

# Policy Discourse

# Analysis: Bangladesh

## Climate Resilient Landscapes & Livelihoods

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M. Shameem Siddiqi and Neha Rai

**Country Report**

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**Climate Change Discourses**

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The Climate Change Group works with partners to help secure fair and equitable solutions to climate change by combining appropriate support for adaptation by the poor in low- and middle-income countries, with ambitious and practical mitigation targets.

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## Abbreviations & Acronyms

ACCCA	Advancing Capacity for Climate Change Action
ADB	Asian Development Bank
ARCAB	Action Research on Community Based Adaptation in Bangladesh
AusAID	Australian Agency for International Development
BCAS	Bangladesh Centre for Advanced Studies
BCCSAP	Bangladesh Climate Change Strategy and Action Plan
BCCRF	Bangladesh Climate Change Resilience Fund
BCCTF	Bangladesh Climate Change Trust Fund
BIDS	Bangladesh Institute of Development Studies
CBA	Community-Based Adaptation
CBO	Community-Based Organisation
Charlands	Riverine sandbars
CIDA	Canadian International Development Agency
CSO	Civil Society Organisation
DFID	Department for International Development (Government of United Kingdom)
DOE	Department of Environment
GoB	Government of Bangladesh
Haor	A wetland ecosystem in the northeastern part of Bangladesh
ICCCAD	International Centre for Climate Change and Development
IFI	International Financial Institution
IIED	International Institute for Environment and Development
IPCC	Intergovernmental Panel on Climate Change
LAPAs	Local Adaptation Plan(s) of Action
LCG	Local Consultative Group
M&E	Monitoring and Evaluation
MoEF	Ministry of Environment and Forests
NAPA	National Adaptation Programme of Action
PDA	Policy Discourse Analysis
PPCR	Pilot Program for Climate Resilience
PRSP	Poverty Reduction Strategy Paper
RA	Resource Analysis
RVCC	Reducing Vulnerability to Climate Change (project)
SAACRLL	South Asia Alliance for Climate Resilient Landscapes and Livelihoods
SACRA	South Asia Climate Regional Alliance
SFYP	Sixth Five Year Plan (of the Government of Bangladesh)
SP	Social Protection
UNDP	United Nations Development Program
UNFCCC	United Nations Framework Convention on Climate Change
USAID	United States Agency for International Development

Climate change is a cross sectoral issue with impacts on development and growth. There is a need to integrate climate change responses into development planning in order to ensure that development and growth objectives are resilient to the impacts of climate change.

Among nations, Bangladesh is most vulnerable to climate change. The government, civil society and development partners have undertaken a wide range of initiatives to formulate strategies, policies, programmes and funding mechanisms to ensure the country's transition to climate resilience.

Based on a policy discourse analysis, this paper explores how climate change resilience enters into existing development discourses that underpin policymaking in Bangladesh.

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# Introduction

# 1

Climate change is inextricably linked to development. On the one hand, climatic variations can impact severely on development, affecting the economic growth of a nation and the livelihoods of its people. On the other hand, the level of development within a country influences the adaptive capacity of a nation and determines its vulnerability to climate change (Brooks *et al.*, 2005). Indeed, climate variations are felt more severely by low-income countries than by high-income countries (Dell *et al.*, 2008).

Correlations between climate change adaptation and development make it critically important to synergise climate action and development policy within those sectors that are directly affected by changing conditions. In reality, the discrepancy between existing and optimum levels of adaptation creates an 'adaptation deficit' that will further increase due to climate disjointed decision making by development practitioners (Burton, 2004). Climate development planning remains a challenge therefore (Adger *et al.*, 2007).

Nevertheless, the need for climate mainstreaming has gained recognition in recent years and various developing countries have begun to show evidence of integrating climate resilience within development planning.

Despite many constraints, Bangladesh is one such country that has paid remarkable attention to climate resilient development planning. Recognising its vulnerability to climate change, Bangladesh has taken various initiatives to link adaptation and development. These include assimilating climate change within policymaking and institutionalising it at the sectoral level, within sectors highly affected by climate change, including agriculture, energy, water, forestry and natural resources.

In addition to the perceived significance of the issue, other drivers shaping pro-climate development policy are national and international discourses that solidify over time and establish themselves within different policy spaces. Policy discourses in particular are key in confirming and endorsing the premises for policymaking and thus play a dominant role in policy decisions (Roe, 1991, Roe, 1994 ).

Despite the influential nature of policy discourses, there is little evidence of how climate resilience enters existing development discourses in Bangladesh. As countries move towards mainstreaming climate within development planning, knowledge of how these underlying discourses are shaped could prove valuable to other countries.

With a view to sharing contextual knowledge in the region, this paper therefore focuses on understanding:

*'how climate change resilience enters the existing development discourses that influence policymaking in Bangladesh.'*

This report is divided into 7 sections, including the introduction. Section 2 provides information on the approach and methodology adopted over the course of researching and writing the report. Sections 4, 5 and 6 make use of the adopted approach, namely discourse analysis, to demonstrate how policy discourses within various policies, programme documents and interviews on climate change, poverty reduction, agriculture and forestry provide a narrative on relationships between climate change issues and the development sectors they inhabit. Both the dominant and contested discourses are explored. Sections 4 to 6 also highlight the findings from the policy discourse analysis. Section 7 concludes the discussion.

# Approach and method

The study uses a policy discourse analysis approach to understand how climate change issues are embedding within the discourses of selected themes and landscapes that are considered important from the climate change perspective. The study is primarily based on analysis of data collected through semi-structured interviews with key informants, secondary review of documents and observation analysis.



## Approach

This paper uses the Policy Discourse Analysis (PDA) approach to outline key discourses on climate resilient landscapes and livelihoods in Bangladesh by:

- identifying discourse(s), their main gatekeepers and the evidence that the discourses build upon or respond to
- outlining the policy, legislative and regulatory developments that support the identified discourses
- assessing the interactions between dominant discourses
- outlining the potential future trajectory of the discourses along with emerging policy windows.

## Method

Data was collected primarily through semi-structured interviews with key informants, secondary review of documents and observation analysis. The collected data was analysed in two iterative stages.

Interviews were conducted in two rounds, first to gain an overview of perspectives and key turning points, and construct interviewee discourses; second, to update interviews for the current publication.

## Scope and limitations

Climate change involves a wide range of stakeholders, policies, financing and programming mechanisms cutting across many sectors of poverty and development. It has not been possible to analyse and present all the discourses in this paper. In particular, it has not been possible to include discourses related to urban context in this limited duration study: the landscapes, mainly coastal and agricultural, are predominantly rural.

During the complementary phase of data collection in 2013, some of the targeted respondents could not be reached due to the political unrest in Bangladesh.

With some respondents, it took time to come to a common understanding of discourse analysis. Often the discussions entered the area of policy analysis rather than policy discourse analysis.

For the scope of this analysis, however, this review provides a sufficient snapshot of the discussions taken from a broad cross section of interviews and document reviews.

## BOX 1. DISCOURSES

Discourses here are defined as 'an ensemble of ideas, concepts, and categories through which meaning is given to phenomena. Discourses frame certain problems; they distinguish some aspects of a situation rather than others' (Hajer, 1993). Policy discourses, similarly, are narratives, stories and scenarios that underwrite and stabilise the assumptions for policymaking (Roe, 1994). These discourses may be shaped by a particular occurrence and may stabilize 'as a discursive formation' (Foucault, 1972, Li, 2005). Discourses play a dominant role in policymaking and provide convergence points for different actors (Roe, 1991, Swift, 1996). The analysis of discourses is therefore an effective way to show correlations between 'political rhetoric and how discourses are created and maintained' in policymaking (Hewitt, 2009, Foucault, 1972).

# Climate change

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Bangladesh is well recognised as a climate change hotspot. The Climate Change Risk Atlas 2010 ranked the country as the top most vulnerable country in the world (Maplecroft News, 2010). In the last 30 years, Bangladesh has experienced nearly 200 climate-related disasters including droughts, extreme temperatures, floods and storms. These events have resulted in the deaths of thousands of people, destroyed homes and livelihoods, and cost approximately US\$16 billion in damages (Oxfam, 2011).

A low-lying riverine country in South Asia, Bangladesh is formed of a delta plain at the confluence of the Ganges, Brahmaputra and Meghna Rivers. The flat landmass constitutes only about 7% of the combined catchment areas of the three rivers but drains over 92% of their flows, making the land susceptible to frequent flooding (Rahman *et al.*, 1990; Ahmad *et al.*, 1994). The country receives large amounts of annual rainfall during the monsoons between June and September. Cyclonic storm surges often ravage the coastal areas, while high tides erode coastal lands and embankments. Climate change received significant attention after two major cyclones, Sidr in 2007 and Aila in 2009, caused widespread flooding and losses in the region (Alam K *et al.*, 2011).

