
Shortcut to the frontline: supporting local NGOs on climate change in Bangladesh

An INTRAC/PRIP Trust research report

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Cover images (l): Men, employed on a food-for-work reconstruction project to rebuild community buildings destroyed after Cyclone Aila, stand on the river embankment.

(r): Children on their way to school, outside a Cyclone Aila reconstruction project, Shyamnagar, Satkhira.

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Background

The impetus for this report came from a common impulse among those who work on development in Bangladesh: 'this country stands to be knee-deep in water in twenty years' time. What can we do about it?'. Work on climate change in Bangladesh is gaining speed and urgency; yet there is no straightforward way to get an overview of the various climate change-related initiatives in the country. While the government and international institutions are working on macro-scale solutions to the problem, NGOs are already starting to adapt their work to the climate change discourse and information at their disposal. But who is doing what, and how can we best engage?

This research project aims to understand the role of local (non-centralised Bangladeshi) NGOs in climate change work: their current situation, outlook and future prospects. It is a snapshot of how different NGOs in south-western Bangladesh approach the issue: small and large ones; ones that are well-connected internationally and those who are well-rooted in their 'base' communities; ones that deliver services to the stricken and those who fight for systemic changes. South-western Bangladesh is a region that is already under threat from climate change-resembling dangers such as cyclones and flooding, and much NGO activity is concentrated there.

The choice of research focus rises naturally from our two organisations' mandates. INTRAC's mission is to work for a stronger civil society worldwide; PRIP Trust's mission is to support Bangladeshi NGOs. INTRAC and PRIP Trust are in close contact with small and medium-scale Bangladeshi NGOs through our collaboration on the EC-funded SMILING project – 'Small Initiatives by Local Innovative NGOs'. SMILING supports NGOs in disaster-prone areas in Bangladesh to design, fund and implement projects on three topics. One of these topics is disaster risk reduction and climate change, and many of the 204 SMILING NGOs work on the frontline of the many superhuman weather-related challenges that Bangladesh faces on a regular basis. By finding out more about how such NGOs approach climate change and by discussing some of the local context we hope to give a sense of the different, difficult considerations that pertain to NGO work in Khulna division in Bangladesh, and provide a shortcut to design and implement climate change projects in the area.

For this paper a team of six researchers visited the three south-westernmost districts in Bangladesh: Satkhira, Khulna and Bagerhat. We interviewed 16 locally-based NGOs (the senior management in all the organisations, field staff group interviews in five cases), held focus group discussions with representatives from 39 SMILING NGOs, spoke to academics, the government's Climate Change Cell, a businessman and three Dhaka-based national-level NGOs. We asked them about their current work, their climate change work, how they started work on climate change, what climate change resources area available to them, and how they see the future unfold in the places where they work in 20 years' time.

With this paper we hope to give some insight into the situation on the ground, and to share answers to some elementary questions. We hope that this can benefit local Bangladeshi NGOs and others who want to work with them to improve life in the face of our common global challenge, climate change.

We would like to thank SIDA, the Swedish International Development Agency, for funding this work through its support to INTRAC.

Outline of the paper

Section 1 describes the probable climate change effects on Bangladesh.

Section 2 discusses the role and approaches of civil society in the Bangladeshi fight against climate change. This includes an outline of the scope for NGOs in the Bangladesh Climate Change Strategy and Action Plan.

Section 3 describes the specific context of the three study districts, analysing pre-existing phenomena such as shrimp farming, minorities and marginalised people, flood defences and politics.

Section 4 provides an overview of local NGO actors and their strengths and constraints. This section is intended to point out some areas that could benefit from capacity building and development.

Section 5 discusses these NGOs' ongoing work and future plans with regard to climate change – the full list of their initiatives is in Appendix 3. This empirical section is of interest to those who want to work on climate change in similar circumstances, to show what is already happening – and what is possible.

Section 6 deals briefly with projections for NGO options in a future climate change-affected Bangladesh. Climate change is a long-term problem that requires careful and strategic thinking – while the urgency of the task spurs us to do something 'now!'.

Section 7 is the conclusion and summary.

1. Climate change impacts in Bangladesh: zero margins

Any publication on climate change in Bangladesh starts with an overview of the terrifying scenario that the country will face when the effects of global warming and climate change take hold: sea level rise, flooding and salination, more intensive cyclones, disrupted river flows, increased temperatures and irregular weather patterns. Of course Bangladesh faces other ongoing challenges as a country, and climate change stands to exacerbate current problems such as land distribution, urban planning, environmental degradation and corrupt distribution of resources. Climate change is far from only an environmental problem. Bangladesh faces the challenge to plan ahead for its already vulnerable population as weather-related risks increase.

The most likely climate change effects for south-western Bangladesh – i.e. riverine flooding, cyclones, sea level rise, and irregular weather patterns – are discussed below.

However, the effects of climate change on Bangladesh are not estimated with any certainty. The most reliable source for climate change information, the IPCC or Intergovernmental Panel on Climate Change, uses analysis grids that are too large to model effects in Bangladesh – much less regionally in Bangladesh¹. The closest we can get with IPCC data is the South Asian subcontinent. This lack of exact data should be kept in mind when designing suitable interventions.

Bangladesh stands to suffer a high risk of damage from climate change for several reasons. Geologically and geographically, Bangladesh is a low-lying active delta interlaced by rivers and waterways, the outlet of three gigantic Himalayan rivers into the Bay of Bengal. It lies on a geological faultline and has a high risk of earthquakes. It is prone to tropical cyclones. In the southern coastal belt, cyclones are often accompanied by storm surges or tidal bores where sea water travels up canals and rivers with deadly force. Near the coast saltwater also seeps up the freshwater channels and makes potable water scarce. Such risks are set to increase with climate change. However, the demographics of Bangladesh also stand to exacerbate its effects.

¹ Interview with Mr Abu M. Kamal Uddin, Programme Manager, Climate Change Cell on 2.11.09

Being a small country with fertile alluvial soil, the population of Bangladesh is close to 150 million people at present, which equates a population density of more than 1000 persons per square kilometre. Bangladesh is the most densely populated country in the world².

The majority – 60%³ - of Bangladeshis live in rural areas and make a living from agriculture, either directly from farming, or attendant processing and services. Hence economic policy is often formulated to support agriculture, the mainstay of the population.

Although fertility rates are falling⁴, the population is projected to grow to 208 million by 2025. Currently more than 43% of the population are estimated to live beneath the poverty line, of whom 32% live in extreme poverty – that is, they are unable to consume the 1750 kCal a day needed to sustain their bodies.

This backdrop means that there is great pressure for people to settle wherever they can, including on marginal land – a great many Bangladeshis live in high-risk areas. The frequent natural disasters (the most destructive recently being super-Cyclone Sidr in 2007 and Cyclone Aila in May 2009) give a taste of what is likely to come as climate change impacts gather momentum. The high winds of Cyclone Sidr killed an estimated 15,000 people. The sudden onset and tidal waves of Cyclone Aila killed fewer than 1000 persons, but its wider impacts have been more devastating. Those people who lived on reclaimed farmland, depending on embankments to keep their land safe from rivers or the sea, suffered the experience of the embankments breaking and the rivers surging in to inundate their land and homes. It is estimated that 40,000 people were displaced and sought refuge on roadsides and embankments. Thousands of them (the common figure is 10,000) are still displaced, while the tidal rivers wash over their former farmland twice a day through the breached embankments, six months after the storm.

Many of the inhabitants in areas that are already at risk from natural disasters, exacerbated by various man-made interventions, have very little to fall back on when disaster strikes. Climate change would increase the many pre-existing risks for this population. Hence, poverty alleviation – making sure that people have options to survive and thrive - is an important aspect of climate change resilience.

The sections below outline the various climate risks that threaten southwest Bangladesh.

1.1 Rivers: flooding and siltation

The Ganges (called the Padma in Bangladesh), the Brahmaputra (the Jamuna) and the Meghna rivers all end their journeys to the sea on the coast of Bangladesh. The rivers carry not only water, but also enormous quantities of silt from their journeys through Nepal, India, Tibet and China – two billion tons a year⁵.

Rivers shape all of Bangladeshi life: intensive rice cultivation, the mainstay of the majority of the population, is dependent on water from these rivers. Regular riverine flooding can be seen as a necessary evil as it inundates and fertilises the paddy fields⁶. Many riverside inhabitants also make a living from fishing in the rivers.

Climate change – rising temperatures causing glaciers to melt – combined with deforestation in the Himalayas would increase the amount of water flowing through these rivers and hence increase

² If small city-states are not counted. Van Schendel 2009

³ While employing 60% of Bangladeshis, agriculture contributes only 20% to GDP. Van Schendel 2009: 135

⁴ Fertility is estimated at 2.79 children per woman in 2009; population growth is 1.74% per annum. CIA World Factbook 2009

⁵ Bangladesh Climate Change Strategy and Action Plan (BCCSAP) 2008:6

⁶ The course of rivers has even had a sociological impact on the way Bangladeshi rural life is organised. As they risk being inundated at short notice, villages are relatively transient structures that don't have the permanent 'village square' model found in e.g. Europe. Van Schendel 2009, pp. 9-10

the risk of flooding⁷. Meanwhile, the delta system has an international dimension as upstream countries construct dams or open flood gates, with serious effects for those downstream. Communication and negotiation about dams has not always been satisfactory.

Riverbank erosion is another current problem that may worsen with climate change: vulnerable people live and farm on the banks of rivers, which are sometimes washed away by the current.

1.2 Cyclones

Tropical cyclones hit Bangladesh frequently: on average every three years. One effect of climate change is predicted to be an increase in the intensity of tropical storms⁸, implying further cyclone damage for Bangladesh.

Cyclones can be accompanied by extremely strong winds⁹, as in Cyclone Sidr in 2007. Another factor that makes cyclones deadly is the accompanying storm surges that sometimes occur: water travelling upstream from the sea at high speeds, surging through canals and waterways. Such surges are especially prevalent in the Bay of Bengal because it narrows towards the north, providing a 'funnel' for strong winds and weather. These surges can damage embankments and cause a great deal of damage at short notice, far inland. Storm surge damage would be intensified if the sea level is higher¹⁰.

Deaths from cyclones have been declining over the years as Bangladesh has developed a comprehensive community-based cyclone warning and preparedness system. Tall, raised cyclone shelters also dot the countryside and provide a safe refuge for people during storms. However, it is estimated that 2000 shelters would be needed for the whole population of south-western Bangladesh, but only 1000 are available¹¹. Some NGOs construct cyclone shelters but it is a large-scale, expensive business.

1.3 Sea level rise and salinity intrusion

Sea level rise is a grave threat to Bangladesh. The IPCC Fourth Assessment Report, revisited in late 2009 by the BBC, shows that sea levels could rise 28-43cm before 2100 due to climate change¹². According to the 2007 Fourth Assessment Report, sea level rise is caused partly by the expansion of water due to higher temperatures, and partly by increased glacier melt. In Bangladesh this is exacerbated by geological/tectonic factors – the country is subsiding, in effect tilting towards the east. This means that the sea level may in effect reach twice as high as it would 'only' from climate change¹³.

With much of Bangladesh lying at very low elevations above sea level, one study¹⁴ suggests that without adaptation, a one metre sea rise would displace 15 million people (at 1995 population densities). This displacement would probably be permanent, creating 'climate refugees'. These figures need to be revisited according to different projections of population growth and sea level rise, but it is evidently a cause for fundamental concern for millions of Bangladeshis.

In the southwest of the country the large deltaic rivers are closely linked to the sea: they are tidal (they rise and fall according to ebb and flow) and their water is brackish. When the sea level rises, it would increase the salinity in these rivers, probably increasing both the reach and concentration

⁷ Once the Himalayan ice melts away, drought would follow.

