1

Introduction

The Sundarbans embankments: Between land and water

While sitting on an embankment, I started a dialogue with Bhagirath Patra, a resident of north Kusumpur¹, one of the most severely affected parts of Kusumpur island, where the rivers Goira and Matla were eroding banks on the eastern and western sides, respectively (see Maps 3 and 4). Bhagirath, one of the worst victims of land erosion, was now left with less than a bigha² of land where he had his house and tiny plot of paddy land. Before I could proceed to interview him, he stopped me and tried to draw my attention to the vast tract of uninhabited landmass of Prakashnagar island right across the river. Pointing towards the opposite bank, Bhagirath told me, 'You know, we used to stay there. We had our bilan jami³ where the river is flowing now. You can't make out where our house was, it was far beyond the new land that has surfaced and added to the landmass of Prakashnagar. This is the fourth ring embankment⁴ that we have seen during our lifetime. Everything is gone. The river and embankment are eating into our strength'.

It would be misleading to consider Bhagirath's narrative as unusual since he shared his agony with many other Sundarbans islanders. The shape and contour of Kusumpur were changing almost every day. Standing on the embankment, it was difficult for an outsider to visualize what the island looked like in the past when the landmass on its western side extended far beyond where the river Matla was now flowing. It was even more difficult to imagine how the new land or char that had emerged out of the siltation process on the other side of the Matla could once have belonged to the people of Kusumpur. But that was how people in Kusumpur perceived their lost land. They believed that the land they lost due to continuous erosion and multiple ring embankments

2

LIVING WITH DISASTERS

had contributed to the increasing landmass of Prakashnagar. But they could not call this new land their own; they were denied access to it as it belonged to a different panchayat.

As Bhagirath was talking to me, I saw Adhar Mondal, another resident of north Kusumpur walking towards us. He brought to our notice fresh breaches that had appeared in the embankment there. There were now two anxious faces. 'This part' - a huge chunk, almost twenty meters long and leaning towards the river - 'is definitely going to go tonight', said Chandan Mondal who lived in the same area and worked as a labourer at the embankment site. 'How can you be so sure?' I asked him. Chandan smiled and answered, 'I am thirty-three now, we have been living with these breaches since our boyhood'. 'You come to my house tonight', suggested Tapan Mondal whose house was quite close to where the breaches occurred. 'Nothing is going to happen during high tide as the water pressure will be too high now. Tonight low tide will be quite late. If you can stay awake we will come back to see how the river takes away this chunk in the course of its retreat during the ebb tide'. 'At this rate', continued Tapan, 'soon we will have the fifth ring embankment. But I am not sure if we can afford any more ring embankments. The irrigation people told us that the maximum land available between the rivers on both sides is 800 feet'. 'We are about 150 families living in this narrow stretch of land', added Chandan. 'We do not know what fate has in store for us. We are fast losing the land beneath our feet'.

While the people of Kusumpur and the Sundarbans continue to lose the ground beneath their feet and are destined to see their paddy fields flooded with saline water or meet with the failure of their winter crops for lack of freshwater, Sundarbans development remains a widely debated issue, both in the public sphere and in government departments. Today such debates over the Sundarbans are intensified by the acknowledgement that this area is a World Heritage Site, primarily because of the presence of endangered species such as the Royal Bengal Tigers (*Tigris regalis*) and because it is the largest mangrove swamp in the world. The question that follows is: what is the Sundarbans, where is it located?

Sundarbans: The land where nothing settles

The region known as the Sundarbans⁵ forms the southern part of the Gangetic delta between the rivers Hooghly in the west of West Bengal and Meghna in the east, now in Bangladesh. Sundarbans, the world's largest mangrove delta,

INTRODUCTION

is located between 21° 32′–22° 40′ north and 88° 5′–89° 00′ south. The swamps of the Sundarbans support one of the biggest tracts of estuarine forest in the world. Ghosh (2004) describes the Sundarbans in the following words:

... between the sea and the plains of Bengal, lies an immense archipelago of islands. But that is what it is: an archipelago, stretching for almost three hundred kilometres, from the Hooghly River in West Bengal to the shores of the Meghna in Bangladesh ... these islands; some are immense and some no larger than sandbars; some have lasted through the recorded history while others are washed into being just a year or two ago ... The rivers' channels are spread across the land like a fine-mesh net, creating a terrain where the boundaries between land and water are always mutating, always unpredictable ... When these channels meet, it is often in clusters of four, five or even six: at these confluences, the water stretches to the far edges of the landscape and the forest dwindles into a distant rumour of land.

