



BANGLADESH

Climate Change and Gender Action Plan

(ccGAP: Bangladesh)



Ministry of Environment and Forest
Government of the People's Republic of Bangladesh



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**BANGLADESH CLIMATE CHANGE
AND GENDER ACTION PLAN**
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FOREWARD

Climate change is the most crucial issue for the growing economy of Bangladesh. The increasing trend of disasters due to climate change places Bangladesh at the top position among vulnerable countries. It is clear to the government that climate change has both economic and social consequences. Thus, the Government of Bangladesh has already taken initiatives at national and international level to combat the impact of climate change. The gender perspective has got due attention in our National initiatives. Women are among the most vulnerable due to the social and economic context of Bangladesh. Furthermore, data inarguably show that women suffer more than men during and after climatic disasters. Therefore, the needs of women should be taken into consideration in making any decision on Climate Change issues.

The Constitution of Bangladesh emphasizes equal rights for all and prohibits discrimination and inequity on the basis of sex. Especially with respect to women, Article 28 states, 'Women shall have equal rights with men in all spheres of state and public life'. Therefore, the government is fully committed to ensuring women become part of the solutions to climate change by creating space for them to contribute in all aspects of sustainable development in Bangladesh. The government has already ensured women's leadership from national assembly-level to grassroots-level decision making processes.

In 2013, realizing the need for coordinated efforts on gender issues and to mainstream gender issues in development initiatives to increase resilience, the government has facilitated preparation of the Bangladesh Climate Change and Gender Action Plan. The document is a result of consultations with the representatives of ministries, universities, civil societies and development practitioners, contextualized especially by the pillars of Bangladesh Climate Change Strategy and Action Plan 2009.

On behalf of the Government of Bangladesh, I thank the Government of Finland for providing financial support and to the International Union for Conservation of Nature (IUCN) for technical support in preparation of this nationally important document. I hope that the document will provide a strong direction on the path toward becoming a resilient society.

Dr. Hasan Mahmud, MP
Minister
Ministry of Environment and Forest
Government of the People's Republic of Bangladesh

MESSAGE

It is a great achievement indeed for the government of Bangladesh to be able to prepare and publish the Climate Change and Gender Action Plan (ccGAP). Bangladesh is a land of one hundred sixty million people and around half of the population is women. Therefore, any development initiative has to serve the needs of women and men alike. Activities focused on adaptation and mitigation to combat climate change is no exception. The means to bring equal emphasis for women and men, toward gender equality and enhanced sustainability, is the objective of the Bangladesh Climate Change and Gender Action Plan (ccGAP).

The initiative to prepare the ccGAP was taken in 2012 by the Ministry of Environment and Forests, with financial support from the Government of Finland and technical support from International Union for Conservation of Nature (IUCN). This action plan considers four key pillars of Bangladesh's Climate Change Strategy and Action Plan (BCCSAP) 2009, namely a) Food Security, Social Protection and Health; b) Comprehensive Disaster Management; c) Infrastructure; and d) Mitigation and Low Carbon Development. The other two pillars of the BCCSAP are also reflected throughout this plan as cross cutting issues. This plan provides guidance on policy issues and initiatives that need to be taken into consideration by government and development practitioners, in collaboration with different institutions to address climate change in a gender sensitive manner.

I thank my colleagues from different ministries, representatives from universities, civil societies and development practitioners who have taken part to develop the action plan. I look forward to further collaboration for successful implementation of this ccGAP.

Md. Shafiqur Rahman Patwari
Secretary
Ministry of Environment and Forest
Government of the People's Republic of Bangladesh

ACKNOWLEDGEMENT

This national Climate Change and Gender Action Plan for Bangladesh (ccGAP: Bangladesh) has been prepared through a participatory process that included in-country meetings, stakeholder consultations involving the representatives from several ministries/government departments, civil society, academia, research institutions, local NGOs and international organizations, a desk review of several key reports, publications, websites, surveys and in-person interviews.

Several people and institutions made the development of this ccGAP: Bangladesh possible and to whom we would like to extend our sincerest appreciation:

Md. Shafiqur Rahman Patwari, Honorable Secretary, Ministry of Environment and Forest (MoEF), for his continuous support and leadership that made it possible to initiate and implement this process. We would also like to acknowledge the technical support given from Dr. Aparup Chowdhury, Additional Secretary (Env-1), Mr. Abu Nayeem, Md. Maruf Khan, Senior Assistant Secretary, Ms. Nasrin Mukty, Senior Assistant Secretary and Ms. Iliya Sumana, Senior Assistant Secretary at MoEF.

The Members of the Steering Committee for this project, including Ms. Farah Kabir, Country Director, ActionAid-Bangladesh, Mr. Md. Sanowar Hossain Sarker, Chair of the National Committee of IUCN Members in Bangladesh, Dr. Ferdousi Begum, Executive Director, DEBTEC, and officials from the MoEF, Ministry of Women and Children Affairs (MoWCA), Ministry of Disaster Management and Relief (MoDMR) and Ministry of Social Welfare (MoSW) for their guidance and collaboration.

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The staff of the IUCN Bangladesh Country Office, in particular, Dr. Istiak Sobhan, Program Coordinator, Mr. Nasim Aziz, Senior Program Officer, Mr. Mohammad Abdul Motaleb, Program Officer and Mr. Sheikh Asaduzzaman, Library & Publication officer.

Participants of both the training workshop for women and women's organizations as well as the national stakeholder strategy-writing workshop for their commitment, enthusiasm and input.

The Government of Finland for the visionary leadership, unwavering commitment to our process and the generous financial support that enables us to do this important work.

Finally, the Secretariat and Alliance Members of the GGCA that engaged in the development of the ccGAP: Bangladesh.

Together we can positively impact on the lives and livelihoods of women and societies around the world.

Ishtiaq Uddin Ahmad

Country Representative

IUCN Bangladesh Country Office

EXECUTIVE SUMMARY

Bangladesh is a country hard hit by climate change. Living with the scars of a tragic history and low development indicators, the negative impacts of climate change is threatening the livelihoods and existence of around 160 million people already perilously close to tipping point. Flood plains – wedged between battering sea surge, cyclones, coastal erosion and salinization from the Bay of Bengal in the south and Himalayan Glacier Outburst Floods (GLOF) from the north -covers around 80% of the country.

The Climate Change Vulnerability Index produced by Maplecroft in 2011 identified Bangladesh as the country most vulnerable to climate change in the world.

Bangladesh is a developing nation with almost half of the population being women who are involved in agriculture and economic activities. As such women bear significant share of contribution to development.

Therefore, the impending impacts of climate change particularly the increasing frequency and intensity of extreme climatic events affecting agriculture, water resources and the livelihoods of poor women not only impede the development activities, but also exerts direct vulnerability to women.

The position of women in policy framework of Bangladesh is mixed. Equal rights for men and women are enshrined in the Constitution of Bangladesh. In the context of Millennium Development Goals (MDGs), the CEDAW (1979), and the Beijing Platform of Action (1995), Bangladesh developed number of policies and sectoral strategies to ensure gender equality, which include;

- The National Policy for Women's Advancement (NPWA) within the framework of CEDAW and a follow up of Beijing Conference on Women;
- The National Action Plan (NAP) as a follow-up to the Beijing Platform of Action;
- Enactment of a number of laws as well as National Policies.

Besides, the major strategy documents of the government of Bangladesh-the Poverty Reduction Strategy Paper (PRSP), The Sixth Five-Year Plan (2011-2015), Steps towards Change: NSARP-II, Vision 2021 specifically identifies bringing women into mainstream development activities of the Government as a major goal to be achieved.

Being the primary victim of climate change impacts, women can play a central role in adaptation to climate change. Women also could play a key role in mitigating climate change by optimizing energy efficiency, using low-footprint energy sources and techniques, and influencing a household's and community's consumption patterns. Therefore, when it comes to decision-making and implementation towards building resilient communities in the face of climate change, the full and meaningful participation of women become essential.

The government of Bangladesh considered gender perspective to its strategies and action plan on climate change. National Adaptation Programme of Action (NAPA) has incorporated gender in a more comprehensive manner throughout the document, while BCCSAP (Bangladesh Climate Change Strategy and Action Plan 2009) emphasizes addressing the needs of the poor and vulnerable, including women and children, in all the activities under the Action Plan.

In line with the country's intention to empower and respond to the needs of the often invisible 'other half' of the population in the context of climate change, the national Climate Change and Gender Action Plan for Bangladesh (ccGAP: Bangladesh) has been prepared with an aim to ensure gender equality into climate change related policies, strategies and interventions. The underlying principle of the ccGAPs is the transformative nature of gender interventions. ccGAPs also have the potential to enhance the effectiveness and efficiency of climate change and socioeconomic development responses.

The development of ccGAP followed a participatory process that included in-country meetings, stakeholder consultations involving the representatives from several ministries/government departments, civil society, academia, research institutions, local NGOs and international organizations, a desk review of several key reports, publications, websites, surveys and in-person interviews. A critical step in the implementation process is anchoring global agreements within national contexts-through the development of ccGAPs.

The ccGAP integrates gender considerations into four of the six main pillars as identified in the BCCSAP: (i) food security, social protection and health; (ii) comprehensive disaster management; (iii) infrastructure and (iv) mitigation and low carbon development. The remaining two pillars of the BCCSAP, those of research and knowledge management and capacity building and institutional strengthening, were main streamed within the above four pillars throughout the document as crosscutting topics.

The ccGAP establishes clear objectives, outlines substantive activities that are accompanied by reachable indicators within the ambit of the four pillars as identified and highlights the specific contribution women do and can make within each of these as well as the required interventions necessary to incorporate the role of women effectively over a timeframe of five years, from 2013/14-2018/19.

Under the food security, social protection and health pillar, emphasis has been given to integrate gender and climate change concerns into policies and national documents concerning the agricultural sector, create environment to lease land/ water bodies to women, ensure crop insurance and/or other safety nets for female farmers, access to financial instruments and capacity development and involvement of women on alternative technologies for example bio-fertilizer; climate resilient cropping etc. Actions have been suggested to integrate Climate change and gender in national health policy and programs, to support livelihood for women migrated due to climate change, better participation of women for efficient water management and better social security/protection of women, adolescents, and children pre, during and post-disaster and emergency situations.

Under the comprehensive disaster management (CDM) pillar, some actions worth highlighting are development of gender responsive disaster management policy, increased women's participation from central to local especially UDMC/UzDMC, more allocation of financial resources to address gender and DRR issues, participation of women in community risk assessment (CRA) vulnerability and capacity assessment activities, capacity development activities for women and men in providing first aid and primary health care as first responders.

In relation to infrastructure, focus has been given to increase women's participation in climate change related infrastructure development and management, monitoring, maintenance and secure and uninterrupted mobility of women in transport sector. In areas of mitigation and low carbon development pathway, increased women's participation, access and benefit in the energy policy has been emphasized, development of gender responsive programs to reduce GHG emission at household (HH) and increased access to energy and power technologies, entrepreneurship development programs related to waste management, solid waste and drainage management and more participation of women in coastal and social forestry programs have been encouraged.

The ccGAP defines the role that the MoEF will play in initiating and facilitating efforts internally, as well as with strategic partners at the national, regional and international levels. It seeks to mainstream gender in climate change advantage of opportunities that promote gender equality and facilitate transformational change as we build a climate action as outlined in the BCCSAP, the NAPA and other policy documents. Importantly, it also seeks to take resilient community.

ACRONYMS

ADB	Asian Development Bank
BARI	Bangladesh Agricultural Research Institute
BCAS	Bangladesh Center for Advance Studies
BCCRF	Bangladesh Climate Change Resilient Fund
BCCSAP	Bangladesh Climate Change Strategy and Action Plan
BCCTF	Bangladesh Climate Change Trust Fund
BFRI	Bangladesh Fisheries Research Institute
BINA	Bangladesh Institute of Nuclear Agriculture
BPDB	Bangladesh Power Development Board
BRRRI	Bangladesh Rice Research Institute
BWDB	Bangladesh Water Development Board
CCGAP	Climate Change and Gender Action Plan
CCU	Climate Change Unit
CDM	Comprehensive Disaster Management
CEDAW	Convention on the Elimination of All forms of Discrimination Against Women
CEGIS	Center for Environmental and Geographic Information Services
CH ₄	Methane
CIF	Climate Investment Fund
CO ₂	Carbon Dioxide
CSOs	Civil Society Organizations
DAE	Department of Agricultural Extension
DC	Deputy Commissioner
DDM	Department of Disaster Management
DEBTEC	Development of Biotechnology and Environmental Conservation Centre

DFID	The Department for International Development
DMB	Disaster Management Bureau
DoF	Department of Fisheries
DoL	Department of Land
DPHE	Department of Public Health Engineering
DPs	Development Partners
DRM	Disaster Risk Management
DWA	Department of Women Affairs
ECAs	Ecologically Critical Areas
ESDO	Environment and Social Development Organization
FAO	Food and Agricultural Organization
FD	Forest Department
FFWC	Flood Forecasting and Early Warning Center
FYP	Five Year Plan
GDP	Gross Domestic Product
GEF	Global Environment Facility
GGCA	Global Gender and Climate Alliance
GHG	Green House Gas
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
HPNSSP	Health Population and Nutrition Sector Strategic Plan
ICDDR,B	International Centre for Diarrheal Disease Research, Bangladesh
IFRC	International Federation of Red Cross and Red Crescent Societies
IMDMCC	Inter-Ministerial Disaster Management Coordination Committee
IPCC	Inter-Governmental Panel on Climate Change
IUCN	International Union for Conservation of Nature
LGED	Local Government Engineering Department
LGRD	Local Government and Rural Division
LULUCF	Land Use, Land Use Change and Forestry
MDGs	Millennium Development Goals
MDTF	Multi-Donor Trust Fund
MFF	Mangroves For the Future
MHA	Ministry of Home Affairs

MoA	Ministry of Agriculture
MoCHTA	Ministry of Chittagong Hill Tracts Affairs
MoDMR	Ministry of Disaster Management and Relief
MoEF	Ministry of Environment and Forest
MoF	Ministry of Food
MoFDM	Ministry of Food and Disaster Management
MoFL	Ministry of Fisheries and Livestock
MoHFW	Ministry of Health and Family Welfare
MoHPW	Ministry of Housing and Public Works
Mol	Ministry of Information
MoL	Ministry of Land
MoP	Ministry of Planning
MoPME	Ministry of Primary and Mass Education
MoSW	Ministry of Social Welfare
MoWCA	Ministry of Women and Children Affairs
MoWR	Ministry of Water Resources
N ₂ O	Nitrous Oxide
NACOM	Nature Conservation Management
NAMA	Nationally Appropriate Mitigation Actions
NAP	National Action Plan
NAPA	National Adaptation Program of Action
NCB	National Coordinating Body
NCSA	National Capacity Self-Assessment
NDMC	National Disaster Management Council
NGO	Non-Governmental Organization
NPDM	National Plan for Disaster Management
NPWA	National Policy for Women's Advancement
NSAPR	National Strategy for Accelerated Poverty Reduction
PfA	Platform of Action
PID	Press Information Department
PPCR	Pilot Program for Climate Resilience
REDD ⁺	Reducing Emissions from Deforestation and Forest Degradation

RETs	Renewable Energy Technologies
SEDA	Sustainable Energy Development Authority
SNC	Second National Communication
SPARRSO	Bangladesh Space Research and Remote Sensing Organization
SPCR	Strategic Program for Climate Resilience
SSN	Social Safety Nets
TIB	Transparency International Bangladesh
UDMC	Union Disaster Management Committee
UN	United Nations
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Program
UNEP	United Nations Environment Program
UNFCCC	United Nations Framework Convention on Climate Change
UZDMC	Upazila Disaster Management Committee
WEDO	Women's Environment and Development Organization

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Section A

Context and Methodology

Country Overview

Geographic location

1. The People's Republic of Bangladesh is a developing country situated in South Asia. To the South, the country faces the Bay of Bengal with a coastline of 580 km¹.
2. The western, northern and eastern borders are shared with India (4,053 km), and the southwestern border shared with Burma (193 km), also known as Myanmar.
3. The Siliguri corridor, a narrow strip of Indian Territory to the North, separates it from the Himalayan countries of Nepal and Bhutan. Bangladesh is also in close geographical proximity to China.
4. The country's terrain consists mostly of flat alluvial plain and becomes increasingly hilly in the southeast. Floodplains occupy about 80% of the country². The lowest and highest points are the Indian Ocean (0 m) and Keokradong (1,230 m) respectively.
5. Due to its geographical setting and other associated environmental and socio-economic reasons, Bangladesh is one of most vulnerable countries in the world to natural hazards. The country experiences tropical cyclones, storm surges, floods, riverbank erosion, droughts and many other disasters on an annual basis. Floods affect around 80% of land in Bangladesh at one time or the other³.
6. The Climate Change Vulnerability Index produced by Maplecroft in 2011 also identified Bangladesh as the most vulnerable to climate change out of all the countries in the world. The index rates 16 countries as 'extreme risk,' including nations that represent new Asian economic power and possess significant forecasted growth. Bangladesh (1), India (2), Philippines (6), Vietnam (13) and Pakistan (16) all feature in the highest risk category and are of particular importance as they are major contributors to the ongoing global economic recovery and are vital to the future expansion of Western businesses, in particular⁴.

Geo-Political and Historical Context

7. The current borders of Bangladesh were established in 1947 during the British partition of Bengal that sought to divide the subcontinent along sectarian lines as India and the Dominion of Pakistan (including

1 Retrieved from the World Wide Web on 3 April 2013: <http://www.climate-zone.com/climate/bangladesh/>

2 Government of Bangladesh. 2012. Second National Communication to the United Nations Framework Convention on Climate Change (UNFCCC). Ministry of Environment and Forests. Dhaka, Bangladesh.

3 Idem.

4 Maplecroft. 2010. Big economies of the future – Bangladesh, India, Philippines, Vietnam and Pakistan – most at risk from climate change. Media Release (21/10/2010).

both the modern day countries of Pakistan and Bangladesh) gained independence from Britain⁵ after the Second World War (WWII) and following 3 decades of nationalist struggle⁶.

8. The British exit resulted in extreme violence and made way for one of the largest human migrations in history⁷ involving 10 million people, and widely recognized as one of the greatest tragedies of humankind.
9. The division of the area, separating modern day Pakistan in the West and Bangladesh in the East, with approximately 1,600 kilometers of Indian territory⁸ in the middle, lead to political exclusion, ethnic and linguistic discrimination and economic neglect by the politically dominant western territory (Pakistan) - fueling significant discontent and agitation in Bangladesh.
10. These circumstances gave rise to a secular nationalist movement in the country that lead to the declaration of independence and the Liberation War in 1971. After nine months of internal strife and a military crackdown against Bangladeshi separatists by Pakistan, India supported Bengali insurgents in an Indo-Pakistani War that lasted only 13 days and ended on 16 December 1971 with the defeat of Pakistan.
11. The newly established state of Bangladesh endured poverty, famine, political turmoil and military coups in the aftermath of the war and independence until 1991, when democracy was restored and relative calm and economic progress followed.

Government⁹

12. The Parliament of Bangladesh is a unicameral legislature consisting of 300 members. They are directly elected from an equal number of territorial constituencies, which is one from each constituency, on the basis of adult franchise. Earlier there used to be 30 seats reserved for women who were elected by the directly elected Members. This provision in the Constitution for the reservation of seats for women was a transitory one. The 7th Parliament was the last Parliament to have this reservation. With the exception of the first Parliament, which had 15 reserved seats for women, and the fourth Parliament, which had no such reservation, all previous Parliaments (before the 8th Parliament) of Bangladesh had included the 30 reserved seats.
13. In the 8th Parliament the Constitution (Fourteenth Amendment) Act, 2004 was passed by the Parliament on May 2004 by which the following provision was inserted in the constitution of Bangladesh: Art. 65(3) *“Until the dissolution of Parliament occurring next after the expiration of the period of ten years beginning from the date of the first meeting of the Parliament next after the Parliament in existence at the time of the commencement of the Constitution (Fourteenth Amendment) Act, 2004, there shall be reserved forty five seats exclusively for women members and they will be elected by the aforesaid members in accordance with law on the basis of procedure of proportional representation in the Parliament through single transferable vote.”* This reservation of seats in favor of women did not disqualify them from being candidates in the general election.
14. At the time of writing this Climate Change and Gender Action Plan (ccGAP), the President of the People’s Republic of Bangladesh was Mr. Md. Zillur Rahman, the country’s 19th Head of State. He was sworn into office on 12 February 2009 supported by a female Prime Minister, Ms. Sheikh Hasina, along with a number of ministers and State Ministers.

5 See also <http://asianhistory.about.com/od/india/f/partitionofindiafaq.htm>

6 Bates, C. 2011. The Hidden Story of Partition and its Legacies. BBC-History. Retrieved from the World Wide Web: http://www.bbc.co.uk/history/british/modern/partition1947_01.shtml

7 The Guardian. 2012. Partition – the birth of India and Pakistan: interactive. Retrieved from the World Wide Web on 3 April 2013: <http://www.guardian.co.uk/world/interactive/2012/sep/06/india-pakistan-partition-interactive>

8 <http://www.bbc.co.uk/news/world-asia-16111843>

9 National Web Portal of Bangladesh. 2013. Retrieved from the World Wide Web: http://www.bangladesh.gov.bd/index.php?option=com_content&task=view&id=116&Itemid=190

15. Bangladesh also has an independent judiciary, including a number of special courts such as the Labor Court, Juvenile Court, Administrative Tribunal, and others.

Climate¹⁰

16. Bangladesh has a subtropical monsoon climate characterized by wide seasonal variations in rainfall, rain-bearing winds, high temperatures and humidity.
17. There are three distinct seasons in Bangladesh: a hot, humid summer from March to June; a cool, rainy monsoon season from June to October; and a cool, dry winter from October to March.
18. In general, maximum summer temperatures range between 30°C and 40°C. April is the warmest month in most parts of the country. January is the coldest month, when the average temperature for most of the country is around 10°C.
19. Heavy rainfall is characteristic of Bangladesh. With the exception of the relatively dry western region of Rajshahi where the annual rainfall is about 1600 mm, most parts of the country receive at least 2000 mm of rainfall per year. Storms of very high intensity often occur early in summer (in April and May) and late in the monsoon season (September to October, and sometimes extending to November). These disturbances may produce winds with speeds exceeding 160 kilometers per hour, and they may generate waves in the Bay of Bengal that crest as high as 6 meters before crashing with tremendous force onto the coastal areas and the offshore islands, causing heavy losses of life and property¹¹.
20. Because of its location just south of the foothills of the Himalayas where monsoon winds turn west and northwest, the regions in northeastern Bangladesh receives the greatest average precipitation, sometimes over 4000 mm per year. About 80 percent of Bangladesh's rain falls during the monsoon season.

Biodiversity¹²

21. Bangladesh, in general, possesses abundant vegetation, with villages appearing to be buried in groves of mango, jackfruit, bamboo, betel nut, coconut, and date palm. However, only a small portion of the country's land surface is covered with forests.
22. Bangladesh has four different areas of vegetation. The eastern zone, consisting of parts of the Sylhet and Chittagong areas, has many low hills covered with jungles of bamboo and rattan (a species of climbing palm). The most common plant is a large type of bamboo that forms the basis of the country's paper industry.
23. The central zone, covering parts of the country to the north of Dhaka, contains many lakes and supports swampy vegetation; the soil of part of this zone produces the Madhupur jungles.
24. The area lying to the northwest of the Jamuna and to the southwest of the Padma forms a flat plain, the vegetation of which consists mostly of cultivated plants and orchards.
25. The southern zone along the Bay of Bengal contains the vast wetlands of the Sundarbans, with their distinctive mangrove vegetation. Several of the mangrove species are commercially valuable. Also valuable are the *gewa* or *gengwa* trees, which yield a soft wood used for making newsprint.

10 Weather On Line. 2013. Retrieved from the World Wide Web: <http://www.weatheronline.co.uk/reports/climate/Bangladesh.htm>

11 Encyclopedia Britannica. 2013. Retrieved from the World Wide Web: <http://www.britannica.com/EBchecked/topic/51736/Bangladesh/33425/Climate>

12 Encyclopedia Britannica. 2013. Retrieved from the World Wide Web: <http://www.britannica.com/EBchecked/topic/51736/Bangladesh/33426/Plant-and-animal-life>

People

26. The latest population estimate by the US Bureau of Census ranks Bangladesh as the world's eighth most populous country with an estimated 161, 083, 804 people in July 2012¹³.
27. The population of Bangladesh is estimated at 98% Bengali with the remaining 2% comprising tribal groups and non-Bengali Muslims (1998)¹⁴. The predominant religion is Muslim (89.5%), followed by Hindu (9.6%) and others.
28. The population growth rate in July 2012 was also estimated at 1.579% (75th highest in the world). The total population sex ration, as estimated in 2011, was 0.95 male(s) to female.
29. In 2010, only 28% of the total population resided in urban areas and the annual rate of change in urbanization from 2010 – 2015 is estimated at 3.1%. The largest cities, according to data from 2009, include the capital Dhaka (14.251 m), Chittagong (4.816 m), Khulna (1.636 m) and Rajshahi (853.000)¹⁵.
30. The World Bank named Dhaka one of the fastest growing 20+ megacities of the world (urban areas with populations over 10 million). Each year, an estimated half a million (more than 1,000 per day) people flock to the capital in search of a better life from the rural poverty exasperated by disasters such as droughts, floods or cyclones. The vast majority ends up in slums or as street dwellers.
31. Dhaka is also one of the world's poorest cities, with a third of the city taken up with slums. Before 2025, the United Nations predicts that Dhaka's population is expected to surpass that of Shanghai, Mexico City or New York.
32. The population is at high degree of risk of contracting major infectious food/waterborne- (diarrhea, hepatitis and typhoid fever) and vector borne diseases (dengue fever and malaria in some locations), water contact- (leptospirosis) and animal contact disease (rabies).



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Development¹⁶

33. The 2011 Human Development Index (HDI) value for Bangladesh, published by UNDP (United Nations Development Program), is 0.500. This places the country 5th in the low human development category and 146th out of 187 countries in the world overall.
34. The pace of development in Bangladesh is, nevertheless, encouraging as it is higher than in any other southern Asian country.
35. When the UNDP Country Director Stefan Priesner, released these data in November 2011, he noted:

13 CIA. 2013. The World Factbook. Retrieved from the World Wide Web: <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2119rank.html?countryName=Bangladesh&countryCode=bg®ionCode=sas&rank=8#bg>

14 CIA. 2013. The World Factbook. Retrieved from the World Wide Web: <https://www.cia.gov/library/publications/the-world-factbook/geos/bg.html>

15 CIA. 2013. The World Factbook. Retrieved from the World Wide Web <https://www.cia.gov/library/publications/the-world-factbook/geos/bg.html>

16 UNDP. Human Development Report 2011. Sustainability and Equity. A Better Future for All. Explanatory note on 2011 HDR composite indices. Bangladesh.

“though Bangladesh has made noteworthy progress in many areas of human development, there is no room for complacency. Bangladesh needs to address the pressure of environmental degradation, adverse impacts of climate change and risk of disaster”¹⁷.

Gender Inequality

36. The 2011 Gender Inequality Index (GII) published by the UNDP assigns Bangladesh a value of 0.550, ranking it 112 out of 146 countries¹⁸.
37. Even though significant improvement in maternal mortality was claimed, Bangladesh still has one of the highest maternal mortality rates in the southern Asia region with 340 deaths in 1,000 mothers. The rate is 30, 39, 230, 200 and 260 in Iran, Sri Lanka, India, Bhutan and Pakistan. Fewer than one fourth of births taking place in the country are also attended by skilled health personnel.
38. The Global Gender Gap Index Report 2012¹⁹ produced by the World Economic Forum places Bangladesh in 86th position out of 135 countries assessed. The Index is a framework for capturing the magnitude and scope of gender-based disparities and tracking their progress globally by benchmarking national gender gaps on economic, political education and health criteria, and provides rankings that allow for effective comparison across regions and income groups, over time.
39. Factors that influenced a lower placement than previous years were cited by the World Economic Forum as due to a decrease in the wage equality survey, the estimated income and a significant decrease in the ration of the enrolment rate in primary education²⁰.
40. On the political empowerment sub-index, Bangladesh is ranked 8th globally. In 2011, 6 of the 300 constituency-elected representatives were women. The amount of dedicated (appointed) seats reserved for women were increased in 2012 from 45 to 50 according to the Inter-Parliamentary Union, bringing the total percentage of women to 16%.

Economy

41. In 2011, Bangladesh had a very low per capita Gross Domestic Product (GDP) of USD 111.9 billion²¹. The GDP has, however, been rising at rates higher than 6 – 6.5% in recent years²². Per capita income has risen from USD 367 (1999/00) with 122% to USD 818 (2010/11).
42. The country has a fair deposit of natural gas as well as other mineral resources including a modest quantity of good quality coal, hard rock, limestone, ceramic clay and glass sand. The main source of energy apart from biomass is natural gas that is used for producing electricity. Natural gas contributes more than 87% of the net power generation by the public Bangladesh Power Development Board (BPDP) and private sector meets 24% of the country’s total fuel consumption. Other primary sources of energy are hydro-electricity and solar energy²³.

17 The Daily Start.2013. Bangladesh 146th among 189 countries. Retrieved from the World Wide Web: <http://www.thedailystar.net/newDesign/news-details.php?nid=209133>

18 UNDP. Human Development Report 2011.Sustainability and Equity. A Better Future for All. Explanatory note on 2011 HDR composite indices. Bangladesh.

19 Hausmann,R., Tyson, L. and Zahidi, S. The Global Gender Gap Report. 2012. World Economic Forum. Geneva. Switzerland. Retrieved from the World Wide Web: http://www3.weforum.org/docs/WEF_GenderGap_Report_2012.pdf

20 Idem

21 World Bank. Data. 2013. Retrieved from the World Wide Web: <http://data.worldbank.org/country/bangladesh>

22 Government of Bangladesh. 2012. Second National Communication to the United Nations Framework Convention on Climate Change (UNFCCC). Ministry of Environment and Forests. Dhaka, Bangladesh.

