CHAPTER 1
INTRODUCTION

This opening chapter provides basic information about the whole thesis, introducing background information and the rationale behind my research, as well as outlining the research questions, objectives and methodology, plus the data analysis methodology used and the organization of the thesis.

1.1Background

Bangladesh is a low-lying country in which floodplains constitute about four-fifths of the total landmass, and as a result, floods are common. The floodplains have been formed from sedimentary deposits carried by three of the largest rivers in the world: the Ganges, Brahmaputra and Meghna, plus their tributaries and distributaries. Bangladesh consists mostly of a low-lying river delta which contains over 230 rivers and tributaries, and is situated between the foothills of the Himalayas and the Bay of Bengal. Since only a small fraction of the total river catchment area (only 7.5%) has to drain over 92% of the rivers' water volume (shown in Figure 1.1), over 80% of which is discharged over about five months of the year during the monsoon (May to September), floods are common and often cause havoc in the deltaic plains. Impediments to drainage caused by both natural and man-made factors decelerate the recession of floodwaters, thereby prolonging the duration of these floods.

Every year, Bangladesh's low-lying areas are inundated by seasonal floods, and since time immemorial people living in the delta have experienced *barsha* ('normal floods') and have adapted to them over the centuries, even finding ways to take advantage of these flooding events. The floods are given different names by the people who live there, based on the magnitude of damage they cause. The annually occurring low-level flood events are the most common and people do not worry about these, calling them *barsha,* with people actually finding these events useful in terms

of replenishing the top soils. Other flooding events disrupt lives, and to some extent may cause damage to agriculture and to a lesser extent infrastructure, and these moderate floods are known as *banna*. The third type of flooding event is the most damaging and unusual, completely disrupting life and economic activities - wreaking havoc on the physical infrastructure. These events are called *plabon* or *maha-plabon* ('devastating floods').