Farming remains the main subsistence and income activity for almost half the population in Bangladesh. As the livelihoods of farming communities depend on favourable weather, climate variability and extreme weather events are liable to result in the loss of livelihoods for millions of poor households across the climate hot spots (Ahmed and Hussain, 2009).

Despite being a Least Developed Country (LDC) Bangladesh has demonstrated a high degree of commitment to address climate change. The discourses around climate resilient development are quite dynamic and have evolved over the years from (a) disaster based discourses, (b) to climate justice, (c) to climate resilience linking into the development agenda, (d) to emergence of mitigation and low-carbon climate resilience, (e) to expected responsibility of private sector, (f) to loss and damage in the present.

### 3.1 Dominant discourses

The overarching discourses that pervade the literature and interviews examined in this analysis are adaptation, disaster management and emission reduction, although the latter is less dominant than the former two.

#### Adaptation:

Adaptive responses to climate change are considered vital in Bangladesh. These are initiatives and actions that reduce the vulnerability of communities against anticipated effects of climate change. The key adaptation discourses are steered equally by

government, international organisations and civil society. Government discourses on adaptation widely recognise climate change as a development challenge and adaptive responses as imperative to address these challenges. The international negotiations and academic discourses are dominated by mainstreaming climate change into development planning, and transferring and diffusing appropriate technologies for adaptation. Climate justice and equity dominate civil society discourses.

Following are some dominant discourses derived from adaptation discourse analysis.

**Climate change will undermine development:** The government of Bangladesh considers climate change to be an economic threat that could prevent Bangladesh from achieving middle-income status. Extreme losses resulting from climate-induced events such as cyclones have been well documented. The need for adaptation as a development agenda was acknowledged in the Sixth Five Year Plan (SFYP) of the government (MoP, 2011) and received further recognition in the election manifesto of the present ruling party (Awami League) (MoP, 2012).

**Mainstreaming climate change into development planning:** Integration of climate resilience into development planning is reflected in the National Adaptation Programme of Action (NAPA), 2005 and the Bangladesh Climate Change Strategy and Action Plan (BCCSAP). Both documents stress integration of climate resilience into the planning processes of development sectors (agriculture, forestry), and implementation of adaptation actions by various sectoral ministries, departments and agencies (MoEF, 2005b, MoEF, 2008). Planning Commission has also incorporated climate change issues into short- medium- and long-term development plans and projects (Pervin, 2013). Climate change has been included in the Sixth Five Year Plan, Vision 2021 and the second Poverty Reduction Strategy Paper (PRSP). In parallel to the national efforts, internationally funded climate finance programmes, such as Pilot Programme for Climate Resilience (PPCR), also support integration of climate resilience into development planning.

**Climate proofing of sectors has a major impact on economic growth:** Within sectors it is widely accepted that climate-proofing investments will ensure protection of economic interests and enable poverty reduction in the country. Climate-proofing is brought about by infrastructure investments in flood management, drainage, coastal embankments and cyclone shelters. Comprehensive disaster management and research and innovation in climate resilient agricultural techniques are some of the other sectoral focuses. These focus areas are prioritised in the BCCSAP and newly introduced climate finance programmes, such as Pilot Programme for Climate Resilience (PPCR) (GoB, 2010).

**Disaster management:**

Early dominant discourses around climate change were linked to disaster risk management in relation to the cyclone of 1970 and the famine of 1974. Following are some key discourses in relation to disaster management.

**Shift from a reactive to a proactive approach:** In the past, disaster management approaches in Bangladesh have been 'relief' and 'response' type approaches where disasters are understood as one-off events isolated from socioeconomic systems. In recent years, however, disaster management discourses have grown more proactive and systematic with the introduction of comprehensive disaster management plans, institutional restructuring of disaster governance systems and engagement of communities in disaster management planning (Haque and Salimuddin, 2013).

**Integration of disaster risk reduction and climate change adaptation:** Disaster risk reduction (DRR) and adaptation are understood as coinciding issues in Bangladesh sharing common objectives aimed at reducing vulnerability in climate related disaster affected areas through the implementation of social protection methods. These integrated objectives are reflected in disaster management, social protection and adaptation policy documents. The Bali Action Plan (BAP), 2007 recognises DRR as a major instrument for bringing about climate change adaptation (Shaw *et al.*, 2013).

**Mitigation and emission reductions:**

The issues around mitigation and low carbon development are emerging discourses, mentioned in the BCCSAP as the fifth component that aims to invest in programmes for reducing emissions (MoEF, 2008). The international community is pushing for efforts to engage the private sector in low carbon resilient development as evidenced by the prevalence of large programmes like the pilot Climate Investment Funds (CIF), which focus on engaging private sector in both adaptation and mitigation interventions. Although an emerging discourse, the mitigation discourse is considered by some bureaucrats and civil society groups as an internationally driven discourse whose validity is contested. Support for this viewpoint is evidenced in the Sixth Five Year Plan where it is clearly mentioned that emission reductions and control on energy use will only be implemented so long as it doesn't compromise the development objectives of Bangladesh (MoP, 2011).

Moreover, a justice based ideology is active amongst campaigners and negotiators within both mitigation and adaptation discourses who hold that Bangladesh will invest in mitigation actions only so long as it receives additional resources from international finance to address climate change issues. Furthermore, negotiating groups and civil society members who hold true to the climate justice ideology contest the provision

of loans for adaptation under the PPCR programme funded by Climate Investment Funds. This narrative refers to the discourse that countries are liable to pay for the climate change effects that developing countries face.

## 3.2 Alternative discourses

**Community-based Adaptation (CBA):**

CBA is gaining greater ground both in terms of programme implementation and research. Bangladesh is seen as a 'pioneer' in CBA, which is largely driven by civil society organisations but increasingly recognised by the government. Annual international CBA conferences have been promoting the approach worldwide. Bangladesh is also home to a couple of large-scale research programmes.<sup>7</sup> Still, there is relatively little knowledge about what works in CBA, and how to effectively support CBA.

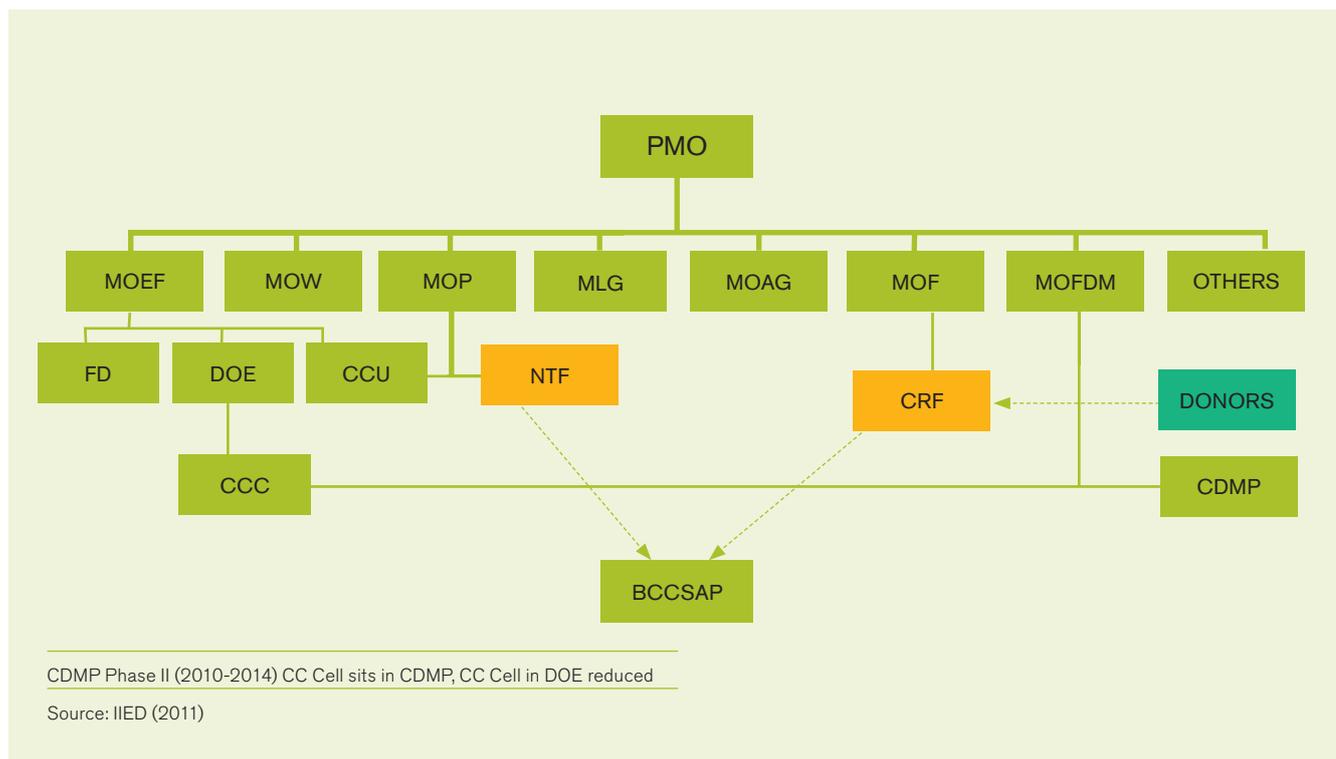
The main drivers for CBA discourse are civil society organisations (CSOs), which are increasingly supported by the government of Bangladesh, development partners, academic and research institutions, collective and long-term research initiatives (Action Research on Community Based Adaptation in Bangladesh (ARCAB)), and experts in the field (IPCC lead authors).