23 Idem

43. Various kinds of services contribute nearly 60% to the GDP. Among these are trade and transport, as well as construction services that comprise a major part.
44. Agriculture, broadly defined, accounts for only around 21% of the GDP, but for nearly 45% of the labor force. Agricultural land mostly dominates the land cover of the country of which arable land occupies around 59%. The cropping intensity of the country is increasing which at present is more than 175%.
45. The manufacturing industry contributes 18% to the GDP, but the main industry, ready-made garments and knitwear accounts for the bulk of the exports. The multimillion-dollar garment industry is a major draw card for women who migrate to urban areas in Bangladesh in search of work. However, wages are poor, and working conditions are atrocious. This is compounded by the insecurity women face in an urban setting without proper affordable housing, transportation facilities and any form of social security²⁴.

Poverty and Hunger

46. Poverty reduction constitutes the central development challenge in Bangladesh²⁵. There is, however, no recent objective poverty statistics available for Bangladesh. Whilst the Second National Communication (SNC) states that poverty has fallen over time from nearly 60% in 1991/2 to 25.1% by 2011, the most recent data that were published for Bangladesh in the Multidimensional Poverty Index (MPI) in the 2010 UNDP Human Development Report refers back to 2007²⁶, making it hard to assess accurately.
47. Whilst the lack of data on poverty constitutes a significant challenge, a further concern is also that the definitions for poverty and hunger appear increasingly outdated and inadequate²⁷.
48. “The Millennium Development Goals (MDGs) in Bangladesh have been monitored by reference to national upper and lower poverty lines, the threshold for poverty and hunger respectively.
49. International standards presume that the upper line allows for the cost of some essential non-food items of household expenditure. But in Bangladesh it is defined as the value of a “minimum dietary energy requirement” of 2122 calories per day. The hunger threshold is based on 1805 calories, significantly below the level normally recommended by the UN (United Nations) Food and Agriculture Organization.
50. The 2009 MDG Progress Report for Bangladesh concedes that ‘the 2122 kcals/day threshold looks to be the most appropriate threshold with regard to monitoring and reporting of progress in hunger.’ The report does not suggest an amended basis for the upper poverty line and its conclusions are accordingly somewhat confused.”²⁸
51. The 2005 Household Survey found that 40% of the population was below the 2122 calorie threshold. This compares with 59% in 1991, the baseline year for the poverty MDG in Bangladesh.
52. Prospects for achieving the goal of halving this figure to 29% by 2015 may have been set back by events since 2005. In addition to external shocks relating to food prices and global economic recession, Bangladesh has suffered a sequence of natural disasters, most notably Cyclone Sidr in 2007.
53. The country’s measure of poverty is so sensitive to the price of food that the Centre for Policy Dialogue, a Dhaka think-tank, has estimated that the increase in food prices in 2007/08 added 8.5% of the population to the ranks of the poor.

24 Absar, Syeda S., 2002. Women Garment Workers in Bangladesh. Economic and Political Weekly. July 20, 2002.

25 World Bank, 2013. Retrieved from the World Wide Web: <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTPOVERTY/EXTPA/0,,contentMDK:20208950~menuPK:435735~pagePK:148956~piPK:216618~theSitePK:430367~isCURL:Y~isCURL:Y,00.html>

26 UNDP. Human Development Report. 2011. Sustainability and Equity. A Better Future for All. Explanatory note on 2011 HDR composite indices. Bangladesh. Retrieved from the World Wide Web: <http://hdrstats.undp.org/images/explanations/BGD.pdf>. Page 4.

27 One World, 2011. Retrieved from the World Wide Web: <http://uk.oneworld.net/guides/bangladesh/poverty>

28 Idem.

54. The profile of poverty in Bangladesh is uneven, the most severe deprivation being found in the southern coastal belt, which is already experiencing changing climate conditions, with drought, lack of fresh water, and severe decline of fisheries - both marine and fresh water, and the northern regions which is prone to *monga* (seasonal food shortages).
55. The capital, Dhaka, is believed to be the fastest expanding and most densely populated of the world's major cities. In common with other Bangladeshi cities, informal slum areas accommodate as much as a third of the urban population, imposing a new and challenging dimension for poverty reduction.
56. Since the 2007 crisis, the government has responded with increasingly robust expenditure on a wide range of cash and food-based social safety net schemes.
57. However, inefficiencies of bureaucracy and corruption have jeopardized the targeting of this spending - as few as 13% of the poorest households may be in receipt of benefits intended for their welfare.
58. In an unprecedented acknowledgement of its shortcomings, the government devoted the opening chapter of its 2009 MDG Progress Report to the subject of "Democratic Governance and Human Rights." And the current National Strategy for Accelerated Poverty Reduction (NSAPR) (2009-2011) concedes, "[that] unless governance improves, poor people will continue to suffer."²⁹

Legal Frameworks: Mandates and Policy Related to Environment

United Nations Framework Convention on Climate Change (UNFCCC)

59. Bangladesh signed the Convention on Climate Change on the 9th of June 1992, ratified it on 15 April 1994 and it entered into force on 14 July 1994. The country also ratified the Kyoto Protocol on 22 October 2001 and it came into force on 16 February 2005.

Institutional Arrangements

60. The Ministry of Environment and Forest (MoEF) has been "mandated according to the Rules of Business of the Government to look after and take actions regarding climate change"³⁰. MoEF is therefore the focal ministry for all work on climate change, including international negotiations. It provides the Unit for the National Environment Committee, which ensures a strategic overview of environmental issues and that is chaired by the Prime Minister³¹.
61. The Climate Change Unit (CCU) under the MoEF was launched in June 2010 as envisaged in the Bangladesh Climate Change Strategy and Action Plan (BCCSAP). As the key institution for the implementation of adaptation and mitigation, the CCU is tasked to coordinate with the climate change focal points of other ministries to mainstream climate change into national development planning. By 2012, the Unit already approved 84 projects under the Climate Change Trust Fund for implementation.
62. Other key government ministries and agencies involved in Bangladesh's response to climate change include the National Disaster Management Council (NDMC), Disaster Management and Relief (MoDMR), Ministry of Agriculture (MoA), Ministry of Health and Family Welfare (MoHFW), Ministry of Water Resources (MoWR), the Meteorological Department and Bangladesh Space Research and Remote Sensing Organization (SPARRSO) under the Ministry of Defense, the Flood Forecasting and Early Warning Center (FFWC), the Bangladesh Water Development Board (BWDB) under the MoWR, and the Planning Commission under the Ministry of Planning (MoP).

29 Idem.

30 Government of the People's Republic of Bangladesh. 2009. Bangladesh Climate Change Strategy and Action Plan (BCCSAP). Ministry of Environment and Forests. Dhaka, Bangladesh.

31 Idem. Page 20.

63. There are also more than 35 other ministries responsible for sectors that are vulnerable to the effects of climate change, including agencies responsible for water resources, health, agriculture, urban planning, roads and transport³².
64. The Government of Bangladesh is, at the time of writing this document, considering the establishment of a separate and dedicated Department of Climate Change to look after climate change issues under the MoEF.

National Communications (INC) to the UNFCCC, 2002 and 2012

65. To date, both an Initial National Communication (INC) and a SNC have been submitted to the UNFCCC Secretariat under the country's obligations on 12 November 2002 and 26 December 2012, respectively.

National Adaptation Plan of Action (NAPA), 2005

66. The Government of Bangladesh also launched its National Adaptation Program of Action (NAPA) in 2005. The document is the product of a collective effort of stakeholders and highlighted the main adverse effects of climate change. It also identified the country's adaptation needs.
67. At the time of submission, the NAPA provided a response to the urgent and immediate needs of adaptation and identified priority programs in Bangladesh.
68. Off the 43 countries that have developed NAPAs up to November 2009, Bangladesh is among a group of eight countries³³ that incorporated gender in a more comprehensive manner throughout the document. In total, eight references to gender are made. Poverty reduction and security of livelihoods with a gender perspective has been ranked as the most important set of criteria for prioritization of adaptation needs and activities and it is acknowledged that various groups in society will experience the impacts thereof in various degrees depending largely on the economic condition they find themselves (poor or non-poor), their location (coastal or non-coastal, rural or urban) and their gender³⁴.

Bangladesh Climate Change Strategy and Action Plans (BCCSAPs), 2008 and revised in 2009

69. The first Bangladesh Climate Change Strategy and Action Plan were developed in 2008.
70. A revised version of the BCCSAP was released in 2009 and "reflects the changed development priorities of the new democratic Government"³⁵ under six priority sectors, including:
 - (i) Food Security, Social Protection and Health;
 - (ii) Comprehensive Disaster Management;
 - (iii) Infrastructure;
 - (iv) Research and Knowledge Management;
 - (v) Mitigation and Low Carbon Development; and
 - (vi) Capacity Building and Institutional Strengthening.

32 Idem. Box 5, Page 20.

33 Uganda, Burundi, Democratic Republic of Congo, Guinea, Bhutan, Malawi., Aguilar, L. Presentation Gender Analysis of the National Adaptation Plans of Action. 2010. Mozambique, Workshop to Develop a Gender Responsive Climate Change Strategy.

34 Ministry of Environment and Forest Government of the People's Republic of Bangladesh. 2005. National Adaptation Program of Action (NAPA). Dhaka, Bangladesh. Pages 16 and 23.

35 Government of the People's Republic of Bangladesh. 2009. Bangladesh Climate Change Strategy and Action Plan (BCCSAP). Ministry of Environment and Forests.. Dhaka, Bangladesh. Page 76.

71. The BCCSAP (2009) includes the Climate Change Action Plan³⁶ “a 10-year program (2009 – 2018) of the country to meet the challenge of climate change. [The BCCSAP states that] ... the needs of the poor and vulnerable, including women and children, will be mainstreamed in all the activities under the Action Plan.”

Climate Investment Funds (CIF) Strategic Program for Climate Resilience (SPCR), 2010

72. Given Bangladesh’s vulnerability to climate change, its protracted experience in dealing with disasters coupled with its commitment to mainstream climate change in development policies and planning, the country was nominated to participate in the Pilot Program for Climate Resilience (PPCR) by the PPCR Expert Group of the CIF. As one of nine CIF PPCR Pilot Countries, Bangladesh is eligible to receive financial assistance to support efforts for building climate resilience.
73. The PPCR Sub-Committee reviewed the SPCR document³⁷ submitted by Bangladesh as a result, endorsed it and agreed to further development of the foreseen activities contained therein. The CIF Trust Fund Committee also agreed to an envelope of up to USD 50 million in grant resources and USD 60 million in concessional loans in PPCR funding to finance the Program³⁸. Areas of intervention included:
- (i) Investment Project 1: Promoting Climate Resilient Agriculture and Food Security;
 - (ii) Investment Project 2: Coastal Embankments Improvement and Afforestation;
 - (iii) Investment Project 3: Coastal Climate Resilient Water Supply, Sanitation, and Infrastructure Improvement;
 - (iv) Technical Assistance 1: Climate Change Capacity Building and Knowledge Management; and
 - (v) Technical Assistance 2: Feasibility Study for a Pilot Program of Resilient Housing in the Coastal Region.
74. A Gender Review³⁹ of the Bangladesh PPCR conducted by the Global Gender Office of the International Union for Conservation of Nature (IUCN) upon instruction of the CIF Administrative Unit in late 2012, concluded that gender was a key theme during the consultation process for the development of the SPCR, but the drafters omitted to include the Ministry of Women and Children Affairs (MoWCA) as a key stakeholder in the process. On balance, whilst gender differentiated impacts of climate change are acknowledged and specific areas were highlighted that require special attention in this regard, only 1 out of the 3 proposed Investment Projects (i.e. Investment Project 3) mentioned women issues. It is also the only Investment Project or Technical Assistance Project that noted gender-sensitive indicators of success.

Reducing Emissions from Deforestation and Forest Degradation (REDD+)

75. The programs under the United Nation’s REDD+ initiative may provide incentives or funding that has to be arranged under the Adaptation Fund for future programs for conservation of forests. The Government of Bangladesh has already prepared its REDD+ Readiness Roadmap in 2012. It describes a plan of activities which, when implemented together in a logical and practical order, prepares the country for national REDD+ programs.

36 Idem. Page 27.

37 CIF Reference Number: PPCR/SC.7/5, Strategic Program for Climate Resilience: Bangladesh.

38 CIF. PPCR Bangladesh. Retrieved from the World Wide Web: <https://www.climateinvestmentfunds.org/cifnet/sites/default/files/Bangladesh%20PPCR%20Strategic%20Program%20-%20Endorsed.pdf>

39 IUCN-CIF. 2012. Gender Review. Meeting Board. Turkey. Retrieved from the World Wide Web: <https://climateinvestmentfunds.org/cif/content/gender-review-cif-full-report>.

The National Strategy for Accelerated Poverty Reduction (NSAPR, FY 2009-11) - General Economic Division, 2009

76. The strategic framework proposed in the NSAPR mainly concentrates on achieving pro-poor growth that is to be achieved by adopting suitable macroeconomic policies for combating the current macro-economic challenges, by addressing critical areas for development and by providing essential infrastructure.

77. It also provides security of lives and livelihoods through social protection and transforming the human population, as human resources are the two remaining strategic blocks of which the first one closely matches the concern of global environmental change and management. Each of the above-mentioned strategic blocks is proposed to be achieved by a group of supporting strategies: empowerment and participation, good governance, efficient delivery of services and amenities, caring for the environment and tackling climate change, and upholding the science and technology for enhancing productivity and efficiency.



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78. Major environmental challenges as mentioned in the NSAPR include water- and air pollution, land degradation, extreme degradation of terrestrial and aquatic ecosystems, unsustainable agricultural practices and unplanned urban growth which are proposed to be addressed by undertaking measures in the areas of policies, planning, regulations and capacity building.

79. Appropriate measures are to be taken in order to adapt to and mitigate the impacts of climate change. It is also proposed that undertaking sectoral- and multi-sectoral approaches will strengthen climate change adaptation. Cross-sectoral measures and detailed elaboration of the strategic actions or initiatives are proposed under this supporting strategy.

Outline of the Perspective Plan: Vision 2021, 2006

80. Bangladesh Vision 2021 is a long-term strategic document of government that includes “Mitigating the Impact of Climate Change” as one of the strategic corner stones to ensure sustainable development⁴⁰.

Sixth Five-Year Plan (2011 – 2015), 2011

81. Bangladesh has been preparing its medium-term development plans known as the Five-Year Plan (FYP) since 1973.

82. Against the backdrop of poverty reduction, employment and growth rate targets set in Vision 2021. The Sixth Five Plan, 2011-2015 endeavors to initiate the transition to the higher growth path. This growth path, while ambitious, is achievable through a strategy that transforms Bangladesh from a rural agro-based economy towards an urban manufacturing-based economy.

83. The driving force for the strategy will be the deepening of a labor-intensive export-oriented manufacturing

40 Government of Bangladesh. 2012. Second National Communication to the United Nations Framework Convention on Climate Change (UNFCCC). Ministry of Environment and Forests. Dhaka, Bangladesh.

sector, and a much more diversified, commercially motivated agricultural sector. The Sixth FYP is also informed by the MDGs. These are particularly relevant for the Sixth FYP as its termination coincides with the 2015 MDGs deadline. The targets outlined in the Sixth FYP fall into seven broad categories⁴¹, including Income and Poverty, Human Resource Development, Water and Sanitation, Energy and Infrastructure, Gender Equality and Empowerment, Environment Sustainability and Information and Communications Technology. The Environment Sustainability category is based upon the priorities laid out in Bangladesh's BCCSAP.

84. The Plan also includes strategies to incorporate “gender mainstreaming into policies” and to “integrate gender issues in planning and budgetary processes” by placing a strong emphasis on the importance of managing climate change through incorporation thereof.

National Plan for Disaster Management (NPDM), 2010 – 2015

85. The NPDM is a medium-term plan that addresses key issues such as risk reduction, capacity building, climate change adaptation, livelihood security, gender mainstreaming, community empowerment, and response- and recovery management.

Establishment of National Climate Funds

86. The Government of Bangladesh, with support from its development partners, has invested over \$10 billion since its independence to make the country more resilient to disasters and other climate shocks⁴².
87. In particular, recognizing the uncertainties and inadequacies of international adaptation finance from both multilateral and bilateral sources, the Government of Bangladesh established the Bangladesh Climate Change Trust Fund (BCCTF) based on revenue from the national budget, within a legal mandate by the Climate Change Trust Act passed in Parliament in 2010.
88. At the same time, an alternate Bangladesh Climate Change Resilient Fund (BCCRF) - formerly known as the Multi Donor Trust Fund (MDTF) - was created to pool funds from the country's development partners backed by mutual agreement. The BCCTF is resourced entirely from the government's own budget (with US\$ 100 million each in 2009, 2010 and 2011).
89. The two funds have differing governance and management arrangements, but both are intended to support the implementation of the BCCSAP. This is a considerable departure from previous models of piecemeal contributions by developed countries to support separate, stand-alone projects⁴³.
90. Though the example of creation of national funding entities and mechanisms such as the BCCTF and BCCRF were hailed in the global policy arena, national CSOs raised their concern that the fund so far failed to benefit the people living in the climate change risk areas.
91. Analysis⁴⁴ shows that by December 2013, a total amount of around 156 million US\$ have funded 107 projects. The highest investment (48.63%) went to Infrastructure Development-related activities. Projects under Mitigation and Low Carbon Development (Theme 5) secured 22.93% and the rest 28.44% went to the remaining four thematic areas. Capacity building and institutional strengthening got the lowest allocation with 1.93% of the total distributed fund. It would appear that the Construction, Repair & Maintenance of Embankments leveraged the highest number of projects and budget allocation (26 projects out of 82) to address climate change.

41 Planning Commission. 2010. Sixth Five Year Plan FY2011-FY2015: Accelerating Growth and Reducing Poverty. General Economics Division, Planning Commission. Government of the People's Republic of Bangladesh. Dhaka, Bangladesh.

42 MoEF. 2009. Bangladesh Climate Change Strategy and Action Plan 2009. Government of the People's Republic of Bangladesh. Dhaka, Bangladesh.

43 Khan, S. M. M. H., Saleemul, H. and Shamsuddoha Md. 2011. The Bangladesh National Climate Funds. A brief history and description of the Bangladesh Climate Change Trust Fund and the Bangladesh Climate Change Resilience Fund. IIED-ECBI.

44 TIB, 2013. “Mapping of Climate Finance Governance in Bangladesh”. Climate finance report

Climate Finance Governance Report, 2013, TIB

Theme	Name of Program	Number of Projects (Until December 2013)	Program-wise Allocation (In US\$ Million)	Program Wise Allocation (In %)	Total Allocation in Each Theme (In %)	Total Allocation in Each Theme (In US\$ Million)
T6	Strengthening Inst. Capacity In Climate Change Management	3	3.02	1.93	1.93	3.02
T5	Afforestation & Reforestation	15	18.79	12.05	22.93	35.76
	Management of Urban Waste	3	4.43	2.84		
	Renewable Energy Development	6	12.54	8.04		
T4	Climate Change Modeling	4	4.47	2.87	6.64	10.36
	Establishment of Centre for Knowledge Management	5	5.89	3.78		
T3	Construction, Repair & Maintenance of Embankments	26	43.47	27.88	48.63	75.82
	Dredging and Resuscitation of Rivers & Khals	10	15.77	10.12		
	Improvement of Urban Drainage	12	12.05	7.73		
	Planning & Design Of River Training Work	1	2.70	1.73		
	Repair & Maintenance of Polders	3	1.83	1.18		
T2	Improvement of Cyclone Storm Surge Warning	5	13.94	8.94	8.94	13.94
T1	Adaptation in Health Sector	1	1.97	1.26	10.92	17.02
	Adaptation in Livestock Sector	1	0.12	0.08		
	Climate Resilient Cropping System	2	3.75	2.40		
	Ins. Capacity for Research towards Climate Resilient Cultivars	1	0.44	0.28		
	Livelihood protection	1	0.84	0.54		
	Livelihood protection in Ecologically fragile areas	3	6.21	3.98		
	Water & Sanitation Program	5	3.69	2.37		
Program-wise Total Fund Distribution		107	155.92	100.00	100.00	155.92

National (Bangladesh) Climate Change Resilience Fund⁴⁵

45 <http://www.worldbank.org/en/news/2012/12/07/bangladesh-maldives-respond-to-climate-change-impacts>

92. As one of the most vulnerable nations to the impacts of climate change, Bangladesh has identified climate change as a key development challenge and embraced actions aimed at increasing climate resilience of people and infrastructure through strategic national investments and innovative climate financing.
93. According to recent estimates, 14.6 million people in the coastal areas of Bangladesh are vulnerable to inundation due to increased cyclonic surges, and this number will increase to 18.5 million by 2050 under moderate climate change scenarios. Measures such as the strengthening of river embankments, building emergency cyclone shelters, and developing world class community based early warning system have significantly reduced the loss of life and livelihoods and property damages caused by extreme weather events.
94. To supplement its national programs, Bangladesh successfully aligned its development partners to address the climate change challenge and established an innovative financing mechanism - the Bangladesh Climate Change Resilience Fund (BCCRF)⁴⁶. Since its establishment on 31 May 2010, the BCCRF has channeled USD 170 million in grant funds from seven development partners, including Australia, Denmark, EU, Sweden, Switzerland, UK and the USA to strengthen the country's resilience to climate change. The Government of Bangladesh has the authority of choosing projects to fund and implementing through the BCCRF. On an interim basis, the World Bank is playing the role of trustee – that is, performing fiduciary transparency, accountability and due diligence of the BCCRF.
95. The Government of Bangladesh has also created a separate “Bangladesh Climate Change Trust Fund” and allocated USD 350 million from its own resources for the last four years consecutively – 2009 to 2012. Bangladesh has been implementing 106 projects to address climate change including better adaptation and mitigation.

National Capacity Self-Assessment (NCSA) for Implementing the Provisions of Multilateral Agreements, 2007

96. The NCSA for Implementing the Provisions of Multilateral Agreements, including on climate change, was launched in 2007. Results and Lessons Learned for Global Environmental Sustainability published by UNDP, UNEP (United Nations Environment Program) and the GEF (Global Environment Facility) on August 2010, indicated that “for Bangladesh, flooding was highlighted as a priority environmental issue, calling for strengthened flood control policies to minimize the impact of riverbank erosion and ease drainage congestion. A Least Developed Country (LDC), Bangladesh has a high population density, with a large portion living in marginal lands, including extensive floodplains of the Ganges Delta and nearby Sundarbans, this may explain why so many of the issues identified in the Rio Conventions are of high priority to Bangladesh”⁴⁷.
97. Other targets of capacity development from the same document indicate “promoting and improving the economic and social status of women and youth in rural areas is a key component of actions geared towards the development of technical and managerial capacities to implement the MEAs (Multilateral Environmental Agreements)”⁴⁸.

Ongoing and Outstanding Issues

98. The SNC⁴⁹ indicates that Bangladesh still has “to prepare a national policy that will solely cover climate

46 The World Bank, 2012. Bangladesh Climate Change Resilience Fund. Retrieved from the World Wide Web: <http://www.worldbank.org/en/news/2012/05/22/bangladesh-climate-change-resilience-fund-bccrf>

47 UNDP, UNEP, GEF, 2010. National Capacity Self-Assessments: Results and Lessons Learned for Global Environmental Sustainability. Retrieved from the World Wide Web: <http://www.thegef.org/gef/sites/thegef.org/files/publication/NCSA-SR-web-100913.pdf>

48 Idem.

49 Government of Bangladesh. 2012. Second National Communication to the United Nations Framework Convention on Climate Change (UNFCCC). Ministry of Environment and Forests. Dhaka, Bangladesh.

- change issues, impact and adaptation options.
99. However, some of the other sectoral policies address climate change issues directly in sectoral development planning. Other important policies like the Water Policy and the Energy Policy have not included climate change issues yet.
 100. Bangladesh is already working to revisit the National Environmental Policy, 1992, to address climate and other sustainable development issues”.

Legal Frameworks: Mandates and Policy Related to Gender

101. Women’s situations were highlighted and included in the development discourse around the world in the early 1960s. The Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW, 1979), the UN Fourth World Conference on Women in Beijing (1995) and other major world conferences such as the Rio Conference on Environment and Development (1992), the Vienna Conference on Human Rights (1993), the Cairo Conference on Population and Development (1994), the Copenhagen World Summit for Social Development (1995), and the Istanbul Conference on Human Settlements (1996), amongst others, resulted in considerable efforts towards ensuring women’s rights are being recognized and upheld globally.
102. The Millennium Development Goals (MDGs, 2000-2015) built on the basic inequality concerns of the above conferences and brought to the fore an additional concern that was not highlighted, i.e. the issue of empowerment. In essence, the MDGs is the first development effort that enjoys worldwide support and recognition, also by developing countries, to advocate gender equality and women’s empowerment as a key tenant for sustainable development. MDG goals and targets are set to ensure various rights of women and men including environmental sustainability⁵⁰.



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50 Mahbba, N. 2008. Violence against Women during Flood and Post Flood Situations in Bangladesh. ActionAid. Bangladesh.

Position of Women in Bangladesh⁵¹

103. The Constitution of Bangladesh (Articles 27, 28, 29 and 31) guarantees equality and non-discrimination on account of sex, religion, ethnicity, place of birth in order to provide scope for affirmative action in favor of the “backward section of citizens”. Article 24 promised to ensure religious freedom within a pluralist, national framework and Article 28 (sections 1,2 and 3) ensures equality in all spheres of life between women and men. Although the constitution guarantees equality between women and men in public domain but further scope for improvements remain in the private sphere.
104. Although these have been upheld in differing degrees since independence some 4 decades ago, changes have occurred in some contexts, including in the situation of women.
105. Efforts towards women’s development in Bangladesh are based on a wide array of international commitments including the Millennium Development Goals (MDGs), the CEDAW (1979), and the Beijing Platform of Action (1995), amongst others.
106. Following the declaration of the UN Decade of Women (1976-85), the Government of Bangladesh, national and international non-government organizations and others have undertaken several programs towards the advancement of women in the country. Simultaneously, the women’s movement has also played an important role in raising mass awareness of women issues and enhancing women’s participation in every sphere of life in order to achieve equality.
107. As a result, over the last 40 years, women in Bangladesh, as was the case with women in other developing countries, have gradually become more visible in the labor force, development programs and local institutions such as local government bodies⁵².
108. Examples of specific policy and legislative reform in this regard, include:
- The National Policy for Women’s Advancement (NPWA) within the framework of CEDAW and a follow up of Beijing Conference on Women and aimed at eradicating gender disparities and mainstreaming of gender issues;
 - The National Action Plan (NAP) as a follow-up to the Beijing Platform of Action;
 - The establishment of the MoWCA, a Parliamentary Standing Committee for MoWCA, an Inter-ministerial Coordination and Evaluation Committee and WID Coordination Committees at district and Upazila Levels;
 - The Poverty Reduction Strategy Paper (PRSP);
 - The Sixth Five-Year Plan (2011-2015);
 - The establishment of the National Council for Women and Child Development (2009);
 - Gender Responsive Budget to ten ministries in 2009-2011 are contributing on CEDAW issues, including laws and policies for eradicating health, education, political participation, achieve economic empowerment of women (as in the Bangladesh Labor Act (2006) and the Fourteenth Amendment to the Constitution allowing an increase in women’s reserved seats to 50, the Representation of People’s (Amendment) Ordinance (2008), the Citizenship (Amendment) Act (2009), entitling a Bangladeshi woman to transmit citizenship to her children, the Right to Information Act (2009), the National Human Rights Act (2009), the Domestic Violence Act (2010), Child & Mother Health Institute Law, 2002;

51 Government of Liberia and UNIFEM. 2011. Empowering Women in Liberia. Joint Program on Gender Equality and Women’s Empowerment Factsheet. Retrieved from the World Wide Web: <http://unliberia.org/doc/genderemail.pdf>

52 Mahbuba, N. 2011. Key note paper on ‘Stepping towards Equality: Social Inclusion and Gender’ presented at a seminar organized by INGO Forum Bangladesh Celebrating 40 Years of Independence. 24 November, 2011.

- The National Policy for Women’s Advancement 2008, the National Education Policy, 2010, Domestic/Family Violence (Prevention and Protection) Act, 2010, Prevention of Cruelty to Women and Children Act, Acid Crime Control Act, Child Marriage Restraint Act and Dowry Prohibition Act, National Women Development Policy, 2011 m., the National Health Policy, 2011; and
 - Steps Towards Change: NSARP-II, Vision 2021, etc.
109. Gender parity in primary and secondary education has been achieved and the Government of Bangladesh also established institutions for girls and women at the secondary and tertiary level.
 110. However, concerns are raised over the high drop-out rate among girls, especially in rural areas, the gender gap at technical/vocational and the tertiary education levels, and the high number of girls who suffer sexual abuse and harassment both at school as well as on their way there.
 111. Barriers experienced by women and girls to quality education, for example, the lack of physical infrastructure, the lack of facilities for girls in schools, the negative impact of early marriages and the lack of access to education by rural women and girls are also of concern.
 112. The Bangladesh Labor Act (2006) promotes equality of opportunity in employment and provides for equal pay amongst men and women. However, it does not extend to workers in the informal sector where the largest population of Bangladesh’s women is being employed. The persistence of discrimination against women in the labor market, in particular, occupational segregation, a wide gender wage gap and the exploitation of girls is also prevalent⁵³.
 113. With regards to Millennium Development Goal 3 (Promote Gender Equality and Empower Women), it is noteworthy to mention that the total fertility rate (TFR) has fallen from 7 live births in the mid-70s to 2.3 births per woman in 2011 as the contraceptive prevalence rate increased from about 8% in the early 1970s to 40 % in early 1990s to 60% by 2011.
 114. The reduction in birth rate is also attributed to education of girls and more women joining the work force. Another positive development is that women’s life expectancy has increased to 68.9 years in 2009 from 46.7 years in 1960.
 115. Overall mortality amongst women of reproductive age has consistently declined over the last 10 years. The maternal mortality has decreased from 322 per 100,000 live births in 2001 to 194 in 2010. More needs to be done, however, to meet the MDG target of 143 deaths per 100,000 live births by 2015.
 116. At primary and secondary level enrolment in educational institutions, girls now account for larger proportions at 1.02% and 1.14% respectively. Girls are also doing better, or no worse, in public examinations at these levels compared to their male counterparts. However, at the tertiary level the proportion of girls is only 39%, which is largely due to social reasons such as the marrying off of girls at that age. Overall, girls lag behind in science education.
 117. The World Development Report 2012: Gender Equality and Development mentions that in Bangladesh, a woman earns only 12 cent for every dollar that a man earns, one of the lowest wages earned by women compared to other countries of the world.
 118. A major breakthrough has been achieved in the area of education and employment for girls due to affirmative action by the government and employment opportunities in the Ready Made Garments (RMG) industries that employ mostly women. Although the wage rates at entry-level within this sector is much lower than in other sectors requiring similar (or less) skill. Other issues such as unsafe working conditions and high levels of harassment also reduce the contribution to women’s empowerment and gender equality.