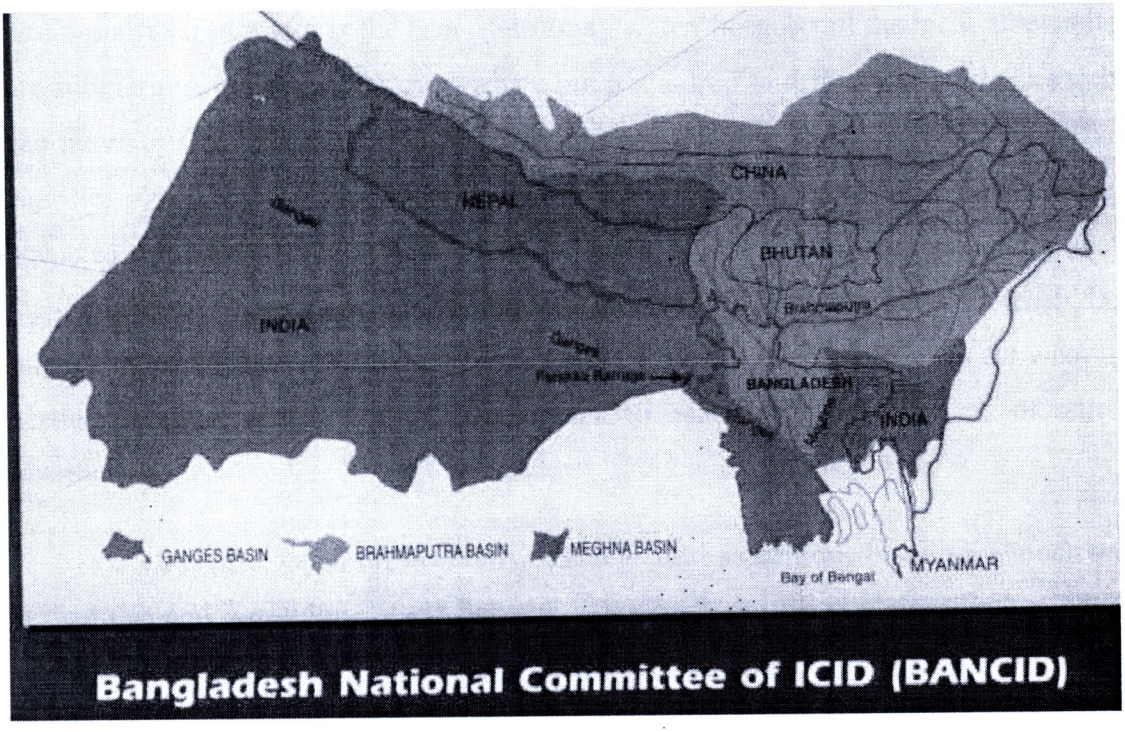

Figure 1.1 The three international river basins that drain into Bangladesh

With a population of about 150 million within an area of 147,570 sq. km, Bangladesh is one of the world's most densely populated countries (at more than 1000 people per sq. km), and the combination of its geography, population density and extreme poverty makes it very prone to disasters.

The impacts of flooding in Bangladesh are manifold, being at the same time both a bane and boon for the country, Very often slow-onset flooding takes place; however, sometimes sudden floods occur – particularly when heavy rains combine with the opening of the gates at the Farakka Dam, built upstream in India. Very often flood warnings are given in vain, as there is no higher ground to which the people can

flee as a 'safe center', except for maybe individual primary schools in the villages. As a result, most of the villages and villagers are trapped by flood water, and very often crops are submerged and communications cut-off. As roads also go under water, no communication is possible without boats or other water-borne vehicles. One of the biggest impacts is the livelihood disruption that occurs for the day-laborers, as they cannot work in the agricultural fields, use the roads for transportation, nor raise their livestock. In addition, at these times the risk of receiving snake-bites increases. An additional vital problem is the lack of drinking water, because all the local tube-wells are submerged, leaving water everywhere but not a drop to drink. Those who are rich can move to safe locations whenever possible, but the poor and middle classes suffer significantly. Usually the government, NGOs, the Red-Cross and other donor agencies come forward to provide relief materials, but these are never enough to meet the demands of the situation, and sometimes the relief workers cannot even reach the remote areas, while at other times the materials provided are not sufficient for what is needed. At other times, corrupt people seek to benefit from the process of relief distribution.

On the other hand, the economy of Bangladesh is still one based very much on agriculture and agriculture itself benefits a lot from the flood-plain alluvium. The floods themselves also provide a kind of natural irrigation, and the regular annual floods that affect much of the country help to restore soil-fertility levels – adding a new layer of silt each time. This process is essential to life and livelihoods, and supports the dense population of farmers and fishers, and so here, the absence of floods may be considered a drought (Schmuck-Widmann 1996). Less often considered is the enhanced fishing opportunities derived from the nutrient-rich waters brought to ponds, lakes, canals and rivers by the freshwater inundation. For centuries people have engaged in complex and sometimes disastrous 'trade-offs' between coping with the floods and exploiting these benefits.

Under these circumstances, past governments have introduced different flood mitigation measures, such as building small-scale dams along the banks of some rivers or have considered adopting larger-scale technology driven projects; however, the first type of measure often fails because it cannot cope with the pressure caused by

the floods, and the second measure has only ever been considered, not implemented. In response to the flooding problem, in 1989 a Flood Action Plan (FAP) was produced, in cooperation with World Bank and some Foreign Donor Agencies. However, it is unfortunate that no ultimate decision has yet been taken, though two decades have passed since the FAP was first conceived.

1.2 Rationale of the Study

Though floods occur as water appearing "in the wrong place" or "at the wrong time", they are regarded as a known risk because of their repetitive nature, which means that self- and social-protection measures can be introduced for most types of flood hazard. However, this basic 'expectedness' is complicated by the wide ranging intensity and duration of floods, as they can affect the same area at different times and vary in terms of the period before they return.