⁸ IPCC cited on BBC Analysis, <http://news.bbc.co.uk/2/hi/science/nature/8389706.stm>

⁹ BCCSAP 2008:10

¹⁰ Thomalla et al 2005:4

¹¹ Interview with Michael Biswas, Caritas Khulna Region, 10.11.09

¹² IPCC quoted in 'Climate science, from Bali to Copenhagen'. BBC news accessed on 2.12.2009 <http://news.bbc.co.uk/2/hi/science/nature/8389706.stm>

¹³ Khulna University interviews, 10.11.09, Thomalla et al 2005:4, IPCC Working Group II report 2007:chapter 10, section 10.6.1

¹⁴ Nicholls et al 1995, cited in Thomalla et al 2005:4

of salt in the river water. This effect would worsen if there is less freshwater flow in rivers, for example due to drought, dams or the melting away of Himalayan glaciers – there would be less river water to ‘flush out’ the salt water¹⁵. However, it is important to note that most water level increases in rivers are not due to climate change at present. Rather, higher rivers (with the attendant problems of overflowing embankments etc) are because the silt in the rivers sinks instead of flooding the land, and raises the river beds.

At present, salinity in river water has exacerbated the inundation problems from Cyclone Aila. The tidal surge during the cyclone rushed over or broke rivers’ embankments and covered farmland in saline water. This means that even after the water has subsided and the land is dry, salinity will continue to harm crop cultivation, grazing, tree growth etc for years.

“It is important to note that most water level increases in rivers are not due to climate change at present. Rather, higher rivers are because the silt in the rivers sinks instead of flooding the land, and raises the river beds. “

Sea water does not only harm that which it covers. It also seeps into the groundwater table and surface water near the coast¹⁶. Shallow and deep tube wells bring up brackish water. Many of these lush and moist places suffer a lack of potable drinking water – with women walking kilometres to find water; an entire union¹⁷ without a source of non-saline drinking water; reports of people having to go to the government crocodile farm in Satkhira for water because it was the only place with access to fresh water, for the crocodiles¹⁸.

Saltwater is also absorbed into the soil, making it difficult to grow crops. This salinity is already a problem in the southwest. The majority of our informants mentioned soil salinity as a problem. The yields of important crops such as paddy and vegetables, coconuts, betel nuts, fruit and grazing for livestock decline in saline soils. Native fish species disappear. It even affects livelihoods such as pottery – saline clay is unsuitable for making ceramics¹⁹. Salinity would become both more widespread and more intense from climate change-associated sea level rise.

1.4 Irregular weather patterns and rising temperatures

Informants are already noticing changes in the traditional weather patterns of the Bangladeshi seasons, a frequently cited climate change-related phenomenon due to rising temperatures. People mention a blurring of the six Bangladeshi seasons: “We used to have six seasons, now we only have three. Summer, winter and the rainy season”²⁰. Others mention that the winter arrives later and is milder: “When I was growing up, we used to need sweaters at this time of year [November]. Now we still have to run the fans.”²¹ Fieldworkers also observe that the monsoon is arriving later²² and that rains are less frequent but heavier. This means a great deal of uncertainty and vulnerability in the agricultural planting cycle: “Farmers sowed in the spring as usual but then there was heavy rain and all their seeds were destroyed”²³. Irregular weather obviously increases the risks for farmers – who are the basis for the livelihoods of 60% of Bangladeshis.

¹⁵ Personal communication from Mr Tommaso Alacevich, Associate Professional Officer, FAO Bangladesh

¹⁶ Dr Datta, interview 19.11.09

¹⁷ Union is the lowest administrative tier in Bangladesh. Source: interview with Life Association, an NGO that gets its water from the neighbouring union.

¹⁸ Interview with Life Association, Bagerhat, 16.11.09

¹⁹ Group discussion with Nabolok field office staff, Mongla, 14.11.09

²⁰ Field officer in group interview with Nowabbenki Gonomuki Foundation staff

²¹ Interview with Life Association field staff, 16.11.09

²² The 2009 monsoon was about a month late throughout South Asia

²³ Interview with Life Association field staff, 16.11.09

2. Civil society responses to climate change

Now that climate change is a prominent issue for international concern, there are calls for NGOs to step in and 'do something'. Some Bangladeshi NGOs haven't engaged with climate change yet but others are vociferous and active. The following section starts with a few NGO approaches – some of which confuse current man-made problems with climate change. The second half goes into some detail about the national policy framework for dealing with climate change, and the role for NGOs in them.

2.1 Rising water: the common hype and man-made realities

Dr Atiur Rahman of BCAS, the best known personality on climate change from Bangladeshi civil society, has an irresistible introduction for his speeches: "In Bangladesh, climate change has a taste. It is the taste of salt". This evocative phrase reflects reality: in many areas of south-west Bangladesh, water from pumps, tubewells and taps tastes salty. Salinity intrusion in freshwater and soils is a persistent problem. Increased flooding and the inundation of farmland (or 'waterlogging' as it is called in Bangladesh) is another climate change risk that is already widely observed in south-west Bangladesh.

But are these problems due to climate change? Many of the symptoms that are predicted to follow climate change can already be seen in Bangladesh, and NGOs are not slow to label this climate change and to talk about climate refugees. However, the causes are often something else: man-made causes, or a combination of weather events and man-made circumstances.

For example, the salinity intrusion and prolonged inundations mentioned above are partly due to the practice of poldering, or raising embankments next to the rivers. This protects farmland from flooding. But polders have been erected in so many places that the rivers no longer flow freely – in central southwest Bangladesh the delta is moribund²⁴, that is, dying. Because the rivers can't spread out and flood the land, they also don't deposit the billions of tons of silt that they carry: instead the silt sinks to the river bed and raises it.

"But are these problems due to climate change? Many of the symptoms that are predicted to follow climate change can already be seen in Bangladesh, and NGOs are not slow to label this climate change."

The river channels become shallower which increases the risk of overflowing and flooding the nearby land. After such a flood it may be impossible to drain the land because the riverbed is now at a higher level than the farmland.

During Cyclone Aila in May 2009 many embankments broke and let brackish or sea water flow into villages, displacing almost 40,000 people whose land and homesteads were inundated. Six months later, thousands are still unable to return home. People and NGOs are referring to them as 'climate refugees'.

In a similar way, when people mention soil salinity as a climate change problem, it sometimes emerges that this salinity is actually caused by shrimp farming²⁵.

"This climate change policy will help attract outside funding, but the diagnosis is wrong. This is a development disaster". (Dr Datta, 10.11.09). So, NGOs may assist 'inundation refugees' or popularise the use of saline-tolerant crops or stimulate livelihoods as alternatives to saline-threatened agriculture. While they may or may not label this as climate change work, it is important to note that most local NGOs are already addressing issues of the type that occur now, but that stand to be exacerbated with climate change. Hence the emerging focus on community-based adaptation to climate change is well-suited to the Bangladeshi NGO landscape – it is an approach which involves building climate change concerns into existing community development. Community-based adaptation means building on a longstanding NGO–community relationship to

²⁴ Interview with Dr Dilip Kumar Datta, University of Khulna, 19.11.09

²⁵ Internal PRIP Trust study with Aila-affected people in south-western Bangladesh, July 2009

consider people's existing adaptation mechanisms, discussing options and planning for – adapting to – the future.

We will discuss these problems that resemble climate change further in the Khulna context section (section 3). The main message here is that the concepts are often mixed and it is difficult to untangle whether a specific problem (or development intervention to solve it) is due to 'normal' weather shocks, human interference, or climate change.

In the words of Abu M Kamal Uddin, Programme Manager at the Climate Change Cell, the government body coordinating a climate change response: "We need to demystify climate change. It is nothing new. We are looking

"Most local NGOs are already addressing issues of the type that occur now, but that stand to be exacerbated with climate change... the concepts are often mixed and it is difficult to untangle whether a specific problem (or development intervention to solve it) is due to 'normal' weather shocks, human interference, or climate change."

at increasing frequency and magnitude of weather events, therefore increased hazards... The impacts of hazards on vulnerable people can be severe: minor changes can lead to grave problems." Hence, many of the development interventions that are already taking place are relevant to support people to cope with climate change.

2.2 Climate change opportunism

Bangladeshi NGOs are very adept at angling their work to new trends in development, and climate change is no exception. A typical rural development NGO may be structured around providing microfinance to certain areas (this also funds its activities) and add different projects according to their perceived requirements - and funding opportunities. One well-established NGO practitioner describes the pattern in one NGO: "They start with microfinance, but then they notice that people can't read so they start an adult literacy programme. Then people need to do something useful with the loans so they run training on income-generating activities and alternative livelihoods. Then they start noticing that the women's position is weak so they do women's empowerment. And so on."²⁶ Such an impetus may lie behind the eclectic mix of activities that many local NGOs run.

Having said that, many NGO activities are also motivated by access to funds. In Bangladesh large-scale, countrywide initiatives in recent years include the government-initiated Total Sanitation programme which added WATSAN (water and sanitation) to the portfolio of many NGOs. Other donor priorities are good governance, women's empowerment and now, climate change. It is worth noting that as well as a pressing issue, the NGO sector considers climate change to be a new money-magnet. Some of our informants expressed this crassly: "NGOs will do whatever they get funded to do."²⁷

As we will see in section 5 some NGOs do advocate for difficult, political solutions that are unpopular and difficult to fund; people do mobilise and things do change for the better. Nevertheless it is a risky and physically dangerous undertaking compared to being part of the latest large-scale development programme.

2.3 Bangladesh and the moral high ground in international fora

Bangladesh has a specific image in international climate change negotiations and campaigns: of the country that stands to suffer the most from climate change, while having done the least to deserve it. This is the main weight behind its negotiation strength. In contrast, while Bangladesh is

²⁶ Personal communication from Mahmuda Khandker, Assistant Director Capacity Building, PRIP Trust 13.11.09

²⁷ Interviews with Professor Dilep Kumar Datta on 11.11.09 and similar sentiments expressed by Mr Rezau karim Chowdhury, Executive Director, COAST Trust on 2.11.09

the most populated megadelta in Asia²⁸, it has less economic clout than the Chinese megacities that are threatened by similar circumstances.

Atiq Rahman, Executive Director of BCAS, commented: “Yes, Bangladesh has the moral high ground in the same way that a beggar has, who can say that you will go to hell if you don’t give. The [international discussions] are all about technology.”²⁹ Nonetheless Oxfam and other international NGOs frequently invite Bangladeshi coastal dwellers to events to describe their suffering from phenomena akin to climate change, e.g. in the Effective Climate Change Hearings. Bangladesh is also active in the Most Vulnerable Countries grouping and its government lobbies internationally.

2.4 Bangladesh policy and institutional framework: the role of NGOs

Bangladesh has a number of policy initiatives for climate change at the national level. The current government of Bangladesh – under the Awami League led by Prime Minister Sheikh Hasina – has made climate change reparations and adaptation a high-level policy issue both internationally and in-country. NGOs have an implementation role within the policy framework: to link the grassroots with higher-level processes, as an “interface between communities and the government”³⁰. There is some reported friction at the very top between two ministries, the Ministry of Environment and Forests (MoEF) and the Ministry of Food and Disaster Management (MoFDM), over which ministry will control climate change funding³¹. Large initiatives, such as embankment construction and maintenance, belong under the mandate of line ministries but according to the Climate Change Cell “we are still awaiting vertical coordination”³². These and other institutional questions are currently delaying the implementation of plans and disbursement of funds.