⁵³ Committee on the Elimination of Discrimination Against Women. 2011. Forty-eighth session. Summary record of the 970th meeting held in Geneva, Switzerland.

Convention on the Elimination of all forms of Discrimination against Women (CEDAW)

119. Bangladesh has ratified CEDAW with the exception of two of its articles, including Article 2 and Article 16(c). Despite not having ratified these, the country has adopted various policies in this regard and has taken action towards achieving the goals contained in the Convention.

National Action Plan (NAP) for Women's Advancement

120. The Sixth Five-Year Plan (2011-2015) identifies bringing women into mainstream development activities of the Government as a major goal to be achieved. The commitment of the Government of Bangladesh not only pursues women's development, but also that women's development is viewed as an integral part of the responsibilities of all line ministries.
121. Ministries and agencies of the government therefore have a definite responsibility for women's development as women are a major part of the total population that each agency is mandated to serve. The MoWCA, is the focal ministry for women's advancement and thus coordinates efforts of government ministries and departments, as well as women's organizations, institutions, NGOs and women.
122. Gender and disaster issues were introduced for the first time in the NPWA (2010).

National Action Plan for the Implementation of the Beijing Platform, 1995

123. The Government of Bangladesh endorsed the Platform for Action (PfA) of the Fourth World Conference for Women in Beijing (1995), which reflects a world consensus to empower women.
124. This paper includes the following relevant goals:
- Specifying allocation for women both in revenue and development budget for the MoEF;
 - Ensuring gender focal point and gender trainings for staff of MoEF; and
 - Making Gender and Environment Impact Assessments (GIAs) mandatory for all projects and programs of the MoEF.
125. The Beijing Platform of Action was reviewed in 2010 to mark the 15 years since its inception. For implementing the PfA, an Action Plan for Women Advancement Implementation of the Beijing Platform for Action was developed by the Government of Bangladesh in 1998.

National Policy for Women's Advancement (NPWA)

126. Prepared in 2011 by Bangladesh's Ministry of Women and Child Affairs, this policy instrument includes the following relevant objectives:
- Protecting women from the adverse effects of climate change;
 - Taking action to acknowledge women's contribution in social and economic spheres; and
 - Facilitating women's participation in all national and international bodies.
 - Gender Integration in the BCCSAP
127. In 2012, a review was conducted by GIZ⁵⁴ (Deutsche Gesellschaft für Internationale Zusammenarbeit) with the objective of analyzing how the MoEF addresses gender-specific aspects in the field of climate change. Under this review the BCCSAP was also analyzed.
128. The main conclusion of this report were:

54 Von Ritter, N. 2012. Gender Analysis of the Project Strengthening Climate Change Finance in Bangladesh: Promotion of the Climate Change Unit in Coordinating the BCCSAP. GIZ. Dhaka, Bangladesh.

- (i) Of the 44 programs in the BCCSAP, only four mentioned gender specifically;
- (ii) The Action Plan does not refer to women as actors in addressing climate change; and
- (iii) The BCCSAP states “needs of women will be mainstreamed in all activities under the BCCSAP” (paragraph 27), however, there are two points which weaken the credibility of this statement: first, the BCCSAP does not elaborate on how women’s needs would be mainstreamed and second, there are no specific instruments or strategies designed to implement gender mainstreaming, nor do any focal person, incentive structure, or monitoring system exist to ensure that it happens.

The Case for Gender Equality

129. Gender continues to be “one of the world’s strongest markers for disadvantage⁵⁵”.
130. Women’s historical situation has led them to systematically be restricted from meaningful participation in economies globally and their access to skills and self-employment was, and still is, severely hampered⁵⁶. All too often the role of women in different spheres of life is overlooked or even denied. This is especially true of the environmental and economic sectors where women’s accesses to resources are often very limited, leading to differences in benefits derived from their use.
131. This resulted in a global economic structure that excludes the majority of women around the world. Increased inequality, exclusion and uneven development are real dangers for all economies. Despite some successes and a plethora of policies, strategies and program interventions at all levels, entrenched gender inequalities continue to persist, acting as a deterrent to growth, economic development, employment creation and poverty eradication as often these are neither implemented nor taken into account.
132. Hence many of these initiatives perform below their potential, as inequalities in the distribution of wealth, income, skills and employment amongst women and men remain.
133. As stated in the Gender Equality and Development World Report 2012 - gender equality is a core development objective in its own right.
134. Greater gender equality is, however, also smart economics, enhancing productivity and improving other development outcomes, including prospects for the next generation and for the quality of societal policies and institutions⁵⁷. Greater gender equality can increase productivity, advance development outcomes for the next generation, and make institutions more representative.
135. Women now represent 40% of the global labor force, 43% of the world’s agricultural labor force, and more than half the world’s university students. Productivity will be raised if their skills and talents are used more fully. Over half a billion women have joined the world’s labor force over the last 30 years as women’s participation in paid work has risen in most of the developing world.
136. The Economist found that the growth in employment of women in developed economies in the last ten years contributed more to global growth than did China. In the U.S., a study conducted by McKinsey established that women went from holding 37% of all jobs to nearly 48% over the past 40 years, and that the productivity gains attributable to this slight increase in women’s share of the labor market now accounts for approximately 25% of U.S. GDP. That works out to over \$3.5 trillion – more than the GDP of Germany and more than half the GDPs of China and Japan.
137. According to the Boston Consulting Group women are the world’s third largest emerging market after China and India. Women will control \$15 trillion in global spending by the year 2014 and by 2028 will be responsible for about two-thirds of all consumers spending worldwide.

55 UNDP. 2005. Human Development Report. UNDP New York, USA.

56 Aguilar, L, et.al. 2012. Gender Review of the Climate Investment Funds (CIF). IUCN Global Gender Office. Washington D.C. USA.

57 World Bank. 2011. Gender Equality and Development World Report 2012. World Bank. Washington DC. USA.

138. Studies of Fortune 500 companies indicate that there is a statistical correspondence between the number of women on a board of directors and higher share prices relative to others in the sector. In 2011, comparisons show that companies with sustained high representation of Women Board Directors (WBD) (three or more WBD in at least four of five years) significantly outperform those with sustained low representation (zero WBD in at least four of five years).
139. Beyond the economics of gender, however, there are also many examples where empowering women to exercise leadership within their communities contributes to climate resilience, ranging from disaster preparedness in Bangladesh, Indonesia and Nicaragua, to better forest governance in India and Nepal, to coping with drought in the Horn of Africa.
140. Gender mainstreaming has been the primary methodology used to integrate a gender approach into development and/or environmental efforts and in light of statistics as those above, it could easily be understood why it has been gaining in currency among policy makers, international organizations and donors.
141. Mainstreaming gender does not merely imply paying lip service to equality between women and men by adding women's participation to existing strategies and programs. Rather, and to be optimally effective, it seeks to transform unequal societies and institutional structures to realize the full creative and productive potential of women to reduce vulnerability and enhance efficiency and effectiveness of development projects and programs.
142. The importance of gender mainstreaming in environmental efforts and poverty eradication has also been recognized in a wide range of global agreements and conventions and within this context governments have equipped all three of the Rio Conventions with strong mandates on gender equality and women's empowerment for the first time.
143. By signing and ratifying the conventions on biodiversity (CBD), climate change (UNFCCC), and to combat desertification (UNCCD), governments officially committed to implement these agreements and monitor and report on their progress. These international agreements are an historic step forward, but the second half of the equation - implementation at national level - now requires urgent attention.

Gender and Climate Change

144. "Climate change is a major threat to the environment and natural resources, which we need for the sustainable development of our globe. Climate change will undermine the very foundation of socioeconomic development and will increase inequality and poverty. It will have a serious impact on the livelihoods of poor women in developing countries, as the increasing droughts and storms will affect agriculture and water resources, which are often the responsibility of women"⁵⁸.
145. Women can, however, play a central role in adaptation to climate change. In Nepal, women farmers avoid crop failure in the face of changing weather patterns by growing off-season vegetables and bananas, which are more resilient to flood and drought⁵⁹. In Jordan, women's management of small-scale irrigation projects and involvement in water harvesting and soil conservation improves the efficiency of water use⁶⁰. In Tanzania, when men migrate from home for longer periods due to the impacts of climate change, women take over the role of livestock herding and pasture management⁶¹. In Nicaragua, following a disaster, women

58 Halonen, T. 2012. Foreword to "The Art of Implementation: Gender Responsible National and Regional Strategies Transforming Climate Change Decision Making". IUCN Global Gender Office. Washington D.C. USA.

59 ActionAid. 2007. We know what we need: South Asian women speak out on climate change adaptation. ActionAid and Institute of Development Studies. Johannesburg, South Africa and London.

60 Al-Naber, S. and Shatanawi, M. 2003. The Role of Women Management in Jordan. presented at the 6th International Water Symposium. Canne, France, June 2003.

61 Matinda, M. Z. 2010. Maasai Pastoralist Women's Vulnerability to the Impacts of Climate Change: A Case Study of Namalulu Village, Northern Tanzania. Paper prepared for the Global Workshop Seminar on Indigenous Women, Climate Change and Reducing Emissions from Deforestation and Forest Degradation (REDD+). Mandaluyong City, Philippines, November 18-19, 2010.

- were actively involved in evacuating those at risk, transporting materials to clear roads, and organizing food collection brigades and health care campaigns⁶².
146. Women often lead the way in adapting to climate change impacts, but they also play a key role in mitigating climate change by optimizing energy efficiency, using low-footprint energy sources and techniques, and influencing a household's and community's consumption patterns⁶³.
147. Low-emissions development pathways can be more effective and more equitable where they are designed using a gender-informed approach. Billions of women around the world make decisions every day that influence the amount of carbon that is released into the atmosphere, for example as home-makers, as farmers and land-managers, or as consumers. Women make major share of the daily purchasing for families and take the lead in households combating climate change⁶⁴. Such choices can be expanded in ways that reduce carbon footprints while also promoting co-benefits for gender equality.
148. When it therefore comes to decision-making and implementation towards building resilient communities in the face of climate change, the full and meaningful participation of women become essential.
149. Until recently, however, policy responses at the global or national level did not reflect this reality, and even at this juncture we still have a long way to go.
150. For more than twenty years, gender was absent from the UNFCCC and in decision-making by its Conference of the Parties and Subsidiary Bodies. Likewise, few NAPAs or national communications submitted by Parties to the UNFCCC addressed gender considerations in a comprehensive manner, and some did not mention gender considerations at all.
151. This lack of a connection between gender and climate change at the global and national levels was a sign of the times - prior to the UNFCCC Bali Action Plan, and the launch of the Global Gender and Climate Alliance (GGCA) in the same year, the theme of gender and climate change was largely nonexistent on the global stage, and most NAPAs and national communications had already been written.
152. Ongoing challenges also remain in the implementation of gender within the context of climate change.
153. Over the last decade, new knowledge has been generated that allowed for a clearer understanding of the linkages between gender and adaptation. As this understanding grew, it also positively influenced Government thinking especially in relation to the PPCRs, as is clear from a recent review conducted by the IUCN Global Gender Office on the Climate Investment Funds in 2012⁶⁵.



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62 Delany, P. and Shrader, E. 2000. Gender and Post-Disaster Reconstruction: The Case of Hurricane Mitch in Honduras and Nicaragua. World Bank. Washington, DC.USA.

63 Rojas, A.V., et. al. 2012. Guidelines on Renewable Energy Technologies for Women in Rural and Informal Urban Areas. San Jose, Costa Rica: IUCN and ENERGIA. http://www.genderandenvironment.org/index.php?option=com_docman&task=search_result&Itemid=535

64 OECD. 2007. Good Practices In Promoting Sustainable Consumption in OECD Countries. Sg/Sd(2007)9 Organization for Economic Co-operation and Development. AMSDE, Paris, 8-9 October 2007

65 Aguilar, L, et.al. 2012. Gender Review of the Climate Investment Funds (CIF). IUCN Global Gender Office. Washington D.C. USA. <https://climateinvestmentfunds.org/cif/content/gender-review-cif-full-report>.

154. In contrast, the linkages between gender and mitigation are, and have been, less intuitive and this constraint could be one of the factors why the mainstreaming of gender in these areas generally has been more limited and challenging.
155. Understanding this relationship, however, is imperative as gender and mitigation offers a unique platform to move away from the notion that women are victims to an understanding that women are agents of change, capable of significantly strengthening our efforts on climate change.

The path to a ccGAP⁶⁶

156. The development of gender-responsive national climate change strategies marks a natural progression in IUCN's longstanding partnership with governments and civil society. The motivation for these strategies is also closely linked to a growing global recognition of the importance of a gender dimension in climate change and environmental decision making, in which IUCN, the GGCA, and other actors have played an important role.



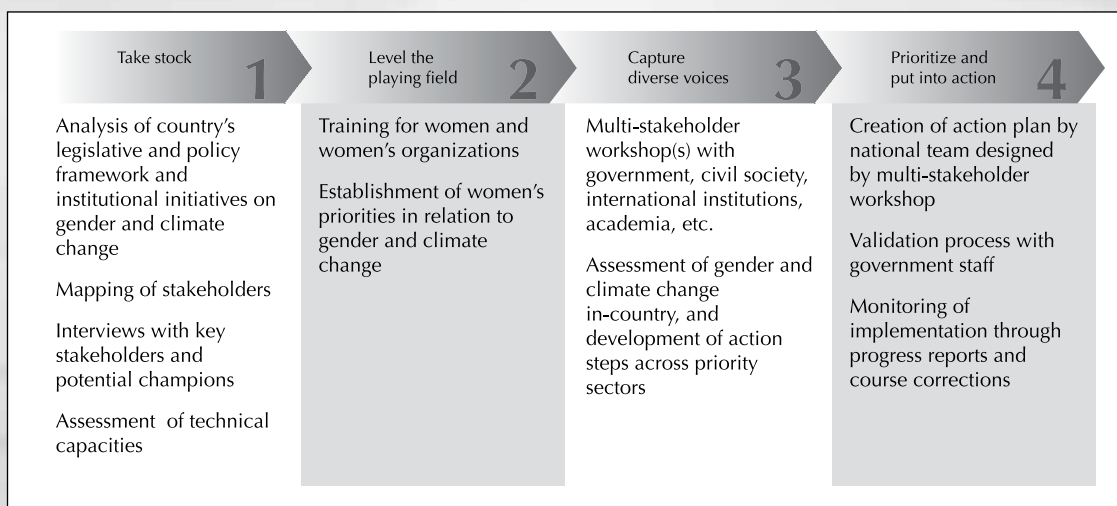
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157. A critical step in the implementation process is anchoring global agreements within national contexts through the development of climate change gender action plans (ccGAPs).
158. Beginning in January 2010, ccGAPs were developed in various countries and regions under IUCN's leadership. IUCN on behalf of the GGCA supported the development of ccGAPs in Nepal, Liberia, Tanzania, Jordan, Egypt, Panama, and Haiti. In Haiti, IUCN engaged the support of WEDO (Women's Environment and Development Organization) and the Secretariat of the Convention on Biological Diversity to develop that country's ccGAP. Two regional governing bodies—those of Central America and the Arab states region—also broke new ground by collaborating to develop regional strategies on gender and climate change. Separately, IUCN collaborated with United Nations Development Fund for Women (UNIFEM) in the development of Mozambique's strategy.
159. In parallel, IUCN leveraged the methodology of the ccGAPs to facilitate distinct processes in other countries and had similar results. IUCN worked with partners to support the mainstreaming of gender in Costa Rica's action plan for the national climate change strategy and partnered with WEDO to develop Gender and REDD+ roadmaps in Ghana, Uganda, and Cameroon.

66 IUCN. 2012. *The Art of Implementation: Gender Responsive National and Regional Strategies Transforming Climate Change Decision-Making*. IUCN Global Gender Office. Washington D.C.USA.

160. These visionary countries and regions are among the world’s pioneers in integrating gender in national climate change decision-making. More strategies will soon follow, as still more countries have communicated requests to IUCN for facilitating these processes.
161. Why do the ccGAPs matter? They represent a country’s intention to empower and respond to the needs of the often invisible “other half” of the population in the context of climate change. They link national and global policy in a concrete and synergistic manner, communicating to women’s constituencies, a country’s population at large, and the international community that gender matters and why it matters. Most importantly, ccGAPs have the potential to enhance the effectiveness and efficiency of climate change and socioeconomic development responses.
162. The underlying principle of the ccGAPs is the transformative nature of gender interventions. If women had the same access to the resources that male farmers do, farm yields could increase by 20-30 per cent and the number of hungry people in the world could be reduced by 12-17 per cent⁶⁷. More equal control over household resources and subsequent investment in women’s and children’s education and health have been linked to a country’s economic growth. Women’s participation in decision-making at higher levels has specifically benefitted environmental policy, such that countries with more women in their parliaments are more likely to set aside protected land areas and ratify international environmental treaties. In fact, new data reveals that there is a causal relationship between environment and gender; when gender inequality is high, forest depletion, air pollution and other measures of environmental degradation are also high⁶⁸.
163. World Bank President Robert Zoellick confirmed these findings while noting, “Gender equality is smart economics... We will not release the full potential of half of the world’s population until globally we address the issue of equality; until countries, communities, and households around the world acknowledge women’s rights and change the rules of inequality”⁶⁹. In the realm of climate change, and in any development challenge, gender equality is an objective with tangible economic, environmental, and social benefits. Gender equality is, indeed, at the heart of smart governance.

Figure 1: Steps toward the development of a ccGAP⁷⁰



67 FAO. 2011. The State of Food and Agriculture. Rome.

68 UNDP. 2011. Human Development Report 2011: Sustainability and Equity: A Better Future for All. UNDP. New York

69 Zoellick, R. 2011. 'Beyond Aid', speech delivered at George Washington University, Washington, DC, 14 September 2011.

70 IUCN, 2012. The Art of Implementation: Gender Responsive National and Regional Strategies Transforming Climate Change Decision-Making. IUCN Global Gender Office. Washington D. C. USA.

164. Further information on similar processes developed in Nepal, Liberia, Tanzania, Mozambique, Jordan, Egypt, Arab League of States, Central American Region, Panama, Costa Rica and Haiti may be found in a publication by the IUCN Global Gender Office, entitled “The Art of Implementation: Gender Strategies Transforming National and Regional Climate Change Decision Making”⁷¹.

Methodology

165. On 23 July 2012, the IUCN Country Representative in Bangladesh and the IUCN Global Gender Office received an official request from MoEF, Government of Bangladesh, to be engaged in the preparation of a national action plan on gender and climate change (see Annex IV).
166. The MoEF formulated a revised edition of the BCCSAP in 2009 in which gender and climate change issues were given substantial importance. In order to operationalize this mandate, the Government of Bangladesh requested the development of a Climate Change and Gender Action Plan (ccGAP) within the framework of the BCCSAP and with the assistance of IUCN. In response to this request IUCN engaged in the preparation of this ccGAP commencing October 2012.
167. In January 2013, a multi-stakeholder Steering Committee including representatives from civil society, IUCN, the MoWCA, the Ministry of Disaster Management and Relief (MoDMR) and the Ministry of Social Welfare (MoSW) was established. Chaired by the Secretary of MoEF, this Committee provided strategic and political oversight in the development of the ccGAP.



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168. Thanks to the generous financial support from the Government of Finland, this document is the result of a series of inputs: research, interviews with policy makers, stakeholder consultation and peer review, amongst others. It has been drafted on the basis of an analysis of the current national priorities concerning climate change and by means of two multi-stakeholder workshops convened in Dhaka, Bangladesh from the 13th to 14th of February and from the 17st to the 19rd of February of 2013 (see Annexes II and III for the list of participants).

71 The publication is available at: http://workshop.fluidbook.com/viewer/10938_c7780deb841cd4aeb24ae3905e13952_1362736044/

169. The main objectives of the workshops were to:
- Identify and understand the importance of gender and climate change; and
 - Identify possible areas of actions/ interventions for an Action Plan on gender and climate change in Bangladesh.
170. It defines the role that the MoEF will play in initiating and facilitating efforts internally, as well as with strategic partners at the national, regional and international levels. It seeks to mainstream gender in climate change action as outlined in the BCCSAP, the NAPA and other policy documents. Importantly, it also seeks to take advantage of opportunities that promote gender equality and facilitate transformational change as we build a climate resilient community.
171. The ccGAP integrates gender considerations into four of the six main pillars as identified in the BCCSAP: (i) food security, social protection and health; (ii) comprehensive disaster management; (iii) infrastructure and (iv) mitigation and low carbon development. The remaining two pillars of the BCCSAP, those of research and knowledge management and capacity building and institutional strengthening, were mainstreamed within the above four pillars throughout the document as crosscutting topics.
172. The ccGAP establishes clear objectives, outlines substantive activities that are accompanied by reachable indicators within the ambit of the four pillars as identified and highlights the specific contribution women do and can make within each of these as well as the required interventions necessary to incorporate the role of women effectively over a timeframe of five years, from 2013/14-2018/19.
173. Upon completion of the first draft of this document, the MoEF, with the support from IUCN, will engage stakeholders at the national and district level in a validation process. To this end the document will be translated into Bangla, after which it will be published with the official approval from the Government of Bangladesh.



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Section B

Climate Change and Gender Action Plan

Overall Objective

To mainstream gender concerns into climate change-related policies, strategies and interventions ensuring access to, participation in, contributions towards and benefits for the diverse group of stakeholders for the sustainable and equitable development of Bangladesh.



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PRIORITY SECTOR I: FOOD SECURITY SOCIAL PROTECTION AND HEALTH

BCCSAP (2009): Pillar no. 1

Overview

174. Food security and climate change are, more than ever, the two major global challenges humanity is facing at present⁷². It's also a complex relationship made up of compounded challenges: besides it being a major concern in its own right, climate change impacts directly on food security, further exasperating the precarious situation of many already living in food insecurity globally through droughts, excessive rainfall, wind and salinity to mention only a few.
175. With many of the resources needed for sustainable food security already stretched, the food security challenges are huge. Climate change will make it even harder to overcome them, as it reduces the productivity of the majority of existing food systems and harms the livelihoods of those already vulnerable to food insecurity.
176. Population growth will continue through 2050 and will be accompanied by unprecedented rates of urbanization. These changes will take place mostly in today's developing countries, many like Bangladesh, of which will achieve - or aspire to achieve - middle-income status.
177. The outcome will be rapid growth in demand for food, both in quantity and quality. Additionally, government policies to raise the share of biofuels in energy consumption increase the challenges to our collective ability to achieve sustainable food security.
178. The poor and other vulnerable groups are likely to be at high risk of food insecurity as result of climate change. Urban poverty is on the increase and, in general, groups affected by poverty are urbanizing more rapidly than the population as a whole. They are people who have few assets and low income earning

72 HLPE, 2012. Food security and climate change. A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security. Rome. Page 7.

- potential. From a geographic perspective, the vast majority is located in two regions - Sub-Saharan Africa and South Asia - where climate change is likely to be especially pronounced.
179. Importantly, the effects of climate change on human society, and our ability to mitigate and adapt to them, are also impacted by social factors such as gender.
 180. With regards to public health, more frequent and severe extreme events are expected to have largely adverse effects on key determinants of human health, including clean air and water, sufficient food and adequate shelter, which further will aggravate existing inequalities. Climate change is therefore also a significant and emerging threat to public health through, for example, a complex pathway of altered infectious disease patterns. This changes the way we must look at protecting our populations' health, including that of women who are especially at risk.
 181. Besides the more obvious impacts of climate change on health as result of heat waves, the frequency and severity of extreme weather events such as storms with dangerous flooding, high winds, reduced air quality, allergens and climate-sensitive diseases such as food-borne-, water borne- and animal-borne diseases, recent studies also suggest that we are yet to learn of many impacts of climate change that may at first glance not be all that apparent.
 182. In Bangladesh, for example, increased deaths as result of high blood pressure and heart attacks have been directly linked to an increase in salinity of drinking water due to coastal surge.
 183. It is therefore imperative that we need to anticipate the effects of climate change and prepare for them accordingly to protect the public adequately as far as possible.
 184. In an article published by The Lancet⁷³ the writers state that "the most vulnerable are the world's poorest people, who already face poor health and premature death, and are least responsible for greenhouse-gas emissions.
 185. Additionally, a clear implication is that policies needed to mitigate climate change will exert health effects by acting on many of the determinants of health and health inequality. These determinants include the conditions in which people are born, grow, live, work, and age, and the structural drivers of those conditions: inequities in power, money, and resources."
 186. Gender-sensitive assessments and gender-responsive interventions have the potential to enhance health and health equity and to provide more effective climate change mitigation and adaptation.
 187. Gender-sensitive research, including collection, analysis and reporting of sex-disaggregated data, is needed to better understand the health implications of climate change and climate policies.
 188. However, there is already sufficient information to support gender mainstreaming in climate policies, alongside empowerment of individuals to build their own resilience, a clear focus on adaptation and mitigation, a strong commitment (including of resources), and sustainable and equitable development⁷⁴.

Situation Analysis

189. Agriculture is viewed as the most important sector of Bangladesh's economy due to its role in food security, employment and livelihood and comprises of three subsectors including fisheries, livestock and forestry.
190. The current share of agriculture to GDP is around 21%, although this share has been in decline over the last decade. More than 70% of the people in the country are either directly or indirectly employed in this sector⁷⁵.

73 Gill, M., Stott, R., 2009. Retrieved from the World Wide Web: [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(09\)61830-4/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(09)61830-4/fulltext)

74 WHO, 2010. Retrieved from the World Wide Web: <http://www.who.int/globalchange/GenderClimateChangeHealthfinal.pdf>

75 Karim, Z and Islam, F. 2010. Towards a Food Secure Bangladesh: National Medium Term Priority Framework of Bangladesh (2010-2015). Ministry of Agriculture, Government of Bangladesh and FAO, Dhaka.

191. Agricultural growth has accelerated from less than 2.0% per year during the first two decades after independence (1971) to around 3.0% during the last decade. Despite such a steady growth in agriculture as well as in food production, Bangladesh has been facing persistent challenges in achieving food security mainly as result of disasters and fluctuations in food prices from the influence of volatile international market for basic food items⁷⁶.
192. Current projections indicate that agricultural GDP is projected to decline with 3.1 percent each year as a result of climate change with an associated USD 7.7 billion lost estimated. The average loss in agricultural GDP associated with existing climate variability is projected to be a third of the agricultural GDP.
193. Lesser consumption per capita will further increase food insecurity and undernourishment of the people living under poverty line. According to the Bangladesh Bureau of Statistics (2007) about one-fifth of populations are living in extreme poverty and who consume less than 1805 kcal per capita per day⁷⁷. Bangladesh had an estimated 40.2 million undernourished people in 2004-06.



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194. The government, particularly the Ministry of Agriculture (MoA), is therefore implementing numerous programs and projects to increase crop production from decreasing land areas through various policy instruments. Interventions include adapting to changed scenarios through the use of seed, irrigation technique and agronomic practices resilient to stress like salinity, drought, and flooding.

195. In this regard, three documents are of particular importance:
- The National Agriculture Policy, 2010, specifically addressing the threats of climate change in agriculture;
 - The Bangladesh Food Security Country Investment Plan (CIP, 2011) paying particular attention to key activities that focuses on the Southern part of Bangladesh – an area with higher poverty and food insecurity levels, as well as suffering the adverse effects of climate change; and
 - Vision 2021, indicating that the country would seek to attain food self-sufficiency by 2012⁷⁸.
196. Increasing income and urbanization are triggering a rapid change in food consumption patterns⁷⁹ in Bangladesh.

76 Ministry of Planning. 2012. The Sixth Five Year Plan, FY2011-FY 2015 Government of Bangladesh. Dhaka.

77 UNICEF, 2009. Retrieved from the World Wide Web: <http://www.unicef.org/socialpolicy/files/BangladeshNationalReport.pdf>

78 Planning Commission .2010. Outline Perspective Plan of Bangladesh 2010-2021- Making Vision 2021 A Reality, Final Draft. General Economics Division, Planning Commission, Government of the People's Republic of Bangladesh. Dhaka, Bangladesh.

79 Government of Bangladesh. 2012. Second National Communication to the United Nations Framework Convention on Climate Change (UNFCCC). Ministry of Environment and Forests. Dhaka, Bangladesh. Page.117.

