what is said in the interviews. It is relevant to reflect on whether the presence of a representative from local authorities, living under an undemocratic state and religious philosophies, all contribute to the stated experiences of hydrosocial change as a normal event, even though this is not covered by the focus of this study.

5.4 Go with the flow – Farmers’ attitudes towards the future

The mindset presented above concerning how hydrosocial relations are experienced as normal in Thanh My Tay can also be applied to our informants' view of the future. When asked about their thoughts on the future of their farming practices and livelihood, several informants simply said that they cannot predict the future. It was not something that they put much thought into, and they found it hard to formulate an answer or even speculate on the subject. One farmer stated, “We just go with the

⁴ Interview Rice farmer outside the dyke system, Thanh My Tay, Vietnam (2026).

⁵ Interview Rice farmer inside and outside the dyke system, Thanh My Tay, Vietnam (2026).

flow⁶” when asked about what effects climate change could have on his production in the future. Another likewise said, “It is hard to think because it belongs to the future, I just go with the flow⁷”. The perspective that the future is something to manage passively can be argued to be an extension of the idea that hydrosocial change is something normal. Returning to Miller et al. (2021) reasoning about how perpetual uncertainty can cause a normalisation of hydrosocial rupture, this might also explain how uncertainties connected to the future are normalised. Just as hydrosocial change, such as floods or increased drought, is not seen as something negative but a part of the natural process, an uncertain future is not seen as something especially problematic. We could also speculate that the informants did not have much knowledge about climate change or the changes in the water dynamics in the Mekong River upstream. Due to this, perhaps they did not know about the possible effects and could not reason about them to understand the potential future consequences for them in relation to their agricultural practices.

It is worth considering what consequences the “go with the flow” mindset might have on the agricultural practices of the informants. Drawing on Coleman's (1988) work regarding how norms can be both a powerful tool to facilitate social relations, they can also be restricting and reduce innovativeness. If we consider the *Go with the flow* mindset regarding the future as a norm among our informants in Thanh My Tay, we can contemplate whether this can be understood as a restriction on future development or not. On one hand, the passive attitude to future challenges might limit the farmers' ability to adapt their livelihoods to these challenges before they happen. On the other hand, the mindset could be interpreted as a necessity when developing a livelihood in a context where changing hydrosocial relations are so prevalent as they are in the Mekong Delta. Since changes connected to local water regimes are so heavily influenced by socio-biophysical processes connected to actors in spatially different areas (Swyngedouw 2009), it makes sense not to try to predict these for farmers in Thanh My Tay. The mindset could therefore be at least partly explained as an adaptation to developing a livelihood in an area characterised by changing hydrosocial relations.

⁶ Interview Rice farmer both inside and outside the dyke system, Thanh My Tay, Vietnam (2026).

⁷ Interview Rice farmer outside the dyke system, Thanh My Tay, Vietnam (2026).

5.5 Collaboration as a social capital

A recurrent aspect throughout our time in Thanh My Tay was the importance of collaboration between farmers regarding their agricultural practices. The different situations when farmers collaborate will be presented below and processed as an expression of social capital.

During the interviews, the farmers told us about several ways they collaborated with their neighbours (here meaning neighbours in agricultural land) in their agricultural production. One example of this was during the process of choosing seeds and the type of crop. The farmers explained that it's easier to use the same seeds as neighbours, as it comes with many benefits. Firstly, it enables them to sell the produce to the same buyer and for a higher price than if they were to sell their produce alone. Secondly, it simplifies the use of fertiliser and pesticides as the collaborating farmers could all agree on when and how to use these services without having to worry about contaminating other land while spreading the inputs. Thirdly, collaborating on the type of crop was expressed as a great way of handling the changing water dynamics. The informants explained that since the neighbouring lands need to be flooded at the same time, water dynamics need to be taken into consideration when deciding what crop to produce. It is therefore necessary to produce the same crop as your neighbours. The same goes for irrigation, as the farmers typically irrigate at the same time as they follow the hydrological seasons. Fourth, another example was when discussing the harvest, several farmers mentioned that it is common to either hire assistance or a harvesting machine. One informant explained that if you want to hire services, you can, but if I help you, you can help me, and we can exchange our labour⁸. The same will to help each other was found when the farmers explained how they check each other's fields for potential divergence or diseases. The informant explained that by doing so, you are preventing diseases from spreading from your neighbour's land to potentially spread to your land⁹. The reason is that the overall loss will be bigger and affect more people; it is in this way important to help one another. All these examples of collaboration can be argued to be an expression of how social capital is present and beneficial in agricultural practices in Thanh My Tay. They show the trust that the farmers put in each other, and their social capital depends on the trustworthiness of the social environment and whether the gesture will be repaid, as argued by Coleman (1988).