The following are the main policy documents that steer climate change work in Bangladesh³³:

2.4.1 National Adaptation Plan of Action (NAPA) 2005

The NAPA was drafted under the auspices of the UNFCCC (United Nations Framework Convention on Climate Change) in 2005. It takes a sector approach to climate change, rather than the more recent, joined-up approaches. The NAPA analyses information on the exposure and sensitivity of Bangladesh to different climate change impacts and charts possible responses. It focuses on six areas: 1) Forestry, Biodiversity and Land Use, 2) Agriculture, Fisheries and Livestock, 3) Water, Coastal Areas, Natural Disaster and Health, 4) Livelihoods, Gender, Local Governance and Food Security, 5) Industry and Infrastructure, and 6) Institutional and Policy Processes.

2.4.2 Bangladesh Climate Change Strategy and Action Plan (BCCSAP) 2008

The BCCSAP takes the NAPA forward and will provide the main basis for the climate change efforts of Bangladesh for 2009-2018. The two parts of the BCCSAP include a background of physical, social and policy bases for a climate change strategy for Bangladesh, followed by a set of 37 programmes based on six ‘pillars’, or areas of intervention. It envisages tasks for a wide range of actors, of whom NGOs are only one. These programmes reflect current and future concerns, and “should be implemented even if there is no climate change”, according to Dr Datta, Head of Environmental Sciences at the University of Khulna.

The BCCSAP pillars or themes are:

1. Food security, social protection and health – for vulnerable groups

²⁸ Cruz et al 2008

²⁹ Interview with Atiq Rahman, BCAS, on 31.8.09

³⁰ Interview with Abu M Kamal Uddin, Climate Change Cell, 2.11.09

³¹ Personal communication from Ms Cristina Coirolo, citing forthcoming paper by Thomas Tanner.

³² Ibid – CCC interview

³³ Sources: BCCSAP 2008; personal communication from Cristina Coirolo, PhD candidate at the Institute of Development Studies, University of Sussex, July 2009; interview with Mr Abu M Kamal Uddin, Programme Manager, Bangladesh Climate Change Cell on 2.11.09; and Thomalla et al 2005.

2. Comprehensive disaster management – building on existing systems
3. Infrastructure – including maintenance of embankments and cyclone shelters
4. Research and knowledge management
5. Mitigation and low carbon development – an area where Bangladesh has lots of potential
6. Capacity building and institutional strengthening.

“The BCCSAP programmes should be implemented even if there is no climate change.”

The BCCSAP includes a wide range of climate change responses, many of them non-traditional and innovative. Examples include developing digital elevation models (DEM) of Bangladesh; initiating micro-insurance schemes; improving the drainage capacity of urban sewers; exploring coal reserves and investing in clean coal energy; assessing the macro-economic impacts of climate change; and revising the Planning Commission pro formas to include climate change information in proposed government programmes. The contributions from NGOs that are outlined in the BCCSAP are in section 2.4.4.

The implementation of the BCCSAP rests with the ministry of Environment and Forests: “The Climate Change Action Plan will be implemented under the overall guidance of the National Environment Committee, chaired by the Chief Adviser. It will be coordinated by concerned Ministry of Environment and Forests. Programmes funded under the Plan will be implemented by Ministries or their agencies, with the involvement, as appropriate, of civil society and the private sector” (BCCSAP, p. xvi). The BCCSAP outlines 37 programmes to be implemented by different stakeholders. The funding for implementing BCCSAP – estimated at \$5 billion a year - is not yet confirmed.

The BCCSAP takes a more holistic view of climate change than the NAPA and shows how climate change policy thinking has changed from 2005 to 2008.

2.4.3 The Climate Change Cell

The Climate Change Cell (CCC) is a DFID- and UNDP-funded body under the Ministry of Environment and Forests and the Comprehensive Disaster Management Programme (CDMP) that is tasked with integrating climate change considerations into various aspects of national planning. They lobby the Planning Commission to include climate change directives in the national development plans (to be implemented by professionals and funded by the line ministries). They also conduct training, capacity building and disseminate information to local government councils – publishing a range of information booklets in Bangla, also available for free online. The CCC also provides climate modelling on the local scale, for a fee.

2.4.4 Practical implementation questions

The government’s climate change policy only deals with the Upazila level – or intermediate local government. Unusually, in this case it appears that the government has abdicated responsibility for grassroots – that is, people-level – development and left the responsibility for the population’s welfare to the third sector. According to the CCC, the role of NGOs is to bridge this gap and bring climate change information and adaptation to communities.

Civil society is not discussed in a central position in the BCCSAP. NGOs are mentioned as implementers in some of the 37³⁴ BCCSAP programmes in collaboration with the responsible line ministries. NGOs are needed for the following programmes³⁵:

Theme 1: Food Security, Social Protection and Health

- T1P1 – research on climate-resistant cultivars. NGOs to field-test new varieties.
- T1P2 – climate-resilient cropping systems: NGOs to support R&D with the Bangladeshi Rice Research Institute (BRRI)

³⁴ Increased to 40 programmes by the end of 2009

³⁵ BCCSAP 2008: Annex 1, pages 31-65

- T1P4 – adaptation in fisheries. NGOs to work with the Ministry of Fisheries and Livestock on threats and adaptation mechanisms for fish.
- T1P5 – adaptation for livestock. NGOs to work with the Ministry as above.
- T1P7 – water and sanitation for climate-vulnerable areas. NGOs to work with the Ministry of Local Government to monitor access to safe water and forecast future needs. Investing in additional water and sanitation facilities.
- T1P8 – livelihoods. NGOs to work with various line ministries on climate resilience towards eroding income, employment and health.
- T1P9 – protecting the livelihoods of vulnerable groups. Various line ministries with NGOs to safeguard the livelihoods of vulnerable groups and study the effects of climate change on women.

Theme 2: Comprehensive disaster management

- T2P1 – improving flood forecasting and early warning systems. CSOs to work on community awareness raising.
- T2P2 – improving cyclone and storm-surge warnings: community awareness, as above.
- T2P3 – public awareness on climate resilience: NGOs, with ministry and the Red Crescent.
- T2P4 – risks management against loss of property: NGOs can take part in running insurance system.

NGOs are not expected to work on the themes of infrastructure (T3) (except for the option to construct cyclone shelters), research and knowledge management (T4), or mitigation and low carbon development (T5).

Under T6, capacity building and institutional strengthening, NGOs are listed under:

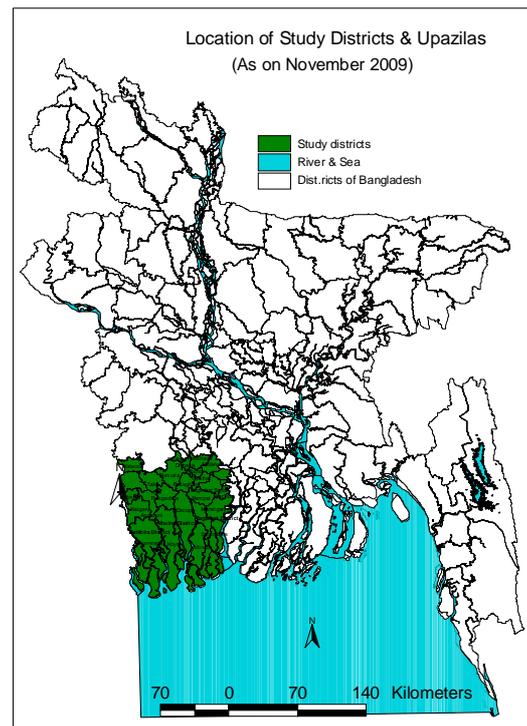
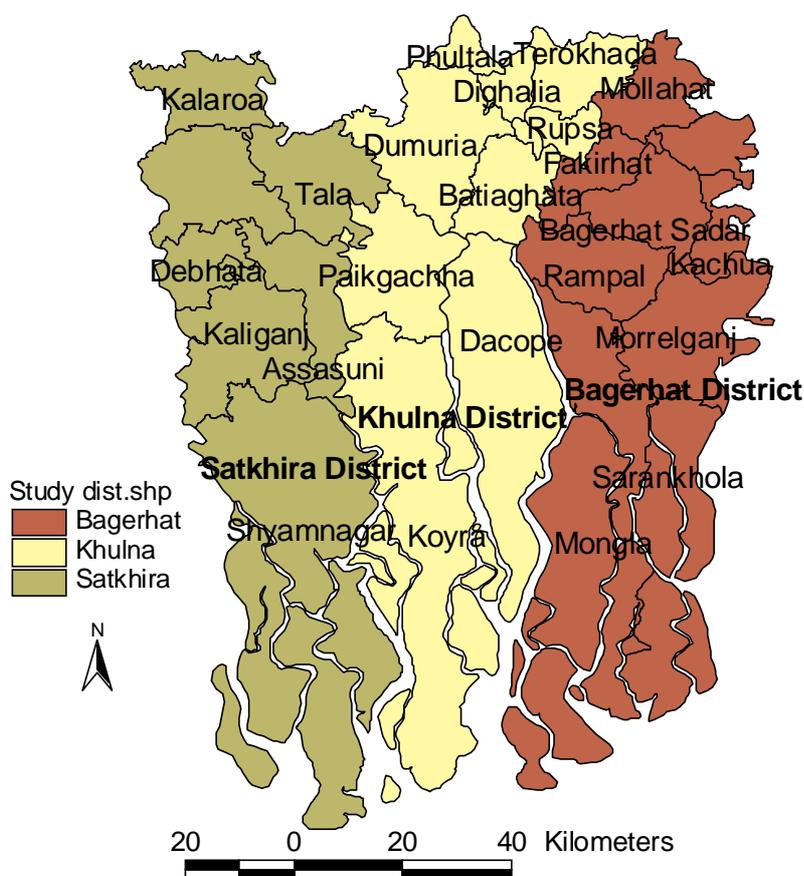
- T6P3, Strengthening Human Resource Capacity, to improve capacity to access international climate change funds
- T6P4, Strengthening Institutional Capacity, to conduct organisational reform of various institutions (including government - not only other NGOs) and to set up mechanisms for intra-institutional coordination to manage new adaptation and mitigation funds.

The bulk of the role for NGOs as envisaged by policymakers in BCCSAP is in community liaison, awareness-raising, crop demonstration etc. But it is interesting to see the BCCSAP invites NGOs to improve linkages between institutions and perhaps improve the capacity of government officials to deal with climate change. Such a view reflects an opinion that NGOs deal mostly with service delivery and micro-finance; they are not seen in the role of credible research institutions or activists/lobbyists.

Meanwhile, the NGOs on the ground that we spoke to are mostly not aware of the national-level policy and do not see it as relevant to their work. We will see below in section 5 whether this division of tasks reflects the current activities of NGOs in Khulna Division.

3. The Khulna context

Location of Study Districts & Upazilas
(As on November 2009)



It's a long way from the national policy level to the realities of running a community support programme in south-west Bangladesh. Geography, economics, society, politics and infrastructure all shape the lives of people and the work of NGOs that try to support them. This section discusses some of the less well known factors that shape everyday life and climate change risk and adaptation in the three districts Satkhira, Khulna and Bagerhat.

3.1 Geography

The map of Khulna Division shows three districts in the south-western corner of Bangladesh that resemble human hands pointing downwards: Satkhira, Khulna and Bagerhat. The 'fingers' of the districts show how a multitude of river mouths serrate the land as they flow into the Bay of Bengal: the southern coasts are more river than land. The last parts of the land, reaching into the sea, constitute the Sunderbans forest of mangrove and other trees. There are few permanent settlements here except for some indigenous communities and fishermen, woodcutters and honey collectors who work at great risk of attacks from Royal Bengal tigers. The mangrove belts protect the land from Cyclone winds and surges. However, much of the Sunderbans is suffering from unauthorised logging, pollution and other man-made ecological stresses.