**Climate change impact exacerbating drought in the dry lands:**

There is good evidence to suggest that climate change will worsen water stress in the drought prone areas of Bangladesh, particularly in the northwest (IPCC, 2007). This is recognised in policy and planning documents (BCCSAP and NAPA). Despite growing research on drought prone areas, these are not given as much attention as coastal areas.

<sup>7</sup> "Reducing Vulnerability to Climate Change" (RVCC), a CARE programme completed in 2005; and "Action Research on CBA in Bangladesh" (ARCAB), a large-scale longitudinal programme in the design phase being managed by IIED and BCAS.

Figure 1: Government and development partner institutions for climate change policy and programming in Bangladesh



### Climate change refugee:

The emergence of a 'climate refugee' narrative is becoming apparent within international discourses on climate change in Bangladesh. The narrative anticipates the potential landlessness and subsequent displacement of millions of people around the coastal belt of the country as a result of rising sea levels. As illustrated by newspaper headlines such as, 'Bangladesh faces climate refugee nightmare' (Reuters news agency, April 14th 2008), this narrative has become a popular tagline for highlighting the urgency of climate change in Bangladesh. Even so, research is needed to find evidence of climate change induced refugee situations, which are distinct from the movement of people that has been happening for decades due to the unstable river and coastal ecology in the country (Lewis, 2010).

The following issues are upcoming in climate change policy programming, research and dialogue.

- Streamlining **climate finance** with fiscal/public finance, instead of maintaining separate climate change funds. Here MoEF is trying to 'protect' its leadership from Ministries of Finance and Planning. Line ministries such as Ministries of Agriculture, Water Resources, and Local Government are also interested to play bigger roles.
- **Loss and damage due to climate change.** The MoEF is collaborating with the Ministry of Disaster Management. Some research and dialogues are underway and the discussion is developing further.

### 3.3 Key actors

The main gatekeepers of climate change policies and programmes in Bangladesh can be categorised as national and local government, civil society organisations including NGOs and community based organisations (CBOs), academic and research institutions, development partners and international financial institutions (IFIs), and the media. Despite their stake and potential, the private sector is yet to become active in this field.

Within the **Government**, the Ministry of Environment and Forests (MoEF) is the lead government of Bangladesh institution on climate change issues. It represents the government in international negotiations under the United Nations Framework Convention on Climate Change (UNFCCC) and other forums, and it chairs the Local Consultative Group (LCG) on Climate Change and Environment. MoEF has also been the key actor in drafting the NAPAs and the BCCSAP. MoEF is also responsible for implementing BCCSAP through Bangladesh Climate Change Resilience Fund (BCCRF) and Bangladesh Climate Change Trust Fund (BCCTF).

Ministry of Finance and Ministry of Planning are actively involved in mainstreaming climate resilience within development planning. The allocation of finance for adaptation through annual development planning budget, integration within short- and medium-term plans, and the incorporation of climate change priorities in the Sixth Five Year Plan and Perspective Plan are key features driven by planning and finance ministries.

Line ministries play a crucial role in implementing sectoral adaptation actions. MoEF and Ministry of Planning have made efforts to 'mainstream' climate change through the respective policies and structures of line ministries that have a major stake in climate change issues. These include the Ministry of Local Government, Rural Development and Cooperatives, Ministry of Water Resources, Ministry of Agriculture, and Ministry of Food and Disaster Management.

During 2004-2009, the Department of Environment (DoE) and its Climate Change Cell served as the technical support units for the Ministry of Food and Disaster Management under their Comprehensive Disaster Management Programme. DoE coordinated climate change research, designed Bangladesh's National Adaptation Programme of Action in 2002-2005, and represented Bangladesh in many UNFCCC related bodies.

**Civil Society Organisations** have made significant contributions in disseminating information and research on Bangladesh's vulnerabilities to climate change, in addition to advocating for adaptation measures. For the most part, non-governmental research organisations and CSOs have taken the lead in climate change issues since the beginning of international dialogue on the topic (Thomalla et al., 2005). Their work focuses on raising awareness of basic climate change concepts, causes, risks, and possible solutions; advocacy, campaigning, and participatory research; piloting and scaling up approaches to Community Based Adaptation (CBA); documentation; generation and dissemination of popular knowledge products. CSO networks (Campaign for Sustainable Rural Livelihoods and EquityBD, for example) have been active in climate justice and vulnerable communities rights. Advocacy groups played a key role in the formation of the All Party Parliamentary Group on Climate Change and Environment, and a parliamentary caucus on climate change. One pioneering CSO project on adaptation was Reducing Vulnerability to Climate Change (RVCC) funded by Canadian International Development Agency (CIDA) and implemented by CARE and its partner organisations in southwest Bangladesh. On the strategic side, the working groups for preparing the BCCSAP and NAPA had members from, and in some cases were led by, national NGOs.

Some **academic and research institutions** are active in the field. A few of them such as Bangladesh Centre for Advanced Studies (BCAS) began to shape global discourse on climate change before the formation of IPCC and UNFCCC. At the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro (Earth Summit) in 1992 NGOs and research institutes from Bangladesh became the focal points for South Asia, taking strong positions in Inter-governmental Negotiation Committees (INC), and

shaping the global discourse on equity issues and inter-generational aspects of climate change. However, the majority of the academic and research institutes entered this field rather late.

The **media** (e.g. newspapers, radio and TV channels) has picked up climate change issues in the last decade although the local and national media has been reporting on environmental and natural disasters for many decades. Some media organisations received training in climate change prior to the Copenhagen Climate Change Summit in 2009 and have been reporting on climate change issues ever since; trained reporters have produced investigative reports on the plight of people affected by climate change, and issues related to programming and fund management.

**Donors and IFIs** supported climate change initiatives with small-scale funding in the 1990s and a few years afterwards. They started making commitments for large-scale funds in the past decade including the creation of the Bangladesh Climate Change Resilience Fund (BCCRF). They have been supporting both government and CSO initiatives.

The **private sector** (including businesses, industries, chambers of commerce and so on.) is yet to implement initiatives to prepare for future climate induced hazards or to safeguard their investments. Recently the sector expressed interest in adaptation and disaster preparedness. Also, a few agencies have promoted energy efficient lighting, solar technologies, and fuel efficient cooking stoves.

### 3.4 Legislative, policy and programme support

Bangladesh is yet to have an exclusive national policy on climate change. The main planning document for climate change action in Bangladesh is the Bangladesh Climate Change Strategy and Action Plan (BCCSAP) (MoEF, 2009). Building on and superseding the National Adaptation Programme of Action (NAPA), it is a "pro-poor" climate change management strategy that prioritises adaptation and disaster risk reduction, and also addresses low carbon development, mitigation, technology transfer and the mobilisation of international provision of adequate finance. The BCCSAP has six pillars:

1. food security, social protection and health
2. comprehensive disaster management
3. infrastructure
4. research and knowledge management
5. mitigation and low carbon development
6. capacity building and institutional strengthening.

## BOX 2. MAJOR POLICIES AND PLANS FOCUSED ON CLIMATE CHANGE IN ADDITION TO BCCSAP AND SFYP

- NAPA: Bangladesh was one of the first countries to complete its NAPA in 2005 with 15 projects. Its last update was done in 2009.
- Climate Change Act (2010): It established the Climate Change Unit under MoEF and the corresponding committees.
- CDAP under the National Capacity Self-Assessment (2007): The study identified a package of 15 actions for climate change that were taken into account in the development of the NAPA and BCCSAP.
- Local Adaptation Plans under the Advancing Capacity for Climate Change Action (ACCA): The ACCA initiative was implemented by UNITAR and completed in 2010. Part of the programme included the development of local adaptation action plans in Bangladesh. Although not a 'main' policy or plan, it is included here for cross-reference with similar planning processes on-going in Nepal.

There are 44 programmes under these pillars; a technical assistance programme to assist with implementation is supported by the Asian Development Bank (ADB). It has consolidated the numerous studies devoted to climate change risk, although no additional evidence was generated for the development of the BCCSAP.

Unlike previous plans, the Sixth Five Year Plan is a significant step forward for climate change programme planning in Bangladesh. An entire chapter is devoted to adaptation and mitigation strategies for addressing climate change, 'Chapter 8: Environment, Climate Change, and Disaster Management for Sustainable Development'. It has also identified specific programmes in line with the themes in BCCSAP, set benchmarks for achieving programmatic goals, and outlined implementation strategies.