According to the World Disasters Report 2003 (IFRC 2004), Bangladesh is among the top three disaster-prone countries in the world, being vulnerable to cyclones, tidal surges, tornadoes, floods, droughts, earthquakes and cold spells. Every year on average, one million people are affected by disasters in the country, 500,000 people are made homeless and rivers consume around 9000 hectares of fertile land. Since its independence in 1971, serious floods have occurred in 1971, 1974, 1980, 1984, 1987, 1988, 1998, 2004, 2007 and 2008 - as disastrous events. In addition, cyclones and storm surges have occurred, most notably in May 1985, November 1988, April 1991 and November 2007. The 1974 flood was followed by a famine, and as a result, 30,000 people died (Alamgir 1980). The floods of 1988 covered 62% of the land area of the country, affecting about 45 million people and causing more than 2,300 deaths. In 1998, Bangladesh experienced the worst floods in its history, when over 68% of the country was inundated (Ninno et al. 2001), there were about 2380 deaths, 1.56 million hectares of crops were lost and over 900,000 houses destroyed. Then, in the year 2004 devastating monsoon floods submerged two-thirds of the country, with 35.9 million people affected, 726 deaths and millions of people left

homeless. Overall, the floods that year are estimated to have caused about US$2.2 billion worth of damage, representing 3.9% of GDP (ADB 2004). Despite its precarious situation, in many countries of the world such as Bangladesh, people who have few livelihood alternatives and/or those on low incomes, are forced to put themselves at risk because they have no option but to try and survive in flood-prone locations.

Bangladesh attracted much international concern in terms of "solving its flood problem", when it experienced a supposed 100-year flood in 1987, followed by another severe one in 1988. A decade later, in 1998, the country endured floods that are considered to have been the worst ever, destroying most of the summer harvest and delaying replanting and recovery. In general, disasters often act as "agents of change", so in 1988 the government of Bangladesh (GOB) in cooperation with the United Nations Development Programme (UNDP), plus with the help of official teams from Japan, France and the USA, began studying the flood problem at a cost of $200 million (Brammer 2000). In concluding, these studies prescribed two quite different approaches; one being the use of capital-intensive, 'high-tech' interventions, and the other entitled "living with the floods". The first approach proposed controlling the floods through the building of dams, while the 'living with the floods' approach suggested not interfering in the natural flow of water, but introducing better land use planning in combination with measures to mitigate the losses caused by floods. The World Bank coordinated between the foreign and GOB proposals, and then in conjunction with the GOB produced the Bangladesh Flood Action Plan (BFAP), which amalgamated some of the ideas from the various other studies (WB 1990). The BFAP claimed that a 'river training' approach would help by promoting agriculture in protected, enclosed areas; however, there was widespread and serious criticism from many people in Bangladesh, including those living in the countryside, from academics, engineers and NGOs. Some Bangladeshi experts and organizations considered the approach top-down and insensitive to the causes of vulnerability (Adnan 1993, Leaf 1997), stating that the BFAP had failed to take adequate account of the fact that flood protection itself can produce victims; it is even possible for a greater number of people to suffer long-term damage to their livelihoods as a result of

flood prevention measures, than when flooding is left unchecked. Numerous NGOs and people's organizations in Bangladesh were concerned that the proposed projects reflected a continuation of the existing processes, which created vulnerability and failed to deal with the needs of the majority. The only study within the BFAP which sought to explore what vulnerable people actually wanted was opposed by some GOB officials at the highest level, because it showed that a "technical fix" was neither wanted nor needed (Leaf 1997). The preference for the 'technical-fix' approach was also driven by the desire of the local elites to protect their own land and property - especially in the towns and cities. One researcher offered the following opinion:

"Some would argue, says Dalal-Clayton, that the flood plan amounts to a political response to the clamour for flood protection from wealthier, influential and urban-based groups...a great many people who presently live along the main rivers and on islands in the river channels will be exposed to increased risks from flooding" (quoted in Pearce 1991:40).

These reports demonstrate what Ulrich Beck has termed "organized irresponsibility" from those supposed to ensure safety for the common people in the country. As a result, White was probably right in his conclusion that "the traditional way of dealing with flood hazards - building more engineered structures - is expensive, irrational and does little to deal with the underlying fundamental problem. Better land use planning and changes in people's behaviour could more easily mitigate future impacts of natural flood events" (Gilbert White 1945). What is really crucial in order to understand the flooding problem in Bangladesh, is to ascertain what causes people to be vulnerable to floods, in particular to 'extreme' floods, and; therefore, to assess what measures can reduce this vulnerability.