197. Food grains dominate the total dietary consumption of the Bangladeshi people and rice (comprising around 88% of total grain consumption) is the main food grain throughout the country. Non-grain food crops and animal products provided only 8% and 4% of the remaining calorie supply, respectively.
198. The BCCSAP points out the absolute necessity to maintain food security.
199. The extent to which food supply may be impaired through climate change in Bangladesh is becoming increasingly important and estimates for the demand for food in future becomes imperative.
200. By 2050 it is projected that the demand for rice in the country will increase with more than 40% (from 27.26 mn mt in 2010 to 38.32 mn mt) and that other dominant cereals like maize and wheat will respectively increase by more than 5 times and twice over by 2050 during the same period. Non-cereal food demand will also increase tremendously as income levels rise.
201. In total, Bangladesh currently grows 46 economic crops and produces more than 33 million tons of rice annually. In addition, around 8.0 million metric tons of potato, 0.79 million metric tons of oilseed and 0.66 million metric tons of pulses are produced. All these crops require temperatures that vary between 18-25 degree centigrade and are also highly sensitive to fog, cloud and change in humidity.
202. Results from crop simulation studies examining climate change impacts on agriculture showed a negative impact on crop productivity in the country. An increase of surface temperature associated with the global warming, in particular, will cause reduction in crop production.
203. Rice in Bangladesh is grown in three seasons: completely rain fed (*Aus*), partially rain fed (*Aman*) and completely irrigated (*Boro*) conditions.
204. All three varieties have been found to be climate sensitive. *Boro* rice that accounts for 60 percent of rice outputs is highly vulnerable to flash floods, while *Aman* is the dominant crop in the coastal area frequently damaged by cyclones. *Aush* is highly vulnerable to floods in general⁸⁰.
205. Sea level rise and intrusion of saline water will reduce rice crop production of about 0.2 million metric ton. In an average year, salinity not only causes a net reduction of rice production, but also diminishes potentials of *Boro* and wheat cultivation in saline affected soils of the coastal areas (World Bank 2000).
206. It is likely that even a moderate drought and/or “drought-like” situation may cause a 35-40 percent reduction of rice crop production and half potato production⁸¹.
207. The fisheries sub-sector in Bangladesh also plays an important role in creating direct and indirect employment of 12-13 million people and earning of foreign currencies.
208. According to DFID⁸² (The United Kingdom Department for International Development), 80 percent of rural households in Bangladesh consume or catch fish to sell which increases their overall animal protein intake with around 60%. Whilst fishing has traditionally been men’s work, women and children are progressively getting more involved in fishing activities as well.
209. Sea level rise and intrusion of saline water in fresh water areas as result of climate change will, however, reduce fisheries production as species and fresh water fisheries are highly susceptible to moderate level of salinity.
210. Changes in water temperature, precipitation and oceanographic variables, such as wind velocity, wave action and sea level rise, can bring about significant ecological and biological changes to marine and fresh

80 Government of Bangladesh. 2012. Second National Communication to the United Nations Framework Convention on Climate Change (UNFCCC). Ministry of Environment and Forests. Dhaka, Bangladesh.

81 Idem.

82 DFID. Women’s role in fish conservation in Bangladesh. Fisheries. Retrieved from the World Wide Web: http://dfid.gov.uk/r4d/PDF/Outputs/IDS/id21-Fisheries_5.pdf

- water ecosystems and their resident fish populations^{83 84}, directly impacting the person who depends on these ecosystems for their livelihoods.
211. Extreme weather events disrupt fishing operations and land-based infrastructure while fluctuations of fishery production and other natural resources can have an impact on livelihoods strategies and outcomes of fishing communities⁸⁵.
 212. Livestock provides 15 percent of total employment in the country. The sector is especially susceptible to increasing temperature rise and increasing humidity. Lower intake of dry matter by livestock due to temperature rise coupled with increasing humidity leads to changes in the weight of the animal and a reduction in milk production which is projected to decrease by 2.5% annually to around 2030, after which milk output may further reduce by around 5% in the 2050s.
 213. Climate change will affect productive ecosystems in Bangladesh and will erode employment and livelihood opportunities of the people depending on ecosystem services.
 214. The ecosystem and biodiversity of the Sundarbans mangrove and wetlands along with the fish and other aquatic life, in particular, are at risk due to climate change⁸⁶. The endangered species in this area include 50 species of fish, 41 species of mammals, eight species of amphibians and 58 species of reptile⁸⁷.
 215. Climate risks will also have severe implications for household welfare. For both the climate variability and climate change simulations, around 80 percent of total losses fall directly on household consumption. Much of the economic losses occur outside of agriculture, particularly in the downstream agriculture processing sectors.
 216. This implies that both rural and urban households are adversely affected, and per capita consumption is projected to fall for both farm and non-farm households.
 217. The pressure on agricultural production may result in under-nutrition significantly impacting on overall public health.
 218. Several research studies already indicate that climate change will have several important impacts on Bangladesh in this regard.
 219. The combination of frequent disasters, high population density and low resilience to economic shocks, make Bangladesh especially vulnerable to climatic risks.
 220. According to a study conducted by IUCN⁸⁸ on behalf of the Bangladesh MoEF, the main effects of climate change on health will include an increase in primary vulnerabilities: water- and vector borne diseases, food insecurities, heat and cold-related illnesses and under nutrition being amongst the most significant. Availability and access to safe water, in particular during the dry period, is an additional threat. Disasters also threaten people and their belongings, causing hardship and stress.
 221. Drainage congestion and standing water will increase the potential for outbreaks of cholera and other waterborne and diarrheal diseases. ICDDR,B (International Centre for Diarrheal Disease Research, Bangladesh) highlights cholera and other diarrheal diseases, malaria, dengue as of particular important

83 Cheung, WWL., Lam, VWY., Sarmiento JL., Kearney, K., Watson, R. and Pauly, D. 2009. Projecting global marine biodiversity impacts under climate change scenarios. *Fish and Fisheries*, 10 (3): 235-251.

84 Westlund, L. Poulain, F. Bage, H. and van Anrooy, R. 2007. Disaster response and risk management in the fisheries sector. FAO. Rome.

85 Iwasaki, S., Razafindrabe, BHN., and Shaw, R. 2009. Fishery livelihoods and adaptation to climate change: a case study of Chilika lagoon, India. *Mitigation and Adaptation Strategies for Global Change* 14(4): 339-55.

86 Koudstaal, R., Werners, S.E., Ahmed A.U, Rahman, A., and Huq, S., 1999. Considering adaptation to climate change towards a sustainable development of Bangladesh. The World Bank .

87 Lin Zhi. 2009 Climate change causes extinction of species of animal in Bangladesh. China View. World Bank. 2000. Bangladesh Climate Change and Sustainable Development, Document of the World Bank

88 IUCN. 2011. Climate Change and Health in Bangladesh – Information Brief.

- diseases in this regard. Visceral leishmaniasis (VL), also known as kala-azar, are also mentioned, although with less empirical evidence of a direct correlation with climate change.
222. The impact of climate change on human health depends critically on the success to adapt to climate change in the other sectors. Improved health infrastructure including the health care system, reliable drinking water supply and improved sanitation will greatly reduce the vulnerability of the health sector.
 223. Strengthening health care systems, implementing water and sanitation programs and widening the coverage of proven and accessible public health interventions to control climate sensitive diseases, would also not only significantly accelerate progress towards the achievement of health-related Millennium Development Goals (MDGs), but also save millions of lives and ease the suffering of many more.
 224. To this end, several policy instruments have been put in place with regards to health in Bangladesh.
 225. The government of Bangladesh has recently established a National Climate Change Fund that will focus largely on adaptation and comprises some USD 100 million.
 226. As health is included in the first pillar of the BCCSAP, a part of this fund should go into adaptation measures addressing the impacts of climate change on health. However, it is important that these funds need to be administered properly with sound disbursement mechanisms, an appropriate governance structure and careful resource management.
 227. The health chapter of the Ten Years' Perspective Plan (2010-2021) also includes a climate change management strategy that places emphasis on improving sanitation issues in rural, towns and cities.
 228. The Sixth FYP (2011-2015) 14 (Part 1) recognizes possible health impacts of degraded environment including due to climate change, and wants to "build capacity in the area of environmental health through both public and private sectors".
 229. Environmental health relates to those aspects of human health and disease that is determined by factors in the environment. The FYP acknowledges limited experience with respect to adaptation in the health sector and therefore sets a target to initiate preliminary studies for possible adaptation options.
 230. In the section on Sectoral Strategies, Programs and Policies direction is given with regards to climate change and health in a number of ways, including:
 - Devising a national program to reduce the burden of diseases due to climate change;
 - Mainstreaming adaptation to climate change as central part of public health services;
 - Short, medium, and long research on the adverse effect of climate change on health;
 - Public awareness program on climate change impacts on health;
 - Development of an advanced preparedness plan; and
 - Partnership across the society and with global community in order to safeguard and enhance national as well as global public health security issues.
 231. The National Health Policy (MoH & FW 2011) states that Bangladesh has achieved remarkable success in the area of disaster/emergency response through better preparedness and proper management. It identifies climate change, salinity intrusion and drought as key factors that have slowed down progress that has been achieved thus far, however.
 232. The health policy identifies respiratory diseases, heat strokes, cold wave related illness, vector borne diseases like malaria and dengue fever, water borne diseases like cholera, and increased malnutrition due to reduced food production as results of climate change and disasters. Therefore, the policy aims to monitor disease and health disaster and explore ways in which to reduce the adverse effects of climate change accordingly.



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233. The Health Population and Nutrition Sector Strategic Plan (HPNSSP) identify the key interventions required to accelerate the pace of the Health, Population and Nutrition sector in Bangladesh. The HPNSSP sets out what the sector's strategic priorities are, including climate change, and explain to a certain extent how these will be addressed.
234. With regards to sanitation, the Government of Bangladesh has initiated a multi-year program on total sanitation starting in October 2003. Water quality surveillance in around 120 towns was reinstated as a direct result.
235. The health sector, in general, has been slow to perceive the enormous significance of global climate change and response measures will therefore need to be undertaken in collaboration with a wide range of sectors of government and other stakeholders.
236. To this end, medium to long term adaptation plans are expected to be implemented by the MoHFW, in association with research centers such as ICDDR,B and others.
237. Managing the impacts of climate change in the agriculture sector and ensuring food and livelihood security of the people living at the forefront of climate risks requires planned and integrated interventions in disaster risk management (DRM), social safety nets (SSN) and agricultural development with the innovation and extension of climate adaptive technologies.
238. By providing immediate access to food, safety nets have an important role to play in enabling poor households to sustainably deal with the shorter-term impacts of climate change. By combining their activities with other interventions such as income generation activities, distribution of saline resistant seed varieties (CCA) and disaster preparedness trainings (DRM), SSNs may also allow households to invest in adapting and/or protecting their livelihood strategies. This, in turn, will reduce their exposure and increase their resilience to climate change-related shocks⁸⁹.

89 IUCN. 2011. Climate Change and Health in Bangladesh – Information Brief.

239. However, little information is available to policy-makers on how to integrate DRM, SSN and CCA. Existing policy and planning documents suggest that, as far as social safety nets, disaster risk management and climate change adaptation is concerned these policies have been developed separately.
240. The National Food Policy Plan of Action (2008-2015) refers to safety nets and the need to increase households' capacities to manage disasters induced by climate change, but stops short of identifying strategies to integrate these areas of intervention.
241. The Climate Change Strategy Plan and Action Plan (2009), although very comprehensive, also only makes a passing reference to the potential role of safety nets in increasing household resilience.
242. Similarly, whilst the 2005 NAPA identified and prioritized a number of suitable adaptation measures, few have actually been implemented.

Gender, Agriculture and Food Security, Social Protection and Health

243. Women play a crucially important role in food production in Bangladesh. In recent years, poverty, women empowerment and male migration have lead to the systematic "feminization" of the agricultural labor force in Bangladesh and by 2008, 66% of all women participated in agricultural activities and women constituted 45.6% of the total farming population overall⁹⁰.
244. The effects of severe weather events related to climate change (cyclones, floods, droughts, salinization of water) and mechanization further amplified this population displacement.
245. In the absence of their male counterparts, the woman's role changed from that of an unpaid family worker to farm managers⁹¹, resulting in women maintaining a dual responsibility for both the farm-, as well as the household production.
246. Women in Bangladesh have always been involved in essential activities associated with agriculture that includes activities such as rice processing (boiling, drying and husking of paddies) and seed preservation. Although these are essential for the existence of any rural household, they are not awarded any form of recognition, since they do not generate income.
247. Generally, women do not own productive assets such as land or a pond. In the agricultural sample survey 2005, female-headed holdings only constituted 2.83%⁹². Access to services and other productive resources are also limited and women are for the largest part not enjoying extension services. Typically, they have limited access to information regarding agriculture and little decision making power and are mostly not involved in marketing of agricultural products at all.
248. The division of work along gender lines in Bangladesh is particularly prominent if men and women's activities in agriculture are compared.
249. In contrast to men, women are more involved in home-based agricultural activities (small-scale vegetable, poultry and livestock production), engaged in production of perishable, but often foods high in nutritional value, and in production for consumption by the family, rather than for the market.
250. This division of labor is exercised through enforcement of traditional gender roles, gender norms of restricted mobility and *pardah*, the definition of separate spheres for women and men to function in and by linking a women's observance of such norms to the honor of individual woman, her husband and/or her family⁹³.

90 Government of the People's Republic of Bangladesh, 2008. Report of the Labor Force Survey. Dhaka, Bangladesh.

91 Jaim, W. M. H. and Hossain, M. 2011. Women's Participation in Agriculture in Bangladesh 1988-2008: Changes and Determinants. Paper presented in the pre-conference event on "Dynamics of Rural Livelihoods and Poverty in South Asia", 7th Asian Society of Agricultural Economists (ASAE) International Conference Hanoi, Vietnam, October 12, 2011.

92 Bangladesh Bureau of Statistics. 2011. Statistical pocket book of Bangladesh 2010. Retrieved from the World Wide Web: <http://www.bbs.gov.bd/PageWebMenuContent.aspx?MenuKey=117>.

93 Naved, R. T. 2011. A Rapid Assessment of Gender in Agriculture of Bangladesh. ICDDR, B. Dhaka, Bangladesh.

251. According to an assessment conducted by ICDDRDB, however, variations on these norms exist, depending on how they intersect with an individual or a community's socio-economic status and religion, and, importantly, how individuals, families and communities choose to negotiate and practice these norms within these contexts in the end.
252. Traditional norms are hence forth much more relaxed in the case of landless, small and marginalized farm households where women, out of necessity, are relatively more engaged in agriculture and even in field-based activities than what otherwise would have been the case.
253. Gender norms and practices in agriculture in Bangladesh also vary by geographic regions.
254. Women from Thakurgaon (in the north-west of the country) are, for example, much more involved and visible in agriculture, whereas women from Noakhali (in the south-east of the country) are least involved in agriculture⁹⁴.

Livestock, forestry and fishery

255. Typically (although with some exceptions), farm work in Bangladesh is delineated clearly and performed along gender lines.
256. Poultry-rearing is traditionally a women's domain in Bangladesh and is an important means of generating much needed cash income for rural families and the women involved in it, in particular, as there are few if any other job opportunities for the landless, disadvantaged women⁹⁵ in these areas. As they are familiar with the rearing of poultry, an estimated 70% of the rural, landless women are either directly or indirectly involved in it as a result.
257. This involvement of women in the rearing of poultry is a crucial cornerstone of the nation's economic development⁹⁶. Keeping only 16 family chickens, she could potentially contribute around TK 5,085 (6.87%) to her family's income of TK 74,003 per year.
258. Other activities performed by women include the feeding of livestock, cleaning their sheds, securing these properly for the night, the collection of farmyard manure⁹⁷ and general healthcare for the animals. Owing to this crucial role in livestock care, women are also generally consulted when buying and selling livestock.⁹⁸
259. Within the homestead, women are also actively involved in the cultivation of tree species. Trees in and around the homestead, managed and accessed by women, fulfill multiple purposes, including contributing to improved nutrition, increasing food security and empowerment⁹⁹.
260. Differences in preference between men and women with regards to the choice of species, location, cultivation techniques and management practices are known to exist¹⁰⁰.
261. In contrast, and within the fishing sector, the involvement of women is mainly delineated according to their religious group.

94 Idem.

95 Saleque, M. A. and Mustafa, S. Landless Women and Poultry: The BRAC model in Bangladesh. Paper presented in Integrated Farming in Human Development, March 25 - 29, 1996 at Course center Tune Landboskole. Greve, Denmark.

96 Bangladesh Food Security Investment Forum, 2010. "Growth and development potential of livestock and fisheries in Bangladesh". 26–27 May 2010. Dhaka.

97 FAO. 2013. Fact Sheet Bangladesh: Women in agriculture, environment and rural production. Retrieved from the World Wide Web: <ftp://ftp.fao.org/sd/sdw/sdww/bgd.pdf>

98 Abdullah, T. A. and Zeidenstein, S. A. 1982. Village Women of Bangladesh: Prospects for Change. Pergamon Press. Oxford, United Kingdom.

99 Nasreen, M., 2012. Role of Food Security and Nutrition interventions in Empowering Women: A Case Study, Research Report. UNFPA. Bangladesh.

100 Hussain, M. S. et al, 1988. Women's contribution to the homestead agricultural production system in Bangladesh. Academy for Rural Development. Kotbari, Comilla.

- 262. Muslim women are traditionally not involved in fishing, but they are involved in processing activities such as the drying and salting of the catch.
- 263. In Hindu dominated areas (such as Goakhola-Hatiara) women are involved in both the catching of fish as well as the collection of other aquatic resources as one of a suite of livelihood strategies¹⁰¹.
- 264. As is the case within other agricultural practices, the increase in poverty and the expansion and growth of shrimp farming has introduced new practices in this regard where poor women – regardless of their religion, age and marital status – have resorted to catching shrimp fry in the coastal areas of Bangladesh. Here 4 out of 5 workers collecting shrimp fry are women and children who could earn around Tk 5,000 (USD 95) during the fry-catching season that runs from January through March¹⁰².

Nutrition

- 265. Ironically, despite the fact that women are actively involved in agriculture, evidence indicate that they suffer from higher levels of mortality and morbidity than their male counterparts, mainly due to the fact that women suffer from higher levels of malnourishment¹⁰³.
- 266. A recent study¹⁰⁴ indicates that malnutrition levels in Bangladesh are among the highest in the world. More than half of the pregnant women in the country are anemic, about 30 percent women suffer from chronic energy deficit, 39% of non-pregnant women, and 40% of adolescent girls, suffer from anemia because of depleted iron stores during pregnancy and lactation, a consequence of insufficient intake of foods rich in iron and folic acid.
- 267. This poor nutritional status of women during pregnancy is one of the main causes of the high incidence of low birth-weight amongst newborn children in Bangladesh. Mothers who have been poorly nourished as girls tend, in turn, to give birth to undernourished infants, thus continuing the circle of malnutrition.
- 268. Malnutrition amongst older children is widely prevalent as well with around 40 percent of children below the age of five years reported as underweight and 43 percent reported as suffering stunted growth.
- 269. A study conducted by the National Food Security and Nutrition Surveillance Project¹⁰⁵ reported that, despite quantitative increase in food grains production, 60 percent of the households including 10 million children in Bangladesh suffered from food insecurity in 2009. Close to 80 percent of these households were from the lowest income bracket of the population.
- 270. Further research¹⁰⁶ also indicates that the burden of coping with food shortages largely and most severely falls on the shoulders of women because of their responsibility for domestic work / looking after the household.
- 271. Due to differential access to resources and their subordinate position in households and the community, women suffer more than men from poverty (women may be poorer than men in even in the same household), hunger, malnutrition, economic crises, environmental degradation; health related problems, insecurity and

101 P. Sultana, P.M. Thompson and M. Ahmed. (n.d.). Women-Led Fisheries Management – A Case Study From Bangladesh. ICLARM-The World Fish Center, Malaysia and Bangladesh. Retrieved from the World Wide Web: http://www.worldfishcenter.org/Pubs/Wif/wifglobal/wifg_asia_bangladesh_study.pd

102 Idem.

103 Nasreen, M., 2004. Gender and Sustainable Development in Bangladesh: Myths and Realities. Paper published in the Environment and Sustainable Development, edited by Prof. Vo Quy et al. Hanoi, Vietnam: Agriculture Publishing House.

104 S.K. Roy. (nd), Base line Survey on Protecting and Promoting Food Security and Nutrition for Families and children in Bangladesh. ICDDR,B. Dhaka.

105 Waid, Jillian L.2010. State of Food Security & Nutrition in Bangladesh. Food Security-Nutritional Surveillance Project (EU-BRAC-HKI-BBS).

106 Nasreen, M., 2008. Impact of Climate Change on Food Security in Bangladesh: Gender and Disaster Perspectives. Paper presented at the 'International Symposium on Climate Change and Food Security in South Asia', Dhaka 25-30 August, 2008.



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political crises. Violence against women and girls is an obstacle to their full participation in households, communities and the economy. Women carry out several tasks related to ensuring food and nutritional security within families. They are responsible for managing the meager resources, allocation of food to family members, preparation of food and for feeding the children. They also contribute to food security, albeit behind the scenes.

Moving forward

272. Despite the fact that the literature convincingly demonstrates the need for addressing gender issues in agriculture, not only for achieving equity and wellbeing, but also for improved productivity and overall development, the interventions designed for Bangladesh rarely take this into account¹⁰⁷.
273. Women continue to be seen as largely dependent upon men for ensuring food security and nutrition. This dependence exacerbates women's vulnerability to exploitation and to violence by their husbands. Women are constrained by social, cultural and economic factors in providing for the families. Lack of education, opportunities, societal restrictions and restricted access to resources are serious constraints that prevent women from bringing about changes in the quantity and quality of food for their families¹⁰⁸.
274. In order to overcome some of these limitations, the draft National Women Development Policy of 2011¹⁰⁹ suggest providing women farmers with the support needed to cope with the challenges of climate change, including by providing the necessary tools, fertilizer, farmer ID cards and loans as necessary.

107 Naved, R. T. 2011. A Rapid Assessment of Gender in Agriculture of Bangladesh. ICDDR, B. Dhaka, Bangladesh.

108 Nasreen, M. 2012. Role of Food Security and Nutrition interventions in Empowering Women. Research report submitted to UNFPA.

109 Government of Bangladesh. 2011. Women development policy. Government of Bangladesh.

275. Likewise, and in the National Agricultural Policy of 2010¹¹⁰, there is a separate section (11) entitled “Women in agriculture” that focuses on empowerment of women (11.1), involvement of women through Participation in Production and Marketing (11.2), income generation through providing of support through credit and microcredit (11.3).
276. In section 11.4, it is mentioned that a block allocation in the agricultural budget will be made exclusively for undertaking women-related activities and programs. Beside these, women’s involvement has been noted in the area 4 (Research and Development (R&D), area 5 (Agricultural Extension) and area 12 (Human Resource Development).
277. In moving forward with these policies and their actions, there are some interesting findings from the ICDDR¹¹¹ that suggests that: 1) landless, small and marginalized farm households have relatively flexible gender norms and this group would be more responsive to interventions addressing gender in agriculture than medium and large farm households; 2) it would be much more efficient to target groups of women rather than individual women; 3) women need to be linked to market chain and need to be enabled to access and control own income; 4) extension services need to be gender friendly in targeting farmers and in designing the services taking into account women’s needs; and 4) new technology introduced in agriculture needs to carefully consider who, when, where and how the technology will be used and what implications would it bear on gender.
278. The above study puts forward several general recommendations, including:
- Targeting small and marginal farm households;
 - Making extension services more gender sensitive by focusing, specially on areas of agriculture, where women are involved and on women’s needs; training of extension workers on gender; recruitment of female extension workers; active engagement with women; considering convenience of women in mix of sex in training, training venue and timing;
 - Working through and in collaboration with government and NGOs;
 - Developing financial literacy of women and link women with market through mobile phones; and
 - Incorporating gender considerations in the development of new agricultural technology, the introduction of which is generally seen to be highly favorable.



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110 Ministry of Agriculture 2010. National Agricultural Policy (Final Draft). Government of the People’s Republic of Bangladesh.

111 Naved, R. T. 2011. A Rapid Assessment of Gender in Agriculture of Bangladesh. ICDDR, B. Dhaka, Bangladesh.

Action Plan Table: Food Security, Social Protection and Health

Objectives	Action Steps	Indicators of Success	Responsible
Recognize women's contribution in agriculture to GDP.	<p>Review the existing policies and national documents concerning the agricultural sector to integrate gender and climate change concerns.</p> <p>Influence policy makers to acknowledge women's contribution in agriculture to GDP.</p> <p>Develop a government-wide balanced score card on agriculture and gender.</p>	<p>No. of gender and climate change references in policy text.</p> <p>Gender disaggregated GDP in national level is available.</p> <p>No. of policies recognizing women's contribution to agriculture.</p> <p>No. of women informed and aware of services available to them.</p> <p>Gender responsive score card in agriculture developed and implemented.</p>	<p>Lead: Ministry of Agriculture (MoA)</p> <p>Other possible ministries/ departments: Research institutions, Civil Society Organizations, MoEF, Bangladesh Bureau of Statistics (BBS), DPs (Development Partners)</p>
Ensure women's access to land tenure ship/ leasing for cultivation.	<p>Motivate land, water body owners to lease land/ water to women.</p> <p>Develop and ensure take up of crop insurance and/or other safety nets for female farmers.</p>	<p>Provisions regarding women's access to land in Land Reform Policy are executed.</p> <p>50% women have land tenure/leasing access by 2021.</p> <p>50% women are under insurance.</p>	<p>Lead: Ministry of Land (MoL)</p> <p>Other possible ministries/ departments: NGOs, CSOs, Local Government Bodies, MoA, MoEF, Private sector, DPs</p>
Enhance women knowledge and access to financial instruments.	<p>Creating an enabling environment for women to access financial instruments easily i.e. loan/credits.</p> <p>Specific credit lines only for women.</p>	<p>Percentage of women applicants that successfully receive funds from different sources.</p>	<p>Lead: Ministry of Industries, Ministry of Commerce</p> <p>Other possible ministries/ departments: MoSW, MoA, Ministry of Fisheries and Livestock (MoFL), NGOs, DPs, Private sector</p>

Objectives	Action Steps	Indicators of Success	Responsible
<p>Introduce innovative (and as far as possible organic) agriculture and aquaculture technologies for female farmers and entrepreneurs.</p>	<p>Capacity development and involvement of women on alternative technologies for example bio-fertilizer; climate resilient cropping, saline resistant vegetables, etc; fisheries culture & management (e.g. coastal area); homestead gardening, technology for micro-nutrient rich food, where appropriate.</p> <p>Develop knowledge and skills of agricultural extension workers both female and male on climate change resistant cropping practices</p> <p>Research conducted on different agriculture products and their impact on the livelihoods of women.</p> <p>More research on climate resilient crops, cropping patterns and varieties responsive to the needs of women.</p> <p>Establish “Climate Field School” for women farmers.</p> <p>Introduce projects such as:</p> <ul style="list-style-type: none"> Promote women’s participation to create enterprise to produce bio-fertilizer (organic waste, ashes, cow dung, and water hyacinth) and bio-insecticide. Alternative fodder/ food for livestock (e.g. saline resistant paddy/grass) and poultry & cattle genotypes. Introduce “mulching practice”¹¹² in agriculture. Wet resources utilization led by women (e.g. Mat produced from murta/mostak¹¹³ plant and other leaves) Promote homestead plant nursery/ gardening in urban, peri-urban and rural communities owns and managed by the women/ women society. 	<p>No. of women managers in food production.</p> <p>No. of meals available in a day at household level.</p> <p>No. of women trained on technologies.</p> <p>No. of studies successfully concluded.</p> <p>Percentage increase in income for women farmers/women entrepreneurs.</p> <p>No. of alternative fodder/ food products available in locally.</p> <p>Women farmers are adopting climate resilient cropping and their earnings are stable.</p> <p>Increased income of women farmers.</p>	<p>Lead: DAE, DoF, DLRS</p> <p>Other possible ministries/ departments:</p> <p>Research Institutes, Government Departments, Female Entrepreneur Groups, Private sector, MoEF, BARI, BINA, MoFL, BRRI, DL, MoF</p>

112 Mulching is a protective covering, usually of organic matter such as leaves, straw, or peat, placed around plants to prevent the evaporation of moisture, the freezing of roots, and the growth of weeds. Mulches conserve moisture by reducing the amount of soil water lost through evaporation. Mulches help maintain a uniform soil temperature. They act as insulators, keeping the soil warmer during cool weather and cooler during the warm months of the year. Mulches minimize soil erosion and compaction from heavy rains and aid in water penetration. Mulches help with weed problems.

113 The murta plant grows around water bodies in Sylhet, Sunamgani, Barisal, Tangail, Comilla, Noakhali, Feni and Chittagong. These days nakshi pati made of murta plants is available only in Sylhet and Noakhali districts of Bangladesh. Shital pati (cool mat) is a kind of mat which feels cold by nature. It is made from murta plants. Shitalpati is made from cane or from murta plants, known at different places as mostak, patipata, patibet and paitara.

Objectives	Action Steps	Indicators of Success	Responsible
Promote indigenous knowledge/products on agriculture.	<p>Document, disseminate and promote indigenous knowledge and practices in the hands of women.</p> <p>Making local agricultural extension services available to women e.g. agriculture extension office, BARI, BRRI, BINA.</p>	<p>No. of case studies documented and disseminated on indigenous knowledge and practice.</p> <p>No. of women benefitting from agricultural extension services.</p> <p>Percentage increase in crops/food.</p> <p>No. of diverse products available.</p>	<p>Lead: DAE, DoF, DLRS</p> <p>Other possible ministries/departments:</p> <p>Universities, Research Institutes, Private sector, Government departments, Local Community, women's organizations, DPs</p>
Integrate CC and gender in national health policy and programs.	<p>Update existing health policy framework to include gender and climate change linkages.</p> <p>Take measures for relevant knowledge increase, documentation and dissemination at national and local levels, through campaign, training, exposure visit and research.</p> <p>Develop knowledge (through appropriate trainings) of medical persons as well as management committees of the Community Clinics, Upazila and Union Level Health Complexes for them to be effective for the grass roots level female including adolescent girls.</p> <p>Capacity development of local level/ GoB health institution, community health workers and other NGO (Non Government Organization) stakeholder in rural areas (especially coastal, <i>haor</i>¹¹⁴, <i>Char</i>¹¹⁵ land, hill tracts areas).</p>	<p>No. of references on climate change and gender related impacts in health policies.</p> <p>No. of workshops/ consultations conducted and knowledge materials (posters, billboards, video documentary, flyers, etc.) produced on health, gender and climate change.</p> <p>No. of cases reported at local health centers relating to climate-related diseases and maternal health.</p>	<p>Lead: MoHFW, MoWCA</p> <p>Other possible ministries/departments:</p> <p>CSO, Local NGOs, International NGOs, DPs, MoCHTA, Hill District Council, Local Government, Mass media</p>

114 *Haor* is a Bengali word which means back-swamps or bowl-shaped depressions between the natural levees of a river, that are flooded every year by monsoonal floods from April until October.