Since 2008, discourses, commitments and initiatives on climate change have gained new momentum on political, technical and bureaucratic fronts. In 2008, the Awami League's elections manifesto made a commitment to take all measures 'to protect Bangladesh -- including planned migration abroad -- from the adverse effects of climate change and global warming' (Bangladesh Awami League, 2008). After being elected to power, the Awami League-led government developed the 'Perspective Plan on Bangladesh 2010-2021: Making Vision 2021 a Reality' where environment, climate change and disaster management issues were further elaborated (GoB, 2012b).

Since the development of the BCCSAP (MoEF, 2009), the government of Bangladesh's strategy has been to integrate climate change challenges and opportunities into the overall development plans and programs of all sectors and processes for socioeconomic development. This process has been supported by the UNDP-UNEP run Poverty Environment And Climate Mainstreaming (PECM) project of the Planning Commission. In addition, climate change is tackled in the critical planning documents, the Annual Development Plan, the Sixth Five Year Plan FY2011-FY2015, and the Outline Perspective Plan Vision 2021 (GoB, 2012a).

A wide range of programmes has been implemented by the GoB and CSOs with funding and technical support from development partners to take the NAPA and (subsequently) BCCSAP forward. These include: (a) NAPA priority 1 (2009-2013) being implemented with funds from Least Developed Countries Fund (LDCF), GoB and UNDP; (b) capacity building of MoEF (2009-2011) for BCCSAP implementation with support from ADB; (c) Pilot Programme for Climate Resilience (PPCR) focused on infrastructure support with funds from World Bank, International Finance Corporation and ADB; (d) Comprehensive Disaster Management Programme (2010-2014) supported by multiple donors and (e) Climate resilience enhancement and protected areas co-management programmes funded by DFID and USAID for different durations in line with the priorities set out in BCCSAP. In addition, numerous on-going non-governmental activities support adaptation at different scales, particularly at the community level.

Figure 2: some key policies, plans, programmes, institutions and financing mechanisms for climate change programming in Bangladesh (IIED, 2011)

POLICIES/PLANS	PROGRAMMES	INSTITUTIONS	FINANCING
1. BCCSAP	1. NAPA (PRIORITY 1, 2009-2013)	1. MOEF	1. BCCRF, US\$120 M
2. NAPA 2005, 2009	2. TA TO BCCSAP	2. DOCC	2. GOB CCTF, US\$200 M
3. CDAP OF NCSA	3. PPCR	3. DOE	3. PPCR, US\$120 M
4. CC TASK ACT 2010	4. CDMP, 2010-2014	4. CCU IN MOEF: TECHNICAL COMMITTEE TRUST BOARD	4. CLIMATE PUBLIC EXPENDITURE & INSTITUTIONAL REVIEW (CPEIR) INITIATED
5. ACCCA	5. USAID/GOB CBA SUNDARBANS - US\$3 MILLION	5. CC CELLS	
6. LAPA	6. USAID/GOB INTEGRATED PROTECTED AREA CO-MANAGEMENT - US\$13 M	6. PARLIAMENTARY COMMITTEE ON CC	
7. CDAP UNDER NCSA	7. DFID CCP, US\$ 75 M, 2009-2014		
8. NO CC OR CDM POLICY	8. URBAN GOVERNANCE - ADB US\$167 M, 2009-2011		

# Poverty reduction and social protection

4

Bangladesh has made remarkable progress in reducing poverty. In the last forty years its poverty rate has fallen by 60 per cent and real per capita income has risen by almost 130 per cent. Nonetheless Bangladesh still has significant levels of poverty with around 47 million people living below the poverty line.

Consequently poverty reduction discourses continue to dominate the country's development planning. These discourses has evolved from community development (1950s); trickle down (1960s); basic needs and integrated rural development (1970s); growth, human resource development and safety net (1980s); labour intensive growth, human resource development, safety net and target approach (1990s); and rights based approach (2000 onwards).

## 4.1 Dominant discourses

Following are the dominant policy discourses on poverty reduction and social protection.

### **Reducing poverty by accelerating growth and productivity:**

According to the Sixth Five Year Plan, enhanced efficiency and productivity in industries and agriculture sector will create better conditions for investments in the country. The idea is to encourage economic growth by investing in energy and transport infrastructure for industrial and agricultural sectors and consequently reverse recent trends in underutilisation of capacity within those sectors.

### **Moving from charity-based social welfare to building capacities (skills, employment):**

Past discourses on social welfare were focused on providing medical and educational support, and support for youth, women and disabled persons. These charity-based discourses have evolved into capability-based discourses that go beyond social welfare to targeted development in rural areas. These include rural development initiatives to improve the skills, employment and socioeconomic prospects of poor people (Qayum and Samadder, 2013). The tendency towards increasing capabilities first gained a foothold in the Third Five Year Plan in the 1980s and was explored further in the Poverty Reduction Strategy Papers supported by the World Bank and IMF in the late 1990s.

### **Social protection only for most disadvantaged:**

In the past social protection benefits were available to all rungs of society whereas the present tendency is to focus on its poorest members. This shift is reflected in the Poverty Reduction Strategy Papers of Bangladesh, as well as various social safety nets such as income transfer programmes, risk insurance and public health programmes.

## 4.2 Alternative discourses

The following alternative views (to those discussed above) have emerged in poverty reduction discussions.

### **Redistribution and harnessing growth for the backward communities:**

While the dominant discourse is focused on accelerating growth and productivity by investing in infrastructure for industries and agriculture, there are contesting views that accelerated growth may not seek benefits for the poorest people. This discourse stems from evidence that economic development in the last three decades has shown a satisfactory increase in per capita income: yet levels of poverty continue to stay high. Civil society organisations and development partners therefore emphasise accelerated growth in labour intensive villages and encouragement of small industries, which is now reflected in the Sixth Five Year Plan (MoP, 2011).

Bangladesh is still an LDC and its aspirations to become a middle-income country could jeopardise aid programmes (e.g. cuts in funding for poverty reduction) aimed at the poorest communities.

### **Social protection for the urban poor:**

In the Sixth Five Year Plan a chapter has been dedicated to the need for social protection for the urban poor, 'Managing the Urban Transition' (GoB, 2011b). However, the urban discourse is yet to become a dominant discourse.

## 4.3 Climate resilience in poverty and social protection discourse

Climate change has emerged as a strong discursive element in poverty reduction discourse where it is considered an impediment to poverty reduction and economic growth. Targeting climate vulnerable communities is one way to combat poverty-induced inequality in Bangladesh. Here are some key narratives that reflect how climate resilience is entering the poverty reduction discourse in Bangladesh.

### **Climate change a major impediment to economic growth targets:**

The effects of climate change are anticipated as a major obstacle in achieving Bangladesh's poverty reduction and economic development goals. According to the Ministry of Environment and Forests (MoEF), increased frequency and intensity of natural disasters due to climate change accounts for 1.5 per cent decrease in the country's GDP (MoEF, 2012). Climate induced monsoon flooding could cost the country US\$2671 million by 2050 to protect the major towns of

Bangladesh (Dasgupta *et al.*, 2011). Impacts of climate change on development outcomes are noted in the Sixth Five Year Plan of the country.

#### **Social protection for climate vulnerable groups:**

Climate change has emerged as a dominant discourse while targeting the most disadvantaged sections of the country for social protection support. Employment opportunities for the ultra-poor in climate affected and disaster prone areas have been stressed in the medium-term budgetary frameworks of Ministry of Food and Disaster Management (Qayum and Samadder, 2013). The first pillar of BCCSAP highlights the role of social protection and commits to increasing resilience through provision of social safety nets. The Sixth Five Year Plan also emphasises social protection for climate vulnerable women. The poverty reduction focus in coastal areas of Bangladesh stems from the recognition of these regions as highly climatically vulnerable (MoP, 2011).

#### **Efforts to mitigate climate change effects shouldn't compromise development:**

The need for lowering emissions from various economic sectors is acknowledged by many developing countries following the Bali Action Plan, 2007. Bangladesh has agreed to operationalise the Bali Action Plan. As demand for energy grows with development, the Sixth Five Year has made it clear that actions to address climate change will not compromise development goals. Nevertheless Bangladesh is willing to support low carbon agenda, provided the country receives international financial and technological support (GED-PC, 2010).

#### **Tackle poverty by multiple economic sectors:**

This discourse derives from the evidence that climate change is not specific to any particular sector. Thus, various programmes and policies address climate related issues by mainstreaming climate risk management within different sectors. The poverty reduction strategy of Bangladesh has progressed from first PRSP to the second, which integrates climate change actions to tackle poverty. The National Strategy for Accelerated Poverty Reduction (NSAPR-II, popularly known as PRSP-II) foregrounds mainstreaming climate change adaptation across multiple sectors, by means of improved crop production practices; watershed and coastal zone management including afforestation; building cyclone shelters and embankments; improving salinity control measures; public awareness; climate research and data collection (GED-PC, 2009).