There have been many studies carried out with regard to the solution to the flooding problem, but only a few of these have dealt with the level of vulnerability to floods in Bangladesh. Ninno et al. (2001) describe their findings from a survey of 757 households in seven flood-affected areas in Bangladesh after the flood in 1998, and according to them, overall rice-crop losses accounted for over half of the total agricultural losses for the year 1998, representing 24% of the total value of anticipated

agricultural production for that year. Brouwer et al. (2007) studied about 700 flood-plain residents living along the Meghna River in the southeastern region of Bangladesh, showing that households with lower incomes and less access to natural productive assets face a higher exposure to the risks of flooding. Kuhn (2002) , in his study of a flood-plain in Bangladesh, describes that households who face an agricultural deficit use remittances from urban migrants as a coping strategy, instead of taking out loans. Afsar and Baker (1999), from a study in rural Bangladesh, found that poorer households tend to leave their homes immediately after the largest floods and view migration as a purely temporary measure; however, households who lose their durable and productive assets are forced to become permanent migrants, moving to nearby urban areas. Recurrent floods that cause crop and livestock losses impoverish many people in Bangladesh, especially small-scale farmers, resulting in increased indebtedness, the sale of land, unemployment and migration to urban areas (Currey, 1978).

Taking into account Bangladesh's geographical location, as well as the dependence of a large number of its people on the benefits brought by normal flooding events in order to sustain their livelihoods, it seems to me that the people there are destined to live with floods. However, these people are not passive or inactive sufferers, but rather proactively think of ways to challenge and respond to the floods by adopting various coping strategies. The harsh reality is that on many occasions they have too little strength to withstand the severity of the floods, and in these circumstances, they have no other option but to resort to relying on external assistance, such as relief from the government and other NGOs. The frequent occurrence of disastrous floods also results in losses of both human life and property values in Bangladesh, and this study aims to examine the relationship between socio-economic conditions and the level of vulnerability to flood hazards, as I believe this will be instructive both for short- and long-term poverty alleviation programs and risk management strategies in rural Bangladesh.

1.3 Research Questions

a) Why and how are the people of Gaibandha (in my study area) vulnerable to flood events? Is it that the problem of flooding has not been properly addressed, or is it the result of ongoing socio-economic and population pressures? Do the powerful in society have a role in creating this vulnerability and if so, how?

b) How do these people cope with the floods when they occur? Do they have enough access to resources to tackle the situation, and are there enough alternative livelihood opportunities to support and maintain their subsistence activities? How does previous experience and local knowledge contribute to their coping strategies? What roles do social networks and the moral economy play in helping people to cope with the floods?

c) How do power relations play-out differently in response to flood situations? How do gender discrimination and religious leadership issues have an impact in these circumstances, and do the powerful groups in society and the social hierarchy play an active role in dealing with the flooding situations and if so, how?

1.4 Research Objectives

a) In relation to my research questions, I tried to explore the underlying causes of people's vulnerability to floods, that is, I attempted to explore their socio-economic situations, their level of access to resources, their livelihood opportunities, housing conditions as well as their exposure to the floods.

b) I then focused on investigating the ways and means in which the floods affect people and how they cope with and adapt to these situations. At this point, I endeavored to understand the *real* struggles of those affected by the floods.

c) I also attempted to study how power relations and social networks have contributed towards tackling the disastrous situation, and here I tried to find out how the different power structures embedded in society operate in my research site. More

particularly, I tried to look into how the colonial legacy, development intervention, religious practices and gender disparity have contributed to marginalize the less powerful people in the study area.

1.5 Research Methodology

1.5.1 The Research Site

I chose Gaibandha District to be my study area, which lies south of th confluence of two major rivers: the Teesta and the Brahmaputra, both of which flow from India to the north, and I followed the suggestion of an expert on this topic - an ex-director of Bangladesh Unnayan Parishad (a research organization in Bangladesh) in order to select this site. The area is situated almost at the extreme north of Bangladesh and about 350 km north of the capital city, Dhaka. The whole of the country is criss-crossed by rivers, and in this respect Gaibandha is no exception; five rivers flow through the District. Being very close to the Indian border, the sudden release of water upstream is felt immediately by its inhabitants, but the main reason why I selected this area as my research site is that Gaibandha suffers from at least two flood peaks a year, either from the rains and/or flash and riverine floods (Asia Pacific Journal on Environment and Development; special double issue June and December 2004). This means that the area is affected by both the early monsoon floods (early June to mid-July) and the late monsoon floods (early August to mid-September).