Further inland is farmland, interlaced with the delta of brackish rivers. The terrain is very young in geological terms – an alluvial plain only 6-7,000 years old³⁶. Many of the rivers are poldered – enclosed behind embankments to prevent flooding. In some areas the poldering is so widespread that Professor Dilep Kumar Datta, Head of the Department of Environmental Science at Khulna University, calls it a 'moribund delta' – the rivers can't flow, flood and deposit silt as they have for millennia. At times the rivers are blocked (illegally) for other reasons too, such as creating

³⁶ Interview with Dr Dilep Kumar Datta, 10.11.09

freshwater ponds or reclaiming farmland. It is possible to apply for a government lease of standing waterbodies, but not flowing bodies. Some people block off rivers and lease the resulting 'pond' from the District Commissioner – a practice which the low accountability of government officials makes possible³⁷. The famous river Koppotakko in Tala, eulogised by Bengali poet Michael Madhusudan Dutta in the mid-1800s, has been severely constricted by land reclamation and is considered 'dead' since 1985³⁸.

In many places the salinity of the water (in rivers and the groundwater) has made the land unsuitable for rice farming, but very well-suited to shrimp farming. Shrimp farming has been a lucrative but controversial economic activity in Bangladesh since the 1970s. Shrimp farming is now also practiced further inland from the sea, on former farmland: large swathes of land lie seemingly barren under shrimp gher (ponds).

The tectonic plates under Bangladesh are moving – the country is slowly tilting towards the east, known as subsidence. This geological phenomenon has caused the mighty river Padma to shift its course towards the east, laying waste to established trade routes and cities along its old banks. This means that the coast is sinking, even as the risks from sea level rise is increasing.

3.2 Poldering

Polders are earthen embankments along rivers. They are the key structural component of the flood management system in Bangladesh. Poldering started in the 1960s under the Pakistani government, with support from the Dutch government³⁹.

Professor Datta, head of the Environmental Science department at Khulna University, and his colleagues hold that structural river management (built structures) is an inappropriate response to an active delta like Bangladesh. He cited the example of the Mississippi in the USA, where structural management was removed in the 1950s, improving the health of the river. Yet Bangladesh has started to implement wide-scale structural management now, financed by a World Bank loan. "This was a wrong strategy and it has led to the siltation of the rivers."⁴⁰ Siltation of riverbanks, again, causes the many problems described in section 2.1: brackish river water, risks of embankment damage and inundation that is then difficult to reverse, leading to a situation that favours shrimp farming over labour-intensive rice farming. Restricting flooding also means that the fertility of the farmland declines as it is not renewed with micronutrients from the silt⁴¹.

As explained in the BCCSAP, "the heights of the embankments were designed based on recent major floods and/or statistical analysis of past river stage data. For embankments along major rivers a 50 year return period was used"⁴². However, inhabitants are noticing that the water now regularly rises above the high tide mark on the polders.

The land inside polders is attractive to farmers – it is very fertile and protected from floods. As a result many people have moved into protected floodplain areas. In such settlements there is a risk of feeling a false sense of security, especially in districts where cyclones are relatively rare: the traditional approaches of building homes on raised mounds and of regularly maintaining the ridges between ponds and fields have been neglected⁴³. "When you have big embankments you forget the habits of putting more soil on the courtyard, repairing small embankments. People always used to have some sort of boat but not any longer. Young people don't know how to row, local adaptation practices are destroyed"⁴⁴.

³⁷ Ibid – Dr Datta

³⁸ Personal communication from Rokeya Zevin Kaisari, PRIP Trust, 10.11.09

³⁹ Personal communication from Nurul Huda, Disaster Management Expert, PRIP Trust.

⁴⁰ Interview with Dr Dilip Kumar Datta and colleagues, 10.11.09

⁴¹ Interview with Dr Datta, ibid.

⁴² BCCSAP 2008: 46

⁴³ Ibid BCCSAP, Interview with Dr Dilip Kumar Datta 19.11.09

⁴⁴ Dr Dilip Kumar Datta 19.11.09

Another sign of how polders make it possible to ignore the dangers of flooding is farmers' choice of rice varieties. Farmers typically choose to grow short-stem, high yielding varieties of paddy because of the security provided by the embankment and associated drainage systems⁴⁵ - a practice where the embankments and high-yielding varieties are mutually dependent. Long-stem local rice, suitable for fields with flood risk, yields less and is not suited for being grown on poldered land. Growing short-stem rice, again, requires polders in place. According to Dr Datta this is a systemic error at the beginning of a process that can't be reversed without undoing the entire initiative. "And there are hundreds of errors like this."



These fields in Satkhira are protected by an embankment three kilometres away. After Cyclone Aila the area was inundated and one crop was lost, but the farmers have managed to get back on track with the next crop.

The Bangladesh Water Development Board (BWDB) is charged with maintaining the embankments. However, as stated in the BCCSAP: "Many of them are in poor shape due to lack of proper maintenance. Local people also sometimes damage embankments by cutting through them to drain water from the land into the rivers. Although these gaps are filled in again, these points remain vulnerable to breaches. In many places the [related] structures, such as sluices and regulators no longer function properly." Sometimes people also cut down the stabilising trees from the banks. Given this, it is very important to rehabilitate existing river flood embankments so that they are fully functional and able to provide the level of security for which they were constructed. Responsibility for these infrastructural works lies with the Ministry of Water Resources – it is too large-scale for most NGOs to engage in.



An embankment that was damaged by Cyclone Aila. It doubles as a road and a base for additional constructions.



The same embankment. Note that the houses constructed on the embankment have been raised another metre on top of the embankment.

We were conducting interviews six months after Cyclone Aila, and the damage it wrought on embankments, the flooded farmlands and the displaced people were still a very fresh and urgent issue. The Bangladeshi Army had been repairing embankments and had to solicit help from locals

⁴⁵ Op cit. BCCSAP, interview with Mr Khaled Husain, Rupayan 10.11.09

because of a lack of funds: people contributed labour and materials, but many kilometres of embankments were still broken.

Hence, many NGOs that were interviewed stated that dredging riverbeds and raising, strengthening and constructing embankments are priority issues to protect inhabitants against the increasing flood risks from climate change. However, Dr Datta counters this view as insufficient and misdirected: “Dredging won’t help. During the monsoons our rivers carry the highest amounts of sediment in the world, hundreds of times as much as the mighty Amazon... There are meters of sediment [accumulating] each year. How could we dredge it? Where would we put it? In the Bay of Bengal? This may be possible with calculators and on paper, but not in practice. Ethically speaking it destroys the environment, and practically speaking it is not feasible.”⁴⁶

River management is clearly a complex and difficult issue that pits the current wish for more stable farmland against the increasing flooding risks that it brings with it. Meanwhile there are no simple alternatives to poldering or solutions on how to deal with the problems they already cause. NGOs have to choose between advocating a solution that makes problems more acute in the medium term, but where the alternatives – getting rid of polders and structural water management - would mean disruption in the lives of millions. Such dilemmas will become only more pressing with climate change.

3.3 Shrimp farming

Shrimp is a lucrative export earner for Bangladesh but it has serious social and environmental drawbacks: the export income from shrimp is not reinvested for the benefit of the areas where shrimp is farmed⁴⁷. Two main types of shrimp are grown in southwest Bangladesh: bagda and golda. Bagda shrimp need salt water ponds whereas golda can be farmed in ponds with lower salinity, e.g. in rice fields in rotation with rice, vegetables and fish. Bagda shrimp are larger, more popular and more valuable.



Shrimp farms, Satkhira district.

Because Bagda shrimp thrive in saline water and have high value added they are a popular choice for farmers. Some shrimp farms lie in coastal areas where the water is naturally too brackish for growing rice but other farms have been converted by letting saline water into (former) rice fields.

However, the saltwater ruins the land and it needs years of careful management to rehabilitate former shrimp ponds for growing rice. The salt and chemicals in the shrimp ghers (ponds) pollute the soil, saturating it with salt and sulfur⁴⁸. Another effect of shrimp farming is rural unemployment: while rice farming needs 40 people per acre shrimp farming only needs two. There are many bitter stories of farmers leasing out their land for shrimp farming only to realise that the lease income isn't enough to sustain them. Bagda farming also requires economies of scale: you need 50 acres to make shrimp farming viable – an amount of land normally belonging to 35-40 people. Each

⁴⁶ Interview with Professor Dilip Kumar Datta, Khulna University, 29.11.09

⁴⁷ Interview with Mr Khaled Hosain, Rupayan, 12.11.09

⁴⁸ Interview with shrimp entrepreneur Mr Kamruzzaman Tuku on 19.11.09

lease needs an advance of 800,000 taka paid, plus investment in embankments, sluice gates, fry, staff etc. This capital-intensive nature makes it ill suited for small farmers and tends to concentrate the ownership in the hands of those with enough capital to invest up front. Shrimp entrepreneur Mr Kamruzzaman Tuku told us: “Where else can you make this kind of profit except by robbery?”⁴⁹

Indeed, there are persistent rumours that shrimp farmers and investors use 'musclemen' (hired thugs) to intimidate people to give up their land for shrimp. Mr Tuku stated “You need influence to convince people give up their land – social, economic, political influence and muscle.”⁵⁰ Mr Tuku admitted freely to 'managing' Union Parishad officials :”Government guidelines are not implemented and because we have money, there are no worries. For the staff and for the government, shrimp is money.”⁵¹ There is also a rumour of shrimp farmers cutting through embankments on purpose to inundate farmland with saline water, after which it is useless for anything other than shrimp farming and can be leased at crisis rates⁵².



Local farmers, Botiagata village, Khulna. The area was covered in shrimp farms under the protection of a local strongman/ businessman in the mid-1990s, who was ousted with the help of the 1996 Awami League government. The villagers have managed to rehabilitate their rice fields from the shrimp ponds.

Large-scale shrimp farming in southwest Bangladesh is becoming less productive over time because the nutrients in the pond soil are becoming depleted, the land becomes polluted, and shrimp diseases are becoming more common: “the land has been under water for a long time, there is no sun, no air - the plankton [that shrimp feed off] are not growing as before”⁵³. The long-term viability of shrimp farming is therefore in question. Similarly, climate change may mean that exporting frozen shellfish by air, as happens with Bangladeshi shrimp, becomes prohibitively expensive. Shrimp processing is another ambivalent area in that it employs people – especially women – but the labour practices can be exploitative⁵⁴.

The comments above are a good illustration of the environmental, social, economic, and political problems intertwined with the shrimp trade.

On the other hand, golda shrimp can be grown on a small scale on homesteads, and rotated with crops. The NGO NGF is promoting organic shrimp culture, supported by a German buyer, and others like Caritas are encouraging shrimp culture in rotation with vegetables, rice and carp.

Shrimp farming is one of the most prevalent environmental problems in south-west Bangladesh today, and inflicts problems that resemble climate change impacts on inhabitants: soil salinity and inundation of land. But it also concentrates wealth, creates rural unemployment, undermines governance and local self-sufficiency: factors that make the rural poor population increasingly vulnerable to poverty shocks – and climate shocks.