## 4.4 Implications of poverty reduction discourse and interactions between discourses

Poverty reduction and social protection is a key policy arena within development planning in Bangladesh. The main discourses around poverty reduction and social protection focus on enhancing growth and productivity; shifting away from social welfare approaches to direct capacity building; along with targeted social protection programmes.

Climate change discourses seem to map onto existing discourses on poverty reduction and social protection. These common discourses focus on keeping growth on track by addressing the impacts of climate change; targeted social protection (safety nets) to address vulnerability of rural poor; integrate climate change across sectors; and supported LCD. Strong overlap between development and climate change discourses is an indication that climate change discourse in Bangladesh is embedded within the development discourse. Both policy areas have common grounds to harmonise interrelated aspects of climate change and poverty reduction.

Conversely, there is a risk that contradictory discourses may have implications on realising policy objectives in either discourse space. Perceived threat of low carbon actions to Bangladesh's economic development may discourage climate related actions and vice versa, for example.

## 4.5 Key actors

**Ministry of Planning and Planning Commission** are the key actors for developing all major plans and policies for achieving poverty reduction goals within the country. Planning Commission is also the responsible authority for mainstreaming climate change within poverty reduction and development. The Sixth Five Year Plan was developed under the aegis of Ministry of Planning. General Economic Division, Planning Commission of Bangladesh is also responsible for developing the Poverty Reduction Strategy Papers (PRSPs).

**Line ministries** that implement various poverty reduction strategies in different sectors determine the uptake of these discourses. Ministry of Agriculture, Ministry of Food and Disaster Management, Ministry of Health and Family Welfare, and Ministry of Social Welfare are some prominent actors.

**Donors and International organisations** such as Multi-lateral development agencies and UNDP support various poverty reduction programmes by financing them. PRSPs were developed with support from International Monetary Fund, for instance.

**Civil society organisations and policy think tanks** also play a key role in defining the emerging discourses in Bangladesh. The Bangladesh Institute of Development Studies, Dhaka and Bangladesh Centre for Advanced Studies, Dhaka have played a key role in bringing the equity discourse on board.

## 4.6 Legislative, policy and programme support

Numerous policy initiatives support poverty reduction and social protection in Bangladesh. The dominant discourses reflect in various Five Year Plans, IMF funded Poverty Reduction Strategy Papers (PRSPs) and sectoral policies, to mention a few. The PRSPs mainly focus on poverty and coping, while the Sixth Five Year Plan focuses on growth. The SFYP has its roots in the Perspective Plan that built upon Vision 2021 set out by the current government when it came to power in 2009. The economic growth discourse is focused on achieving 'middle-income' status by 2021 through a pro-poor development strategy.

The Vision 2021 and associated Perspective Plan of Bangladesh 2010-2021 have set development targets for Bangladesh up to the end of 2021 (GoB, 2012b). Along with higher per capita income, Vision 2021 lays down a development scenario where citizens will have a higher standard of living, better education, social justice and equitable socioeconomic environment. Moreover, sustainable development will be ensured through better protection from climate change and natural disasters. The associated political environment will be based on democratic principles with emphasis on human rights, freedom of expression, rule of law, equal opportunities, equality of citizens irrespective of race, religion and creed. The economy will be managed within the framework of a market economy with appropriate government interventions to correct market distortions. The implementation of Vision 2021 will be executed during two medium term development plans (i.e. five-year plans), with the first spanning FY2011-FY2015.

Although Bangladesh is yet to have a specific social protection policy, there are various programmes for social protection. Many started with the goal to support the poorest and most vulnerable people and benefit from the discourses on adaptation to climate change. An extensive social protection programme forms a core part of Bangladesh's poverty reduction strategy. Social protection takes the form of both direct measures (income and employment generating programmes targeting poor people, for example) and indirect measures (human development programmes that are growth oriented and, therefore, expected to leave indirect effects on poverty reduction, for example). Direct government programmes include: (a) Food for Work; (b) Vulnerable Group Development; (c) Vulnerable

Group Feeding; (d) Open Market Sales; (e) Cash for Work; (f) Gratuitous Relief; (g) 100 Day Employment Program; (h) Allowances for the elderly, disabled, freedom fighters, widowed and distressed women; (i) Grants for orphanages and (j) Microcredit programmes. Indirect or growth oriented measures cover mostly infrastructural development and rehabilitation programmes.

Programmes are implemented with both revenue budget and development budget, and managed by specialised institutions. The Sixth Five Year Plan recognises that a core gap in social protection schemes is low coverage, high 'leakage' and double counting. The current policies aim to address these issues through introducing improved oversight, and monitoring and evaluation mechanisms.

# Agriculture

5

Agriculture and related activities form an important part of Bangladesh's economy. Around 70 per cent of the country's population resides in rural areas and depends on income and employment from agriculture and related activities. Agriculture sector also forms an important part of Bangladesh's per capita income. Crop sector alone accounts for 12 per cent GDP of the country (GED-PC, 2010). Bangladesh has experienced an exemplary increase in agriculture production over the years. Yet, persistent challenges caused by natural disasters, unstable crop prices and unprepared market mechanisms have affected the country's ability to achieve food security.

Some key discourses within the agriculture and food security domain are discussed below.

## 5.1 Dominant discourses

### Food security and right to food:

Agriculture and food security have led the economy, livelihoods and 'politics' in Bangladesh. The inability of a government to ensure enough food at affordable prices poses a threat to its re-election. Bangladesh's agriculture policy, interventions and discourses are focused on crop production, which presently accounts for 60 per cent of the sector value (GoB, 2011a). Bangladesh is regarded as a 'rice economy', and the country is nearly self-sufficient in rice production. Policies that have contributed to this success include the adoption of the seed-fertilizer technology, provision of irrigation, farm extension, research and development, and public subsidies on fertilizer and water.

*[Food production in Bangladesh is] a success story. It kept up with the population growth. The farmers, the government, CSOs, and the private sector collaborated in this. There are sound and resilient policies, and the farmers are smart.*

– A respondent to the PDA (2013)

Alongside productivity, other factors to consider in the discourse on food security include distribution and quality of food, and people's right to food, with a focus on poor and marginalised populations. Water related issues also factor into crop production. A popular concern is that 'too much water (flood), too little water (drought) and inappropriate water (salinity)' has a detrimental impact on agriculture and other aspects of people's lives.

Rice dominates, but the structure of agriculture is changing slowly with some gains mainly for fisheries and forestry products (between 2006 and 2010), with livestock remaining virtually stagnant (GoB, 2011a).

### Declining and deteriorating agriculture land:

Declining area and deteriorating quality of agricultural land are key concerns. It is estimated that agricultural land is declining by 1 per cent every year (MoA, 2010). Factors contributing to the degradation in quality of land are loss of soil fertility, soil erosion, soil salinity and shrinking water resources. It is recognised that climate change will exacerbate these problems. Issues around inadequate land for agriculture also shape the discourse to transform Bangladesh's economy from a purely agrarian economy to a manufacturing and service based economy in the long run (MoP, 2011).

### Accelerating pro-poor growth oriented agriculture:

The focus here is on higher growth in rural areas, development of agriculture, and rural non-farm economic activities as means of accelerating pro-poor economic growth (GoB, 2011a). Diversification and intensification of agriculture in a sustainable manner is considered crucial. Agricultural extension is a key driving force for this growth. Its role is to deliver services for farmers and to increase access to and adoption of new technologies (GoB, 2011c). Part of the new Extension Approach is 'a shift from the top-down, hierarchical approach to bottom-up participatory approach in which farmers, researchers and extension workers will serve as peers' to improve the responsiveness of extension programmes to local needs by encouraging farmers to voice needs and problems to extension staff. The agricultural policy is not explicit about how this will be achieved. The extension strategy also emphasises new collaboration between research and extension organisations and universities to promote research in climate change adaptation. The Government will encourage promotion of crops suitable to agro-climatic conditions of a particular region based on crop zoning. The revised (final draft) Agriculture Policy also includes proposals for a crop insurance programme and an agricultural disaster response fund. The Sixth Five Year Plan also emphasises support to enhance infrastructure capacities for agriculture sector.

## 5.2 Alternative discourses

Some narratives have been unable to dominate the agriculture discourses of Bangladesh but provide interesting contesting storylines to those discussed above.

### **Targeting rural sectors diverts attention from urban development:**

Urban development experts have identified certain narratives that divert attention from urban development such as the belief that urban development will attract more rural-to-urban migration, whereas developing rural areas will contain the aspirant migrants there. The recognition of such discourses has contributed to the development of the GoB's urban policy (currently awaiting approval before the Cabinet) and formation of the Bangladesh Urban Forum.