With the collaboration among farmers in mind, we draw on the concept of Coleman's (1988) third definition of social capital as norms that comprise powerful social capital by facilitating relationships. We can see this definition exemplified by the norm and tradition of rice cultivation, and choosing the same seeds. By following the norm and by utilising social relationships, the farmers gain benefits in their agricultural production. However, Coleman (1988) also explains how the same norms that support social capital in some ways also have limiting consequences, as they can reduce innovativeness. This aspect can also be found in

⁸ Interview Rice farmer inside the dyke system, Thanh My Tay, Vietnam (2026).

⁹ Interview Rice farmer inside the dyke system, Thanh My Tay, Vietnam (2026).

the collaborative relationships between farmers and became evident when we asked questions about whether the farmers had ever tried to have other production as their neighbours. On this subject, one farmer told us about how he had previously tried vegetable production but decided to switch to rice when most of his neighbours changed because it was too hard to work alone¹⁰. Another informant had similar experiences and told us of the difficulties of having fruit production surrounded by rice production:

There is no other garden [fruit production] next to the land, so when it comes to the period when they release the water, it is hard for me to handle it alone¹¹.

These statements demonstrate how the farmers in Thanh My Tay are dependent on one another, and how water dynamics is one prerequisite that makes it so. They also show how the norm to collaborate limits alternative production choices other than rice, which consequently limits innovativeness. Against this background, we speculate that the norm of collaboration could imply risks for the farmers and their production. When all the farmers have the same crop and the same type of seed, if damage occurs, there is a possibility that it will affect everyone, as the risks are not spread out.

Again, we want to include a reminder that the farmers do not have full decision-making power and agency related to the agricultural practices in terms of what to produce due to the policy encouraging rice production present in the commune. They, however, have agency related to the sort of seed.

5.6 Knowledge sharing as a social capital

An expression of the farmer's social capital that stood out as especially important, and a form that all informants had experienced, was in the form of knowledge sharing. Since this was something every informant said was of importance for their agricultural practices, we would like to highlight this in the following section.

Several farmers told us that they would meet at a coffee shop each morning to talk with their neighbours. During one day on our field study, we sat in one of these small coffee shops, owned by the farmer and his wife, that had been running since his father's time. The farmer's house and coffee shop were located around a 10-minute drive from the commune centre. We were driving along the dyke where the road is built, passing rice fields and jackfruit trees on the side. The farmers had just started pumping water into the fields, so the sounds of the engines could be heard while driving past the fields. When arriving at the coffee shop, we were met by a simple, shed-like building, built on stilts on the side of the dyke. Around it, rice

¹⁰ Interview Rice farmer outside the dyke system, Thanh My Tay, Vietnam (2026).

¹¹ Interview Rice and Jackfruit farmer inside the dyke system, Thanh My Tay, Vietnam (2026).

fields with tractors driving through them, preparing the land for the next season, could be seen everywhere.



Figure 3. Coffee Shop, Thanh My Tay. Evelina Porling (2026).