The area of my research site is about 2179 sq. km and has a population of about 2,117,959 (2003). Of this large population 50.26% are male and 49.76% are female. As most women are not involved in earning activities, most households have to depend on a single earning member of the family for their livelihoods, so if the wage earner becomes sick or passes away, the whole family becomes vulnerable economically. In total, 40% of the people in the study area are landless, 35% are small land holders, 23% are medium-scale farmers and only 2% can be referred to as rich, called *jotdars*. During the off-cropping season, which coincidentally covers the

flooding season, many landless people in this area suffer from what the locals call *monga* (starvation) - another factor which led me to select this site.

There is neither any formal institutional nor community level approach to flood preparedness in my study area, as is the case elsewhere in Bangladesh, and as a result, people themselves have to think at the household level about how to tackle the floods. Most people do not worry about the *barsha* ('normal floods') but many people, particularly the landless and those who earn a living by driving *vans* or *rickshas* along the village roads, suffer from a lack of employment during the *banna* ('moderate floods'). The miseries of these poorest groups in society go unnoticed or are unsung if there are no powerful people or political leaders in the area, or if the situation fails to garner any media interest. Once people sense the imminent likelihood of a *banna* or *plabon* (devastating floods) event, they engage themselves in a variety of informal ways in order to take mitigating actions. Some people opt to escape the flood waters by taking shelter in non-flooded neighbors' or kin's homes, but many people feel this is socially demeaning and consider it only as a last resort.

As mentioned earlier, the floods have different impacts on people depending on their level of wealth and power. The *jotdars* can maintain a normal life despite a considerable loss of crops and property, while those who belong to middle classes cope with the situation by borrowing from neighbors or relatives, but for the landless and those left unemployed due to the floods, their coping strategy becomes a survival struggle. Sometimes, Scott's moral economy comes into play, but sometimes it does not. Most often, the government attempts to deal with the situation by taking temporary measures like distributing relief among the flood-victims through Union Parishad Members, who often abuse their power when distributing materials - profiting by selling the relief materials provided. NGOs also extend a helping hand, but in most cases the help is too scant to meet the needs of the poor flood victims, so as a result, the fate of the poor is often left in their own hands. On a national level, the government tries to solve the flood problems by erecting flood protection embankments, and in my study area, there are two such embankments: the Teesta Right Embankment (TRE) and the Brahmuputra Right Embankment (BRE) – which cover an area of 76 sq. km. However, there have been reports (FAP2) that recent

flooding in Gaibandha has occurred due to breaches in the TRE and BRE, and this gave me an opportunity during my research visits to assess the impacts of flood protection measures upon the lives and livelihoods of the flood-affected people in my study area.

To sum up, the flood situation in Gaibandha District and the response of local people serves as a microcosm of the overall picture in flood-prone Bangladesh. For example, floods visit this area at least twice a year (one flash-flood and another peak riverine flood), and this area is commonly known as a *monga* area, though there is lack of work elsewhere in rural Bangladesh during the flooding season (July to September/October). The socio-economic condition of the people in Gaibandha District also resembles the low-income, densely packed population of Bangladesh as a whole; moreover, the floods, combined with the impacts of river erosion affect the lives and livelihoods of the people in Gaibandha, as they do elsewhere in the country.