115 *Char* is a Bengali word which means low lying river island.

Objectives	Action Steps	Indicators of Success	Responsible
Ensure alternative livelihood opportunities for women affected by climate change in urban settings.	Support affected (CC migrated) women for livelihood activities in rural area and slum community in urban area.	Increased income.	<p>Lead: MoWCA, MoEF</p> <p>Other possible ministries/ departments:</p> <p>MoHFW, Ministry of Commerce, DPHE (Department of Public Health Engineering), Rural Development and Co-operatives, NGOs, Local Administration, Private sectors</p>
Ensure women's involvement in efficient water management.	<p>Make alliance of women's association to create movement for keeping the water bodies (rivers, canals, lakes and wet lands) usable.</p> <p>Capacity development of women to fully engage in water resource management committees.</p> <p>Extension services on alternative irrigation technology (e.g. water purification, rain water harvesting, waste water collection, water conservation).</p> <p>Introduction and capacity development on low water consuming crop technology.</p> <p>Identification, documentation and expansion of indigenous water management technology. Introduction of gender friendly water technologies (de-salinization solar driven water plant.</p> <p>Technological support for new efficient water technologies in the hand of the community.</p> <p>Collect and disseminate good practices, best technologies, and information within the country through "appreciative enquiry" tool.</p>	<p>Time and distance reduced for water collection.</p> <p>No. of women involved in wetland/ water point/ source management.</p> <p>Amount of water saved in household level (reduction of water wastage).</p> <p>No. of women as member of decision making bodies on water management (WMA/ WMCA).</p> <p>No. of women trained and practicing alternative irrigation technology and water management.</p> <p>No. of women trained and practicing low water consuming crop production.</p> <p>No. of low cost technologies identified documented and replicated by communities.</p>	<p>Lead: MoWR, DPHE, LGED</p> <p>Other possible ministries/ departments:</p> <p>MoHFW, DAE, DoF, DLRS, MoA, Ministry of Local Government, Rural Development and Co-operatives, MoWCA, Local NGOs, International NGOS, Donors</p>

Objectives	Action Steps	Indicators of Success	Responsible
Improve social security/ protection of women, adolescents, and children pre, during and post-disaster and emergency situations.	<p>Advocacy/ awareness at central and local (community) level, including engaging print and electronic media, community radio for dissemination.</p> <p>Include relevant issues in national curriculum and any other education materials (INGO/ NGOs/ CSOs).</p> <p>Sensitize men and harness them as champions in preventing violence and assaults.</p> <p>Ensure enforcement of social security and protection rules and regulations by integrating women in community policing/ security system including Anser and VDP.</p> <p>Undertake special programs on income generating activities for women.</p>	<p>No. of awareness raising campaigns developed and rolled-out.</p> <p>No. of publications developed and disseminated.</p> <p>No. of men engaged successfully.</p> <p>Percentage of assaults against women adolescent and children are reduced.</p> <p>No. of women increased in community policing/ security system.</p> <p>No. of steps taken police/RAB/VDP and other law enforcement agencies.</p> <p>No. of criminals placed in custody.</p>	<p>Lead: MoWCA</p> <p>Other possible ministries/ departments:</p> <p>CSOs, NGOs, UDMC (Union Disaster Management Committee, MoDM, Department of Disaster Management MHA (Ministry of Home Affairs), Bangladesh Police, Bangladesh Anser and VDP, Local Government Division, Public representatives, Mass media</p>

Alignment of the ccGAP with the BCCSAP

279. The BCCSAP addresses the theme of food security, social protection and health as the first pillar of the Climate Change Action Plan “to ensure that the poorest and most vulnerable in society, including women and children, are protected from climate change and that all programs focus on the needs of this group for food security, safe housing, employment, and access to basic services, including health.”
280. Under this pillar, the BCCSAP seeks to:
- 1.1 Increase the resilience of vulnerable groups, including women and children, through development of community-level adaptation, livelihood diversification, better access to basic services and social protection (e.g. safety nets, insurance) and scaling-up;
 - 1.2 Develop climate change resilient cropping systems (e.g. agricultural research to develop crop varieties, which are tolerant to flooding, drought and salinity, and based on indigenous and other varieties suited to the needs of resource poor farmers), fisheries and livestock systems to ensure local and national food security;
 - 1.3 Implement surveillance systems for existing and new disease risks and ensure health systems are geared up to meet future demands; and
 - 1.4 Implement drinking water and sanitation programs in areas at risk from climate change (e.g. coastal areas, flood- and drought-prone areas).
281. Specific programs include:

- T1P1 Develop capacity for research towards climate resilient cultivars and their dissemination;
- T1P2 Development of climate resilient cropping systems;
- T1P3 Adaptation against drought;
- T1P4 Adaptation in the fisheries sector;
- T1P5 Adaptation in the livestock sector;
- T1P6 Adaptation in the health sector;
- T1P7 Water and sanitation program in climate vulnerable areas;
- T1P8 Livelihood protection in ecologically fragile areas; and
- T1P9 Livelihood protection of vulnerable socio-economic groups (including women).

282. The ccGAP objectives for this sector correlates as follows:

BCCSAP TAG	Objective ccGAP
<p>Direct linkage T1P8, T1P9</p> <p>Indirect linkage T4P1, T4P2, T4P5</p> <p>T6P1, T6P2, T6P3, T6P4, T6P5</p>	Recognize women’s contribution in agriculture to GDP.
<p>Direct linkage T1P2, T1P8, T1P9</p> <p>Indirect linkage T4P1, T4P2, T4P5, T4P6</p> <p>T6P1, T6P2, T6P4, T6P5</p>	Ensure women’s access to land tenure ship/ leasing for cultivation.
<p>Direct linkage T1P8, T1P9</p> <p>Indirect linkage T4P1, T4P2, T4P3, T4P4, T4P5, T4P6</p> <p>T6P1, T6P2, T6P3, T6P4, T6P5</p>	Enhance women knowledge and access to financial instruments.
<p>Direct linkage T1P1, T1P2, T1P3, T1P4, T1P8, T1P9</p> <p>Indirect linkage T4P1, T4P2, T4P3, T4P4, T4P5, T4P6</p> <p>T6P1, T6P2, T6P3, T6P4, T6P5</p>	Introduce innovative (and as far as possible organic) agriculture and aquaculture technologies for female farmers and entrepreneurs.

BCCSAP TAG	Objective ccGAP
<p>Direct linkage T1P1, T1P2, T1P8, T1P9</p> <p>Indirect linkage T4P1, T4P2, T4P3, T4P4, T4P5</p> <p>T6P1, T6P2, T6P3, T6P4, T6P5</p>	Promote indigenous knowledge/ products on agriculture.
<p>Direct linkage T1P6, T1P8, T1P9</p> <p>Indirect linkage T4P1, T4P2, T4P3, T4P4, T4P6</p> <p>T6P1, T6P2, T6P3, T6P4, T6P5</p>	Integrate CC and gender in national health policy and programs.
<p>Direct linkage T1P6, T1P8, T1P9</p> <p>Indirect linkage T4P1, T4P2, T4P3, T4P4, T4P6</p> <p>T6P1, T6P2, T6P3, T6P4, T6P5</p>	Ensure alternative livelihood opportunities for women affected by climate change in urban settings
<p>Direct linkage T1P2, T1P3, T1P8, T1P7, T1P9</p> <p>Indirect linkage T4P1, T4P2, T4P3, T4P4, T4P6</p> <p>T6P1, T6P2, T6P3, T6P4, T6P5</p>	Ensure women's involvement in efficient water management
<p>Direct linkage T1P9</p> <p>Indirect linkage T4P1, T4P2, T4P5</p> <p>T6P1, T6P2, T6P3, T6P4, T6P5, T6P6</p>	Improve social security/protection of women, adolescents, and children pre, during and post-disaster and emergency situations.



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PRIORITY SECTOR II: COMPREHENSIVE DISASTER MANAGEMENT (CDM)

BCCSAP (2009): Pillar no. 2

Overview

283. Disaster risk reduction and comprehensive disaster management are prerequisites for sustainable development. Disasters can also impede - or even roll back – the achievement of the MDGs.
284. Fortunately, years of implementing the MDGs and the Hyogo Framework of Action (HFA) have resulted in considerable progress in reducing development disparities and the risk of disasters, respectively.
285. As each agenda has matured and became more widely accepted throughout countries and across development sectors, a greater appreciation of their synergy has emerged amongst many policy makers.
286. Notwithstanding the progress achieved, however, there is growing evidence that disaster costs are increasing.
287. The impacts are more direct in lower- and middle-income countries that are affected by large-scale disasters, where disaster risks are high and progress towards MDGs are typically slow¹¹⁶.
288. Climate change compounds the accumulation of social and economic risk to disasters. The IPCC (Intergovernmental Panel on Climate Change) highlighted that, as a result of climate change, over many regions the frequencies of heavy precipitation events are likely to increase. Increases in the frequency of warm daily temperature extremes and decreases in cold extremes would also occur on a global scale.
289. Heat waves will very likely increase in length, frequency and/or intensity over most land areas, as will the

116 UNESCAP and UNISDR. 2012. The Asia-Pacific Disaster Report 2012: Reducing Vulnerability and Exposure to Disasters. Retrieved from the World Wide Web: http://www.unisdr.org/files/29288_apdr2012finalowres.pdf

- average maximum wind speed of tropical cyclones in many ocean basins.
290. Climate change, therefore, constitutes a main driver of risk across many sectors.
 291. Globally, the risk relating to disasters also continue to increase as more people and assets are located in areas of high risk. Over the last 3 decades, the world population increased with 87%, the proportion of the population living in flood-prone river basins increased by 114% and those on cyclone exposed coastlines by 192%¹¹⁷.
 292. The continued growth in cities and urban areas presents a further challenge. Half of humanity now lives in urban centers, with 70% of the world's population expected to live in urban areas by 2050. This growth is largely driven in low- and middle-income nations in locations already prone to earthquakes, droughts and floods¹¹⁸.
 293. The Asia-Pacific region is the most disaster-prone area of the world and it is also the one that is the most seriously affected¹¹⁹.
 294. Almost 2 million people were killed in disasters between 1970 and 2011, representing 75% of all disaster fatalities globally. The most frequent hazards in the region are hydro-meteorological, which also affect the most people.
 295. Since 2000, more than 1.2 billion people have been exposed to hydro-meteorological hazards alone, including through 1,215 disaster events, compared to the 355 million people exposed to 394 climatological, biological and geophysical disaster events during the same period.
 296. The effects of climate extremes and variation suggests that, while the number of tropical cyclones (typhoons in Asia and the Pacific) are not increasing in number, more of them are stronger, making the region more susceptible to greater potential losses. This also becomes more serious because of the anthropogenic (human induced) factors involved, with more people being exposed to the risk of tropical cyclones.
 297. Investments in ecosystem restoration can benefit multiple policy sectors and help them to achieve their policy goals. This applies – but is not limited to – urban development, enhancement of the productive capacity of agricultural systems water purification and wastewater treatment, regional development, transport and tourism as well as providing buffering services against extreme weather events¹²⁰.
 298. Investment in natural capital and conservation of ecosystems can help to avoid crises and catastrophes or to soften and mitigate their consequences. However, if catastrophes do strike, they should be regarded as opportunities to rethink policy and to incorporate greater investments in natural capital into new programs and rebuilding efforts – e.g. mangrove or other coastal ecosystem restoration and protection following a tsunami or hurricane, wetland restoration and protection after flooding in coastal areas, forest restoration after a catastrophic mudslide¹²¹.
 299. There is also an important economic argument to be made for mangrove restoration within the context of disaster risk management and climate change.

117 UNISDR. 2011. Retrieved from the World Wide Web: <http://www.unisdr.org/we/inform/publications/19846>

118 IOM, ITU, OHCHR, UNESCO, UNEP, UNISDR, UNFPA and WMO. 2013. Building Resilience to Disasters Through Partnerships – Lessons from the Hyogo Framework for Action. Thematic Think Piece. UN System Task Team on the Post-2015 Development Agenda. Retrieved from the World Wide Web: http://www.unisdr.org/files/30374_thinkpieceondrmfinal.pdf

119 UNESCAP and UNISDR. 2012. The Asia-Pacific Disaster Report 2012: Reducing Vulnerability and Exposure to Disasters. Retrieved from the World Wide Web: http://www.unisdr.org/files/29288_apdr2012finalowres.pdf

120 TEEB. 2009. The Economics of Ecosystems and Biodiversity. TEEB for National and International Policy Makers .Investing in Ecological Infrastructure, Chapter 9, Recommendations. Page 4.

121 See section on Mangroves for the Future Initiative under Priority Sector IV: Mitigation and Low Carbon Development of this document.

300. A report issued by the Economics of Ecosystems and Biodiversity Initiative (TEEB)¹²² states that following the 2004 tsunami disaster, there was considerable interest in rehabilitating and restoring ‘post-shrimp farming’ mangroves in Southern Thailand as natural barriers to future coastal storm events.
301. Yields from commercial shrimp farming sharply decline after five years, after which shrimp farmers usually give up their ponds to find a new location. One study found that the abandoned mangrove ecosystems can be rehabilitated at a cost of USD 8,240 per hectare in the first year (replanting mangroves) followed by annual costs of USD 118 per hectare for maintenance and protecting of seedlings¹²³.
302. Benefits from the restoration project comprise the estimated net income from collected forest products of USD 101 per hectare/year, estimated benefits from habitat-fishery linkages (mainly the functioning of mangroves as fish nursery) worth USD 171 per hectare/year and estimated benefits from storm protection worth USD 1,879 per hectare/year¹²⁴.
303. In order to compare costs and benefits of restoration, it has to be recognized that rehabilitating mangroves and the associated ecosystem services will take time and may never reach pre-degradation levels. Therefore the benefits are accounted for on a gradual basis, starting at 10% in the second year and then increasing them every year until they were eventually capped in the sixth year at 80% of pre-degradation levels.
304. Applying these assumptions, and a 10% discount rate, the rehabilitation project would pay off after thirteen years. If lower discount rates – as argued for in TEEB – are applied, the cost-benefit ratio of the restoration project improves. At a discount rate of 1%, the project would pay off after nine years. If one extends the calculation to 40 years, the project generates a benefit/cost ratio of 4.3 and a social rate of return¹ of 16%.
305. It should be noted that these calculations still do not account for the wide range of other ecosystem services that may be attached to the presence of mangroves, ranging from microclimate effects and water purification to recreational values.

Situation Analysis

306. The direct annual cost to the national economy of Bangladesh incurred through disasters over the last decade through damage and loss is estimated to be between 0.5% and 1% of the country’s GDP.
307. As the economy grows, these costs are likely to increase in absolute terms and also as a proportion of GDP, if climate change is not factored into long-term economic planning.
308. Disaster risk reduction and -management is a crosscutting issue that requires long-term planning and perspectives, mainstreaming and integration across sectors, and a change in mindset, that suggests moving from responding to an event, to preparing for it and preventing it.
309. Just as important is the realization that reducing risks and impacts of disasters constitute a shared responsibility amongst a wide array of actors and stakeholders.
310. Over time, the Government of Bangladesh, with the support of its development partners, has invested in flood management schemes, flood protection and drainage schemes, coastal embankment projects, comprehensive disaster management projects, irrigation schemes, agricultural research programs and coastal “greenbelt” projects.

122 The Economics of Ecosystems and Biodiversity (TEEB) is a global initiative focused on drawing attention to the economic benefits of biodiversity. Its objective is to highlight the growing cost of biodiversity loss and ecosystem degradation. TEEB presents an approach that can help decision-makers recognize, demonstrate and capture the values of ecosystems & biodiversity, including how to incorporate these values into decision-making. (<http://www.teebweb.org>).

123 Sathirathai, S. and Barbier, E.B. 2001. Valuing mangrove conservation, southern Thailand. *Contemporary Economic Policy* 19(2). Page, 119.

124 Barbier, E.B., 2007. Valuing ecosystem services as productive inputs. Retrieved from the World Wide Web: http://www.unep.org/climatechange/adaptation/Portals/133/documents/AdaptCost/10%20EBA_AdaptCost_Final.pdf



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311. MoDMR as the focal ministry for disaster risk reduction and emergency management assumes a leading role in disaster risk reduction and emergency management planning and also enjoys the overall responsibility for coordinating national disaster management efforts across all agencies of government.
312. These include, amongst others, the NDMC, Inter-Ministerial Disaster Management Co-ordination Committee (IMDMCC), National Disaster Management Advisory Committee (NDMAC), Disaster Management Training and Public Awareness Building Task Force (DMTATF), Focal Point Operation Coordination Group of Disaster Management (FPOCG), NGO Coordination Committee on Disaster Management (NGOCC), Committee for Speedy Dissemination of Disaster Related Warning/ Signals (CSDDWS), District Disaster Management Committee (DDMC), *Upazila*¹²⁵ Disaster Management Committee (UZDMC), Union¹²⁶ Disaster Management Committee (UDMC), *Pourashava*¹²⁷ Disaster Management Committee (PDMC), and the City Corporation Disaster Management Committee (CCDMC).
313. Various policy instruments also direct the Government of Bangladesh's efforts on managing disaster risks and emergencies.
314. In context of adapting to climate change, the Sixth Five Years Plan indicates that the Government of Bangladesh is supporting communities and people in rural areas to strengthen their resilience and adapt to climate change and that this will remain a high priority in coming decades.
315. The Plan emphasizes that with increasing urbanization and economic growth, the type of risks that

125 Each district in Bangladesh is divided into sub-districts called Upazila.

126 Unions are the smallest rural administrative and local government unit in Bangladesh.

127 Paurashavas are administrative units at every municipality composed of elected members

- Bangladesh will have to face in coming years will change. These changes, in turn, will call for better planning to ensure that the pattern of urbanization takes account of the likely risks from climate change.
316. The Bangladesh policy framework on disaster management is far-reaching and comprehensive.
 317. The Disaster Management Act of 2012 (DMA) outlines the country's disaster risk and emergency management and forms the legal basis upon which related activities and actions are managed.
 318. The DMA also outlines the obligations and responsibilities of Ministries, committees and appointments under the objective to:
 - (a) Help communities to mitigate the potential adverse effects of hazard events, prepare for managing the effects of a disaster event, effectively respond to and recover from a disaster or an emergency situation, and adapt to adverse effects of climate change;
 - (b) Provide for effective disaster management for Bangladesh;
 - (c) Establish an institutional framework for disaster management; and
 - (d) Establish risk reduction as a core element of disaster management.
 319. The National Disaster Management Policy seeks to define the national perspective on disaster risk reduction and emergency management, and to describe the strategic framework, and national principles of disaster management in Bangladesh.
 320. The Bangladesh National Plan for Disaster Management provides the overall guidelines for the relevant sectors involved in disaster management and related disaster management committees at all levels, in order to prepare and implement their respective plans.
 321. The Standing Orders on Disasters outlines the detailed roles and responsibilities of committees, Ministries and other organizations in disaster risk reduction and emergency management, and establishes the necessary actions required in implementing Bangladesh's Disaster Management Model.
 322. In the most recent Draft Position Paper of the People's Republic of Bangladesh¹²⁸, the Government of Bangladesh communicates its intension to integrate Disaster Risk Reduction, Climate Change & Sustainable Development throughout its suite of legislation, policies, strategies and programs. It states that the challenges facing Bangladesh from the emerging threats of climate change are complex and multi-dimensional. Bangladesh has already made significant steps forward in climate change adaptation through a combination of evidence-based research and use of technology and indigenous knowledge.
 323. "The country, therefore, attaches importance to pro-active policy response to disaster management, climate change and in the context of sustainable development that shifting the focus from response/relief to risk reduction and building resilience through comprehensive disaster management policies and programs."

Gender and Comprehensive Disaster Management (CDM)

324. Although disasters affect all segments of the population, women are more adversely impacted than their male counterparts due to their particular social position that they are constrained to. During the 1991 cyclone in Bangladesh, for example 90% of the 140,000 people who died as a result, were women¹²⁹.
325. The realization that women face the challenges of disasters associated with the risks differently than men has been accepted widely across the world, yet in Bangladesh, it has only recently been recognized.

128 UNISDR. Towards a Post- 2015 Framework for Disaster Risk Reduction. Retrieved from the World Wide Web on 24 March 2013: http://www.unisdr.org/files/25129_towardsapost2015frameworkfordisaste.pdf

129 IUCN, 2007. Disaster and gender statistics. <http://cmsdata.iucn.org/downloads/disaster_and_gender_statistics.pdf>

326. In the time immediately following disasters, household food insecurity becomes one of the major concerns for women. The collection of drinking water during floods, cyclones and drought disasters becomes very challenging as almost all tube wells are under water and women have to take considerable risks to obtain drinking water, often over great distances.

327. It has been observed that during these periods women, at times, have to walk through chest-high water or even swim to collect fresh water. The food security of women farmers is also threatened as floods from disasters destroy their land, stored seeds and livestock¹³⁰.



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328. Often existing early warning systems do not reach women resulting in them having to run away from impending disasters with clothing and children in hand at the last minute. It is also reported that women also face more violence during and after disasters¹³¹.

329. Health issues related to disasters and widely suffered by women in Bangladesh during and in post disaster periods are also well documented.

330. According to the World Food Program, lesser access to food make women more vulnerable to men to the impacts of disasters¹³² in that they impact negatively on women's nutrition and mental- and social wellbeing.

331. The Bangladesh Centre for Advanced Studies also points out that less access to proper food leads to malnourishment and anemia¹³³ of expectant women, in particular.

332. Women's nutrition suffers as increased salinity and conversion of large tracts of land for shrimp ponds¹³⁴ impact negatively on the consumption of fish, poultry, fruits and vegetables – all declining due to the lowered survival rates of the different species of plants and animals that would usually make up their diet.

333. Water logging from floods compels women to stay in marooned conditions for several months in a year. The prolonged exposure to the filthy water causes severe skin diseases and gynecological problems. During floods, adolescent girls report perinea rashes and urinary tract infections, as they are not able to wash out menstrual rags to dry, or have no access to clean water. They have reported wearing clothes that are still damp as there is no place to dry them¹³⁵.

130 Nasreen, M. 2012. Women and Girls: Vulnerable or Resilient? Institute of Disaster Management and Vulnerability Studies. University of Dhaka, Bangladesh.

131 Nasreen, M. 2008. Violence against women during flood and post flood situations in Bangladesh. ActionAid. Dhaka.

132 World Food Program, 2009. WFP Policy on Disaster Risk Reduction and Management. Retrieved from the World Wide Web: <http://documents.wfp.org/stellent/groups/public/documents/newsroom/wfp247914.pdf>

133 BCAS, 2010. Determinants and Effectiveness of Local-Level Adaptation to Climate Change: Summary of Case Studies of Two Initiatives in Bangladesh. Retrieved from the World Wide Web: http://www.climateadapt.asia/upload/publications/files/5088e330ce4cdSummary_Bangladesh_Case_Studies.pdf

134 Datta, A. et al, 1995. Impact of Shrimp Cultivation: Pattern of changes in the lives of people in Paikgacha Shivanagar, Research Monograph. Dhaka, Bangladesh. Retrieved from the World Wide Web on 24 March 2013. <http://nature.berkeley.edu/bwwg/crow.pdf>.

135 Bangladesh Comprehensive Disaster Management Program (CDMP), 2008. Retrieved from the World Wide Web: <http://www.cdmp.org.bd>

334. Despite these challenges, women have also become more resilient to disasters and they demonstrate ingenuity in overcoming problems by drawing on indigenous knowledge¹³⁶, act as community mobilizers in disaster response and demonstrate diverse adaptation coping strategies and mechanisms such as moving to safer places, saving their assets, dietary adaptations, energy-saving techniques, adapting agricultural practices, and earning income¹³⁷.
335. During times of crises women’s own adoptive techniques and initiatives have become crucial for their family’s sustenance, ensuring both food security and nutrition.
336. Many women in Bangladesh have also since the 1991 cyclone, become involved in various disaster committees at the local level, initiated by the government, the Red Cross and Red Crescent Society and various NGOs.

Action Plan Table: Comprehensive Disaster Management (CDM)

Objectives	Action Steps	Indicators of Success	Responsible
Develop gender responsive policy based on disaster management, climate change and sustainable development ¹³⁸ .	<p>Develop a separate GAP for DM/ DRR policies.</p> <p>Review-revise existing policies regarding DRR from a gender-perspective.</p> <p>Motivate policy and decision makers for commitment on framing gender sensitive policies.</p> <p>Updating policy and decision makers on the concerned areas for inclusion of gender issues.</p> <p>Sharing knowledge/ experience on gender mainstreaming from indigenous good practices and global practices from risk reduction and resilience perspectives.</p> <p>Ensure women’s participation at all policy making levels from central to local, e.g.UDMC/ UzDMC</p> <p>Developing a Platform on Gender and DRR.</p>	<p>GAP developed for DRR.</p> <p>No. of reports reviewed and amended.</p> <p>No. of gender-sensitive DRR policies in place.</p> <p>No. of trainings held (sex-disaggregated participants) in country and abroad.</p> <p>No. of advocacy meetings held.</p> <p>Increased number of women engaged in UDMC/UzDMC.</p>	<p>Lead: MoDMR</p> <p>Other possible ministries/ departments: MoEF, MoWCA, CSO/DPs MoHFW IFRC, Academic Institutions and others</p>

136 Nasreen, M., 2012. Women and Girls: Vulnerable or Resilient? Institute of Disaster Management and Vulnerability Studies, University of Dhaka.

137 WEDO, 2008. Gender, Climate Change and Human Security. Retrieved from the World Wide Web: <http://www.wedo.org/wp-content/uploads/hsn-study-final-may-20-2008.pdf>

138 In this process there is a need for shifting the focus from response/relief to risk reduction and building resilience through comprehensive disaster management policies and programs.

Objectives	Action Steps	Indicators of Success	Responsible
To allocate adequate financial resources to address gender and DRR issues.	Introduce gender budgeting across all government agencies in DRR.	Amount of resources allocated for gender and DRR in specific sectors.	Lead: MoEF, Ministry of Finance Other possible ministries/departments: BCCTF, BCCRF, Social Safety net Program (SSNP), including cash transfer and housing, Emergency Cyclone Recovery and Restoration project (ECRRP), MoDMR, LGED (Local Government Engineering Department), BWDB, MoP, MoF, MoSW
Ensure participation of women in community risk assessment (CRA) vulnerability and capacity assessment activities.	<p>Conducting baseline survey on women participation in CRA.</p> <p>Develop and implement comprehensive CRA program that engage women meaningfully in all stages.</p> <p>Include local elected women representatives at Upazila Disaster Management Committee (UzDMC) and Union Disaster Management Committee (UDMC) in applying CRA.</p> <p>Involve local young women/ women groups in the process.</p> <p>Develop gender and DRR training at all level stakeholders providing the key roles of women received Training of Trainers (TOT).</p>	<p>No. of survey on status of women participation in CRA concluded.</p> <p>Percentage increase in number of women in CRA.</p> <p>No. of training conducted for relevant stakeholders.</p> <p>No. of elected women representatives and women's groups involved in the mapping of hazards and risks.</p> <p>No. of elected women representatives and group of women received TOT.</p> <p>No. of participants trained.</p>	Lead: MoDMR (DDM) Other possible ministries/departments: MoWCA (DWA), Ministry of LGRD (Local Government and Rural Development) and Cooperatives, MoEF(DoE), NGOs, Educational-Research & Training institutions
Develop adequate communication facilities to ensure movement of women to reach safe places (cyclone shelters, flood shelters, killahs, & others).	<p>concerned provisions of Disaster Management Act to ensure logistical support, safe private places & buildings.</p> <p>Ensure access roads to designated shelters, private places and building to be paved road (pucca).</p> <p>Dissemination of information on available safe designated facilities</p> <p>Empower women with essential skills such as rowing boats, riding bi cycling and swimming, etc. in peacetime.</p>	<p>No. of transport, safe private places & buildings earmarked for requisition.</p> <p>Increased percentage of access roads to designated shelters, private places and building are paved road (pucca).</p> <p>No. of initiatives taken by local authorities to disseminate information.</p> <p>No. of essential skills acquired by women.</p>	Lead: LGED, PWD Other possible ministries/departments: PID (Press Information Department), DC (Deputy Commissioner), UNO (<i>Upazila</i> Nirbahi Officer), <i>Upazila</i> chairman, NGOs, Women groups local level

Objectives	Action Steps	Indicators of Success	Responsible
Equip women and men in providing first aid and primary health care as first responders.	Ensure women and men's participation in first aid and primary health care.	No. of men & women trained on first aid and primary health care as first responders. At least half of the participants in first aid training are women.	Lead: MoHFW Other possible ministries/departments: PID, DC, UNO, <i>Upazila</i> chairman, NGOs, Women groups at <i>Union, Upazila</i> , and <i>Pourashava</i> level
Equip women and community with DRR, CCA and SD nexus in building the framework for 'resilience'.	Arrange formal training on: <ul style="list-style-type: none"> • Flood • Cyclone • Tidal surge • Storm surge • Landslides • Arsenic contamination in ground water • Fire, electric & gas safety measures, etc • Encompasses of DRR, CCA and sustainable development as core concept Ensure broadcasting of necessary information to combat disaster through print & electronic media (public & satellite channels). Encourage religious & community leaders to disseminate information.	No. of training courses (sex-disaggregated data for participants) No. of communication campaigns executed by electronic and media and PID. No. of religious leaders motivated/sermons delivered. No. of women and community members have knowledge on DRR/CCA and SD	Lead: MoDMR (Dept of Disaster Management), MoEF Other possible ministries/departments: Other ministries, Line agencies and Departments, PID, NGOs, Religious Organizations, Media
Develop context specific IEC/ ICT materials focusing DRR incorporating gender issues.	Establish ICT centers at community level (information hub). Solar powered radio/TV with special programs for women are easily accessible to community women.	No. of ICT centers established and functioning at community level (information hub). No. of Solar powered radio/TV are present at the ICT centers with special hours allocated just for women.	Lead: MoWA Other possible ministries/departments: PID, MoDMR (DDM), Power division, Private sector, DPs, NGO, International NGO
To inform poor women in urban areas on DRR issues and address their issues in policy framework.	Focus on the issue of rapid, unplanned urbanization.	No. of urban women are equipped with knowledge on urban hazards. No. of women receive services on DRR issues.	Lead: MoDMR Other possible ministries/departments: DDM, Ministry of LGRD and Cooperatives

Alignment of the ccGAP with the BCCSAP

337. The BCCSAP addresses the theme of comprehensive disaster management as the second pillar: “to further strengthen the country’s already proven disaster management systems to deal with the increasingly frequent and severe natural calamities.”
338. Under this pillar, the BCCSAP seeks to:
- 1.1 Strengthen government’s capacity and that of civil society partners and communities to manage disasters, and ensure that appropriate policies, laws and regulations are in place;
 - 1.2 Strengthen community-based adaptation programs and establish them in each of the disaster prone parts of the country; and
 - 1.3 Strengthen cyclone, storm and flood early warning systems to enable more accurate short, medium and long-term forecasts.
339. Specific programs include:
- T2P1 Improvement of flood forecasting and early warning;
- T2P2 Improvement of cyclone storm surge warning;
- T2P3 Awareness raising and public education towards climate resilience; and
- T2P4 Risk management against loss on income and property.
340. The ccGAP objectives for this sector correlates as follows:

BCCSAP TAG	Objective ccGAP
<p>Direct linkage T2P1, T2P2, T2P3</p> <p>Indirect linkage T4P1, T4P2, T4P3, T4P4, T4P5, T4P6, T4P7</p> <p>T6P1, T6P2, T6P3, T6P4, T6P5</p>	Develop gender responsive policy based on disaster management, climate change and sustainable development.
<p>Direct linkage T2P1, T2P2, T2P3, T2P4</p> <p>Indirect linkage T4P1, T4P2, T4P3, T4P4, T4P5, T4P6, T4P7</p> <p>T6P1, T6P2, T6P3, T6P4, T6P5</p>	To allocate adequate financial resources to address gender and DRR issues.
<p>Direct linkage T2P1, T2P2, T2P3</p> <p>Indirect linkage T4P1, T4P2, T4P3, T4P4, T4P5, T4P6, T4P7</p> <p>T6P1, T6P2, T6P3, T6P4, T6P5</p>	Ensure participation of women in community risk assessment (CRA) vulnerability and capacity assessment activities.