Our informants told us that they would come to coffee shops like this one every day to socialise every morning. They told us of how they came not only for the enjoyment of meeting friends but also to learn, for example, about different fertilisers and how to use them. In this way, the coffee shop functions as an information channel, a way of accessing information through social capital (Coleman 1988). The sharing of information was an important resource that could be used to improve farming practices. One farmer shared his experience when switching from rice farming on part of his land to jackfruit production. He said that because of his lack of experience, it was hard for him to take care of the garden in the beginning, so he learned a lot from other people about the amounts of pesticides, fertiliser and water use in order to take care of the land. Gradually, he applied various methods to his farmland, and at first, the productivity was not as high as it is now¹². This highlights the significance of access to information through social capital for agricultural practices in Thanh My Tay. It enables farmers to adjust their production practices and helps them access resources they would otherwise be unable to utilise. It shows how farmers can access new information, gain new knowledge, and strengthen their social capital through collaboration and dialogue with one another. We would like to consider whether it is possible that the prevalent use of knowledge sharing among farmers could be linked with their collaboration. Maybe the use of information channels would not be so extensive if the surrounding circumstances, water dynamics being an important one, did not connect farmers in the way they do.

¹² Interview Rice farmer inside the dyke system, Thanh, My Tay, Vietnam (2026).

5.7 New opportunities with bridging social capital

All of the above-discussed reasoning about social capital has referred to relations between farmers in Thanh My Tay. The relationships among farmers can be categorised as bonding since they exemplify social relations within a community that shares demographic characteristics, attitudes, available information, and resources (Claridge 2018). While bonding social capital can be an important resource for a community by contributing trust, norms, and information, it is commonly not enough to *get ahead*, but rather enough to *get by* (ibid). We argue that the collaboration between neighbours fits this description well. Collaboration helps the farmers get by with their production, but not to differentiate themselves in any way that can help them get ahead and access significantly more capital than any other farmer. In this section, we would like to discuss what potential access to bridging social relations could have for the farmers in Thanh My Tay. For this purpose, we will mostly base our material on one interview conducted with our local guide, whom we have presented as the key informant in this study.

Our key informant stood apart from our other informants in many ways. Firstly, he was the deputy village leader. Secondly, he was part of a project hosted by the NGO World Wildlife Fund. The project supported our key informant, along with two other farmers in Thanh My Tay, to implement fish production on the rice fields outside the dyke system during the flooding season. This enables the farmers to maintain productivity during all three seasons on their land, even if it is not protected from floods. The key informant also holds connections with An Giang University. This meant that he had connections to organisations outside of the commune. In addition to owning land outside the dyke system, the key informant leased land inside the dyke system. He explained that he prefers the land outside the dyke system because of the alluvium, but hires most of the land inside the dyke system, as he knows the owner. We got the impression that he changed the land used for production at a higher rate than any other informant. While other farmers seem to think of leasing land as a long-term investment, the key informant varied the amount of land for production largely over the years and explained that he tries to lease whenever he gets the chance and believes he can make a profit.

We argue that the key informant's ability to adapt and change his agriculture in a way that we did not encounter anywhere else in the commune is connected to his social capital both inside and outside the village. Over the course of our time spent in Thanh My Tay, it became evident to us that the key informant had access to the bonding social capital within the village. Everywhere we went, he talked to farmers and seemed to have a connection to almost every local. However, we speculate that the relation he has beyond the village, with connection to local leaders, An Giang University, and the NGO, sets him apart in an important way that allows him to access different information and resources, allowing him to have a more flexible agricultural production. If the consequences of these connections were applied to more farmers in Thanh My Tay, it could potentially lead to bridging social capital

for the community. As described by Clairidge (2018), bridging social capital refers to the connections *between* groups or communities that are different regarding skills, knowledge, and information. Outcomes of bridging social capital can, for example, be access to new information, innovation, and facilitation of realising new opportunities. In these ways, bridging relations can help one *get ahead* (ibid).