⁴⁹ Interview with shrimp entrepreneur Kamruzzaman Tuku on 19.11.09

⁵⁰ Ibid

⁵¹ Ibid

⁵² Mr. Subhash Saha, freelance consultant, Ms Zakiya Akter, Banoful, and Dr Datta

⁵³ Interview with shrimp entrepreneur Kamruzzaman Tuku as above

⁵⁴ Interview with Mr Khaled Hosain, Rupayan, 12.11.2009

3.4 Lack of political patronage at the centre

Why is the government not taking more decisive action on deforestation, pollution, shrimp exploitation, river siltation and climate change – severe problems for southwest Bangladesh? One response, from the University of Khulna⁵⁵, is that the region's political representation in central government is weak: the region is traditionally underrepresented in budgetary allocations and in influence. The southwest also has a large proportion of Hindu inhabitants – many of them disenfranchised Dalit - which reduces its influence with the Muslim majority. Some Cabinet ministers in the current government are from Khulna division but allegedly their influence is not enough to counter the longstanding sidelining of the region.

3.5 Minorities and marginalised people

There are people who fare worse than others under normal circumstances and even more so in emergencies: disabled people, Dalit (casteless) and ethnic minorities. Women in southwest Bangladesh also face specific problems. These groups need different interventions in order to cope with disasters, and by extension, with climate change.

1. Disabled people

Disabled people are often physically unable to move to safety by themselves during cyclones or floods, and risk remaining in homes and drowning or perishing under collapsing roofs if their family members can't carry them. Old cyclone shelters don't have entrance ramps – only stairs – although some new ones do feature ramps⁵⁶. This should make access marginally less difficult.

2. Low caste people (Dalit)

Although Bangladesh is a predominantly Muslim country there is a proportion of hereditary low caste or 'untouchable' Bangladeshis who are compelled to work in unsavoury and dangerous occupations. Caste is a Hindu concept but in Bangladesh it is acted on by Muslims as well. Some Dalit are tanners, sewage and garbage workers, sweepers, cobblers or barbers, but others are ordinary fishermen, farmers or farm labourers, or indeed, run NGOs. Dalit are often excluded from the rest of society, e.g. not allowed to share utensils with others or enter tea stalls or restaurants. 80% of Dalit are landless and half live a hand-to-mouth existence⁵⁷. They are systematically marginalised and even though they enjoy quotas of government posts (primarily as cleaners⁵⁸) and places in higher education, many remain unaware of their rights. For those who live directly from natural resources (such as fishing or wood gathering), any weather-related shocks have an immediate destructive impact on their livelihoods.

During the field research for this paper we visited Dalit NGO Parittran which supports Dalit rights, where the research team were able to observe both environmental disaster and Dalit discrimination. Parittran's office is next to the No. 5 Tetulia Union Parishad office where people had taken refuge from inundation: 400 families whose homes and farms are under saline water following an embankment break were camped in temporary housing in the courtyard, on the roof and in the offices and waiting for a dredger to dredge the Kopotakko river channel and drain the water from their lands. The Union Parishad had kept only two offices for themselves and made the rest available to the displaced people. Half the families were Dalit (Hindu) and the other half Muslim. Only the Muslims were allowed to seek shelter inside the building, while the Dalit had to take the space outdoors next to the busy Khulna-Satkhira road.

The above example shows that Dalit are disadvantaged when it comes to accessing post-disaster rehabilitation. During cyclones Dalit are also not welcome in the cyclone shelters as the other

⁵⁵ Interview with Dr Dilip Kumar Datta, Department of Environmental Science, University of Khulna 10.11.09

⁵⁶ Interview with Mr. Michael Biswas, Caritas, and Ms Anita Roy, KNKS.

⁵⁷ Interview with Mr Milon Das and colleagues, Parittran, 15.11.2009

⁵⁸ The reserved cleaning jobs for Dalit are frequently filled by non-Dalit people who then 'subcontract', or sell, the jobs to real Dalit – in exchange for a large share of the wages. Personal communication from Ms Mahmuda Khandker, PRIP Trust, based on her work with Dalit in Rangpur.

citizens do not wish to share spaces with them⁵⁹. This example shows how prejudice is stronger than need. Climate change management plans need to take into account the prejudices and marginalisation between the different rural populations that need support. Dalit NGOs are, similarly, excluded from networks or cooperation with NGOs that 'work with everybody' – in practice this often means 'everybody except Dalit'⁶⁰.



Displaced people camping at the Union Parishad office and subsisting off cash for work – their land had been inundated for four months.



Whole families live on the roof of the Union Parishad offices.



The waterlogged area behind the Union Parishad office – stagnant water next to the latrine.

3. Ethnic minorities

There are many ethnic minorities in Bangladesh, with distinct languages and customs. We visited the NGO Sundarban Adivashi Munda Sangstha (SAMS) that supports the Munda minority in Shamnagar. Because of their dietary habits and culture Munda are also considered 'untouchable' by both Hindu and Muslim Bangladeshis. They live in a remote area and have little access to

⁵⁹ Interview with Mr Milon Das and colleagues, Paritran, 15.11.2009

⁶⁰ Ibid

mainstream life. During Cyclone Aila people from SAMS, with the help of the local minority supporter Father Luigi Paggi, set out in a fishing trawler to rescue Munda people marooned by the storm. They picked up 18 families and found shelter for them in a disused fish processing factory. Munda people are marginalised and, like Dalit, are typically not welcome in cyclone shelters. They also lack the assertiveness and confidence to demand their rights, and hence feel uncomfortable dealing with the majority population. When asked what would have happened to the families if SAMS had not rescued them, Executive Director Krishnapada Munda said “relief and disaster people don't go there [to the remotest areas] – there's nobody. Some may have died, their belongings would have been under water and they would have been attacked by diseases because they were marooned.” In November, six months after Cyclone Aila, several Munda families still lived in temporary shelters in one Munda village as their land was inundated twice a day, during the tides⁶¹. Other Munda youths lived, grew vegetables and went to school at the centre next to the SAMS office run by Father Paggi.

Accessing mainstream disaster – or climate change - support is still far from easy for ethnic minorities.

4. Women

Bangladesh is a patriarchal society and women are at a disadvantage in many respects, both formally and informally. One important effect of the lack of governance in Bangladesh is that law enforcement is weak, especially in cases involving crimes against women. This combines with the influence of the Muslim tradition of purdah (or separation of women from men) that seems to have left men unaccustomed to dealing with female strangers in respectful ways. We are left with a situation where women are considered to be at high risk of predation from men, in the knowledge that there is little recourse to formal justice in the case of gender-based violence. Hence precautions are taken to minimise women's exposure to risk outside the home.

Climate change and disasters conspire to expose women to a higher than usual risk of violence. For example, women risk rape and abuse from lack of privacy in cyclone shelters, temporary housing and relief queues. Gynaecological problems also proliferate where women can't use private space to go to the toilet or take care of their menstruation – they may have to wait until it gets dark to relieve themselves without being seen. This is not a problem for men.

Less obvious risks mentioned by informants include insecurity and a lack of privacy in homes because fencing plants suffer from soil salinity. Women also face longer distances to drinking water and fuel wood sources⁶². In Bagerhat men have started fetching the water because it is considered too risky and indecorous to allow women to stray far from the home, especially when pregnant⁶³.

Climate change interventions should take into account a situation where women are at significant risk from sexual violence while also having very little recourse to justice or retribution. Many projects for economic empowerment, for example, may require more mobility and autonomy than Bangladeshi rural women possess at present.

4. The Khulna NGOs landscape

This study consulted a small number of the NGOs active in Khulna division: SMILING NGOs and large, well-known players. Some of the large players are also part of SMILING, but there are many more small NGOs that did not take part in this research project. This section details the existing initiatives and future needs of different types of NGOs. There is a detailed section with recommendations for international NGOs who may wish to set up climate change projects in south-western Bangladesh with local partner organisations. This section can be considered an

⁶¹ Interview with SAMS: Mssrs Krishnapada Munda I and II, Mr Gopal Chandra Munda, Mr Provash Munda and Mr Tapon Kumar Munda, 16.11.09

⁶² Interview with Life Association field staff, 17.11.09

⁶³ Interview with Life Association management staff 17.11.09

incomplete list of NGOs, networks and actors in the region, and can be used as a starting point when looking for organisational partners.

4.1 Big climate change players

There are a handful of well-known NGOs with nationwide reach in south-western Bangladesh, and some national NGOs with strong Khulna-based activities. The ones with the strongest climate change track record that were interviewed for this report are:

- Shushilon: Large and well-respected NGO, having an initiative on climate change since 2003 when it worked on CARE's Reduced Vulnerability to Climate Change programme.
- Nabolok: Has comprehensive climate change information programmes, runs the Network on Climate Change, Bangladesh (NCC,B) together with Pradipan, has sent representatives to IPCC meetings including COP15. Envisions government officials as climate change activists.
- Pradipan: considers that wide-scale responses are necessary for climate change adaptation, both at the policy, livelihoods and governance levels⁶⁴.

Some relevant national-level NGO actors (based in Dhaka) include BCAS (Bangladesh Centre for Advanced Studies), the best-connected organisation on climate change; COAST Trust, an NGO focusing on rights activism for the coastal areas; BDPC (Bangladesh Disaster Preparedness Centre), a pioneering disaster readiness NGO with a small network (NC4) of its own partner NGOs for mutual information about climate change.

It is worth noting that we spoke to other large, well-regarded NGOs, but we have only mentioned here those who are known for their climate change work.

These large NGOs (and others like them that were not interviewed for this report) would tend to be the 'usual suspects' for INGO partnerships and donor funding. Nonetheless it is worth considering their capacity to increase and spread the positive effects of work through 'cascading', i.e. involving smaller NGOs in projects. There are other smaller NGOs that are as well run and have the same reach and commitment to communities.

4.2 Small players

For this study the research team focused on interviewing small and medium-scale NGOs with headquarters in Khulna, Satkhira or Bagerhat that are known to INTRAC and PRIP Trust through our capacity-building programme SMILING (Small Initiatives by Local Innovative NGOs). SMILING NGOs have benefited from training by PRIP Trust on local governance, health and hygiene, and disaster risk reduction; and in project planning, proposal writing and budgeting skills. All SMILING NGOs have the opportunity to apply for European Union (EU) funding for projects they have designed and those who secure funding continue to work with PRIP Trust on project management skills. SMILING NGOs are the focus of the section on approaches below. Some of these NGOs are members of networks; some have funding from INGOs or donors. Their staff numbers range from ten to 200.

NGOs at this size can rarely pay competitive salaries to their field staff. Hence it is not uncommon that staff leave for employment in other organisations once they are trained in something. Most of the SMILING NGOs we interviewed have added climate change to a wide repertoire of activities they run: at this stage it was not the main focus of any of them. Many were nonetheless interested to learn more about climate change as a phenomenon and as an opportunity.

⁶⁴ Interview with Ms Saudia Khandaker, Coordinator of NCC,B, Pradipan and Mr Mizanur Rahman Bijoy, Coordinator NCC,B, Nabolok, on 16.11.09

4.3 International NGOs

International NGOs (INGOs) work in different ways in Bangladesh. Some have decentralised country offices that run more or less autonomously with Bangladeshi staff. Examples include Oxfam GB, Caritas, Practical Action and CARE. Caritas runs its own Christian-inspired programmes in disaster management and service delivery. CARE, ActionAid and Oxfam were mentioned as convenors of useful networks, programmes and campaigns where smaller NGOs had participated as partners. Oxfam's Campaign for Sustainable Rural Livelihoods was mentioned as an especially successful networking effort.

Other INGOs may keep offices in Bangladesh but remain closer linked to their headquarters overseas. Some of these NGOs fund local NGOs' initiatives or involve them in campaigns or programmes but without the INGO being involved directly as an implementing partner. Bread for the World, Word and Deed, and CARE were mentioned as such INGOs. Now that climate change is becoming a headline topic it is very valuable for these local NGOs to have developed climate change programmes autonomously, before the advent of hype and received wisdom.