### **Intensification of crop production compromises other related sectors:**

Intensification and emphasis on increasing crop productivity dominate the agricultural discourse in Bangladesh. Yet, it is argued that increasing crop production through excessive use of chemicals and water will impact the fisheries industry. Construction of flood embankments for crops also affects fish breeding grounds. Policy documents fail to acknowledge these interlinking issues, even though evidence from the past confirms fish-crop conflicts (MoA, 2006).

### **Emphasis on coastal agriculture over drought areas:**

Most of the emphasis on climate change and agriculture in Bangladesh focuses on managing crop inundation and salinity intrusion. However, there is less attention to managing agriculture in drought prone areas.

## 5.3 Climate resilience in agriculture and food security discourse

Climate change concerns have emerged as a strong narrative in agriculture and food security discourses of Bangladesh. Growing effects of climate change induced disasters such as increased frequency of floods and droughts have affected the productivity of agriculture in Bangladesh. Saline intrusion and degradation of land are some impacts of climate change. The following narratives reflect on how climate related discussions are entering the agriculture discourse of the country.

### **Agriculture sector requires research and innovation in crops and technologies to adapt to adverse climatic conditions:**

Increased frequency of climate related disasters such as floods and droughts emphasise the need to innovate in climate resistant high yielding crop varieties and

technologies. Evidence of decreasing yields every year due to extreme climatic conditions has prominently shaped this narrative. As per NAPA (2005) estimates, extreme scenarios caused by a 4°C rise in temperature could lead to fall in rice yields by 30 per cent, wheat by 50 per cent and potato by 70 per cent (MoEF, 2005a). Many programmes and plans therefore support crop production, which is appropriate to saline, drought and flood affected areas. Ministry of Agriculture has prioritised these actions in its medium-term budgetary frameworks (Qayum and Samadder, 2013). In addition, research and innovation within the sector are supported by the Sixth Five Year Plan. Lastly, The BCCSAP has prioritised research in climate resilient cropping systems to support food security within the country (MoEF, 2008).

### **Reducing emissions from agriculture:**

The discourse on emission reduction emerges from evidence that GHG emissions from agriculture and forestry constitute a significant proportion of total GHG emissions in Bangladesh (almost 50 per cent as per the data from second communication to UNFCCC). Increase in energy consumption in agriculture is cited as the key cause for agriculture related emissions. This is due to energy intensive high yield crop varieties, and mechanised irrigation and tillage practices. Reducing emissions from agriculture is perceived as a discourse driven by development partners and international organisations (DoE, 2006).

## 5.4 Implications of agriculture discourse and interactions between discourses

Climate change is considered a threat to the agriculture sector of Bangladesh. Emphasis on climate resilient cropping systems therefore synergises with increased crop productivity and diversification objectives of the agriculture sector: these separate discourses may potentially merge in future.

Nonetheless, contradictions between the discourses on emission reductions from agriculture sector and food security may have future policy implications. Even though GHG emissions from agriculture constitute a significant part of total GHG emissions, achieving food security is a priority for the country. Emissions reduction would be considered only if it doesn't come in the way of establishing food security.

## 5.5 Key actors

Many direct and indirect actors use and contribute to diverse research findings within agriculture. Ministries of Agriculture and Food, Bangladesh Rice Research Institute, Bangladesh Agricultural Research Institute, and Bangladesh Agricultural Research Council are the prominent players, as well as the Ministries of Fisheries and Livestock. Some CSOs remain active, especially within agriculture related research.

A USAID funded research project on Low Emission Development Strategies (LEDS) in the Agriculture, Forestry, and Other Land Use (AFOLU) sectors also provides evidence that drives the discourse on emissions reduction in the agriculture sector of Bangladesh.

## 5.6 Legislative, policy and programme support

Several mainstream policies and plans have focused on agriculture and food security with varying degrees of concern for climate change impacts. These policies and plans include the Perspective Plan 2010-2021, Sixth Five Year Plan, the National Agriculture Policy (final draft), and BCCSAP. Food security is a key theme in BCCSAP.

In Bangladesh, the agriculture sector encompasses crops, fisheries, livestock, and forestry sub-sectors. The National Agriculture Policy (2010) was drafted in 2010-2011 and the final policy was prepared in 2013. The aim has been to enhance crop productivity, profitability and employment in the rural areas to improve well-being of the poor. The new policy replaces the previous one from 1991 and outlines strategies to protect agricultural land, arrest the decline of biodiversity, and address natural disasters including climate change (GoB, 2012a).

Besides the agriculture policy, Bangladesh Country Investment Plan, 2011 – a roadmap towards investment in agriculture, food security and nutrition, emphasises research in agriculture to innovate and develop climate resistant crop varieties and technologies (GoB, 2011).

In the past, the Ministry of Agriculture prepared a synthesis of the 18 agriculture sector related policies (GoB, 2006). The report has made a good number of references to environmental issues and policy provision, but there is no mention of climate change. Most of those policies and plans were developed in the 1990s and early 2000s. This indicates that the specific discourses on agriculture and food security in relation to climate change are fairly recent.

Bangladesh Climate Change Strategy and Action Plan, 2008 has a dedicated component on food security, social protection and health. One way the plan aims to achieve its objectives is by developing climate change resilient cropping systems (MoEF, 2008).

The Sixth Five Year Plan also emphasises on 'increasing crop and non-crop agriculture production that is best suited to the climate of coastal belts' by focusing on technology and climate resistant crop varieties (MoP, 2011).

# Forestry

6

Around 16 per cent of the total land area of Bangladesh constitutes government and village forests, but only 6.5 per cent of the total land is under tree cover; the rest includes grassland, scrubland, and encroached areas. Per capita forest land has reduced from around 0.035ha in 1969 to 0.02ha in 1990 (BBS, 1999, Alam, 2009). Major causes of these changes are rapid conversion of land use due to development and illegal logging in many parts of the country. The rapid depletion of forests in Bangladesh has made national and global actors more attentive to the forestry agenda.

## 6.1 Dominant discourses

### Scarcity and conservation:

As a result of widespread deforestation, conservation and biodiversity have emerged as dominant discourses. The National Forestry Policy, 1994, Brick Burning Control Amendment Act, 2001, and Wildlife (Preservation & Securities) Act, 2012 focus on protecting 'scarce' forests and/or afforestation. Protection measures are promoted by the UNDP, World Bank and other donor support projects, and the Forest Department has recently started implementing a five-year, US\$36 million project to enforce the Wildlife Act, 2012. The Sixth Five Year Plan considers the protection of forests essential for 'environmental and biodiversity conservation' (GoB 2011: p191). The remaining forests must be protected to preserve biodiversity and protect endangered species in order to preserve genetic material essential for natural adaptation. The National Forest Policy, 1979 focused on providing greater protection and placing greater emphasis on conservation of the country's forest assets whilst concomitantly developing its rural and industrial economies. Forest Department and Ministry of Environment and Forests are key in implementing the forestry programmes. Reducing Emissions from Deforestation and Degradation (REDD) also supports the conservation agenda at the global level.

### Social forestry:

The participatory forest management approach is expected to ensure community participation and better care of forests by the people who have known the forests for a long time. The current forest policy of 1994 recognises for the first time the importance of people's participation in forestry. Some noteworthy policy commitments include sustainable development, poverty alleviation, local people's participation in forest protection, and governmental support for forest development.

### Private sector development and participation:

The National Forestry Policy, 1994 states that, 'private initiatives will be encouraged' (GoB, 1994). To this end, the participation of the private sector in afforestation

programs and the promotion of 'cottage industries' are encouraged. The Sixth Five Year Plan stresses the role of cottage industries in improving the 'income of poor people' (MoP, 2011). The SFYP also encourages 'private plantation of rubber, teak, mango, jackfruit and other high-value trees' and sets out to provide 'extension, training and credit facilities to encourage the private sector to undertake rubber, teak, jackfruit and other high-value crop plantation on a commercial basis' (*Ibid.*, p. 198, 200).

### Research and development in forestry:

Despite several afforestation efforts depletion of forests has continued. Although various institutions are supporting research in this sector, research carryover from laboratory to field is missing. Strengthening research, innovation and linkages with ground projects is crucial to bridge the gap. Bangladesh Forest Research Institution (BFRI) is a prominent research actor supporting Department of Forest and Bangladesh Forest Industry Development Corporation (BFIDC) (MoP, 2011).

## 6.2 Alternative discourses

### Win-win solutions:

One alternative discourse questions the 'win-win' potential of ad/mit in coastal afforestation. Although there is a strong discourse on ad/mit 'win-wins' in the forestry sector in Bangladesh, there is relatively little evidence to support or quantify the trade-offs and benefits. In addition, there is little evidence on the benefits of carbon sequestration with some arguing that the additional time and costs of supporting sequestration efforts could be put to better use by focusing on adaptation efforts.