We make the connection that it is possibly these outcomes that we can see exemplified by the key informant's innovative production adaptations, with the implementation of fish in his production, as well as adapting land to rent depending on current circumstances. Naturally, we can only speculate how much of the key informant's agricultural strategy has been influenced by social connections and if this will create a bridge for him and other farmers to access information and knowledge between various individuals and information channels, and if this will develop and lead to bridging social capital for the village and Thanh My Tay.

6. Conclusion

In this study, we have explored the relationship between changing water dynamics and social structures. This has been done through the voices of local rice farmers' households in Thanh My Tay and their relation to the water dynamics of the Mekong River, as well as the importance of social capital related to their agricultural practices. The study is based on the underlying understanding of the hydrosocial framework, which states how water is both a physical and social process connecting society and nature (Swyngedouw 2009). From this viewpoint, it is relevant to examine social relations' correlation with water dynamics, which the study has introduced by discussing findings on social capital's impact on farmers' agricultural practices. The objective of the study was to gain a deeper understanding of the complex water dynamics in the Mekong Delta and how they relate to and are connected with residents' agricultural practices and social connections. Since hydrosocial relations are only limitedly understood in geographically limited areas (Miller 2021), the results of this study are not meant to be applied as an explanation of the hydrosocial relations of the whole Mekong Delta, but rather as a piece of the puzzle that Thanh My Tay represents. To completely understand hydrosocial rupture in the Mekong Delta, we need to look at it from the effects of water disruptions and the impacts of human-made activities, both cross-nationally and locally, which is beyond the limitations of this individual study.

Our findings show how informants' agricultural practices were tightly connected to the local water regime, as several major events of their production were heavily influenced by the water. For example, the crops are ecologically suitable for the land, and the time for harvest is dependent on the hydrological seasons. Even though the informants experienced changes in the water flow, such as more severe drought seasons and the implementation of a dyke system, a majority described their connection between their agricultural practices and water in a quite unproblematic way. With the support of the hydrosocial rupture framework (Miller 2021), we argue that this attitude can be viewed as evidence that people who live close to changing water regimes have adapted to them in such a way that they have become normalised. We continue by showing how this mindset is stretched into the informants' view of the future, which they have difficulty formulating ideas about. This mindset can be viewed both as a limitation and an opportunity for the agricultural practices of the informants. On one hand, it can limit them from adapting their agriculture to challenges before they happen. On the other hand, the mindset could be viewed as advantageous when building a livelihood so connected to changing water dynamics influenced decisions out of your hands. Not seeing change in water flow as something problematic but rather as something natural could be a traditional way of life in Thanh My Tay, and possibly something that has allowed livelihoods to keep developing here.

The findings further show how social capital both shapes and are shaped by water dynamics and how this is shown in agricultural practices. By comparing our findings to Coleman's (1988) forms of social capital, we present how collaboration

is an important aspect that brings many benefits for agricultural practices in Thanh My Tay. For example, when selecting what crop to sow, it can be beneficial to have the same crop as your neighbours, partly due to the water dynamics. Another example of the benefits of social capital among farmers is the function of an information channel. Farmers meet in coffee shops to learn from each other and to develop their production strategies, which may stimulate the general level of trust in the community. Collaboration helps the farmers get by with their production, but not to differentiate themselves in any way that can help them get ahead. With the help of the terms bonding and bridging social capital (Claridge 2018), we end our discussion by comparing the effects of bonding relations between farmers to potential effects that bridging relations could have for farmers in Thanh My Tay and argue that this could lead to more flexible agricultural practices.

To conclude, this study has shown how both water dynamics and social relations have a great influence on agricultural practices in Thanh My Tay. Water and community shape and are shaped by each other, and can together be used as a way to understand the complex hydrosocial relations that farmers experience in their day-to-day lives. It is an important insight into what it is like to live close to, while being dependent on changing water dynamics in the Mekong Delta. From these conclusions, it is clear that it is neither easy nor necessary to separate the understanding of water dynamics from the understanding of the social, since they are interlinked and influence each other.

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