It is important to note that INGOs have a tendency to look for partners among the same pool of well-known Bangladeshi NGOs. INGOs should be aware of the good potential of these lesser-known local organisations and to explore cooperation possibilities with them. In this way INGOs can foster partnerships with local NGOs that are marginalised by the mainstream, such as disabled, Dalit or minority NGOs.

INGOs have a valuable role to play in supporting local NGOs' climate change work by:

- Brokering cooperation between organisations or spearheading networks
- Providing long-term capacity development support to local NGOs as they reconsider how to reconfigure their programmes in the long term to adapt to climate change
- Funding innovative ideas – or funding novel practices, or well-regarded but unfashionable work
- Providing clear, non-sensationalist, interactive information on climate change that conveys the ambiguities and controversies involved
- Providing, stimulating or disseminating useful ideas on how to adapt local NGOs' practices to climate change
- Linking local NGOs to national strategy
- Linking local NGOs to global strategy, networks and campaigns
- Linking local NGOs to other relevant actors so that climate change activities can be coordinated. Examples could be campaigns (international or national), university or research initiatives with useful findings, funding sources, training opportunities, local government coordinating initiatives etc.

One key role for INGOs would be to demonstrate a good example by eschewing turf wars and fragmentation/overlap of climate change efforts. INGOs can be less politicised than local NGOs – for better or worse – and have access to wider information resources (online information, research, and discussion forums). Hence INGOs have the opportunity to take a wider perspective and work towards more cooperation and efficient division of labour among civil society actors.

4.4 Networks

Networks can be a good source of climate change information, common action and support. One of the aims of this study was to chart which networks local NGOs use for their climate change work. It appears that collaboration on climate change is still embryonic.

When local NGOs in this research project were asked about whether they take part in networks, a typical response was 'We haven't joined any network, they are dormant or not good. But we've started a network on climate change. We are the convenors.' This gives a network 'map' of a multitude of small networks with limited membership or clout and disparate lead NGOs. On the other hand, some of the focus group discussions for SMILING NGOs (with 74 representatives taking part in small groups) revealed a desire to join a wider network for information and resources.

Those larger NGOs that took part in the SMILING focus groups of partner NGOs were reluctant to open their existing networks to all those present⁶⁵.

Thus it seems that these NGOs have cultures and political contexts that make it difficult for them to join together and cooperate for wider causes. The underlying reasons for this are complex and merit a separate study. The reasons may be related to the 'my net – your work' tendency, whereby the members find it difficult to follow up on network work outside of meetings. Another reason that keeps people from joining networks is the lack of funds and the need for members to invest money in the network – this is done with reluctance. Many of the successful networks are funded by INGOs.

Below is a list of some of the relevant networks mentioned by respondent NGOs:

- NC4 – by BDPC. This is the NGO Coordination Council for Climate Change. It has about 100 invited members who are partner NGOs of BDPC. It was started so that these NGOs could learn about climate change and incorporate it into their work. It meets sporadically and has an informal steering committee.
- NCC,B – Network for Climate Change, Bangladesh. Co-convened by large Khulna NGOs Nabolok and Pradipan, Unnayan Dhara and BASSA. Active and bold, e.g. ran a postcard campaign targeting the Prime Minister.
- Asroy Foundation has its own climate change network., Prevention of Climate Change. It has no external funds and is based on information-sharing for NGOs that work in the same five districts as Asroy.
- There are in theory district-wide networks for NGOs from each district. From what we heard only the Bagerhat network is functioning and useful.
- Coastal People's Network with BDS, Nabolok and Ypsa.

A network success story:

The Association for Land Reform and Development (ALRD) (assoc for land Ref Bangladesh ALRB?) conducts advocacy for distributing khas land (marginal land allocated to poor people) to real landless people rather than to those with the wherewithal to avail themselves of it. This is an acutely dangerous and complex undertaking anywhere in Bangladesh, as those elites who occupy the land illegally have a tendency to launch interminable legal cases against legitimate claimants, during which time no land can change hands. ALRD is a success story of advocacy: an alliance of NGOs, journalists and others that mobilised people and held demonstrations. Now 50 families have received 50 acres on permanent (99 year) leases and 500 families have one-year leases for 120 acres. The most striking sign of success is that police officers have been dissuaded from accepting false cases against khas land claimants: three policemen who filed false cases have been transferred to a punishment posting in the Chittagong Hill Tracts⁶⁶. JOARE Bangladesh, Banaphol and Rupayan have been members of ALRD.

Government forums are another type of coordinating network:

- The District Disaster Management office. The DCs (Deputy Commissioner) at the District level in Khulna, Bagerhat and Satkhira convene monthly coordination meetings for all NGOs and government organisations. Approximately 100 NGOs participate in each district. During the first half of the meeting NGOs report on their activities. Meetings have different themes and several NGOs mentioned that this was a good source of learning about climate change. It is a well-functioning, established mechanism for NGO coordination.
- Similar meetings take place at some Upazilla Parishads – where these meetings exist they are a good resource. At the Upazilla level the UNO (Union Nirbahi Officer, an appointed central government official) chairs the meetings and about 20-25 NGOs attend.

⁶⁵ Focus group discussions for SMILING Cluster 5 NGOs at ADAMS Training Centre, Khulna, on 11 and 12.11.09

⁶⁶ Interview with Mr Khaled Hosain, Rupayan, 12.11.09

5. NGO approaches to climate change: a priority?

The research team interviewed 16 local NGOs for this paper. Although most of them have some sort of climate change response, only three or four have explicit climate change projects. One response was “We don't really work on climate change... it is a cross-cutting issue⁶⁷”. Indeed, climate change may not be a priority issue for these organisations' mandates. The most common NGO response was that they add climate change aspects to their existing rural livelihoods or disaster management work. One (Nabolok) was preparing to attend the Conference of Parties 15 (COP15) summit of the IPCC in Copenhagen in December 2009 as an observer, to bring Bangladeshi concerns to an international forum. Some others were providing ‘awareness dialogue’ meetings for local government officials (JJS, CSS). Community-level awareness raising on climate change was another popular response, but the two community theatre ‘infotainment’ pieces that the research team were shown dealt only incidentally with climate change.

When asked what kinds of resources the NGOs needed to work on climate change, typical responses were:

- Funding
- Technical support (knowledge about climate change and its effects)
- Analytical support (information on what to do about climate change, and how).

This section describes where the climate change impetus for local NGOs came from; what kinds of livelihoods and disaster management initiatives the respondents work with now; and some advocacy initiatives on climate change. Although climate change may not be a central feature of local NGOs' activities now, this shows which types of outreach and information channels do get the message across. It also shows what kinds of useful activities NGOs are already undertaking – these help alleviate climate change effects even if they are not explicitly labelled 'climate change'.

5.1 How do NGOs start work on climate change?

Climate change gives us an opportunity to see how Bangladeshi NGOs adopt new development trends. We were interested in finding out about the climate change resources available to local NGOs: information, training, contact persons, research findings, forums, policy. The table below lists the responses, with a 'star' system indicating how common the response was: five for common, one for unique.

A typical learning trajectory would be one where NGO employees hear about climate change in the media. They may find opportunities to learn more in training sessions or seminars. They may decide to incorporate climate change in their work with or without outside funding or support. Only a few have made it a central activity for their organisation.

Type of outreach	Source	Frequency	Specifically
	Own experience	*****	Living through changing weather, cyclones, declining agricultural yields, inundations and water scarcity
Information	Newspapers	*****	Climate change is now a daily feature in the Bangladeshi press
	TV	*****	E.g. a BBC feature in 1999 stating that ‘Bangladesh will be under water’.
	NGOs	**	Pradipan leaflets and newsletter – internal learning from colleagues
	Partner INGO	**	Partner or funder INGOs suggested

⁶⁷ Interview with Ms Momtaz Khatun, Executive Director, Asroy Foundation on 12.11.09

Type of outreach	Source	Frequency	Specifically
			preparing a climate change project
	Local government	***	Monthly NGO coordination meetings at District or Upazila level
	Internet	*	Only three NGOs had used the internet for accessing climate change information.
Training	BDPC/Care– climate change and rescue training	*	Staff who did this training left the organisation.
	Pradipan/Care training	*	Mentioned once (not by Pradipan)
Research	Not popular	-	No respondent mentioned reading research reports on climate change
Policy	Not popular	-	Only two respondents mentioned studying policy documents – one academic and one advocacy organisation
Word of mouth	Not popular(?)	-	Although it seems like a probable information source, no respondent mentioned learning about climate change from a colleague or friend. This may be more to do with saving face than with facts.

This overview shows us that most of NGOs' climate change knowledge comes from the media. It is also crucial to note that most of these NGOs are not in the habit of using the internet for information searches or communication. Official documents are similarly inaccessible.

The Climate Change Cell publishes useful information booklets in Bangla, but these printed materials don't reach far.

Since media coverage is unlikely to include in-depth or practical information, it follows that there is demand for clear, NGO-specific, interactive climate change information. Workshops, information visits and training courses are sure to attract interest and attendance. The challenge is to follow good active learning principles when designing sessions; to make the content useful to NGOs who need to design programmes and attract funding; and to manage to convey the subtleties of climate change. For example:

- that there are still many questions about the impact of climate change;
- how many of current problems are due to climate change – and which ones are not;
- the importance of taking a long-term view when considering climate change interventions.

The community-based adaptation (CBA) approach is especially salient for Bangladeshi NGOs and can be recommended. CBA relies on an organisation's connections with communities to incorporate climate change into long-term community-based, community-owned support. The new International Centre on Climate Change and Development in Dhaka runs climate change training for NGO staff, but there is scope for more high-quality training.

5.2 Building on pre-existing programmes

The majority of NGOs interviewed had not started separate climate change initiatives but had incorporated climate change resilience into their existing programmes. The ideas range from household-level work like providing rainwater tanks to infrastructure works like reconstructing cyclone shelters; from concrete approaches like providing saline-tolerant rice to the effects of empowering mobilisation; and from tried and tested methods like seed banks to novel ideas like cultivating crab. The full list with details of the activities, their climate change effects, and which NGOs are doing them, is in Appendix 3.

Alternative rural livelihoods is the most popular category of activities that NGOs described as relating to climate change. Eleven distinct types of livelihoods diversification were mentioned, including:

- more efficient use of land (using marginal land or ponds through 'hanging' or floating gardens; composting; crop rotation)
- disseminating the use of saline- and flood-resistant rice varieties. These are developed by the Bangladesh Rice Research Institute (BRRI).
- encouraging novel 'crops' such as crabs, saline-resistant fish or mushrooms. Crab and mushroom are not consumed but sent to Dhaka, which means that most of the value added will be earned by processors and retailers.

Most NGOs would also support the construction of higher and wider embankments – and more embankments in places where the rivers are currently unrestrained. This is a highly problematic request since it increases siltation and flooding unless an effective way of dredging and disposing the silt on a gigantic scale is found.

Other types of climate change activities that were mentioned by 3-6 NGOs are:

- providing sources of drinking water both during normal times and after disasters
- income-generating activities and skills training underpinned by microfinance loans
- infrastructural works like raising homesteads, planting trees to stabilise polders, building cyclone shelters
- Disaster preparedness and management
- Disaster/climate change awareness raising through various means.

Many political solutions were mentioned. These include empowerment and advocacy initiatives – five of each came up during the research. Empowerment can be seen as a long-term approach to tackling many development problems, not only climate change – but it is obviously a fundamental aspect of people's ability to strive for control over their lives. They included:

- Land rights
- Market linkages for women/ engaging women in commerce
- Dalit rights
- Munda rights
- Informing/training local government Standing Committees on their responsibilities and/or on climate change. A surprising number of SC members are not aware of what they are expected to do and welcome the information. Others, of course, are not motivated to perform their duties.