### Indigenous land and intellectual property rights:

The passing of laws and the implementation of projects that affect the rights and access of indigenous populations in forest regions have been questioned by observers who see these efforts as promoting the 'growing forces of marketization and privatization' (Halim et al., 2002). Traditional farming practices that rely on forests for 'jhum' (shifting cultivation) and alternative farming practices are either threatened or copied without recognising the rights of indigenous populations.

**Tiger conservation:**

The Sundarbans are home to the 'largest surviving single populations of tigers in the world' (Zoological Society of London (ZSL)). To protect the population, the Ministry of Environment and Forests is implementing the Bangladesh Tiger Action Plan 2009-2017 (MoEF, 2009). The protection of tigers is supported by two discourses: the first upholds that tigers are 'a valuable part of human culture and a focal point of many tourist visits', and the second upholds the 'tiger's intrinsic right to survive' (MoEF, 2009). The Tiger Action Plan also draws attention to the fact that 'climate change threatens to reduce the area in which tigers can live' (*Ibid.*).

## 6.3 Climate change discourse in forestry

At the national level, the climate change discourse in forestry comes from a variety of natural resource perspectives (as example, 'there are opportunities from investing in forestry including through co-benefit'). Within the GoB there have been initiatives since 2009 to engage relevant line ministries. The following storylines reflect how climate change is entering the forestry discourse.

**Protection from climate-related disasters:**

Afforestation schemes are seen as strong adaptation strategies for protection against storms and cyclones, and for water management. The government has piloted carbon sequestration projects in the Sundarbans. Bangladesh is exploring possibilities under REDD, particularly for the Sundarbans region. The forestry priorities outlined in the BCCSAP have been noted for their potential to manage climate risks (see section 3.4.5). Social forestry and greenbelt programmes are noted in policy documents as both adaptation and mitigation strategies. The Sixth Five Year Plan also promotes the creation of a 'Coastal Green Belt' to 'prevent the extent of damage by cyclones and tidal surges' (GoB, 2011 p. 199).

**Biodiversity for adaptation:**

The BCCSAP is committed to monitoring and research on biodiversity. A proposal for replanting mangrove forests is in the appraisal stage for the PPCR. The first NAPA project to be implemented is a coastal afforestation project.

An emerging discourse centred on changes in temperature and water resources due to climate change is concerned with its impact on climate-sensitive species, and increased erosion and deterioration of soil quality in upland forested areas (MoEF, 2008).

## 6.4 Implications of forestry discourse interactions between discourses

The discourses within the forestry and natural resources sectors interact well especially when the policy agendas share common issues such as poverty reduction through livelihood support from forest resources. The climate change discourses also interface often in these sectors.

However, underneath the unified vision promoted by forestry and climate change efforts, there is friction between dominant and alternative discourses.

Within dominant discourses, inclusive 'social' and inherently exclusive 'private' development pathways are promoted by the same policies (Sixth Five Year Plan). For instance, the privatisation of plantations will by definition exclude others in the same area from utilising the land and generating profit from forest resources.

Furthermore, there is conflict of interest between the discourse promoting improved income for the poor and the discourse promoting conservation of 'scarce' forest resources. Preventing the use of forest resources will also prevent the generation of income by those populations who rely on the exploitation of that scarce forest resource. Some of the negative effects of conservation may be mitigated with eco-tourism or tiger reserves, but the re-definition of the rights of people to access resources will always favour some individuals over others.

Finally, the discourses that promote generating income from forest resources, whether sustainable or otherwise, conflict with discourses promoting the protection of cultures and ways of life of people who have lived within forest regions prior to government or private sector involvement. It is possible that strict enforcement of indigenous rights, including intellectual property rights, may overcome these barriers, but it is likely that any change in forest use or rights will alter the way of life of indigenous populations.

## 6.5 Key actors

Forest Department and Ministry of Environment and Forest are responsible for policymaking and implementing forestry programmes in the sector. Around 7 per cent of the total forest land is managed by the Forest Department, which plays an important part in 'maintaining environmental balance and sustainable land based production systems' (MoP, 2011). Conservation and productive forest discourses are promoted by the UNDP, World Bank and other donor supported projects.

## 6.6 Legislative, policy and programme support

Bangladesh developed the first National Forest Policy in 1979. The current policy was introduced in 1994, and marked a shift towards participatory forestry management.

The Forest Policy, 1994 recognises the importance of biodiversity for environmental sustenance. Aims 3 and 8 of the policy explicitly mention that habitats for wildlife and vegetation will be conserved through afforestation and by bringing forests under Protected Areas. The policy aims to bring 20 per cent of the total land area under forest cover, and at least 10 per cent of that under Protected Areas by 2015. Measures will be taken to improve degraded forests. As well, the policy advocates social forestry including agro forestry, woodlot plantations and strip plantations in vacant public and private lands of the country. Afforestation could directly contribute to climate change mitigation efforts and also improve forest quality and forest resilience (GoB, 2012a).

Climate change is not reflected in the current forestry policy mainly because it is an old policy. The Sixth Five Year Plan contains a chapter on forestry. It includes key strategies that can directly and indirectly tie in with the efforts to combat climate change. The strategies are given in box 3.

In addition, the following policies affect how forest resources can be used in Bangladesh:

- Social Forestry (Amended) Rules, 2010
- The Forest Act, 1927 (as amended up to 2000)
- Bangladesh Wildlife (Preservation) Order, 1973
- Bangladesh Spotted Deer Rearing Policy, 2009
- Compensation Policy for Casualties Caused by Wildlife
- Brick Burning (Control) (Amendment) Act, 2001
- Prime Minister's National Award for Tree Plantation
- Transit Rule for Bangladesh, 2011
- Saw-mill (License) Rules, 2012
- Wildlife (Preservation & Security) Acts, 2012.

It is intended that each piece of legislation will be aligned with the 1994 Forest Policy.

Finally, the Sixth Five Year Plan promotes efforts to conserve, research, and use forest resources under the following sections:

- Ethnic Communities and the related issues of 'Rural development and non-farm economic activities'
- Environmental Management, which includes

'Conserving Forestry Resources' and 'Research and Development in Forestry'

- Forestry Sector, which seeks to 'expand forest resources, make forests productive, develop institutional capabilities, and encourage people's participation'
- Managing Climate Change, which sees managing forests as part of both mitigation and adaptation efforts.

Despite various efforts, forest sector continues to face challenges. According to various respondents, the formal forests suffer from poor policies and poor implementation of policies: logging and forest destruction are common. The Shaal Forest has reduced significantly due to illegal logging in recent years. On the other hand, the informal forests, such as roadside plantations, are doing well through partnership with relevant communities, GoB and CSOs.

### BOX 3. KEY STRATEGIES FOR FORESTRY IN THE SIXTH FIVE YEAR PLAN (FY2011-FY2015)

- Moratorium on felling in the natural forest will continue.
- Productivity of plantations to be increased manifold. Integration of tree plantation and crop cultivation will be practiced.
- People's participation will be incorporated in all forest development activities.
- Existing coastal afforestation and enrichment plantation to be continued. Existing mature coastal plantations will remain. Special attention will be given to the Sundarbans for biodiversity conservation.
- To prevent the extent of damage by cyclones and tidal surges, Coastal Green Belt will be created and seedlings will be raised for distribution or sale in the coastal zone.
- Social forestry programmes will continue for expansion and strengthening of thana (i.e. *upazila* or sub-district) nurseries, union level nurseries, expansion and strengthening of forest extensions and nursery training centres. Local government bodies will coordinate the afforestation programme at the grassroots level under this programme. NGOs will be more directly involved in afforestation programme.

# Conclusions



This discourse analysis provides an overview of how climate resilience discourses interact with the dominant discourses prevalent within three affected sectors: poverty reduction and social protection, agriculture and food security, and forestry. The PDA explores the ways in which climate discourses are assimilated into the development themes of Bangladesh, the key drivers that shape these discourses and potential policy implications as a result of interactions between these discourses.

### What are the key emerging climate change discourses within developmental sectors of Bangladesh?

#### Climate change discourses

The dominant discourses surrounding climate change in Bangladesh can be categorised within three overarching elements: adaptation, disaster management, mitigation.

#### Adaptation:

The key adaptation discourses in Bangladesh are steered equally by government, international organisations and the civil society.

- **Climate change will undermine development:** Government of Bangladesh considers climate change a threat to the economic development of the country that may discourage Bangladesh from achieving middle-income status. Widespread attention to linkages between adaptation and development is also reflected in the Sixth Five Year Plan of the government (MoP, 2011).
- **Mainstreaming climate change into development planning:** Awareness of linkages between development and adaptation also steer the need to mainstream climate resilience into development planning of the country as reflected in the National Adaptation Programme of Action (2005) and the Bangladesh Climate Change Strategy and Action Plan.
- **Climate proofing of sectors has a major impact on economic growth:** Climate proofing through infrastructure investments in flood management, drainage, coastal embankment, cyclone shelters, has commonly prevailed across programme focus areas.