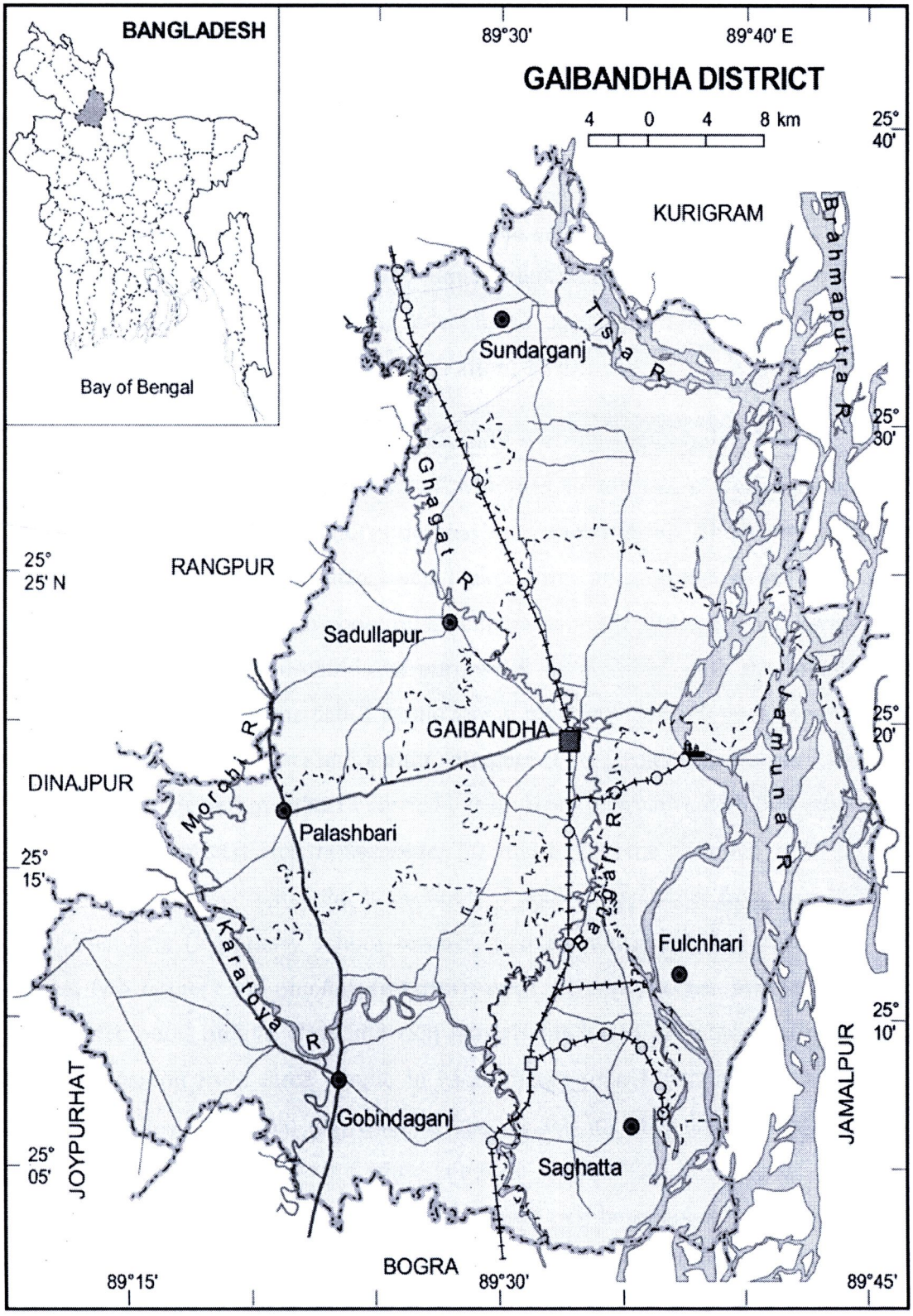

Figure 1.2: The research site. Source: www.Banglapedia.org/httpdocs/HT/G-0004.htm

1.5.2 Research Process and Data Collection Methods

The purpose of this work is to describe and analyze the constant struggles faced by the inhabitants of Gaibandha District with regard to the recurrent floods that disrupt their lives and livelihoods. For my research, I selected a representative sample of two villages from the District: Char Kalasona and Uria, both of which fall within Fulsori Sub-district. To serve my study aims, I chose a qualitative approach because I thought it would be the most reasonable one to use, being appropriate for studies where little empirical data already exists (Patton, 1990).