Advocacy initiatives tended to be tangentially related to climate change, except for the members of the network NCC,B who were sending a delegation to the international high-level COP15. The five advocacy initiatives mentioned were:

- A postcard campaign demanding a higher national budget for climate change
- Land rights (access to khas land)
- Embankment monitoring
- Demanding an end to shrimp cultivation on farmland
- Information for people on how to claim their rights through community groups.

Many NGOs also disseminated climate change information to their client communities through different media (written, theatre) and for different audiences (disabled people, schoolchildren, local government officials).

There is clearly no shortage of useful initiatives for improving rural lives. The challenge lies in relating these ongoing development activities to the long-term imperatives of climate change as well as to the focus and capacities of individual NGOs, and in coordinating efforts.

5.3 Advocacy, activism and its dangers

All but four of the NGOs we interviewed discussed climate change in terms of adapting their existing livelihoods or disaster risk reduction work, or raising community awareness on climate change. However, long-term ideas that foresee structural changes (e.g. to the economy) or that prepare for a different reality 20 years hence were scarce. Two NGOs conceded that life in the villages they work in will be untenable with climate change. And although several NGOs mentioned corruption and organised crime ('musclemen') as local problems, only a few conduct advocacy work to change such oppression. This is partly due to the real physical dangers of political activism in Bangladesh. NGOs are also legally forbidden to work in 'politics'. NGO employees who oppose local strongmen, business leaders or politicians have been falsely accused and imprisoned⁶⁸; beaten up or tortured⁶⁹; or run into trouble⁷⁰ with their NGO Affairs Bureau registration. Some NGOs explicitly choose not to work in areas where musclemen are a problem. One of our most political interviewees who works on land rights has suffered death threats and currently has four (trumped-up) charges against him pending in the courts. This shows that advocacy in Bangladesh is not something undertaken lightly.

Hence poverty in Bangladesh has strong political/distributional roots, which has obvious implications for running a successful climate change strategy (or anything else) in the country. This was expressed most strongly by Mr Rezaul Karim Chowdhury, Executive Director of COAST Trust: "For climate change adaptation the whole paradigm has to change. Tweaking livelihoods won't work. Today Dhaka has a population density of 5000 people per square kilometre. In the chars⁷¹ women are having four children each. [With climate change] we are looking at numbers of displaced people that can increase rural-urban migration to 6% annually – and 12% for Dhaka. The government has to consider this. Where is the plan for the 19 districts, the 30 million people that will be submerged?"⁷²

Mr Reza calls for activism independent of government and donor support, for NGOs themselves to show accountability in order to press

"For climate change adaptation the whole paradigm has to change. Tweaking livelihoods won't work."

for government accountability, and for mobilising grassroots activism for "demand-driven accountability"⁷³. Indeed, NGOs are not universally considered as benign actors in Bangladesh since many of them are funded by microfinance initiatives that charge high interest rates from poor people; since their practices are not always accountable or transparent and since their participatory methods don't in reality always include everyone's views. An ambitious climate change strategy for Bangladesh can only be implemented by institutions of integrity.

Perhaps the implications of climate change are so overwhelming that no single agency – including the government – feels equal to the task of tackling it holistically? When many agencies do

⁶⁸ Two CARITAS staff served 8 months in prison in 1994 on false charges. One employee of another prominent NGO was arrested and tortured under the interim Caretaker Government. Such political violence is specifically a threat for people working on redistribution or land rights.

⁶⁹ Three informants spoke guardedly about a colleague who suffered torture under the military caretaker government.

⁷⁰ Interview with Bonoful, 12.11.09

⁷¹ Chars are silt- or sandbanks in rivers – they are at high risk of being washed away again and are inhabited out of necessity. They are considered at very high risk of being inundated.

⁷² Interview with COAST Trust 2.11.09

⁷³ Ibid COAST Trust

something that is small, but within their power, they may achieve something. But this is likely to be less than what they could achieve by coordinating and cooperating their efforts.

6. Future scenarios and the role of local NGOs

It seems that many of the research respondents have not thought in great detail about how their surroundings are likely to change because of climate change over the coming decades. This is not so surprising considering that there is no certainty, even among experts⁷⁴, about climate change effects on south-western Bangladesh. But the fact remains that most of the future plans that were suggested in the (limited) course of this research are appropriate for the problems that people face now. As pointed out by the International Centre for Climate Change and Development Bangladesh (ICCCDB) in their introduction to an action research programme, it will be important to differentiate between coping with climate shocks in the short term, and adapting more fundamentally to long-term climate change risks⁷⁵. For example, some coastal areas and chars (shifting sandbanks) may simply become uninhabitable, in which case it would be misleading and even dangerous to run development interventions that encourage the inhabitants to stay.

Similarly, while the climate is likely to change over the next 20 years, so too are the economy and social norms. In future educated Bangladeshis may find easier employment in services or industry; women's social standing may have improved and with it maternal and infant mortality, income and education levels; oil, food or water price changes may have given Bangladesh new competitive advantages. Higher fuel and emission costs are likely to put an end to the viability of exporting frozen shrimp, for example. It is clear that one of the most valuable interventions now for helping Bangladesh cope with climate change would be to equip today's youth and children to be flexible enough to take advantage of future opportunities – beyond rural agriculture.

The sections below discuss some of the climate change suggestions raised by informants, grouped under three general categories: options for remaining where you are; options for migrating in search of a better life; and options for making change.

6.1 Option: remain

Our respondents are very well aware of what it means to leave your home village: living under harsh circumstances in a city, competing for a meagre living with other migrants and locals: “We would like to work with people if their conditions are made liveable. Nobody likes it when people move to towns and live in a slum. It is better to stay at home as human beings”⁷⁶..

Many NGOs are working for higher and stronger embankments to protect farmland: e.g. through campaigns and popular mobilisation. This happens despite the knowledge that polders aggravate river siltation and increase the long-term risks of inundation.

According to Professor Dutta one of the key changes to make it to stop shrimp cultivation. It is not as big in terms of income as in social and economic hazards. “It’s a bigger danger than climate change.” Another current problem according to Dr Datta is too much structural water management. Removing the polders would restore the fertility of the land, reduce salinity and remove the dangerous inundation risks from storm surges. But it would mean serious trouble and displacement for farmers over 5-10 years, after which they could grow crops again⁷⁷.

The SMILING focus groups suggested improving dredging, raising homesteads and buildings, raising the embankments, improving sluice gates, and reforestation. Less tangible suggestions were making sure people participate in decision-making, empowering the youth, including climate

⁷⁴ See Tomalla et al 2005

⁷⁵ Unpublished project outline, Cannon and Haq 2009

⁷⁶ Interview with Ms Zakiya Akter, Banoful, 11.11.2009

⁷⁷ Interview with Professor Dilip Kumar Datta, 19.11.09

change in the school syllabus, learning from others, improving leaders, and training women who can inform their children and husbands. Some other suggestions are:

Future priority	Specifically
Safe drinking water	Drilling tubewells and raising them above flood level
Safe drinking water	Promoting rainwater harvesting (from roofs)
Disaster management	Improving warning systems
Rural electricity	Possibly from a biogas plant
Land use	Stopping shrimp culture
Dalit claiming their rights	Hence improving their opportunities
Land reform	Starting with redistribution of khas land
More and higher polders	To safeguard farmland from inundation
Alternative incomes	E.g. tailoring, crab fattening, snails, other microenterprises
Social forestry	With saline-tolerant trees
Extension work based on learning	Incorporating climate change into agricultural extension
Mutual learning	Building networks
Rights	Building social justice

We can see that a quick brainstorming session among local SMILING NGOs yielded some suggestions for improving rural life: biogas for electricity; claiming rights; and linking sectors – including climate change information in agricultural extension. They were also keen on mutual learning between NGOs – building networks. Such initiatives can be supported and there is plenty of ongoing NGO work in the region that can be built upon.

Although some areas of southwest Bangladesh are likely to face a dire future with climate change this does not mean that there is cause for despair. People should not be frightened with climate change information⁷⁸ but rather shown what can be done. Some of our informants expressed the future in positive terms: “we tell them, you can’t go away, you have to stay and fight.”⁷⁹ Others point out that the people of Bangladesh have always had to adapt to drastic changes and that they are very resilient. “People in the coastal area are very fighting. They are always fighting against cyclones, floods, tides, tigers.⁸⁰” The implication is that climate change is a worse variation of the struggles people already fight against, and that it is a fight that can be won.

6.2 Option: migrate

Migration is such a miserable option that it makes staying and fighting seem all the more attractive. Bangladesh is already a prime example of how developing-country cities cope with unplanned expansion: cities are crowded, transport infrastructure creaks at the seams, housing is inadequate and numerous people live in unconscionable slums, drainage and sewage infrastructure are inadequate for treating wastewater, and pollution is increasing. Although only 20% of the population lives in cities now, there is not enough capacity to generate electricity. Clearly the cities need far more planning and investment to function at present, let alone to be able to absorb millions of climate IDPs (internally displaced persons). The BCCSAP includes a project for

⁷⁸ Interview with Mr. Kazi Nuruzaman and colleagues, Nabolok, 12.11.09

⁷⁹ Interview with Mr. Michael Biswas, Caritas, 11.11.09

⁸⁰ Interview with Mr. Sazzadur Rahim Pantha, CSS, 11.11.09

government to improve sewerage in Dhaka but this is only one of many ongoing problems that needs to be solved.

The current government is aware of the risks from climate change-related rural–urban migration⁸¹. Other actors are looking further afield; the COAST Trust runs a campaign to legalise ‘climate refugees’ with the same rights as other refugees according to the Geneva Convention. This also fits under the WTO’s (World Trade Organisation) Mode 4, or free movement of natural persons, under which migrants are seen as useful assets to economic growth. However, Western countries may also tighten their immigration policy if their economic situation remains difficult. Trade and campaigning organisations may wish to pursue this line of support for the effects of climate change on Bangladesh.

6.3 Option: make change

Governance is the cornerstone of development for Bangladesh: the abysmal corruption levels (and the resulting low education, health, infrastructure etc) are the main reason why foreign aid and investment are not forthcoming to Bangladesh. Traditionally civil society organisations, including NGOs, have a role as ‘counterweight’ i.e. in pressurising the government to behave in a transparent and accountable manner. As we have seen above in section 5.3 such advocacy is dangerous in Bangladesh and it would be immoral to require NGOs to take such risks.

Nonetheless advocacy work already takes place. In addition to confrontational rights demands there are more modest advocacy and governance projects. Some examples of current work are:

- Working to activate standing committees at the Union or Upazilla levels. Standing committees are supposed to implement local government tasks. There are 13 standing committees in each Union and nine in each Upazilla and some members are pleased to hear something concrete about what is expected from their committee roles⁸².
- A postcard campaign asking the Prime Minister and Minister of Finance to increase the climate change budget from 30 billion Taka to 100 billion, a budget breakdown, and prioritising agriculture, climate refugees and climate change-sensitive construction.
- Working to support a movement for Dalit rights at the local and national levels.
- Training for women’s groups on Gender and Environment – with 12 training components including seven on climate change and disaster. Accustoming women to demand their rights.
- People’s mobilisation to reject shrimp farming in favour of rice farming in Satkhira, 2009.
- Campaigning, mobilisation, empowerment and three-way negotiation to improve working practices of women in shrimp processing plants. Rupayan and others.