<p>Direct linkage T2P1, T2P2, T2P3</p> <p>Indirect linkage T4P1, T4P2, T4P3, T4P4, T4P5, T4P6</p> <p>T6P1, T6P2, T6P3, T6P4, T6P5, T6P6</p>	<p>Develop adequate communication facilities to ensure movement of women to reach safe places (cyclone shelters, flood shelters, killahs, & others).</p>
<p>Direct linkage T2P3</p> <p>Indirect linkage T4P5</p> <p>T6P1, T6P2, T6P3</p> <p>T6P3, T6P4, T6P5</p>	<p>Equip women and men in providing first aid and primary health care as first responders.</p>
<p>Direct linkage T2P1, T2P2, T2P3</p> <p>Indirect linkage T4P1, T4P2, T4P3, T4P4, T4P5, T4P6</p> <p>T6P1, T6P2, T6P3, T6P4, T6P5, T6P6</p>	<p>Equip women and community with DRR, CCA and SD nexus in building the framework for ‘resilience’.</p>
<p>Direct linkage T2P1, T2P2, T2P3</p> <p>Indirect linkage T4P1, T4P2, T4P3, T4P4, T4P5, T4P6</p> <p>T6P1, T6P2, T6P3, T6P4, T6P5, T6P6</p>	<p>Develop context specific IEC/ICT materials focusing DRR incorporating gender issues.</p>



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PRIORITY SECTOR III: INFRASTRUCTURE

BCCSAP (2009): Pillar no. 3

Overview

341. According to scientific evidence the climate will continue to change and this unpredictable and extreme weather will present – and is already presenting - a particular challenge to infrastructure across the globe.
342. Infrastructure refers to the basic physical and organizational structures needed for the operation of society, or the services and facilities necessary for an economy to function.
343. As it encompasses a set of interconnected structural elements that provide a framework for supporting development, the impact of climate change on infrastructure is also strongly related to sustainability, with social, economic, and environmental qualities.
344. The importance of the impact of climate change to infrastructure has been identified in Chapter 7 of the Working Group II Report, published by the IPCC in 2007. It evaluates the impacts to settlements, industry, and society, from a broad perspective that includes public infrastructure, private assets and natural resources, with the goal of assessing impacts to “*the structure, functioning, and relationships of all of these components of human systems.*”¹³⁹
345. As infrastructure assets typically have long operational lifetimes, they are sensitive not only to the existing climate at the time of their construction, but also to climate variations over the decades of their use. A substantial proportion of infrastructure built in the next five years, will still be in use for a long time after completion and will therefore be expected also to endure the impact of extreme weather conditions amplified by the impacts of climate change going forward.

139 James E Newmann and Jason C Price. 2009. Adapting to Climate Change. The Public Policy Response Public Infrastructure, RFF Report Adaptation an Initiative of the Climate Policy Program at RFF.

346. Importantly, to achieve the objective of more climate resilient infrastructure requires both an in-depth understanding of the impacts of climate change, as well as for this understanding to become an integral part of the manner in which infrastructure is planned, designed, built and maintained in sectors such as energy, ICT, transport, water and others.
347. Forward planning and strategic management of these issues are key to increase the resilience of both new and existing infrastructure. Failure by governments, the private sector and civil society, to understand and acknowledge the impacts of climate change on both new and existing infrastructure increases the possibility of disruption of services, as well as other adverse economic impacts, even causing catastrophe in a worst case scenario.
348. In many parts of the world infrastructure is already experiencing the impact of current climate variability and future climate change will in all likelihood be even more disruptive.
349. Under a rapidly changing climate, all countries therefore will need to increase their resources spent to build and renew their infrastructure to adjust to a more challenging climate. It is important to begin adapting national infrastructure to the impact of climate change proactively.
350. In this context, effective, reliable infrastructure is essential for future economic activity and due to the capital outlay involved would also constitute an important part of our transition to a green economy.
351. The effect of floods, severe weather events and the increased frequency of these disasters increases the risks that national infrastructure could face and the significant economic damage these types of events may bring.
352. If today's extreme weather events become both more frequent and extreme, so too will the level of disruption they cause, unless appropriate adaptation measures are taken.
353. In order to reduce the risk infrastructure faces from climate change, planned yet flexible adaptation responses are required.
354. It is important to keep in mind that such action has as its objective the establishment of mechanisms that allow the cost effective management of climate impacts that seeks to reduce the risk that climate change presents to government, the private sector, communities, civil society, infrastructure owners, users, and civil society, rather than eliminating the risks from climate change or extreme weather altogether. It also seeks to integrate an understanding and appropriate response to the impacts of climate change on infrastructure into decision-making at all levels whether for new infrastructure or the maintenance of existing ones.¹⁴⁰

Situational Analysis

355. At the time of writing this ccGAP, the most recent information relating to infrastructure in Bangladesh could be obtained from the SNC submitted by the Government of Bangladesh to the UNFCCC Secretariat in December 2012.
356. The SNC identifies the major physical infrastructure of the country as those that support livelihood activities, including settlement infrastructures, transportation infrastructure (shelters such as multipurpose cyclone shelters), health care centers (hospitals, clinics, dispensaries, etc.), water infrastructure, embankments, market places, food storage infrastructure, urban centers, village growth centers, industrial and manufacturing units, ports (inland and sea-bound), utilities and communications infrastructures.
357. Several key institutions therefore coordinate issues relating to infrastructure. These include:

140 Secretary of State for Environment, Food and Rural Affairs. 2011. Climate Resilient Infrastructure: Preparing for a Changing Climate Presented to Parliament. May 2011 / Cm 8065 URL: www.defra.gov.uk/.../files/climate-resilient-infrastructure-full.pdf

- BWDB and the LGED that constitute the line departments with the overall responsible for infrastructure¹⁴¹;
 - The MoWR that acts as national focal point for the FFWC and that also undertakes the operation of sluice gates and other water discharging devices in polders; and
 - The Ministry of Local Government, Rural Development and Cooperatives that assists local government agencies to build roads, bridges and culverts and advises people to keep foundations of homes above flood level. This Ministry also prepares maps indicating population concentration and deep wells, protected ponds and other sources of drinking water, ensures availability of drinking water at times of need and directs local government institutions for extending assistance to both the DC and TNO (Thana Nirbahi Officer) for rescue and relief operations.
358. According to the SNC, floods are the major natural hazard with often very destructive consequences observed over the last 25 years, but with increasing intensity since the 1980's. In addition, coastal areas are particularly vulnerable to tropical cyclones and associated storm surges. In more recent history, several major devastating cyclones caused huge losses and displaced millions of people in the coastal areas of the country.
359. Official figures released by the Government of Bangladesh in 2008 and reflected in the SBC estimates the damage and loss associated with two recent and very destructive cyclones in 2007 (Sidr) and 2009 (Aila) at 115.6 billion Tk.
360. Various types of infrastructure may face damage due to the increased physical impacts of climate change depending on the locality, geography and natural conditions of where these are situated. Communications infrastructures of all types may be under threat, whilst residential houses as well as institutional facilities such as schools, hospitals and market places may have to close under sever circumstances.
361. Often, retreat and relocation of the local population in affected areas might be the only option. Finding new locations are often challenging, but in addition the economic, social and psychological cost incurred could also be considerable.
362. Regardless, it is of extreme importance to protect key institutions.
363. The Government of Bangladesh therefore has linked infrastructure to Vision 2021¹⁴² through the Sixth Plan core target, which sees infrastructure development as an integrated multi-modal transport encompassing roads, railways, and inland water transport.
364. The strategy focuses on giving the private sector a greater role, and envisages a sizable increase in infrastructure investment during the planning period.¹⁴³
365. Bangladesh Vision 2021¹⁴⁴, mentions infrastructure in the context of ensuring uninterrupted power supply all over the country, effective urban planning, develop cost-effective alternate sources of energy, and to strengthen necessary infrastructure to ensure quality of education at all levels¹⁴⁵.
366. The Sixth Five Year Plan¹⁴⁶ also addresses regional disparities through a strategy that involves public expenditure in infrastructure. Social barriers that prevent women from economic opportunities outside the home and limited access to sanitation and safe drinking water are seen as impediments to gender equality,

141 CIF. 2010. Strategic Program for Climate Resilience Bangladesh (SPCR). PPCR/SC.7/5 October 25, 2010

142 Centre for Policy Dialogue. 2007. Bangladesh Vision 2021. Prepared under the initiative of Nagorik Committee. Dhaka, Bangladesh.

143 Planning Commission. 2011. Sixth Five Year Plan FY2011-FY2015. Accelerating Growth and Reducing Poverty Part 1. Strategic Directions and Policy Framework. Ministry of Planning, Government of Peoples Republic of Bangladesh. Page. 81

144 Centre for Policy Dialogue. 2007. Bangladesh Vision 2021. Prepared under the initiative of Nagorik Committee. Dhaka, Bangladesh.

145 Idem.

146 Planning Commission. 2011. Sixth Five Year Plan FY2011-FY2015. Accelerating Growth and Reducing Poverty Part 1. Strategic Directions and Policy Framework. Ministry of Planning, Government of Peoples Republic of Bangladesh.

and low utilization of essential public services. The Plan therefore focuses on ensuring better access to electricity and rural roads.

367. The importance of the availability of financial infrastructure is viewed as important in reducing poverty and regional inequality. The density of banks and micro finance institutions, access by the poor to micro finance credit programs, and the demand for microcredit (much exceeding the present supply and coverage of microcredit schemes) are seen as indicators of economic activity.
368. The Sixth FYP also refers to the BCCSAP (2009) as a blue print for integration of climate change issues into the planning process. In this context the infrastructure within the BCCSAP is also referred to in the Sixth FYP¹⁴⁷.
369. The Bangladesh SPCR¹⁴⁸ submitted to the Climate Investment Funds that were designed to help developing countries pilot low-emissions and climate resilient development, also identifies two investment projects related to infrastructure:

Investment Project 2 Coastal Embankments Improvement and Afforestation, with the objective of embankment stabilization, internal polder water management, and afforestation; and

Investment Project 3: Coastal Climate Resilient Water Supply, Sanitation, and Infrastructure Improvement, with the objective of climate resilient water supply, sanitation and drainage development, climate resilient infrastructure improvement, and climate resilient small-scale water resources improvement.

370. Expected outcomes from the SPCR for the Investment Project 2 is increased resilience of coastal infrastructure (housing, connectivity, flood control and improved drainage systems within polders, improved water supply and sanitation) for withstanding effects of climate induced seasonal and disasters.
371. The expected outcomes for Investment Project 3 are reduced water and soil salinity and improvements in agricultural and fisheries production. In addition, there is also mention of Technical Assistance 2: Feasibility Study for a Pilot Program of Climate Resilient Housing in the Coastal Region.

Gender and Infrastructure

372. Current research suggests that there is gender-differentiated access to use of and control over infrastructure facilities and services by men and women, which are linked to inequalities in social structure and within the household, property rights and culture and tradition¹⁴⁹.
373. Yet, in reality, infrastructure projects do not consider the different needs of women and men, and are often gender insensitive, because it is incorrectly assumed that women and men will automatically benefit equally from new infrastructure.
374. In most cases the effects of social and economic impacts, whether positive or negative, are not considered. Very often, the positive outcomes experienced by women through infrastructural projects are unintended and unplanned. Hence, well-designed, appropriately located low cost infrastructure can be a powerful tool towards achieving gender equality.
375. Gender mainstreaming should, therefore, not only be regarded as a factor requiring attention in infrastructure projects, but rather must be considered as a critical factor in ensuring the project's success and sustainability

147 Idem.

148 See section on Climate Investment Funds (CIF) Strategic Program For Climate Resilience (SPCR), 2010 under part II of this document (Legal Framework: Mandates and Policy Related to Environment and Gender).

149 African Development Bank Group. 2009. Checklist For Gender Mainstreaming in the Infrastructure Sector. Retrieved from the World Wide Web: <http://www.afdb.org/fileadmin/uploads/afdb/Documents/Policy-Documents/Checklist%20for%20Gender%20Mainstreaming%20in%20the%20Infrastructure%20Sector.pdf>

by ensuring that women do not become worse off both absolutely and in relation to men¹⁵⁰.

376. The project “Rural Infrastructure Improvement Project II (RIP-II)” by the Asian Development Bank (ADB) is a good case in point, clearly showing that infrastructure initiatives also offer many opportunities for women’s empowerment.

377. Overall, however, and in the context of infrastructure, women have little participation in the development of infrastructure – i.e. the design, planning, and management thereof. As users of basic amenities, their access to transport, roads, safe drinking water, sanitation, and housing, is also limited.

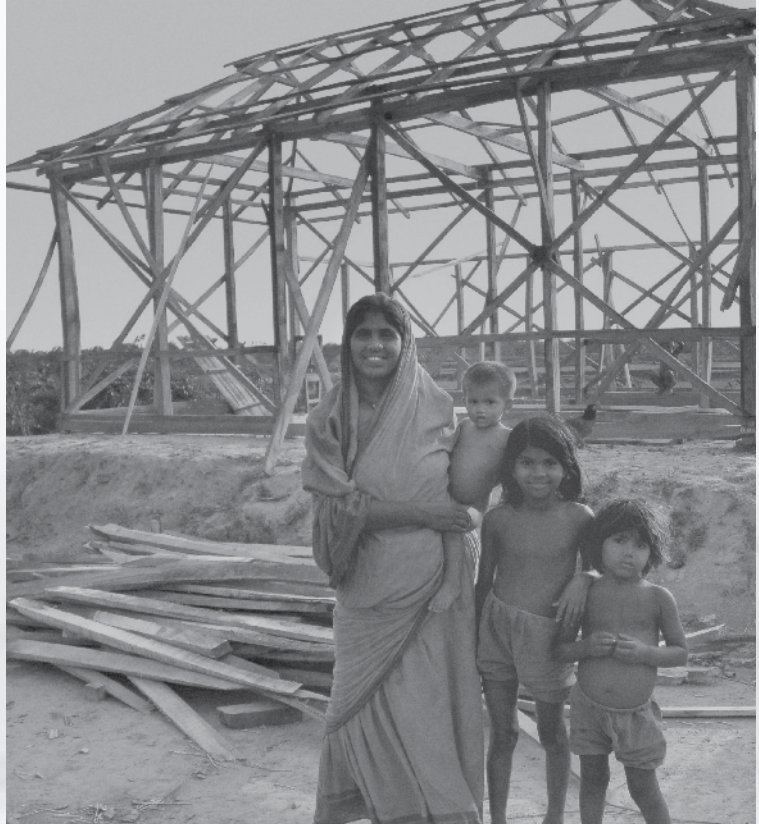
378. For example, in Bangladesh in general, women are not involved in the design of cyclone shelters,

transport networks, or even in the design of their own shelters. This is notwithstanding the fact that flood and cyclone shelters are gender sensitive as these facilities provide private spaces for women. In instances where women do not have access to safe and private toilet facilities in such shelters, they experience considerable challenges in maintaining personal hygiene.

379. Appropriate infrastructure design in terms of providing separate toilets in market areas, and meeting rooms for women in the local government buildings also supports women’s mobility.

380. Employment opportunities in the construction and maintenance of infrastructure could create new opportunities for women in the building sector, and can lead to a greater role in ongoing infrastructure management through their participation in local government committees that are responsible for such planning and maintenance.

381. Given women’s limited access to income opportunities and household resources, they may also have different views on priorities for infrastructure or specific design elements¹⁵¹.



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Transport

382. Globally, there is an extensive body of work focusing on gender and transport, particularly relating to urban transport networks and the design of public transport services in ways that serve and enable women and girls optimally.

383. In Bangladesh, the role and needs of women in the transport area are, however, often ignored. Typically, and by means of example, there are 48 seats in total in a public bus of which only 4 have been reserved for women to sit on.

150 World Bank. 2006. Gender and Transport Resource Guide. Retrieved from the World Wide Web: <http://www4.worldbank.org/afr/ssatp/Resources/HTML/Gender-RG/index.html> Accessed October 2012.

151 ADB. 2010. Gender Equality Results: Case Studies Bangladesh. Dhaka.

384. Addressing gender in transportation projects has a number of benefits according to *Gender and Urban Transport: Fashionable and Affordable*.¹⁵²
385. The Sourcebook site increases in economic rates of return on investment on infrastructure (therefore increases in the profitability of mass transport systems); meeting the demand for transport services through a better understanding of diverse needs, preferences and constraints of end users; lower transaction costs through optimization of transport systems across user groups; increasing access to employment, education and services that ultimately raise productivity; and enabling women to better meet the needs of the household, thereby strengthening the economic base of the household as reasons why those designing and developing transport policies and programs should incorporate a gender perspective into their work.
386. There is widespread recognition of the need for transport policies and regulations to be responsive to women and men's social and economic circumstances including revenues, activities, localization, mobility patterns and special needs. This, however, requires baseline knowledge of travel patterns and behaviors, monitoring and evaluation of the responsiveness of the transport system to women's mobility needs, demands and issues, incentives and regulations to ensure improved gender responsive transport services, and the adoption of transport technologies, management structures, planning choices, governance and participation features which embrace a gender approach¹⁵³.
387. There is a sound business and social case for incorporating gender aspects into transport investments supported in Bangladesh. Considering women and men in a differentiated way when planning and implementing transport solutions that reduce GHG (Green House Gas) emissions presents the possibility of increasing profits, increasing use, reducing overheads, and enhancing the societal benefits of transport investments as a whole.
388. Additionally due to the poor road network in rural areas in Bangladesh, women cannot move easily from one place to another, restricting their mobility and isolating them from markets, schools, health centers, and other important infrastructure facilities.
389. Similarly, as the construction sector is also largely male dominated, the construction of river embankments, drainage systems, water facilities, and irrigation systems are all designed and envisioned by men, who are often not the main users of these structures¹⁵⁴.
390. Examples of gender indicators that could guide the mainstreaming of gender considerations in infrastructure initiatives in Bangladesh include¹⁵⁵:
- Infrastructure constraints on men's productive roles and women's economic, domestic and community management roles addressed;
 - The economic and cultural issues affecting women's and men's access to transport and services identified and addressed;
 - Participatory project planning and implementation with women and men in communities, including procurement activities of the project;
 - Increase in number of women selected to participate in project activities such as road or path construction and maintenance; and
 - Increased number of women and men entrepreneurs on roadsides.

152 Kunieda, M. and Gauthier, A. 2007. *Gender and Urban Transport: Fashionable and Affordable*. Module 7a. Sustainable Transport: A Sourcebook for Policy-makers in Developing Cities. GTZ. Germany.

153 *Women Issues in Transportation*. (n.d.). Conference Themes and Topics – Transport Policy, Transport Patterns and Mobility (to be held 14-21 April 2014 in Paris, France).

154 Bangladesh Haor Infrastructure and Livelihood Improvement Project. 2011. *Enabling Poor People to Adapt to Climate Change*. Project Design Report Volume 1 Main Report May 2011.

155 These examples are based on the African Development Bank Group. 2009. *Checklist For Gender Mainstreaming in the Infrastructure Sector*.

Action Plan Table: Infrastructure

Objectives	Action Steps	Indicators of Success	Responsible
Transform the infrastructure sectors in Bangladesh to be more gender inclusive and equitable.	Review existing policies, plans, strategies and national documents concerning infrastructure to integrate gender and climate change.	<p>No. of policies with gender criteria incorporated (e.g. water, transport, irrigation, ICT, energy, water supply and sanitation).</p> <p>No. of policies with targets, actions and budget allocation to enhance participation and benefit women and marginalized groups.</p> <p>Guidelines-circulars on incorporation of women's participation in bidding documents and contractors' contracts (including occupational safety, wage parity, water supply sanitation).</p>	<p>Lead: LGED, PWD, DMB, MoHPW (Ministry of Housing and Public Works)</p> <p>Other possible ministries/ departments: Sectoral Ministries with support from MoEF, MoWCA, and other ministries related to infrastructure</p>
Increase women's participation in climate change related infrastructure development (planning, designing, construction and maintenance)	<p>Disseminate the policy/strategy guidelines.</p> <p>Monitor implementation of policies through sex-disaggregated data, at government department and local government level.</p> <p>Enhance knowledge and linkages between lowest tier of local administration and women, regarding local infrastructure development.</p> <p>Capacity building of women regarding technical knowledge of infrastructure and local service providers.</p>	<p>No. of government departments and local governments that proactively involve women in infrastructure planning, implementation and maintenance.</p> <p>No. of women groups using knowledge and benefitting from infrastructure at local level.</p> <p>No. of women involved in infrastructure related decision making committees (e.g. water management, water supply and sanitation and project implementation).</p>	<p>Lead: LGED, PWD, DMB, MoHPW (Ministry of Housing and Public Works), MoEF, BWDB</p> <p>Other possible ministries/ departments: MoWCA, Sectoral Ministries and Local Government Institutions</p>

Objectives	Action Steps	Indicators of Success	Responsible
Enhance technical capacity for gender responsive infrastructure development.	<p>Include gender aspects of infrastructure and the importance of addressing women's needs in different types of infrastructure in the curriculum of technical and engineering education.</p> <p>Undertake special program to encourage women in technical education especially those related to infrastructure design and management.</p>	<p>No. of universities and departments incorporating gender into their curriculum and syllabus.</p> <p>Resources allocation to gender related programs in technical education.</p> <p>No. of women taking courses that relate to infrastructure and management.</p>	<p>Lead: LGED, PWD, DMB, MoHPW (Ministry of Housing and Public Works), MoEF, BWDB</p> <p>Other possible ministries/ departments: MoWCA, DoE, Universities, Vocational training institutions.</p>
Increase women's role as whistle blowers for monitoring and maintenance of infrastructure (early warning, embankment breach, river erosion, infrastructure breakage).	<p>Increase women's access to information, communication and technology (CIT) (e.g. mobile and community radio).</p> <p>Develop a network of women and local bodies and sectoral departments for efficient infrastructural management.</p> <p>Orientation on monitoring, maintenance and dissemination of early warning messages.</p> <p>Documentation of best practices, lessons learnt.</p> <p>Replicate the best practices to other disaster prone areas.</p> <p>Construct strong radio and mobile transmitting towers at different disaster prone and remote areas.</p>	<p>No. of women in the community using mobile phones and part of community radio network.</p> <p>No. of functional infrastructure networks in place.</p> <p>No. of hotlines established with different ministries and agencies.</p> <p>No. of examples documented and linked to the data base of Mo Science Technology and ICT.</p> <p>Uninterrupted mobile and radio network available in remote areas.</p>	<p>Lead: LGED, PWD, DMB, MoHPW (Ministry of Housing and Public Works), MoEF, BWDB</p> <p>Other possible ministries/ departments: MoWCA, MoST (Ministry of Science and Technology), other ministries related to infrastructure, communication, water resources, food and disaster, and private sector, mobile service providers, Local Government Divisions</p>
Ensure protection of infrastructure from damages during calamities.	<p>Awareness raising at school level, community level, on operation and maintenance of infrastructure.</p>	<p>No. of community adults and adolescents that understand breach of infrastructure.</p> <p>No. of community people including women effectively involved in infrastructure operation and maintenance committees.</p>	<p>Lead: LGED, PWD, DMB, MoHPW (Ministry of Housing and Public Works), MoEF, BWDB</p> <p>Other possible ministries/ departments: MoEF, Ministry of Primary and Mass Education, Ministry of local government and rural development and Cooperatives. NGOs, Ministry of Youth and Sports</p>

Objectives	Action Steps	Indicators of Success	Responsible
Ensure secure and uninterrupted mobility of women in transport sector.	<p>Campaign to increase number of women in management positions in transport sector.</p> <p>Training women drivers.</p> <p>Training women in transport maintenance.</p> <p>Safe ticketing and sitting areas for women in bus and train and launch terminals.</p> <p>Introduction of day passes¹⁵⁶ and common ticket for bus trains and boats.</p>	<p>No. of women in transport management, ticketing, scheduling, and in transport associations.</p> <p>No. of women commercial driving license holders.</p> <p>No. of micro repair workshops owned by women.</p>	<p>Lead: Ministry of Communication Bangladesh Road Transport Authorities, Bangladesh Road Transport Corporation, Bangladesh Railway, Inland Water Transport Authorities.</p> <p>Other possible ministries/ departments: City Corporations, MoWCA, MoEF, Ministry of Finance, Planning commission, Local Government</p>

Alignment of the ccGAP with the BCCSAP

391. The BCCSAP (2009) addresses the theme of infrastructure as the third pillar of the Climate Change Action Plan “to ensure that existing assets (e.g. coastal and river embankments) are well-maintained and fit-for-purpose and that urgently needed infrastructure (e.g. cyclone shelters and urban drainage) is put in place to deal with the likely impacts of climate change.”
392. Under this pillar, the BCCSAP seeks to:
- 1.1 Repair and rehabilitate existing infrastructure (e.g. coastal embankments, river embankments and drainage systems) and to ensure effective operation and maintenance systems;
 - 1.2 Plan, design and construct urgently needed new infrastructure (e.g. cyclone shelters, coastal and river embankments and water management systems; urban drainage systems, river erosion control works, flood shelters) to meet the changing conditions expected with climate change; and
 - 1.3 Undertake strategic planning of future infrastructure needs, taking into account the likely (a) future patterns of urbanization and socio-economic development; and (b) the changing hydrology of the country, because of climate change.
393. Specific programs include:
- T3P1 Repair and maintenance of existing flood embankments;
 - T3P2 Repair and maintenance of cyclone shelters;
 - T3P3 Repair and maintenance of existing coastal polders;
 - T3P4 Improvement of urban drainage;
 - T3P5 Adaptation against floods;
 - T3P6 Adaptation against tropical cyclones and storm surges;
 - T3P7 Planning and design of river training works; and
 - T3P8 Planning, design and implementation of resuscitation of river and khals through dredging and de-siltation work.

¹⁵⁶ Due to the diversity of activities that women have to conduct during a day (school, market, among many others), they spent a lot of time queuing to purchase tickets to move from one transport mean to another.

394. The ccGAP objectives for this sector correlates as follows:

BCCSAP TAG	Objective ccGAP
<p>Direct linkage T3P3</p> <p>Indirect linkage T4P1, T4P2, T4P3, T4P4, T4P5, T4P6, T4P7 T6P1, T6P2, T6P3, T6P4, T6P5</p>	<p>Transform the infrastructure sectors in Bangladesh to be more gender inclusive and equitable.</p>
<p>Direct linkage T3P1, T3P3, T3P2, T3P3, T3P4, T3P5, T3P6, T3P7, T3P8</p> <p>Indirect linkage T4P1, T4P2, T4P3, T4P4, T4P5, T4P6, T4P7 T6P1, T6P2, T6P3, T6P4, T6P5, T6P6</p>	<p>Increase women’s participation in climate change related infrastructure development (planning, designing, construction and maintenance)</p>
<p>Direct linkage T3P1, T3P2, T3P3, T3P4, T3P5, T3P6, T3P7, T3P8</p> <p>Indirect linkage T4P1 T6P1, T6P2, T6P3, T6P4, T6P5</p>	<p>Enhance technical capacity for gender responsive infrastructure development.</p>
<p>Direct linkage T3P1, T3P2, T3P3, T3P4, T3P6</p> <p>Indirect linkage T4P3, T4P4, T4P6, T4P7 T6P1, T6P3, T6P4, T6P5, T6P6</p>	<p>Increase women’s role as whistle blowers for monitoring and maintenance of infrastructure (early warning, embankment breach, river erosion, infrastructure breakage).</p>
<p>Direct linkage T3P1, T3P2, T3P3, T3P4, T3P5, T3P6, T3P7, T3P8</p> <p>Indirect linkage T4P2, T4P3, T4P4, T4P5, T4P6, T4P7 T6P1, T6P2, T6P3, T6P4, T6P5</p>	<p>Ensure protection of infrastructure from damages during calamities.</p>
<p>No ref. in BCCSAP</p> <p>Indirect linkage T4P2, T4P5 T6P1, T6P3, T6P4, T6P5, T6P6</p>	<p>Ensure secure and uninterrupted mobility of women in transport sector.</p>



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PRIORITY SECTOR IV: MITIGATION AND LOW CARBON DEVELOPMENT

BCCSAP (2009): Pillar no. 5

Overview

395. Global response to climate change can be divided into two broad areas of policy action at the global as well as national levels, i.e. mitigation and adaptation. Mitigation calls for actions to lower and ultimately stop the emission of green house gases into the atmosphere and adaptation relates to the minimization of the adverse impacts of climate change on communities and their associated vulnerabilities.
396. The concept of green growth was first proposed under international climate negotiations as countries were requested to embark upon a low carbon development path, largely through Nationally Appropriate Mitigation Actions (NAMAs).