The key unit of analysis for this study was the 'household', because it is a single decision-making unit, the aim of which is to maximize welfare subject to differing situations. A household is defined as a social group which resides in the same place, shares the same meals and makes joint or coordinated decisions over resource allocation and income pooling (Meillassoux, 1981; Ellis, 1993). I wanted to make my selection of households as purposeful as possible, with the intention of maximizing the utility of the data I would use to meet my research goals, so, with the help of some students (four) and senior villagers (two farmers, two school teachers and one female elected member) I carried out in-depth interviews with 84 households, comprised of fourteen rich households, 30 middle-income families and 40 poor families. When categorizing the households, I took suggestions from some of the senior members (a primary school teacher, two elected members - including one woman, two farmers and one *haji* (pilgrim)) from the two villages. First, I collated a list of three poor, middle class and rich households based on their existing overall financial position from three people in each village (one farmer, one *haji* and one woman for Char Kalasona; one teacher, one elected member and one farmer from Uria village). After this, I found some common names from the collated list and I myself finalized the list of poor, middle class and rich households for the household survey and in-depth interviews. A brief view of the 84 selected households is shown in the table below:

Table 1.1 The three categories among the 84 selected households

14 Rich Households (income level: above TK 40,000/ US$600)		30 Middle Class Households (income level: TK 18,000-40,000/ US$250- 600)		40 Poor Households (income level: below TK 18,000/ US$ 250)	
Number of Households	Common Occupations	Number of Households	Common Occupations	Number of Households	Common Occupations
4	Farming and Services	4	Fishing	21	Farm labor
				7	Off-farm labor
5	Farming and Business	4	Boat	2	Van driving
		6	Sharecropping	2	Fishing
5	Farming	16	Farming	8	Construction work, domestic help, livestock rearing

When collecting the data, I focused on identifying how people in my study area interact with the world around them, and then determined how they experience and understand that world. As a result, I relied almost entirely on ethnographic research methods to formulate a pattern of analysis that made reasonable sense out of human actions within the given context of a specific time and place (Fife, 2005).

I used both primary and secondary data for the research; primary data was gathered from the field and the secondary was collected from a number of available sources.

(1) Documentary Research

This method of research, relying as it does on secondary data sources, is associated with the use of "mute evidence" such as written texts and cultural artifacts (Hodder, 1994, cited in Jennings, 2001:181). This method provided me with recent data sources, such as specialized and non-specialized literature on my research topic, sources that helped form my methodological decision-making in the field. The necessary secondary data was collected from government documents, the Bangladesh Bureau of Statistics, district development plans, the Water Development Board, Bangladesh Institute of Development Studies, the BUP, newspapers, NGO reports and other literature from different libraries, plus I also procured some related books from the market. These documents provided me with data about the ecology, history, culture and socio-economic aspects of Gaibandha, as well as state laws, policies, and economic and development programs at my research site. Fortunately, I obtained one small booklet called the 'Uria Union Parishad Profile' (Uria Union Parishad, 2010) which contains basic information about the two villages I chose to study.

(2) Interviews

Qualitative researchers rely extensively on interviews, as it is a useful way to obtain a large amount of data fairly quickly (Marshall and Rossman, 1999:108). Kahn and Cannel (1957, cited in Marshall and Rossman, 1999) describe interviewing as "a conversation with a purpose". Of the different types of interview available, I chose to use both structured and unstructured (or open-ended) interviews, as they enabled me to extract a greater amount of data on local people's views and opinions. During my field visit, I went from house to house to carry out interviews, as well as to gain an overview of the conditions in each household. The details of the interviews I held are as follows:

a. Interviews with local people from the village households - Included in-depth interviews with people of different ages and genders, which allowed me to obtain data about local social history, land use practices, environmental change in the study area, as well as the different generations' perceptions of their social and cultural processes, livelihoods and perspectives on the future. With the help of a college student, I moved through the village and carried out in-depth interviews with two school teachers, 57 farmers (including fifteen women), seven day-laborers (three women), four village doctors, three NGO workers (one woman), seventeen women (three young and a fourteen year old) and three elected members (one woman) of the Union Parishad.