Examples such as these show that change is possible. But it takes place at different levels. In the words of Nabolok employees in Rampal: “For those standing here, it is impossible to do higher-level advocacy. We can only work on adaptation but without mitigation work in the long term the area will be destroyed again and again. We need a rights-based approach. But what to do next? Sometimes we are confused. This needs better coordination and unity at the national level.”⁸³ This echoes COAST Trust’s view that climate change can’t be countered by ‘tweaking livelihoods’ but that the development agencies that deal with climate change have to be transparent and have integrity. Nabolok and Pradipan’s NCC,B coordinators also state that “to face climate change we need equity, good governance, human rights, and harmony in society”⁸⁴..

Could climate change be a serious enough motivation for Bangladesh to eschew corruption and destructive hierarchies? If the national elites in the capital – academics, media, think tanks – make small local NGOs’ concerns their own, a rich debate could start.

⁸¹ Sheikh Hasina has been quoted in the Daily Star, Bangladesh, as wanting to avoid climate ‘internally displaced persons’, www.thedailystar.net/story.php?nid=114601 accessed on 4/2/10

⁸² Comment on positive standing committee responses to training: personal communication from Shirin Banu, Governance Expert, PRIP Trust

⁸³ Interview with Nabolok field staff, Rampal, 14.11.09

⁸⁴ Interview with Pradipan and Nabolok coordinators in Dhaka 16.11.09

7. Conclusion

South-western Bangladesh already displays many of the alarming symptoms of climate change and the future looks bleak. Some of these problems – salinity and inundations – are due to human activity such as poldering, shrimp farming, deforestation, pollution, dam building etc. The worrying thing is that such features stand to become even worse with climate change, specifically irregular weather patterns, intense cyclones and loss of the Himalayan glaciers. Rural Bangladeshi citizens already live on precariously narrow margins, something which was demonstrated in May 2009 when a tidal surge from Cyclone Aila broke through embankments up and down the southwest and inundated the countryside under brackish water. Six months after Aila some 10,000 displaced people are still estimated to live on roadsides and in improvised shelter, living off dwindling food for work support and with diminishing prospects of returning home. The damage from Aila was exacerbated by man-made river management, but man has failed to make alternatives or amends for the displaced. It appears that Bangladeshi capacity is woefully inadequate to deal with more frequent and intense catastrophes due to climate change.

Local Bangladeshi NGOs already deal with these problems that look like climate change effects but which have other causes. It stands to reason that, in order to help the Bangladeshi response to climate change, such efforts should be supported even if they are not specifically called 'climate change projects': diversifying rural livelihoods, empowering marginalised people, preparing for disasters. The government's climate change strategy and action plan (BCCSAP) sets out clear roles for NGOs in counteracting climate change. In addition, political advocacy work is done by many brave activists to empower ordinary and marginalised people, claim the rights of disenfranchised people, strive to change oppressive structures, and speak truth to power. Such work is dangerous – in a place where 'musclemen' still distribute rough justice on behalf of elites – and should be supported with great care.

Meanwhile there is a lot of work to be done on coordinating climate change responses, disseminating realistic and useful information, and campaigning for transparent use of the billions of Taka that are currently budgeted for climate change work, but not dispersed.

This paper has tried to show opportunities for supporting NGOs' climate change work, and to describe the local context in order to pre-empt fruitless work. The NGO landscape in south-western Bangladesh includes well-known actors, but it is worth casting the net wider and involving small, locally-rooted NGOs in climate change work. Their links with the communities they serve and their lack of political baggage can make them valuable partners. To begin with, local NGOs that want to work on climate change need clear and useful information, funding and networks. Ultimately climate change needs to be talked at a higher level than south-western Bangladesh. But while we unite to affect change globally we should not forget about supporting those who work on the real frontline – where the land meets the water.

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Appendix 2: Methodology

The study was conducted over a relatively brief period, August-December 2009, with field interviews in mid-November (11-20 November 2009).

Desk research in Dhaka by Linda Lönnqvist covered literature on climate change adaptation and community-based adaptation, the Bangladeshi policy context, international debates leading up to the IUCN's 15th Conference of Parties (held in Copenhagen on 14-18 December 2009) and NGO activities on climate change. Due to the proximity of COP15, media and organisational attention to climate change was high.

Interviews were conducted with high-level NGOs and other actors, mainly on the Bangladeshi policy context, their views on climate change priorities, and the role for NGOs. These took place in Dhaka during August-October 2009 and November 2009.

A team went to Khulna during 9-20 November 2009 to visit local NGOs. The respondent NGOs were selected based on recommendations from high-level actors and experienced PRIP staff. A SMILING training course was taking place in Khulna during the field phase, giving the researchers a chance to run focus group discussions on the topic and to approach relevant SMILING NGOs for further in-depth interviews.

'Snowballing' was used to follow up further recommendations in Khulna.

The second week of fieldwork saw the team travelling to field offices of Khulna-based NGOs.

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Appendix 3: Table of NGO activities relating to climate change

When studying the table, please note that the list of NGOs is not exhaustive. Other NGOs may well work on the areas without having discussed it with the research team.

Area	Activity	Responds to which climate change threat	Notes	NGOs that mentioned this method ⁸⁵
Agriculture – alternatives	Hanging gardens	Flooding/ inundation	Growing vegetables in troughs on tripods – safe from flooding and livestock	Asroy
	Floating gardens	Loss of arable land	Growing vegetables on freshwater bodies on floating beds – maximising land use	Nabolok, Asroy, CSS
	Seed banks	Loss of seeds during disasters	Communities can save seeds – in silos raised above flood levels. Can also have a food sovereignty angle.	Asroy, Rupayan, Pradipan, Caritas
	Supporting saline-tolerant rice and crop varieties	Soil salinity	Variety BR47- high-yielding, can grow in saline soil. Certain vegetables and fruits are better adapted to saline soils. The Bangladesh Rice Research institute (BRRI) is the main source of saline-tolerant rice.	Nabolok, JOARE, CSS, Caritas, Shushilon
	Supporting flood-tolerant rice	Flooding/ inundation	An indigenous (lower-yielding) variety called Halipodo Dhan (named after the farmer who researched this variety) that grows quickly when submerged	Rupayan with CSRL (Campaign for Sustainable Rural Livelihoods, supported by Oxfam GB)
	Fish farming	Water salinity	For saline-tolerant fish species	Nabolok, JOARE
	Composting	Soil and water salinity	Compost can alleviate salinity and is a tool for e.g. Rehabilitating shrimp ponds.	Nabolok, KNKS, JOARE, NGF, Caritas
	Crab rearing	Soil and water salinity (alternative to shrimp)	Crabs can be grown in brackish ponds as well as shrimp, but need shorter rearing times and less chemical-intensive methods. Crabs are bought at TK40/kg, grown, and sold at 200 TK/kg. Crabs are also sent to the cities or exported.	Nabolok, NGF, CSS, Caritas
	Crop rotation	Sea level rise	Makes more effective use of small land holdings. Can be about rotating vegetable crops or rice/shrimp/fish/vegetables in ponds.	JOARE, Caritas
	Organic shrimp	Alternative to current shrimp farming	Avoids soil depletion and chemical pollution. At early stages with only one German supporter.	NGF
	Mushroom farming	Inundation	Less land-intensive cash crop	Prodipan
Drinking	Water tanks	Salination,	Providing tanks for rainwater	Caritas

⁸⁵ Others may practice it without having mentioned it to us.

Area	Activity	Responds to which climate change threat	Notes	NGOs that mentioned this method ⁸⁵
water		inundation	harvesting	
	Pond sand filters	An alternative to drinking saline ground water	Filters some contaminants from pond water – but not salt or toxic chemicals	Caritas
	Water purification plants	An alternative to drinking saline ground water	Effective but expensive	CSS
Income-generating activities (some with microfinance loans, some without)	Skills development	All climate change effects	Provides income alternatives when agriculture becomes precarious	JOARE (technical skills for youth), NGF (tailoring training for women, especially tiger victim widows), Caritas, Pradipan (tailoring, poultry rearing)
Infrastructure	Demanding bigger embankments	Sea level rise, increased river flow	Advocating for new embankments to be higher than previous – 40 or 50 feet rather than the proposed 30 ft, and ten feet higher	Rupayan, NGF and almost all NGOs and communities
	Raising homesteads	Flooding/inundation	Rebuilding houses, water pumps etc on raised plinths above flood levels	EADA, SMILING focus groups, NGF, Prodipan, Nabolok, Caritas
	Tree planting on embankments	Flooding	Stabilises embankments	Pradipan, SMILING focus groups
	Reconstructing embankments	Flooding, cyclones, irregular weather	Needs permission from Water Management Board	JJS, Caritas, CSS, NGF and many more – both NGOs and communities
	Building cyclone shelters	Cyclones, floods	Very expensive	Caritas has built 300 and has a new design with ramps.
	Alternatives to firewood	Counters deforestation	Promoting indigenous knowledge on alternatives to firewood	SMILING NGO
Disaster preparedness	Awareness raising about disasters and responses (e.g. through theatre)	More frequent or unpredictable disasters	Theatre, song and graphics are often used as entertaining ways of bringing a message across	Asroy, Paritran, Banaphol, CSS, Caritas, Shushilon, JOARE
Empowerment – encouraging people to control their lives	Land rights	Landless are more vulnerable to shocks	Violent, fraught work	Shushilon, Rupayan and others – see below
	Market linkages for	Migration risks	Women have far to go before working as equal members of	Caritas – encourages women to sell their

Area	Activity	Responds to which climate change threat	Notes	NGOs that mentioned this method ⁸⁵
	women		society. Empowering women to take part in economic activity makes households half as vulnerable to loss of livelihoods.	vegetables at market (only men tend to sell).
	Dalit rights	Reducing vulnerability	Dalit are even more vulnerable than other Bangladeshis to shocks	Parittran, Bhumijja Foundation
	Munda (ethnic minority) rights	Reducing vulnerability	As above	SAMS
	Climate change workshops for local government officials	Climate change policy implementation	A surprising number of standing committee members are not aware of their obligations and the content of their work.	Most SMILING NGOs; JJS, CSS
Advocacy	Climate change	Overall	Postcard campaign asking PM and finance minister for more climate change budget, a budget breakdown, and prioritising agriculture	NCC,B, i.e. Nabolok, Pradipan, BASSA and Unnayan Dhara
	Land rights	Marginalisation of landless poor	Access to khas (allocated) farmland for landless people according to their legal rights	Banoful, (with Uttaran, Manusher Jonno and others), Rupayan (with SPS, BELA, Consens Khulna, Mukhtir Alo, BLAST and Advocate Firoz Ahmed).
	Embankment monitoring	Increased inundation risk from sea level rise exacerbated by bad embankment maintenance	Forming volunteer groups to monitor the integrity of embankments	Rupayan
	Demanding an end to shrimp cultivation on agricultural land	Exacerbating soil salinity, marginalisation of rural poor (loss of work/income)		Rupayan and others through Oxfam
	Information on rights and how to claim them through community groups	Supporting local government transparency and responsiveness	From local government e.g. The citizens' charter, local government mandates for service provision. Through People's Development Committees (Gonu Unnayan committees)	Nabolok
Information dissemination	Climate change information through different channels to various audiences	Across the board climate change preparation		KNKS (information for disabled people and school pupils), CSS (produces information materials for communities), Nabolok, Parittran (community theatre),

Area	Activity	Responds to which climate change threat	Notes	NGOs that mentioned this method ⁸⁵
				Nabolok (for government officials), Asroy (theatre)
International forums	Sending climate change messages to COP 15	Affecting climate change mitigation, reparations, adaptation etc at the global level	COAST Trust has the specific message to give climate refugees the same rights as those under the Geneva convention.	Nabolok, Rupayan, BCAS, COAST Trust