... There are no borders here to divide fresh water from salt, river from sea. The tides reach as far as three hundred kilometres inland and every day thousands of acres of forest disappear under water only to re-emerge hours later (Ghosh 2004, 6–7).

The above words capture the Sundarbans in its essence. However, can anything remain as essence in a land where nothing seems permanent? Here we encounter a region being shaped by tidal waves where everything looks transient and fleeting. The forested land which disappears under water every six hours during high tide is the abode of wildlife, while the islands which have erected mud embankments around themselves to prevent their submergence are where people live. Yet, the forests and the islands do not exist in isolation, as rivers keep connecting and disconnecting as they flow around them. Islands are the rivers' restitution, the offerings through which they return to earth what they have taken from it, but in such a form so as to assert their permanent dominion over their gift (Ibid, 7). The area consists of low, flat alluvial plains and is intersected by tidal rivers or estuaries from north to south and by innumerable tidal creeks from east to west. The derivation of the word 'Sundarban', in the words of Pargiter,

... is undecided. Several derivations have been suggested, but only two appear to me to deserve attention. One is *sundari*, "the sundari tree," [*Heritiera fomes*] and *ban*, "forest," the whole meaning "the sundri forests;" and the other *samudra* (through its corrupted and vulgar form *samundar*), "the sea," and *ban*,

4

LIVING WITH DISASTERS

"forests," the whole meaning "the forests near the sea" ... The second derivation seems to me the more probable (Pargiter 1934, 1; italics as in original).

Thus, the Sundarbans is a place where land is found at the mercy of the rivers. It is the unpredictability of land and water that adds to the natural beauty of the region, a beauty that is a visual treat for visitors and tourists, but a constant source of anxiety and vulnerability for its settlers. This anxiety is manifested in the villagers' narratives which I have presented at the beginning of this chapter, the narratives with which the book opens. One comes across villagers ventilating their angst over their existence, their survival in a land being taken away from them by the rivers.

The Sundarbans: Administrative and social profile

The Sundarbans encompasses an area of over 25,500 square kilometres, two-thirds of which lie in Bangladesh and one-third in India. The Indian part (see Map 1), with which I am concerned in this book, is in the state of West Bengal⁶ and covers an area of 9,630 square kilometres. This huge forested area is composed of mangroves, vast stretches of trees and bushes growing in brackish and saline swamps. The Indian Sundarbans, which lies in West Bengal, is spread over the districts of North and South 24 Parganas.⁷ The district of 24 Parganas, of which the Sundarbans is a part, remained a single entity until 1986 when, for administrative reasons, it was divided into North and South 24 Parganas. As a result, out of the nineteen blocks that constitute the Sundarbans, six - Hasnabad, Haroa, Sandeshkhali I, Sandeshkhali II, Minakhan and Hingalganj - came under the jurisdiction of North 24 Parganas and the remaining thirteen blocks - Sagar, Namkhana, Joynagar I, Joynagar II, Mathurapur I, Mathurapur II, Patharpratima, Kakdwip, Canning I, Canning II, Kultali, Basanti and Gosaba - became part of South 24 Parganas. An imaginary line called the Dampier-Hodges line serves as the boundary of the Sundarbans and marks it off from the non-Sundarbans parts of the districts of North and South 24 Parganas. This line runs from the south-western part of what is now South 24 Parganas, goes through parts of North 24 Parganas and finally extends beyond West Bengal into Bangladesh. William Dampier, the Sundarbans Commissioner, and Lieutenant Hodges, the Surveyor for the Sundarbans, defined and surveyed the line of dense forests in 1829-1830. In their venture they were helped by Ensign Prinsep's line of dense forests already surveyed in

INTRODUCTION

1822–1823. In 1832–1833, Dampier formally affirmed Prinsep's line in the 24 Parganas. Prinsep's line was renamed the Dampier-Hodges line, which till today determines the limit of the Sundarbans region.