b. Interviews with key informants - In this case, I selected some senior people from my study site, such as two primary school teachers, two elected representatives (one woman) of the Union Parishad and two elderly farmers. This method helped me a lot, providing me with additional information about the history of flooding in the area, such as state measures, local people's livelihood opportunities and also their coping strategies during flooding periods. From the key informants, I also tried to obtain data about the different impacts of the floods on women and the poor, and the dynamics of power and religious practices in this regard.

c. Interviews with local government officials - During my interview with Fulsori Upazila Nirbahi Officer Mr. Zahidul Islam, I discussed the overall situation in my two study villages regarding flood impacts and coping measures. I also held talks with a local project officer in relation to development programs at the study site. This method helped me to explore national and local steps related to the flood response and economic development at the research site.

d. Interviews with Imams (religious preachers) at the mosques - In total I talked to seven Imams from the two villages during my fieldwork visits, and discussed issues such as people's views and responses towards

religious rituals, the Imams' views on gender relations, family planning and development issues, plus their views on any correlation between religious practices and different hazards. Through this method, I was able to gather data on religious practices related to gender, population control and natural events like floods, storms, cyclones and droughts, as well as the views of these Imams regarding these practices.

e. Focus group interviews - Instead of interviewing participants individually, here I interviewed study participants together, including the farmers (poor, middle class and rich), the landless, women, Imams, key informants and one NGO worker. This method helped me to improve the quality of data as a result of group members questioning, clarifying, challenging and discussing their positions with regard to the items under discussion.

(3) Participant Observation

Participant observation is to some degree an essential element of all qualitative studies (Marshall and Rossman, 1999: 106), and using this method I spent a considerable period of time (35 days during November and December 2010) immersing myself in the study setting to see, hear and experience what the participants do, and this approach enabled me to obtain an emic view of the naturally occurring events (particularly normal daily life) at my research site. More specifically, it enabled me to witness for myself the daily lives of the people, their approaches to hazards like floods and how they cope with emerging situations.

(4) Household Surveys

Household surveys involve the use of interviewer-completed questionnaires, or the delivery and collection of self-completed questionnaires (Jennings, 2001: 239), and for me, the main aim of using this method was to collect basic information about the socio-economic, demographic and geo-physical conditions of the people at my study site. As my study area has a population of about two million, I selected and conducted household surveys using a representative sample of 84 families from two

villages, including 50 households out of 485 from Char Kalasona and 34 households out of 227 from Uria village.

1.5.3 Data Analysis

After collecting the data, I coded my field notes based upon the different themes of my research questions and theoretical concepts, so that I could categorize them in terms of issues, history, patterns and context. For my research, the probable codes included the history of the floods, reasons for demonstrating vulnerability to the floods, living conditions, employment situations, social relations and coping strategies. Next, I adopted descriptive, narrative and interpretative methods to analyze the data and draw a conclusion. I also tried to analyze the existing discourse in the national and international media regarding floods and vulnerability.

1.6 Organization of the Thesis

This thesis consists of seven chapters as follows:

This first chapter introduced the background information and rationale of the study, and also contained the research questions, research objectives, research methodology and data analysis methods used.

The next chapter reviews the literature related to the three concepts I have chosen to apply in this thesis, these being: (1) vulnerability (2) coping strategies and (3) power structures. This second chapter also includes the conceptual framework of the study.

Chapter three deals with the historical context in terms of flooding in Bangladesh, and describes the major types of flooding that occur and the three major river basins that exist in Bangladesh. At the end of the chapter, I describe the most prominent flooding events over two sections; the events that occurred before the birth of Bangladesh in 1971, followed by the events since 1971.

Chapter four focuses on the socio–economic conditions of the people who live at my research site, describing the location, the people, their culture, land ownership situation and access; their livelihoods, housing conditions and exposure to floods.

Chapter five discusses the coping strategies used by the people at my study site in order to cope with the floods, and describes the pre-flood, during flood and post-flood coping strategies that are used on two levels: the local government level and the household level.

The penultimate chapter deals with the prevalent power structures in Bangladesh, which have been shaped by the colonial legacy and include development interventions, religious practices and gender disparities. Chapter seven concludes the thesis by elaborating upon the research findings and results, gives some theoretical reflections, identifies my policy recommendations and outlines the limitations of the research.