Situation Analysis

397. Although it is not obligatory for Bangladesh to develop NAMAs and undertake a low carbon development path, the country is nevertheless committed to achieving one, provided the process of doing so does not place an additional burden on the country's already overstressed economy and financial capacity. It must provide a win-win situation for all and requires guaranteed and adequate international support (financial and otherwise) from the international community.
398. Dialogue amongst stakeholders in Bangladesh is therefore already underway on how to move into "green

- development” that would promote a “green economy” and provide sustainable “green jobs” in future.
399. Given the Government’s view on low carbon development, it is of the utmost importance that these discussions have to take place within the context of Bangladesh’s priorities for accelerating economic growth, poverty reduction, social emancipation and sustainable development for it to be widely acceptable.
 400. In short: the government of Bangladesh is committed to undertaking a low carbon path provided in doing so it does not compromise the need for accelerated economic growth and poverty reduction.
 401. Long-term policy documents such as “Vision 2021” and the Sixth Five Year Development Plan (2011-2015) therefore emphasize climate resilient and low carbon development based on the four buildings blocks of the Bali Action Plan: adaptation to climate change, mitigation, technology transfer and the adequate and timely flow of funds for investments within an inviolate framework of food, energy, water, livelihoods and health security.
 402. In line with country’s commitment to low carbon development, the BCCSAP outlined the activities under its core thematic area (pillar no. 5) of “Mitigation and Low Carbon Development” mentioned above.
 403. The most recent SNC submitted to the Secretariat of the UNFCCC in December 2012 includes an inventory of GHG emission for the years 2001 and 2005 and covering energy, industry, agriculture, waste, land use, land use change and forestry. The GHGs considered in the inventory are CO₂ (Carbon dioxide), CH₄ (Methane) and N₂O (Nitrous Oxide) from both the country’s energy and non-energy sectors.
 404. The energy sector includes seven sub-sectors, i.e. energy industries, manufactures and construction, transport, residential, agriculture, as well as the non-specific and commercial sectors. Major sub-sectors of non-energy sectors include industry, the agriculture sector and waste management. During 2001-2005 emissions from the energy sector increased from 30.2 million mt to 37.9 million mt.
 405. In 2005, the total emission both from energy and non-energy sectors was only 68 million mt of carbon-di-oxide of which combustion for energy related activities accounted for nearly 38 million mt (56%). Land use, land use change and Forestry (LULUCF) contributed a further 28 million mt (39%). In 2005, the per capita GHG emission was 0.42 mt CO₂/ year, which was less than 1/5th of one percent of world total - reflecting its extremely low consumption of energy. In 2005 the total GHGs emission from Annex 1 Parties¹⁵⁷ was 18.2 billion tons of CO₂ equivalent.
 406. Agriculture constitutes the main source of non-CO₂ emissions. Of the total emission of nearly 2.5 million mt of methane, 1.8 million mt or nearly 2/3rds were contributed by the sector.
 407. On any given day huge amounts of municipal solid waste is also generated throughout the country. A huge portion of this waste find its way to drains or is dumped in water bodies, polluting the environment. Solid waste that is dumped in the dumping sites produce significant amount of CH₄ that is emitted into the atmosphere. The IPCC indicates that the net annual CH₄ generations from solid wastes in six city corporations (including Dhaka, Chittagong, Khulna, Rajshahi, Barisal and Sylhet) were 24.56 Gg in 2001 and 29.44 Gg in 2005¹⁵⁸.
 408. Both domestic and industrial wastewater often contains biodegradable organic matter that leads to the release of CH₄ and N₂O.
 409. Taking direction from the BCCSAP (2009), the Government of Bangladesh undertook a project with funding leveraged from the BCCTF to Reduce, Reuse and Recycle (3Rs) of Household Wastes Initiative. The Initiative was implemented in the Gulshan-, Baridhara- and Dhanmondi areas of Dhaka and the Nasirabad- and Khulshi areas of Chittagong.

157 Signatories to Kyoto Protocol and UNFCCC are divided into 3 groups for efforts to reduce CO₂/GHGs emissions - Annex I parties: industrialized and economies in transition, Annex II: developed countries which pay for costs of developing countries and Developing Countries.

158 Government of Bangladesh. 2012. Second National Communication to the United Nations Framework Convention on Climate Change (UNFCCC). Ministry of Environment and Forests. Dhaka, Bangladesh.

410. With such initiatives, however, it is also important also to monitor and enforce the implementation of legal measures that manage solid and household waste in an efficient manner and which sometimes fall short of expectation.
411. Among the GHG emitting sectors, energy is the most critical as this sector is key to development and a fundamental issue in relation to poverty reduction and achievement of MDGs.
412. Bangladesh is a low energy consuming country with per capita annual consumption of 220 KW hours. The country is struggling to meet the current demand of 5500 MW. Energy demand will continue to rise in response to expanding economic activity and rising population. The increasingly high population density in the urban areas and rapid industrialization is also driving up the demand for energy. Indeed, energy security is essential for Bangladesh's sustainable development.
413. The main energy resources of Bangladesh are natural gas, oil, peat, hydropower, solar power, and biomass fuels. In Bangladesh, currently around 88% of all power generation is based on natural gas. About 55% of the country's energy supply is based on traditional fuels (crop residues, animal dung and fuel wood), 24% on natural gas, 19% on imported oil and coal and the remaining 2% from hydroelectricity¹⁵⁹. About 88% of the commercial energy consumption is met from natural gas, the remainder coming from oil augmented by hydropower and coal. Non-commercial energy sources, such as wood, animal wastes and crop residues are estimated to account for over half of the country's energy consumption¹⁶⁰.
414. Forty-seven percent of the total population has access to electricity, whilst the per capita consumption is 220 Kw/h and which is very low compared to other developing countries¹⁶¹. The existing national grid provides 96.8% of demand and the remaining 3.2% are derived from off-grid solar PV (3%) in rural areas.
415. It is expected that the output of existing grid that is generated from natural gas will be reduced to 66%, and that output derived from coal will be increased to 20%. The off-grid access (renewable energy) will be increased to 14%, and will include various percentages of solar, wind and biomass. In urban areas, the existing grid has an access of 100%.
416. The government has given the highest priority to the development of the power sector and has committed to ensure universal electricity access available to all by 2021. To this end, the Government has initiated reforms in the power sector and has also taken up various expansion programmes.
417. Bangladesh formulated the Renewable Energy Policy in 2008. This policy envisioned to facilitate both public and private sector investment in renewable energy projects to substitute indigenous non-renewable energy supplies and to scale up contributions of existing renewable energy based electricity production. The Policy envisions 5% of total generation from renewable sources by 2015 and 10% of the same by 2020.
418. This Policy was formulated in line with the power sector ambitions outlined in "Vision and Policy Statement 2000" to bring the entire country under electricity coverage by the year 2020 in phases and also in line with the direction of the Article 16 of The Constitution of the People's Republic of Bangladesh. One of the major reasons behind formulating this Policy was to facilitate reducing global emissions for mitigating climate change (80% reduction by 2050). In line with this, the Policy has identified different renewable energy sources like solar, wind energy, biomass, biogas, hydro-power and other renewable energy sources include bio-fuels, gasohol, geothermal, river current, wave and tidal energy.
419. The Renewable Energy Policy of the Government envisions the establishment of a nodal agency, the Sustainable Energy Development Authority (SEDA), which is currently under development. Several NGOs have also been involved in renewable energy development.

159 www.discoverybangladesh.com, accessed on 13 March 2013. URL: <http://www.discoverybangladesh.com/meetbangladesh/energy.html>, 2010

160 UNDP, 2009. MDG Needs Assessment and Costing Report 2009 - 2015. Retrieved from the World Wide Web: <http://www.undp.org.bd/info/pub/MDG%20Needs%20Assessment%20&%20Costing%202009-2015%20small.pdf>

161 Government of Bangladesh, 2009. Bangladesh Economic Review 2009. Ministry of Finance. Retrieved from the World Wide Web: http://www.mof.gov.bd/en/index.php?option=com_content&task=view&id=70

420. Solar power, wind energy and biogas will be major interventions for RETs (Renewable Energy Technologies). Promoting energy efficient bulbs will be one of the major interventions as electricity technologies, which would help in reducing pressure on electricity supply. It could involve electricity, which is generated from renewable resources and clean sources better for human health and the environment. The objective is to maximize the use of renewable energy sources to lower GHG emission and ensure energy security. The scope for developing renewable energy supplies (e.g., solar, wind and sustainable biomass technologies) has not been explored well in Bangladesh.
421. RETs create income-generating activities for landless and marginal farmers and from such households, while reducing environmental problems, like deforestation and indoor air pollution from cooking with poor quality fuels.
422. In the rural areas biomass (fuel wood, tree leaves, crop residues and animal residues mainly in the form of dried cow dung cakes or sticks) is the principal form of energy. According to a survey by BIDS, a rural household uses nearly three metric tons of biomass in a year of which about 1.7 metric ton is tree biomass composed of 1.2 metric ton of fuel wood and 0.5 metric ton of tree leaves. Practically all biomass is used for cooking and parboiling rice. The relationship between the amount of fire wood use and level of income is clearly positive, as the poor have much less access to quality fuel for cooking. Income poverty thus translates into energy poverty.
423. Bangladesh has strong potential for biomass gasification based electricity. The biomass resources available in the country are rice husk, crop residue, wood, jute stick, animal waste, municipal waste, sugarcane bagasse etc. This technology can be disseminated on a larger scale for electricity generation¹⁶².
424. Bio-based renewable energy is usually associated with jobs that can be undertaken by both women and men. Women are often more concerned about environmental implications and hence, women may find jobs in the renewable energy sector attractive; similarly with advocacy on renewable energy and green growth.
425. In Bangladesh, the average solar radiation is 3.85 kWh/m²/year, which is quite good for photovoltaic (PV) applications, except during the monsoon season. This is now being used for lighting, radio and television in rural villages instead of kerosene lamps, which provide poor illumination for working after nightfall. RETs could thus be selectively applied to various rural applications, potentially generating income, improving health and educational quality, and increasing labour productivity.
426. Solar photovoltaic (PV) systems are in use throughout the country with over 300,000 household-level installations having the capacity of about 15 MW. Scaling-up of solar PV systems assisted by development partners are being implemented through Infrastructure Development Company Limited (IDCOL), Rural Electrification Board (REB), LGED, BPDB, NGOs and Private Organisations implementing solar energy programmes.
427. The total hydropower resources of Bangladesh were limited to around 417 million KWH in 2008-09¹⁶³. Micro hydro and mini-hydro have limited potential in Bangladesh, with the exception of Chittagong and the Chittagong Hill Tracts. Hydropower assessments have identified some possible sites from 10 kW to 5 MW but no appreciable capacity has yet been installed. There is one hydro power plant at Kaptai established in the 1960s with present installed capacity of 230 MW¹⁶⁴.

162 Government of Bangladesh, 2008. Renewable Energy Policy, 2008. Ministry of Power, Energy and Mineral Resources. Retrieved from the World Wide Web: http://www.powerdivision.gov.bd/pdf/REP_English.pdf

163 Bangladesh Bureau of Statistics, 2010. Statistical Yearbook of Bangladesh – 2010. Retrieved from the World Wide Web: <http://www.bbs.gov.bd/WebTestApplication/userfiles/Image/SY2010/Chapter-06.pdf>

164 Government of Bangladesh, 2008. Renewable Energy Policy, 2008. Ministry of Power, Energy and Mineral Resources. Retrieved from the World Wide Web: http://www.powerdivision.gov.bd/pdf/REP_English.pdf

428. Wind Energy has also made some inroads, but its potential is mainly in coastal areas, and offshore islands with strong wind regimes. These coastal settings afford good opportunities for wind-powered pumping and electricity generation. Presently there are 2 MW of installed wind turbines at Feni and Kutubdia (Renewable Energy policy, 2008). The BPDB also has installed wind power project at Kutubdia near the Bay of Bengal. At least 1,000 consumers are benefiting from this power supply project¹⁶⁵.
429. To promote renewable energy government has exempted income tax for next 5 years from commercial production from RE. Government has recently initiated 500MW solar power programme with the inspiration and support of ADB.
430. LULUCF in Bangladesh contributes 28 million mt (39%), the majority of which are from forest degradation. Increase of forest coverage and their conservation and management is critical both for mitigation and adaptation.
431. The area of forestland is 2.5 Mha which is 17.08% of the country's total area. Bangladesh Forest Department (FD) manages 1.52 Mha of forestland. According to Bangladesh's most recent Forest Resource Assessment (FRA) to FAO (Food and Agricultural Organization), 11% of the land area is under tree cover¹⁶⁶.
432. However, another 20% (about 2.5 Mha) of the country is recorded under FRA categories "other wooded land" or 'other land with trees'. Though the area under tree cover has increased nearer to the MDG target of 20%, but the density is much less than the target of 10% and above.
433. Bangladesh already has a reserved forest in place in the Sundarbans World Heritage sites, also happens to be one of the largest carbon-sinks in the world. About 60% of this largest mangrove forest in the world with its unique biodiversity, including the Royal Bengal Tiger, is in Bangladesh while 40% is in the Indian territory. Experts predict that 15% of this unique bio-reserve will be lost to sea level rise in the next few decades. Urgent attention needs to be given to the threats faced by the Sundarbans, as outlined in the BCCSAP, for which external funding would be required.
434. Recently as part of regional cooperation between Bangladesh and India a Memorandum of Understanding (MOU) for Conservation of the Sundarbans and a Protocol on Conservation of Royal Bengal Tiger of the Sundarbans has been signed between the two countries.
435. The Ecologically Critical Areas (ECAs) Act was enacted by the Government of Bangladesh to protect endangered biodiversity and forest cover. The country now has 12 ECAs, 17 national parks and 17 wild life sanctuaries. The protected areas are 1.8-2% of the total land of Bangladesh. The national target for protected areas is set for 5% by 2015.
436. Bangladesh's coast consists of 19 coastal districts. The country's culture is closely linked with the rivers that reach the coast through complex natural linkages. The official coastal zone includes both land and sea areas. Based on vulnerability to salinity intrusion, cyclones and tidal surge; the land area is further divided into interior and exterior coast.
437. Bangladesh considers 200 nautical miles seawater and continental shelf southwards of its coastline as its exclusive economic zone. Among the 25 bio-ecological zones of the country, 11 are wholly situated in the coastal zone, 4 others have parts of them in the coast.
438. The country's coastal ecosystems include mangroves, coral reefs, sea grass beds, sandy beaches, sand dunes, inter-tidal and sub-tidal wetlands and mudflats, flood plain, salt marshes, estuaries, lagoons, peninsula, offshore islands, tropical hill forest etc. A major part of the world's largest mangrove, the Sundarbans is one of its key ecosystems.

165 Saleque, Kh. A. 2010. Banglabandhu's Vision for the energy sector. Retrieved from the World Wide Web: <http://www.e-bangladesh.org/2010/07/30/bangabandhu%E2%80%99s-vision-for-the-energy-sector/>.

166 FAO, 2010. Global Forest Resources Assessment 2010. Retrieved from the World Wide Web: <http://www.fao.org/forestry/fra/fra2010/en/>



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439. These ecosystems are, however, degrading alarmingly due to various external pressures especially due to pollution and exploitation. The coastal zone contributes highly to the national development and fishery is the second largest contributing sector to the national GDP.
440. The major hazardous issues faced by the country includes cyclones and storm surge, land erosion, flood, drainage congestion, salinity intrusion, drought, earthquake, shortage of drinking water & arsenic contamination, ecosystem degradation, pollution and climate change. The country is repeatedly struck by fierce cyclones leaving devastations for human beings as well as biodiversity.
441. Changes in land use mainly due to the increased pressure of population on the limited resources are posing threat to the coastal ecosystems. The main livelihoods in the coastal zone are agriculture, fishery, salt farming, shrimp culture, industrial and agricultural labor, and extraction of forest resources etc. GDP of the coastal zone is lower than the national GDP. Poverty is very common in the coast, 29 % of the people are among the extreme poor ¹⁶⁷.
442. To provide protection against tidal surges during cyclones, mangrove plantation was undertaken on 160,000 hectares of newly accreted coastal land in recent years. The Coastal Green Belt project continues to implement the coastal afforestation initiative of the government.
443. Bangladesh is also the newest member country participating in the Mangroves for the Future (MFF) Initiative. MFF focuses on ecosystem based adaptation to climate change and building coastal resilience, including understanding the full economic value of mangroves for building coastal resilience, promoting benefit sharing mechanisms to ensure rights of the coastal communities over coastal ecosystems, exploring ecosystem based solutions for coastal protection, and assisting the coastal communities to become more resilient.
444. The country strategy for Bangladesh focuses on three principles that include preserving ecosystem integrity, ensuring population safety and promoting sustainable livelihoods.
445. Thematic areas also include strategies to address the five crosscutting issues of MFF, i.e. climate change, gender, communications, capacity development and private sector engagement.
446. The MoEF established a National Coordinating Body (NCB) for MFF Bangladesh in October 2011. The Bangladesh NCB endorsed its National Strategy and Action Plan in 2012 and Bangladesh is currently initiating its Small Grants Facility with the financial assistance of DANIDA (Danish International Development Agency) from 2013 onwards.

¹⁶⁷ Mangroves for the Future Initiative, 2013. Retrieved from the World Wide Web: <http://www.mangrovesforthefuture.org/countries/members/bangladesh/>

Gender, Mitigation and Low Carbon Development

447. Research indicates that economic growth contributes to an increase in emissions. With growing income, carbon emissions typically rise and the IPCC reports¹⁶⁸ already as early as 1992 pointed to the relationship between carbon emissions and economic growth¹⁶⁹.
448. Such a relationship seems to suggest that there is a trade-off to be made between slowing climate change on the one hand and economic growth and development on the other. By enlarge economists would also argue that with such economic growth, environmental outputs would often also decrease.
449. Whilst these assumptions hold a measure of truth, there are several means by which women can contribute in a positive manner economically, environmentally and socially to climate change action and, mitigation in particular.
450. Unfortunately, the discourse on climate change does not adequately take into account gender - either at international negotiations, or at the implementation/project level.
451. The role of women are still not taken fully into account in policies, the needs of women are not considered in the development of new technology or the refinement of existing ones, and more often than not, women are under-represented in planning, decision-making and implementation in key sectors such as energy and transport, for example.
452. As the impact of climate change affects women and men differently, women are thus unable to voice their specific requirements and needs. Moreover, their potential as agents of change on mitigation also remains insufficiently exploited despite various surveys indicating that women tend to be more concerned about climate change and would prefer more ambitious efforts to reduce greenhouse gas emissions than men.
453. Evidence from studies conducted on single-person households in Europe, for example, shows, that there is evidence that the sources and level of emissions of women and men differ substantially, independently of their age and income. This difference stems from factors such as car use and food preferences¹⁷⁰.
454. Whilst there are a number of possible reasons for the absence of gender in mitigation action, the lack of information, gender-disaggregated data, knowledge and therefore also our lack of understanding of the gender differentiated impacts of mitigation activities and the potential role of women as agents of change significantly contribute to this omission.
455. Women's extensive theoretical and practical knowledge of the environment and resource conservation is also not given due consideration despite their involvement fostering economic growth and socio-economic development, reducing poverty, keeping environmental problems in check, and increasing the wellbeing of societies as a whole.
456. Women generally lag behind in access to education and training, they have less access to and control over productive resources, including access to land and ownership rights, access to services, markets (including land, labor, financial and product markets), public funds and the general discretion on how to generate income independently.
457. Women are not paid for the environmental services that they already provide (e.g. reforestation). Their potential contribution to climate mitigation by being part of the economic cycle, therefore, remains untapped¹⁷¹.

168 IPCC, 1992. Climate change 1992: The supplementary report to the IPCC scientific assessment. Cambridge University Press. New York, USA.

IPCC. 2007. Climate change 2007: Mitigation of climate change. Contribution of Working Group III to the Fourth

169 South South North, 2013. Retrieved from the World Wide Web: <http://www.southsouthnorth.org>

170 Gender cc, 2013. Text largely obtained and adapted from the World Wide Web on 3 April 2013: <http://www.gendercc.net/policy/topics/mitigation.html>

171 OECD, 2010. Retrieved from the World Wide Web: <http://www.oecd.org/social/gender-development/46975138.pdf>

458. As part of agroforestry and afforestation efforts, women can also plant trees that not only sequester emissions, but also produce crops which may provide them with an alternative source of income, or have distinctive co-benefits such as assisting in disaster risk management, alternative household energy and others.
459. These projects could also be tied to emissions trading, and reduced emissions resulting from afforestation could be traded in the form of certificates. This could be used to fund further measures and related services in such projects. Complementary training programs that focus on the processing and marketing of these products would further enhance the economic benefits for women¹⁷².
460. In Bangladesh, women are actively engaged in various forestry programs. The idea of ‘social forestry’ started with loans from the ADB since the late 1980s, enabling women and local poor people to have an alternative source of income and to overcome the rural fuel crisis through the planting of quick growing tree species.
461. As the latest country to join the MFF Initiative, it is therefore an important entry point for mainstreaming gender in climate action in Bangladesh as the Initiative is committed to ensuring that equality between men and women, or gender equality, is an integral part of its work. The MFF’s Gender Equality Strategy recognizes gender equality as fundamental to conservation and sustainable development.
462. The strategy addresses gender equality across the regional, national, and project levels of MFF, and recommends approaches based on the specific needs of the various MFF stakeholders. The Initiative aims to ensure that equality of outcomes for both men and women is achieved in the management of coastal natural resources and promotion of sustainable livelihoods.
463. The energy sector, key to mitigation efforts, is furthermore also largely a male dominated environment in need of transformation. In most countries of the developing world, including in Bangladesh, domestic energy (e.g. for cooking, heating or lighting, is still obtained from the energy-inefficient and toxic burning of biomass such as wood, charcoal or agricultural waste which is traditionally a women’s work¹⁷³.
464. Women are the major consumers of energy in rural areas as they are responsible for gathering fuel for cooking and heating. More than 100 million people in Bangladesh - about 80 percent of the population - live in rural areas, where annual per capita commercial energy consumption averages less than 100 kilograms of oil equivalent (kgoe), considerably lower than the average international levels¹⁷⁴.
465. Women in the country do not have any access to modern energy or technology. In their role as the main providers of family and community care, they have different needs in terms of energy than most men and this need to be taken into account in policy development and implementation.
466. As women, on average, also have lower incomes than men, measures leading to higher energy prices for end users, for example, might therefore also affect women more strongly. Conversely, women and men might benefit differently from the positive effects of climate policy, for example from job creation in various sectors including the renewable energy, energy efficiency and waste management/recycling.
467. The promotion of renewable energies that help avoid greenhouse gas emissions could provide an interesting approach for promoting women’s economic participation in climate action. Not only are jobs created for women who can be engaged in the upkeep and maintenance of solar plants, but solar powered lamps also extend the productive time available to street vendors.

172 OECD, 2010. Retrieved from the World Wide Web: <http://www.oecd.org/social/gender-development/46975138.pdf>

173 Carlsson, G., 2007. Where Energy is Women’s Business. National and Regional Reports from Africa, Asia, Latin America and the Pacific.

174 UNDP/World Bank, 2004. Opportunities for Women in Renewable Technology Use in Bangladesh (Phase I). Energy Sector Management Assistance Program (ESMAP) and the Bank Netherlands Water Partnership Program (BNWPP).

468. Women in communities can collaborate to maintaining a healthy community environment, whilst at the same time benefitting economically by generating much needed income. One opportunity presented is through “waste-to-wealth” initiatives whereby women are paid for bringing recyclable waste materials like plastic, paper and iron or steel to centrally located facilities that then re-use these materials in various other ways. Taking this initiative a step further, women themselves could establish cooperatives and use these materials to produce economically feasible goods such as carpets, furniture, household goods, fertilizer, and many more.
469. Gendered impacts of climate policy are an issue that therefore clearly deserves more attention. As yet, research has hardly looked at these impacts systematically. However, there are indications that various policies and measures will affect women and men differently.
470. On their website, Gender cc¹⁷⁵ highlights a number of interesting differences in the attitude of men and women as it relates to mitigation:
- Women are more willing than men to change their behavior in order to save energy and purchase low-carbon emitting products; however, they often know less about their own energy consumption and they reject measures that would burden them with extra work;
 - Women and men have different preferences in terms of technologies to reduce greenhouse gases – a majority of women rejects risky technologies such as nuclear power and carbon capture and storage; and
 - A majority of women prefers to rely on lifestyle changes rather than on technological progress only.



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175 Gender cc, 2013. Retrieved from the World Wide Web on 3 April 2013: <http://www.gendercc.net>

Action Plan Table: Mitigation and Low Carbon Development

Objectives	Action Steps	Indicators of Success	Responsible
Ensure that gender considerations are address in the process of reviewing energy and technology policies.	<p>Identified a group of gender experts to support the review of the energy and technology policies and incentives to promote efficient production, consumption, distribution and use of energy¹⁷⁶.</p> <p>Incorporate women's participation, access and benefit in the energy policy.</p>	Gender references incorporated in the energy and technologies policies.	<p>Lead: Min of sci. and Tech., Ministry of Power, Energy and Mineral Resources, BCSIR</p> <p>Other possible ministries/ departments:</p> <p>ENERGIA (International Network on Gender and Sustainable Energy) UNWomen, Women NGOs, MoEF</p>
Develop gender responsive programs to reduce GHG emission at household (HH) while ensuring women's access to energy and power technologies.	<p>Stakeholder's workshop including women to identify the current status and gaps.</p> <p>Disseminate information on environment friendly and green technology regarding the positive impact of these technologies on the health of women.</p> <p>Train and create access of women to renewable alternative energy solutions (wind, solar).</p> <p>Introduce energy efficient low cost cooking technology.</p> <p>Expansion of bio-gas technology amongst women livestock enterprise owners</p> <p>Promote "Solar Bottle Bulb" for reducing day time energy consumption.</p> <p>Include energy consumption methodology in the national school curriculum.</p> <p>Organize energy fair at school, college and university with parents (women and men) with information, services.</p> <p>Soft credits/ loans for women to use green technology.</p> <p>Train women to develop as a resource pool (local service provider at the local level).</p>	<p>Women's groups' formed/ oriented and networking towards solutions.</p> <p>Reduction of traditional fuel¹⁷⁷.</p> <p>Reduction of respiratory pulmonary related diseases.</p> <p>Increased usages of new alternative technologies, energy efficient cooking stove.</p> <p>Budget allocated for expanding solar power technology for women</p> <p>No. of women/livestock entrepreneurs practicing bio gas technology.</p> <p>No. of households using bottle bulb.</p> <p>No. of women producing and operating bottle bulb.</p> <p>Incorporation of "necessity of efficient energy use" at the course curriculum.</p> <p>Amount of curricula included related with gender and energy.</p> <p>No. of energy fair held at school, college and universities.</p> <p>No. of women accessing loans.</p> <p>Purchasing capacity of new technology by women.</p> <p>Number of women entrepreneurs -local service provider.</p>	<p>Lead: DoE, FD, Ministry of Power, Energy and Mineral Resources, MoEF</p> <p>Other possible ministries/ departments:</p> <p>MoWCA, Ministry of Information, MoHFW, Banks, Financial institutes, Local & International NGOs, Donors, Research organizations</p>

176 One of the actions identified under the "mitigation and low carbon development" pillar of the BCCSAP is the review of the energy and technology policies and incentives.