The Indian part of the Sundarbans has 102 islands, of which 54 are inhabited and protected by 3,500 kilometres of earthen embankments and the rest are reserved for tigers. Of the 9,630 square kilometres area that constitutes the West Bengal Sundarbans, 2,585 square kilometres was declared a Tiger Reserve in 1973. There are three sanctuaries in the forest area – Sajnekhali, Lothian and Halliday islands. In 1989, the Sundarbans was declared a World Heritage Site for the following reasons: (1) the Sundarbans is the largest mangrove delta in the world; (2) it is the only mangrove land with tigers to be found anywhere; (3) the Sundarbans possesses the greatest faunal and floral diversity among mangroves of the world; and (4) it serves as a nursery for ninety per cent of the coastal and aquatic species of the eastern Indian Ocean as well as the Bangladesh–Myanmar coast.

The fact less known is that the Sundarbans today is also an abode of about 4.4 million (more than 44 lakh) people. The Sundarbans islands began to be peopled after 1765 when the East India Company (EIC) acquired the civil administration of Bengal (Jalais 2010, 3). However, settlement in the wetlands accelerated around the middle of the nineteenth century when the colonial state in search of revenue leased out large tracts of lands for their reclamation and agriculture. Labourers were hired from Chotanagpur Plateau, present day Orissa (renamed as Odisha) and Arakan coast in Myanmar to reclaim the mangrove wetlands of the delta. This large-scale migration that happened in the Sundarbans during colonial rule was not the first of its kind. Prior to the eighteenth and nineteenth centuries, these mangrove wetlands were inhabited in semi-permanent ways by fishermen, woodcutters, pirates and cultivators (Ibid).

Today the Sundarbans islanders are mostly migrants from other parts of West Bengal or Bangladesh. The islands lying further south (on the margins of the forest) and closer to the Bangladesh border have migrants mostly from Bangladesh, with immigrants still crossing the border and settling into the Sundarbans. These islands on the southern fringes are part of the active delta, being constantly configured and reconfigured by tidal movements in rivers. The areas further up and nearer to Kolkata⁸ are parts of the stable delta. The stable delta, just south of Kolkata, has agglomerate, compact settlements that contrast sharply to semi-nucleated, dispersed settlements of the active delta (Banerjee 1998, 184). Nicholas⁹ (1963) uses ecology as an analytical category

6

LIVING WITH DISASTERS

in understanding social structure in two villages in deltaic West Bengal. He makes a comparison between two villages, one belonging to the active delta in Midnapore district and the other belonging to the moribund delta in Birbhum. Nicholas argues that the two villages had distinct social structures affected by their unique ecological location. According to Nicholas, housing pattern, caste structure and political organization of the active delta village contrast sharply with those of the moribund delta village. Nicholas observes,

... active delta villages are ordinarily dispersed, ..., with houses quite distant from one another ... moribund delta villages are usually nucleated and compact ... As a consequence ... active delta villages are smaller and in caste composition, simpler than moribund delta villages. Because of their settlement patterns and flooding, social interactions of all kinds – including inter-caste relations – is much less frequent in the active than in the moribund delta villages (Nicholas 1963, 1195–1196).

Nicholas uses a distinctive method of ecology in exploring social relations understood primarily in caste terms. In the Sundarbans the areas that are part of the stable delta are more elevated. The lands here are well irrigated because of their proximity to canals that are not as saline as those of the southern islands. The islands of the active delta do not have elevated ground level and, therefore, have protective earthen embankments or mud quays to prevent daily saline ingress during high tides. In the stable delta or in areas, which are connected to the mainland of West Bengal, prevalent modes of transport are rickshaws, motor-driven three wheelers (often referred to as autos), buses and trains. However, the areas lying further south and surrounding the forests have mechanized boats (locally called bhatbhati) or non-motorized boats (dinghies) as the dominant mode of transport that connects otherwise isolated islands. Most of these islands have brick-paved roads, which only allow cycle-vans (or van rickshaws i.e. three-wheeled cycles with raised platform to carry goods as well as people) to ply. These roads are few and vans ply as far as roads exist. Beyond roads are mud embankments, which serve as pathways connecting one part of an island to another.