#### Disaster management:

While 'adaptation' dominates the climate change policy discourse space in Bangladesh, the earliest dominant discourses on climate change were also linked to disaster risk management, as follows.

- **Shifting from a reactive to a proactive approach:** Over the years disaster management discourses have grown more proactive and systematic with comprehensive disaster management plans, institutional restructuring of disaster governance

systems and engagement of communities in disaster management planning (Haque and Salimuddin, 2013).

- **Integration of disaster risk reduction and climate change adaptation:** Discourses around DRR and adaptation are converging in Bangladesh due to their common objectives to reduce vulnerability in climate related disaster affected areas by using social protection methods.

#### Mitigation and emission reductions:

The issues around mitigation and low carbon development are emerging and mentioned in the BCCSAP (MoEF, 2008). There is discussion about engaging with the private sector for its roles in low carbon resilient development and climate change mitigation and adaptation. A justice-based ideology is prominent amongst campaigners and negotiators within both mitigation and adaptation discourses. Its mandate being that Bangladesh will invest in mitigation actions as long as it receives additional resources from international finance to address climate change issues.

#### Poverty reduction

The dominant discourses surrounding poverty reduction are as follows.

- **Accelerating growth and productivity:** The dominant policy discourse that has prevailed over many years is reducing poverty by stimulating growth and productivity in Bangladesh.
- **Moving from charity based social welfare to building capacities:** Past discourses around social welfare focused on providing medical and educational support, and support for youth, women and disabled persons. These charity-based discourses have evolved into capability-based discourses and focus on creating employment opportunities and skill-based development in rural areas.
- **Social protection only for the most disadvantaged:** There is a shift in the social protection discourse towards providing support for the poorest members of society. This is reflected in the Poverty Reduction Strategy Papers and various social safety nets, such as income transfer programmes, risk insurance and public health programmes that have been created for the alleviation of extremely poor populations.

Discourses on climate resilience have become increasingly linked with poverty reduction and social protection discourses:

- **Climate change is a hindrance to the development process:** effects of climate change interfere with Bangladesh's poverty reduction and economic development goals.
- **Social protection for climate vulnerable groups:** climate change has emerged as a dominant discourse in relation to providing social protection to the most disadvantaged sections of the population.
- **Efforts to mitigate climate change effects shouldn't compromise development:** Bangladesh has agreed to operationalise the Bali Action Plan. However, as demand for energy grows with development, Bangladesh will follow a low carbon energy path only as long as its development goals are not compromised.
- **Tackle poverty by strengthening climate change adaptation of multiple economic sectors:** This discourse derives from the evidence that climate change issues are not specific to any particular sector. They are cross cutting and prevail across sectors. Various programmes and policies therefore emphasise the need for mainstreaming climate risk management within different sectors in order to addressing climate related issues.

**Potential future trajectory/policy implications:**

Contradictory discourses may have implications on realising policy objectives in either of the two discourse domains. Perceived threat of low carbon actions on country's economic development may influence or discourage climate related actions and vice versa.

## Agriculture

The dominant discourses surrounding agriculture are as follows.

- **Food security and right to food:** Food security has dominated the agriculture discourse of the country. Both agriculture and food security have led the economy, livelihoods and 'politics' in Bangladesh. A government's inability to ensure there is enough food in the market at affordable prices poses a risk to its re-election.
- **Declining agriculture land:** The quantity and quality of land available to agriculture are key concerns within agricultural discourses and policies.
- **Accelerating pro-poor growth oriented agriculture:** The agricultural discourses focus on higher growth in rural areas, development of agriculture and rural non-farm economic activities as

drivers of pro-poor economic growth. Diversification and intensification of agriculture in a sustainable manner is considered crucial. Agricultural extension is promoted as a key driving force for this growth.

The discourses surrounding climate resilience have become increasingly linked to agriculture.

- **Agriculture sector requires research and innovation in crops and technologies to adapt to adverse climatic conditions:** Agricultural productivity and food security in Bangladesh experience major challenges due to increased frequency of climate related disasters such as floods and droughts. Evidence of decreasing yields every year because of extreme climatic conditions has prominently shaped this narrative. These trends emphasise the need for innovation in climate resistant high yielding crop varieties and technologies. Many programmes and plans therefore support increased crop production, which is appropriate to saline, drought and flood affected areas.
- **Reducing emissions from agriculture:** Emission reduction within the agriculture sector of Bangladesh is an emerging discourse, and perceived to be driven by development partners and international organisations (DoE, 2006).

**Potential future trajectory/policy implications:**

The interrelation of climate change and agriculture is considered a threat to the agriculture sector. Emphasis on climate resilient cropping systems however synergises with increased productivity and diversification objectives of the agriculture sector and may potentially merge in future. Yet, contradictions between reducing emissions from agriculture sector and achieving food security may have future policy implications: even as greenhouse gas emissions from agriculture constitute a significant part of the total GHG emissions, food security continues to be a priority for Bangladesh. Emissions reduction would be considered only if it doesn't come in the way of development and food security.

## Forestry

The dominant discourses surrounding forestry are as follows.

- **Scarcity and conservation:** Widespread destruction of forests in the last few decades has resulted in rapid decline in the forest cover of Bangladesh. As a result conservation of forests and biodiversity have emerged as dominant discourses.
- **Social forestry:** Another dominant discourse is on participatory forest management. This approach is expected to ensure community participation and better care of the forests by people who have known the forests for a long time.
- **Private sector development and participation:** The participation of the private sector in afforestation programs and the promotion of 'cottage industries' are two examples of a discourse that runs through government policies.
- **Research and development in forestry is also an emerging agenda:** Despite several afforestation efforts deforestation has continued. Strengthening research, innovation and linkages with ground projects is recognised as crucial to finding solutions. Bangladesh Forest Research Institution (BFRI) is a key actor supporting the Department of Forest and Bangladesh Forest Industry Development Corporation (BFIDC) (MoP, 2011).

The discourse of climate resilience has become increasingly linked to forestry.

- **Protection from climate-related disasters:** Afforestation schemes are seen as strong adaptation strategies for protection against storms and cyclones, and for water management. Social forestry and greenbelt programmes are noted in policy documents as both adaptation and mitigation strategies.
- **Biodiversity for adaptation:** The BCCSAP commits to monitoring and research on biodiversity. An ongoing discourse in this area deals with changes in temperature and water resources due to climate change. It is also concerned with the consequent impacts on climate-sensitive species, and increased erosion and deterioration of soil quality in upland forests (MOEF, 2008). Furthermore, there is a growing discourse that stresses the need for preserving biodiversity, which is essential for protecting the diversity of genetic material. This enhances a forest's capacity to adapt to climate change, whilst also safeguarding opportunities for medical discoveries.

### *Potential future trajectory/policy implications:*

When looking at the relationships between climate change and forestry there are several competing discourses. Within dominant discourses, inclusive 'social' and inherently exclusive 'private' development pathways are promoted by the same policies, such as Sixth Five Year Plan. Yet, the privatisation of plantations will by definition exclude others in the same area from utilising the land and generating profit from forest resources. Furthermore, there are tensions between the discourses promoting income opportunities for poor people and conservation of 'scarce' forest resources. Preventing the use of forest resources will prevent the generation of income by populations who rely on forests as economic resources. Finally, the discourses that promote generating income from forest resources, whether sustainable or otherwise, are competing with discourses that protect the culture and way of life of indigenous people who have inhabited forest regions prior to government or private sector involvement.

Overall, the PDA provides evidence that climate resilience is interacting with the development sectors of Bangladesh and clearly offers opportunities for cross-sectoral planning. There have been a number of initiatives to incorporate climate change issues into poverty reduction and social protection strategies. At the same time, poverty reduction and social protection have a critical role in climate resilience planning. These present important opportunities for drawing lessons in mainstreaming climate change in the policies and programming for poverty reduction and social protection. The social protection strategy is intentionally 'transitory in nature' so that it can be responsive during natural disasters. Such flexibility is worth exploring, supporting and learning from for understanding and communicating the role of social protection in adaptation. There have been shifts in the approach to agricultural extension towards more inclusive and responsive strategies. There is potential here to strengthen the approach, and to take the opportunity of a 'vertical' entry point for evidence generation and dissemination from local to national level. There is also opportunity to engage in research as there is emphasis on collaboration among research and extension organisations including universities in the field of 'adaptive research'.

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Climate change is a cross sectoral issue with impacts on development and growth. There is a need to integrate climate change responses into development planning in order to ensure that development and growth objectives are resilient to the impacts of climate change

Among nations, Bangladesh is most vulnerable to climate change. The government, civil society and development partners have undertaken a wide range of initiatives to formulate strategies, policies, programmes and funding mechanisms to ensure the country's transition to climate resilience.

Based on a policy discourse analysis, this paper explores how climate change resilience enters into existing development discourses that underpin policymaking in Bangladesh.

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