In a more or less similar vein, Jalais makes a distinction between the 'up' and 'down' (2010, 5) islands. According to Jalais, 'up' and 'down' are English words used by the Sundarbans islanders as part of everyday Bengali speech to refer to their unique social and geographical location (Ibid). 'Down' islands correspond more or less to places that are part of the active delta lying to the

INTRODUCTION

south of the Sundarbans. Not only do these places have low elevations, but also they are cut off from the mainland and hence poorly connected. Being part of the active delta, they are exposed to the risks of cyclonic storm and tidal inundation. By contrast, the 'up' places are those that are part of the stable delta and stand in proximity to Kolkata. Being connected with the mainland they are certainly settled by people who are economically well-off. People living in the 'down' islands often refer to people from areas closer to Kolkata as up-er lok (literally meaning people from 'up' areas). The very phrase up-er lok suggests that 'up' and 'down' are not merely ecological, but socially relevant categories, for it points to the perceptions that people belonging to 'down' islands have of those from 'up' areas and vice-versa. These 'down' islands are the ones lying in proximity to the forests. In characterizing the 'down' islands Jalais states,

At high tide, when most of the vast expanses of forests go under water, these inhabited islands come alive through communication with each other as sailing between them becomes possible once again. In contrast, during low tide, the forest re-emerges and many of the inhabited islands become isolated once again as riverbeds are left with insufficient water for boats to ply (Ibid, 6).

These are the 'down' islands that characterize the Sundarbans I have described at the beginning of the chapter. My book focuses on people who live on these islands. The opportunities of livelihood for people living on these so-called down islands are very few. People's life on the southernmost islands revolves around water and forest. The Sundarbans is often referred to as the land of jele, mouley and bauley (fishers, honey collectors and woodcutters, respectively).¹⁰ In the absence of heavy or small industries, forest and river remain two significant domains of livelihood. The activities people undertake are not only physically demanding and challenging, but also involve considerable risk. Islanders entering the forest in search of firewood, wood or honey and fish or crab in narrow creeks are often attacked by tigers. According to the forest department's estimate, about 150 people get killed by tigers or crocodiles every year. Women and children belonging to poor families are often attacked by sharks or crocodiles while drawing nets along the riverbanks in search of tiger prawn seeds (Penaeus monodon), the largest Indian marine prawn farmed extensively in the region. Agriculture is a source of livelihood for the islanders, but the brackishness of rivers makes agriculture unsuitable and uncertain. As mentioned at the beginning of the chapter, the

8

LIVING WITH DISASTERS

Sundarbans embankments, which protect the down islands, are erosion prone resulting in saline ingress and flooding of village lands. Salinity leaves the rice fields unsuitable for cultivation for many years. Winter cultivation is virtually non-existent for want of freshwater. Despite agriculture being an important source of livelihood, a substantial proportion of the farming population belongs to the category of marginal farmers and agricultural labourers. Poor families especially those having very little or no land tend to rely on rivers for marine resources such as fish, prawn or crab.

The islands lying further south and on the margins of the forest are inhabited predominantly by scheduled caste population. As mentioned earlier, these are the islands inhabited by people who once migrated from Bangladesh. The Sundarbans has also a sizeable proportion of tribal population. According to 2011 Census, 40.35 per cent of the whole population of the Sundarbans belong to scheduled caste and scheduled tribe communities (see Tables 1.1 and 1.2 for block-wise distribution of scheduled caste, scheduled tribe and other population). Among the thirteen Sundarbans blocks of the district of South 24 Parganas, Gosaba is one of the southernmost blocks, part of the active delta and down areas, (others being Basanti, Patharpratima, Kakdwip, Namkhana and Sagar) where I carried out my fieldwork (see Map 2). Gosaba block composed of about ten islands, all surrounding the Sundarbans Tiger Reserve, has about 62 per cent of its population belonging to scheduled castes, 9.46 per cent to scheduled tribes and the rest (27.84 per cent) to other backward castes, the so-called upper caste Hindus and Muslims and Christians (as per 2011 Census).

Blocks	Population	Scheduled Castes	Scheduled Tribes	Others
Haroa	214,401	50,636	12,728	151,037
Minakhan	199,084	60,578	18,564	119,942
Sandeshkhali I	164,465	50,812	42,674	70,979
Sandeshkhali II	160,976	72,300	37,695	50,981
Hasnabad	203,262	51,295	7,492	144,475
Hingalganj	174,545	115,227	12,743	46,575
Total	1,116,733	400,848	131,896	583,989

 Table 1.1: Block-wise Distribution of Population of the Sundarbans

 in the District of North 24 Parganas

Source: Compiled from Census of India 2011, Primary Census Abstract.

INTRODUCTION

Blocks	Population	Scheduled Castes	Scheduled Tribes	Others	
Canning I	304,724	144,906	3,710	156,108	
Canning II	252,523	52,859	14,910	184,754	
Mathurapur I	195,104	68,636	496	125,972	
Joynagar I	263,151	102,645	80	160,426	
Joynagar II	252,164	85,587	1,046	165,531	
Kultali	229,053	104,193	5,672	119,188	
Basanti	336,717	119,631	20,060	197,026	
Gosaba	246,598	154,584	23,343	68,671	
Mathurapur II	220,839	62,342	4,643	153,854	
Kakdwip	281,963	97,944	1,836	182,183	
Sagar	212,037	56,261	854	154,922	
Namkhana	182,830	47,260	741	134,829	
Patharpratima	331,823	76,163	2,640	253,020	
Total	3,309,526	1,173,011	80,031	2,057,483	

Table 1.2: Block-wise Distribution of Population of the Sundarbans
in the District of South 24 Parganas

Source: Compiled from Census of India 2011, Primary Census Abstract.

Living on these down islands - islands in proximity to forests, away from the mainland, geographically inaccessible, lacking basic amenities such as electricity, drinking water and proper roads - assigns a lack of social recognition to these people. The binary 'up' and 'down' (and correspondingly up er lok and down er lok) demonstrates a sense of condescension towards people in these remote locations. It is as if by living in down areas these people – the majority of who were once migrants from Bangladesh - themselves internalize this sense of condescension towards them. They view people from Kolkata or places closer to Kolkata as having wealth and social status, while they feel that they are hapless settlers who have to negotiate their adverse climate and topography to survive and on an everyday basis settle scores with tigers and crocodiles to eke out a living in the Sundarbans (I will discuss this in detail in Chapter 2). The settlers' selfperception as socially and ecologically vulnerable is further reinforced by a lack of development initiatives in the region. This peculiar geography is often cited as an excuse for the lack of effort on the part of the authorities to improve the material conditions of the islanders through programmes such as strengthening embankments, building roads or installing electricity (Jalais 2010, 7).

10

LIVING WITH DISASTERS

Entering the field: Island/s at stake

Gardner, in sharing her fieldwork experiences, cautions that fieldwork usually in some far-flung location - is anthropology's centrepiece, the ultimate transformative experience through which the students of the discipline must pass if they wish to call themselves anthropologists (Gardner 1999, 49). For a person like me, who was born and has spent most of his life in Kolkata, the Sundarbans should not have appeared a far-flung place since Canning, the nearest port of entry into the Sundarbans, is only about two hours journey from Kolkata. However, in the middle-class Calcuttans' world-view the Sundarbans always remains an enigma, a 'wonderland', where tigers stroll and crocodiles swim. In my teens, I often came across people coming back disappointed from their winter visits to the Sundarbans and lamenting that they were unfortunate not to have had a single glimpse of a tiger. But this is not the only time when the urbanites encounter the Sundarbans. The people in Kolkata get to meet and perhaps hear the sad stories of poverty and sufferings of many Sundarbans islanders who arrive in the city in search of employment as domestics in urban households. We also meet such people at tea stalls or roadside eateries where they do odd jobs or run errands. It is through such interaction with them that we experience the Sundarbans in our everyday life. Their presence constantly reminds us how little we know about the land which we occasionally visit as tourists. Thus, the Sundarbans remains a remote place even when many of its inhabitants live right there in the city.

However, when it came to actually negotiating the terrain, the Sundarbans became an even more far-flung place for me. The sheer size of the islands and the expanse of the rivers made me feel completely out of place. I remember the first time I crossed the river Matla at Canning. It was during low tide that I reached the ferry. The water had receded considerably leaving me with no other option but to wade through knee-deep mud. With two reasonably big bags I found myself struggling in the extremely slippery terrain, while people who had started behind walked past me and reached where the boats were anchored in no time. They kept looking back to catch a glimpse of what I was doing. I felt as if I was a stranger to the place, an alien to the people I intended to study. Although my destination was Kusumpur island, my fieldwork virtually started the moment I crossed the Matla. For me, then, carrying out fieldwork meant not only interviewing people and obtaining information, but also coming to terms with the landscape of the region and emulating what others did when they walked on the slopes of the riverbanks or got on or off the boats.