177 Timber, agricultural waste, leaves, coal

Objectives	Action Steps	Indicators of Success	Responsible
Improve women's knowledge on climate change mitigation issues.	<p>Mapping (gather baseline information by case studies, photo essay etc.) of impacts of climate change and its gender dimension.</p> <p>Awareness raising among women through local media (e.g. poster, "miking", drama) poster competition, art exhibition, debate, media, pot song etc.</p> <p>Disseminate climate change adaptation and mitigation related information through different media.</p> <p>Conduct studies, research, debates, learning spaces on gender and mitigation.</p>	<p>Increase number of women with knowledge about climate change mitigation and adaptation issues.</p> <p>Changes in attitude and practices by women.</p> <p>No. of women participating in climate change related activities.</p> <p>No. of new publications addressing gender and mitigation.</p> <p>Increase in the amount of projects submitted to the financing mechanism in Bangladesh that addresses gender and mitigation.</p>	<p>Lead: MoEF</p> <p>Other possible ministries/ departments: MoWCA MoEF, Ministry of Education MoDMR, Ministry of Information, Research organizations, Local & International NGOs, Donors, Universities</p>
Develop women's entrepreneurship related to waste management.	<p>Involve women in collection, management, and processing of waste in rural and urban areas.</p> <p>Women's cooperative society for community waste management.</p> <p>Women's access to credit, finance and services for waste management.</p> <p>Community fair on chain demonstration of recycling cycle and utilization of waste.</p> <p>Awareness on waste management through community radios in local dialects and electronic media for urban areas.</p> <p>Sharing good practices of women's initiatives in South Asian countries on waste management (promoting south-south cooperation).</p>	<p>No. of women involved in the collection, processing and recycling of waste.</p> <p>No. of small/medium waste recycling enterprises led or setup by women.</p> <p>No. of institutions providing loans to women.</p> <p>Amount of loan received by women entrepreneur.</p> <p>No. of community fair held.</p> <p>No. of coverage in community, electronic and print medias.</p> <p>No. of sharing meeting held in the country.</p> <p>No. of women utilizing new acquired knowledge.</p>	<p>Lead: DoE, MoEF</p> <p>Other possible ministries/ departments: Local NGOs, International NGOs, Ministry of Local Government and Rural Development and Cooperatives, Community Based Organizations, Private companies</p>
Increase women's participation in solid waste and drainage management.	<p>Orientation and participation of community women in solid waste and drainage management.</p> <p>Encourage women in decision-making positions in urban municipal waste management committees.</p>	<p>No. of women actively involved in committees' solid waste management/ slum development/ drainage and public toilet management).</p> <p>Women in CBOs participating in solid waste/slum/ and drainage management.</p>	<p>Lead: : DoE, MoEF</p> <p>Other possible ministries/ departments: Local Government Division, LGED, Municipalities/City Corporations, NGOs</p>

Objectives	Action Steps	Indicators of Success	Responsible
Mainstream gender considerations in coastal and social forestry programs or initiatives.	<p>Expand coastal green belt including mangroves through women’s participation.</p> <p>Expand social forestry and plantations on river/coastal embankments through women’s participation.</p> <p>Support women establishing nursery for making mangrove-tree saplings available.</p>	<p>No. of coastal communities expanding green belt through women’s participation.</p> <p>No. of KMs covered by social forestry on roadsides and plantation on river/ coastal polders/embankments.</p> <p>No. of nurseries developed and owned/managed by women.</p>	<p>Lead: MoWR, FD, MoEF</p> <p>Other possible ministries/ departments: MoP, Ministry of Local Government and Rural Development and Cooperatives, NGOs/ MoYouth</p>

Alignment of the ccGAP with the BCCSAP

- 471. The BCCSAP (2009) addresses the issue of addresses mitigation and low carbon development through the fifth pillar of the Climate Change Action Plan “to evolve low carbon development options and implement these as the country’s economy grows over the coming decades and the demand for electricity increases.”
- 472. Under this pillar, the BCCSAP seeks to:
 - 1.1 Develop a strategic energy plan and investment portfolio to ensure national energy security and lower greenhouse gas emissions;
 - 1.2 Expand the social forestry program on government and community lands throughout the country;
 - 1.3 Expand the “greenbelt” coastal afforestation program with mangrove planting along the shoreline;
 - 1.4 Seek the transfer of state-of-the-art technologies from developed countries to ensure that we follow a low-carbon growth path (e.g. “clean coal” and other technologies); and
 - 1.5 Review energy and technology policies and incentives and revise these, where necessary, to promote efficient production, consumption, distribution and use of energy.
- 473. Specific programs identified, include:
 - T5P1 Improved energy efficiency in production and consumption of energy;
 - T5P2 Gas exploration and reservoir management;
 - T5P3 Development of coalmines and coal-fired power stations;
 - T5P4 Renewable energy development;
 - T5P5 Lower emission from agricultural land;
 - T5P6 Management of urban waste;
 - T5P7 Afforestation and reforestation program;
 - T5P8 Rapid expansion of energy saving devices e.g. Compact Florescent Lamps (CFL);
 - T5P9 Energy and water efficiency in built environment; and
 - T5P10 Improvement in energy consumption pattern in transport sector and options for mitigation.

474. The ccGAP objectives for this sector correlates as follows:

BCCSAP TAG	Objective ccGAP
<p>Direct linkage T5P1, T5P4, T5P8, T5P9, T5P10</p> <p>Indirect linkage T4P1, T4P5, T4P6</p> <p>T6P1, T6P2, T6P3, T6P4, T6P5</p>	Ensure that gender considerations are address in the process of reviewing energy and technology policies.
<p>Direct linkage T5P1, T5P4, T5P8, T5P9, T5P8, T5P9</p> <p>Indirect linkage T4P1, T4P5</p> <p>T6P1, T6P2, T6P3, T6P4, T6P5</p>	Develop gender responsive programs to reduce GHG emission at household (HH) while ensuring women's access to energy and power technologies.
<p>Direct linkage T5P1, T5P4, T5P6, T5P7, T5P8, T5P9, T5P10</p> <p>Indirect linkage T4P1, T4P2, T4P3, T4P4, T4P5, T4P6. T4P7</p> <p>T6P1, T6P2, T6P3, T6P4, T6P5, T6P6</p>	Improve women's knowledge on climate change mitigation issues.
<p>Direct linkage T5P6</p> <p>Indirect linkage T4P1, T4P5, T4P6</p> <p>T6P1, T6P2, T6P3, T6P4, T6P5, T6P6</p>	Develop women's entrepreneurship related to waste management.
<p>Direct linkage T5P6, T5P7</p> <p>Indirect linkage T4P1, T4P5</p> <p>T6P1, T6P2, T6P3, T6P4, T6P5</p>	Increase women's participation in solid waste and drainage management.
<p>Direct linkage T5P7</p> <p>Indirect linkage T4P1, T4P2, T4P3, T4P4, T4P5, T4P6, T4P7</p> <p>T6P1, T6P2, T6P3, T6P4, T6P5</p>	Mainstream gender considerations in coastal and social forestry programs or initiatives.



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Section C

Annex

ANNEX I

**UNFCCC GENDER REFERENCES FOR CANCUN (2010), DURBAN (2011), DOHA
(2012)¹⁷⁸.**

**Women and Gender Language in the Cancun Agreements
Outcome of the work of the Ad Hoc Working Group on long-term Cooperative Action under the
Convention
Decision 1/CP.16¹⁷⁹**

The following is a compilation¹⁸⁰ of gender equality texts retained in the Decisions adopted by the 16th Conference of Parties:

Preamble

Noting resolution 10/4 of the United Nations Human Rights Council on human rights and climate change, which recognizes that the adverse effects of climate change have a range of direct and indirect implications for the effective enjoyment of human rights and that the effects of climate change will be felt most acutely by those segments of the population that are already vulnerable owing to geography, **gender**, age, indigenous or minority status and disability;

I. A shared vision for long-term cooperative action

7. *Recognizes* the need to engage a broad range of stakeholders at global, regional, national and local levels, be they government, including subnational and local government, private business or civil society, including the youth and persons with disability, and that **gender equality** and the **effective participation of women** and indigenous peoples are important for effective action on all aspects of climate change;

II. Enhanced action on Adaptation

12. *Affirms* that enhanced action on adaptation should be undertaken in accordance with the Convention; follow a country-driven, **gender-sensitive**, participatory and fully transparent approach, taking into consideration vulnerable groups, communities and ecosystems, and should be based on and guided by the best available science, and as appropriate, traditional and indigenous knowledge, with a view to integrating adaptation into relevant social, economic and environmental policies and actions, where appropriate;

III. Enhanced action on Mitigation C. Policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries

72. *Also requests* developing country Parties, when developing and implementing their national strategies or action plans, to address, inter alia, drivers of deforestation and forest degradation, land tenure issues, forest governance issues, **gender considerations** and the safeguards identified in paragraph 2 of appendix I to this decision, ensuring the full and effective participation of relevant stakeholders, inter alia, indigenous peoples and local communities;

178 Summary provided by Women Environment and Development Organization (WEDO) on behalf of GGCA.

179 March 15, 2011; FCCC/CP/2010/7/Add.1

180 Compilation of direct quotes from text, courtesy of WEDO on behalf of the GGCA; bold and highlighting of text by WEDO. For more information, please contact Sandra@wedo.org or Rachel@wedo.org.

III. Enhanced action on Mitigation E. Economic and social consequences of response measures

Affirming that responses to climate change should be coordinated with social and economic development in an integrated manner, with a view to avoiding adverse impacts on the latter, taking fully into account the legitimate priority needs of developing country Parties for the achievement of sustained economic growth and the eradication of poverty, and the **consequences for vulnerable groups, in particular women** and children,

IV. Finance, technology and capacity-building C. Capacity-building

130. *Decides* that capacity-building support to developing country Parties should be enhanced with a view to strengthening endogenous capacities at the subnational, national or regional levels, as appropriate, **taking into account gender aspects**, to contribute to the achievement of the full, effective and sustained implementation of the Convention, by, inter alia:

Annex IV. Composition and mandate of the Technology Executive Committee

3. Parties are encouraged to nominate senior experts to the Technology Executive Committee, with a view to achieving, within the membership, an appropriate balance of technical, legal, policy, social development and financial expertise relevant to the development and transfer of technology for adaptation and mitigation, taking into account the **need to achieve gender balance in accordance with decision 36/CP.7**.

**Women and Gender References from part two of the addendum to the
Report of the Conference of the Parties on its sixteenth session, held in Cancun from
29 November to 10 December 2010:
Action taken by the Conference of the Parties at its sixteenth session¹⁸¹**

Decision 6/CP.16

Extension of the mandate of the Least Developed Countries Expert Group

2. *Also decides* that the Least Developed Countries Expert Group should be mandated to provide technical guidance and advice on:

(c) Strengthening **gender-related considerations** and considerations regarding vulnerable communities within least developed country Parties;

Decision 7/CP.16

Progress in, and ways to enhance, the implementation of the amended New Delhi work programme on Article 6 of the Convention

2. *Invites* Parties, with a view to enhancing the implementation of the amended New Delhi work programme:

(c) To enhance efforts to elaborate national strategies and action plans on Article 6 of the Convention, including climate change communication strategies, taking into account, inter alia, the **gender perspective**;

(e) To foster the **participation of women**, youth, indigenous peoples, civil society groups and relevant stakeholders in decision-making on climate change at the national level and their attendance at intergovernmental meetings, including sessions of the Conference of the Parties, the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol and the subsidiary bodies;

181 FCCC/CP/2010/7/Add.2

Nairobi work programme on impacts, vulnerability and adaptation to climate change
Conclusions of 33rd Session of the Subsidiary Body for Scientific and Technological Advice in
Cancun, Mexico from 30 November to 4 December 2010¹⁸²

7. The SBSTA noted that additional effort is needed to assist all Parties, in particular developing countries, including the LDCs and SIDS, to improve their understanding and assessment of impacts, vulnerability and adaptation and make informed decisions on the implementation of practical adaptation actions and measures, and to assist Parties to **enhance the capacity of relevant decision makers and stakeholders, at different levels, including representatives of women**, local communities and indigenous peoples, to better utilize the information and tools provided by the Nairobi work programme.

Gender Equality Language in Durban Outcomes¹⁸³
Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action
Decision 2/CP.17

The following is a compilation¹⁸⁴ of gender equality texts retained in the advance version of the Durban Outcome:

II. Enhanced action on mitigation

F. Economic and social consequences of response measures

90. *Urges* Parties to give full consideration to the positive and negative impacts of the implementation of response measures to mitigate climate change on society and on all vulnerable groups, in particular **women** and children

III. Enhanced action on adaptation

103. *Encourages* Parties to nominate experts to the Adaptation Committee with a diversity of experience and knowledge relevant to adaptation to climate change, while also taking into account the need to achieve **gender balance** in accordance with decision 36/CP.7;

VI. Capacity-building

Further reaffirming the importance of taking into account **gender aspects** and acknowledging the role and needs of youth and persons with disabilities in capacity- building activities,

Annex VI

Composition and working modalities of the Standing Committee

2. The Standing Committee shall be composed of members nominated by Parties for approval by the Conference of the Parties, who shall have the necessary experience and skills, notably in the areas of climate change, development and finance, taking into account the need to achieve **gender balance** in accordance with decision 36/CP.7.

182 http://unfccc.int/files/adaptation/application/pdf/sbsta33_draft-conclusions.pdf

183 Durban Agreements, from 17th Conference of Parties of the United Nations Framework Convention on Climate Change (UNFCCC COP17)

184 Compilation of direct quotes from text, courtesy of WEDO on behalf of GGCA; bold and highlighting of text by WEDO. For more information, please contact rachel@wedo.org.

Annex VII

Terms of reference of the Climate Technology Centre and Network

1. The mission of the Climate Technology Centre and Network is to stimulate technology cooperation and to enhance the development and transfer of technologies [...], to facilitate the preparation and implementation of technology projects and strategies taking into account **gender considerations** to support action on mitigation and adaptation and enhance low emissions and climate-resilient development.

Annex VIII

Criteria to be used to evaluate and select the host of the Climate Technology Center and Network and information required to be included in the proposals

4. The prospective host's existing governance and management structures will be scored based on the following sub criteria, which are of equal importance:

(c) Effectiveness of the current management structure of the host organization to ensure **gender sensitivity**, transparency, responsiveness, flexibility, financial management, auditing and reporting functions, and the ability to provide high-quality administrative, infrastructural and logistic arrangements, and accessibility to developing country Parties including least developing countries;

Gender Equality Language in Durban Outcomes

Launching the Green Climate Fund Decision 3/CP.17

I. Objectives and guiding principles

3. [...] The Fund will strive to maximize the impact of its funding for adaptation and mitigation, and seek a balance between the two, while promoting environmental, social, economic and development co-benefits and taking a **gender-sensitive** approach.

II. Governance and Institutional Arrangements

C. Rules of procedure of the Board

2. Selection of Board members

11. The members of the Board and their alternates will be selected by their respective constituency or regional group within a constituency. Members of the Board will have the necessary experience and skills, notably in the areas of climate change and development finance, with due consideration given to **gender balance**.

E. Secretariat

1. Establishment of the secretariat

21. The secretariat will be staffed with professional staff with relevant experience. The staff selection will be managed by the Executive Director and will be open, transparent and based on merit, taking into account geographical and **gender balance**.

V. Operational modalities

31. The Fund will provide simplified and improved access to funding, including direct access, basing its activities on a country-driven approach and will encourage the involvement of relevant stakeholders, including vulnerable groups and addressing **gender aspects**.

XIII. Stakeholder input and participation

71. The Board will develop mechanisms to promote the input and participation of stakeholders, including private-sector actors, civil society organizations, vulnerable groups, **women** and indigenous peoples, in the design, development and implementation of the strategies and activities to be financed by the Fund.

Gender Equality Language in Durban Outcomes National adaptation plans Decision 5/CP.17

A. Framing national adaptation plans

3. *Further agrees* that enhanced action on adaptation should be undertaken in accordance with the Convention, should follow a country-driven, **gender-sensitive**, participatory and fully transparent approach, taking into consideration vulnerable groups, communities and ecosystems, and should be based on and guided by the best available science and, as appropriate, traditional and indigenous knowledge, and by **gender-sensitive approaches**, with a view to integrating adaptation into relevant social, economic and environmental policies and actions, where appropriate;

Annex

Draft initial guidelines for the formulation of national adaptation plans by least developed country Parties

B. Elements of national plans

2. Preparatory elements

3. In developing NAPs, consideration would be given to identifying specific needs, options and priorities on a country-driven basis, utilizing the services of national and, where appropriate, regional institutions, and to the effective and continued promotion of participatory and **gender-sensitive approaches** coordinated with sustainable development objectives, policies, plans and programmes. Activities may include:

Gender Equality Language in Durban Outcomes Nairobi work programme on impacts, vulnerability and adaptation to climate change Decision 6/CP.17

4. *Also requests* the secretariat to organize, in collaboration with Nairobi work programme partner organizations and other relevant organizations, the following workshops, informed by the information contained in annex I to the report of the Subsidiary Body for Scientific and Technological Advice on its thirty-fourth session¹ and subsequent views of Parties, and to include indigenous and traditional knowledge and practices for adaptation and **gender-sensitive tools and approaches** as cross-cutting issues:

Gender Equality Language in Durban Outcomes

Guidance on systems for providing information on how safeguards are addressed and respected and modalities related to forest reference emission levels and forest reference levels as referred in decision 1/CP.16 Decision 12/CP.17

Guidance on systems for providing information on how safeguards are addressed and respected

2. Agrees that systems for providing information on how the safeguards referred to in appendix I to decision 1/CP.16 are addressed and respected should, taking into account national circumstances and respective capabilities, and recognizing national sovereignty and legislation, and relevant international obligations and agreements, and respecting **gender considerations**:

Gender Equality Language in Durban Outcomes

Capacity-building under the Convention Decision 13/CP.17

Reaffirming the importance of taking into account **gender aspects** and acknowledging the role and needs of youth and persons with disabilities in capacity- building activities,

Gender Equality Language in Durban Outcomes

Capacity-building under the Kyoto Protocol Decision -/CMP.7

Reaffirming the importance of taking into account **gender aspects** and acknowledging the role and needs of youth and persons with disabilities in capacity- building activities,

Gender Equality Language in Doha Outcomes

National adaptation plans Decision 12/CP.18

Underlining that the national adaptation plan process should build on and complement existing adaptation planning, should not be prescriptive and should facilitate country-driven, **gender-sensitive**, participatory action, taking into consideration vulnerable groups, communities and ecosystems,

Gender Equality Language in Doha Outcomes¹⁸⁵

Approaches to address loss and damage associated with climate change impacts in developing countries that are particularly vulnerable to the adverse effects of climate change to enhance adaptive capacity Decision 3/CP.18

The following is a compilation¹⁸⁶ of gender equality texts retained in the advance version of the Doha Outcome

7. Acknowledges the further work to advance the understanding of and expertise on loss and damage, which includes, inter alia, the following:

(a) Enhancing the understanding of:

(iii) How loss and damage associated with the adverse effects of climate change affects those segments of the population that are already vulnerable owing to geography, **gender**, age, indigenous or minority status, or disability, and how the implementation of approaches to address loss and damage can benefit those segments of the population;

(b) Strengthening and supporting the collection and management of relevant data, including **gender-disaggregated data**, for assessing the risk of loss and damage associated with the adverse effects of climate change;

Gender Equality Language in Doha Outcomes

Arrangements to make the Climate Technology Centre and Network fully operational Decision 14/CP.18

3. *Adopts* the memorandum of understanding between the Conference of the Parties and United Nations Environment Programme regarding the hosting of the Climate Technology Centre, as contained in annex I to this decision;

5. *Decides* that the Advisory Board of the Climate Technology Centre and Network is hereby established, with the constitution contained in annex II to this decision and with the functions contained in decision 2/CP.17, annex VII, paragraphs 8 and 9;

Annex I

Memorandum of Understanding between the Conference of Parties to the United Nations Framework Convention on Climate Change and the United Nations Environment Programme regarding the hosting of the Climate Technology Center

Whereas the mission of the CTCN is to stimulate technology cooperation and to enhance the development and transfer of technologies and to assist developing country Parties at their request, consistent with their respective capabilities and national circumstances and priorities, in order to build or strengthen their capacity to identify technology needs, to facilitate the preparation and implementation of technology projects and strategies, **taking**

185 Doha Outcomes from the 18th Conference of Parties of the United Nations Framework Convention on Climate Change (UNFCCC COP18)

186 Compilation of direct quotes from text, courtesy of WEDO on behalf of GGCA; bold and highlighting of women and gender texts by WEDO. For more information, please contact rachel@wedo.org.

into account gender considerations to support action on mitigation and adaptation and enhance low-emission and climate-resilient development,

Annex II

Constitution of the Advisory Board of the Climate Technology Centre and Network

4. Government representatives shall be nominated by their respective groups or constituencies and elected by the Conference of the Parties (COP). Groups or constituencies are encouraged to nominate the government representatives to the Advisory Board, with a view to achieving appropriate balance of expertise relevant to the development and transfer of technologies for adaptation and mitigation, **taking into account the need to achieve gender balance in accordance with decisions 36/CP.7 and X/CP.18.**

Gender Equality Language in Doha Outcomes Doha work programme on Article 6 of the Convention Decision 15/CP.18

Also recognizing that a goal of education is to promote changes in lifestyles, attitudes and behavior needed to foster sustainable development and to prepare children, youth, **women**, persons with disabilities and grass-root communities to adapt to the impacts of climate change,

Also reaffirming the importance of **taking into account gender aspects** and the need to promote the effective engagement of children, youth, the elderly, **women**, persons with disabilities, indigenous peoples, local communities and non-governmental organizations in activities related to Article 6 of the Convention,

A. Observations

8. **Gender** is a cross-cutting issue in all six elements of Article 6 of the Convention

9. Implementation of Article 6 of the Convention has a broad range of stakeholders, including, governments, the private sector, IGOs, NGOs and other international organizations, decision makers, scientists, the media, teachers, the general public, youth, **women**, people with disabilities and indigenous peoples among others.

B. Purposes and guiding principles

14. The Doha work programme shall be guided by:

- (d) **Gender** and an intergenerational approach;

C. Scope of the Doha work programme

Education

16. Cooperate in, promote, facilitate, develop and implement formal and non-formal education and training programmes focused on climate change at all levels, targeting **women** and youth in particular, and including the exchange or secondment of personnel to train experts.

D. Implementation

Parties

22. As part of their national programmes and activities in implementing the Convention, and within the scope of the Doha work programme, Parties could, inter alia:

Tools and activities

(i) Seek input and public participation, including participation by youth, **women**, civil society organizations and other groups in the formulation and implementation of efforts to address climate change, and also in relation to the preparation of national communications, and encourage the involvement of all stakeholders and major groups in the climate change negotiation process;

(k) Foster the participation of all stakeholders in the implementation of Article 6 of the Convention and invite them to report on the implementation of activities. In particular, enhance the active participation of youth, **women**, civil society organizations and the media;

Non-governmental organizations

26. NGOs are invited to foster the participation of all stakeholders in the implementation of Article 6 of the Convention and to encourage them to report on the implementation of their activities. In particular, NGOs are invited to enhance the participation of youth, **women**, civil society organizations and the media in climate change activities.

Gender Equality Language in Doha Outcomes

**Promoting gender balance and improving the participation of women in UNFCCC negotiations and in the representation of Parties in bodies established pursuant to the Convention or the Kyoto Protocol
Decision 23/CP.18**

The Conference of the Parties,

Recalling decision 36/CP.7 on improving the participation of women in the representation of Parties in bodies established under the Convention or the Kyoto Protocol,

Acknowledging the recent progress made under the Convention and the Kyoto Protocol in advancing gender balance and women's empowerment in international climate change policy under the guidance of decision 1/CP.13 (Bali Action Plan) and decisions taken at its sixteenth and seventeenth sessions,¹ as well as in various bodies and programmes under the Convention,

Noting that notwithstanding the efforts made by Parties to implement decision 36/CP.7, women continue to be underrepresented in bodies established under the Convention and the Kyoto Protocol,

Recognizing the need for women to be represented in all aspects of the UNFCCC process, including through membership of their national delegations and the chairing and facilitation of formal and informal negotiating groups, in order to inform gender-responsive climate policy,

Also recognizing the importance of a balanced representation of women from developing and developed country Parties in the UNFCCC process so that gender-responsive climate policy responds to the differing needs of men and women in national and local contexts,

Considering the importance of ensuring coherence between the participation of women in the UNFCCC process and the principles and objectives of international instruments and relevant multilateral processes, such as the Convention on the Elimination of All Forms of Discrimination against Women and the Beijing Declaration and Platform for Action, which recognize the importance of women's empowerment and their full participation on equal terms with men in all spheres of society, including participation in decision-making processes and access to power,

Acknowledging the outcome of the United Nations Conference on Sustainable Development, in particular the recognition of women's leadership and their vital role in achieving sustainable development and the emphasis on the impact of setting specific targets and implementing temporary measures, as appropriate, for substantially increasing the number of women in leadership positions, with the aim of achieving gender parity,

Recognizing the advances made by Parties in the promotion of gender balance and the empowerment of women,

1. *Agrees* that additional efforts need to be made by all Parties to improve the participation of women in bodies established pursuant to the Convention and the Kyoto Protocol as envisaged in decision 36/CP.7;

2. *Decides* to enhance decision 36/CP.7 by adopting a goal of gender balance in bodies established pursuant to the Convention and the Kyoto Protocol, in order to improve women's participation and inform more effective climate change policy that addresses the needs of women and men equally;

3. *Invites* current and future chairs of such bodies to be guided by the goal of gender balance when setting up informal negotiating groups and consultation mechanisms, such as contact groups, spin-off groups and panels, and nominating their facilitators and chairs;

4. *Also invites* other institutions established pursuant to the Convention and the Kyoto Protocol to be guided by the goal of gender balance, with the aim of a gradual but significant increase in the participation of women towards achieving this goal and review

progress made at the twenty-second session of the Conference of the Parties;

5. *Further invites* Parties to commit to meeting the goal of gender balance by, inter alia, nominating women to bodies established under the Convention and the Kyoto Protocol with the aim of a gradual but significant increase in the participation of women towards achieving this goal, and review progress made at the twenty-second session of the Conference of the Parties;

6. *Invites* Parties to encourage more women to be candidates for positions within bodies established pursuant to the Convention and the Kyoto Protocol and to give due consideration to nominating female representatives to these bodies;

7. *Also invites* Parties to strive for gender balance in their delegations to sessions under the Convention and the Kyoto Protocol;

8. *Requests* the secretariat to maintain information on the gender composition of constituted bodies established under the Convention and the Kyoto Protocol, including information on the representation of women from regional groups, to gather information on the gender composition of delegations to sessions under the Convention and the Kyoto Protocol and to report this information to the Conference of the Parties for its consideration on an annual basis, in order to enable the tracking of progress made towards the goal of gender balance in advancing gender-sensitive climate policy;

9. *Decides* to add the issue of gender and climate change as a standing item on the agenda of sessions of the Conference of the Parties to allow the Conference of the Parties to consider the information referred to in paragraph 8 above;

10. *Requests* the secretariat to organize, in conjunction with the nineteenth session of the Conference of the Parties, an in-session workshop on gender balance in the UNFCCC process, gender-sensitive climate policy and capacity-building activities to promote the greater participation of women in the UNFCCC process;
11. *Also requests* Parties and observer organizations to submit to the secretariat, by 2 September 2013, their views on options and ways to advance the goal referred to in paragraph 2 above;
12. *Further requests* the secretariat to compile those submissions into a miscellaneous document for consideration by the Conference of the Parties at its nineteenth session;
13. *Takes note* of the estimated budgetary implications of the activities to be undertaken by the secretariat pursuant to the provisions contained in paragraphs 8, 10 and 12 above;
14. *Requests* that the actions of the secretariat called for in this decision be undertaken subject to the availability of financial resources;
15. *Invites* the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol to endorse this decision.

ANNEX II

PARTICIPANT'S LIST IN THE WORKSHOP FOR WOMEN ORGANISATIONS TITLED "LINKING GENDER AND CLIMATE CHANGE" (13 – 14 FEBRUARY 2013)

SL No	Name	Organization
	Ms. Khadija khondker	UN Women
	Ms. Haoa Begum	ActionAid Bangladesh
	Mr. A. M. Nasir Uddin	ActionAid Bangladesh
	Mr. Dibakor Mondol	Development of Biotechnology and Environmental Conservation Centre (DEBTEC)
	Md. Shahidul Islam	DEBTEC
	Ms. Marjina	Action Aid Bangladesh
	Ms. Dilara zahid	Institute of Disaster Management and Vulnerability Studies, University of Dhaka
	Mr. Benozir Ahmed	NGO Forum for Public Health, Dhaka
	Dr. Mahbuba Nasreen	Institute of Disaster Management and Vulnerability Studies, University of Dhaka
	Dr. Pronob Kumar Mozumder	Nature Conservation Management (NACOM), Dhaka
	Mr.Md. Saidur Rahman	Ministry of Health and Family Welfare
	Ms. B.N. Naher	FAO
	Ms. Mim Tabassum	NGO Forum for Public Health, Dhaka
	Ms. Nigar Sultana	Skills Development Project, Education Department, Dhaka
	Ms. Nayela Akter	HELVETAS Swiss Intercooperation, Bangladesh
	Mr.Md. Rezaul Kader	BRAC
	Ms. Farzana Aktar	Environment and Social Development Organization (ESDO), Dhaka
	Mr. Nur Newaz Khan	ICDDRDB Dhaka
	Mr. Mahmud Hasan Tuhin	Bangladesh Centre of Advanced Studies (BCAS)
	Ms. Lutfunnessa Hira	Shushilan
	Ms. Nadia jabin Malik	WaterAid
	Mr. Sadhona Mahal	ADB, Dhaka
	Mr. Md. Shamsuddoha	CPRD

Mr. M. Jakir Hossain Khan	Transparency International Bangladesh (TIB), Dhaka
Ms. Rafayet Ara	Democracy watch
Ms. Jesmun Nahar	Planning Division, Dhaka
Ms. Fahmida Islam	GIZ
Ms. Nafisa Sher	Khan Foundation
Dr. M. Najmul Islam	BCAS
Ms. Ruchira Tabassum Naved	ICDDRDB
Ms. Selina Perveen	CEGIS
Dr. Ferdousi Begum	DEBTEC
Ms. Amena Akter	DEBTEC
Ms. Hosne Ara Begum	DEBTEC
Ms. Susmita Paik	National Human Rights Commission (NHRC)
Ms. Rehmuna Nurain	Bangladesh Environmental Lawyers Association
Ms. Sharmind Neelormi	Jahangirnagar University
Mr. Shoeb Chowdhuri	Centre for Global Change
Ms. Nasrin Mukti	Ministry of Environment and Forest
Ms. Rafiq Sultana	IUCN Bangladesh
Mr. Md. Touhiduzzaman	IUCN Bangladesh
Mr. Md. Kamruzzaman	IUCN Bangladesh
Mr. Muzammel Haque	IUCN Bangladesh
Mr. Ishtiaq Uddin Ahmed	IUCN Bangladesh
Ms. Shamimara Begum	IUCN Bangladesh
Ms. Marufa Sultana	IUCN Bangladesh

ANNEX III

PARTICIPANT'S LIST IN THE NATIONAL STAKEHOLDER WORKSHOP TITLED "DEVELOPING A GENDER SENSITIVE STRATEGY FOR CLIMATE CHANGE EFFORTS IN BANGLADESH" (17 – 19 FEBRUARY 2013)

SL No	Name	Organization
	Mr. Ashutosh Mazumder	Practical Action, Bangladesh
	Ms. Syeeda Farhana	International Federation of Red Cross and Red Crescent Societies (IFRC), BD Delegation, Dhaka
	Ms. Umme Salma	General Economist Division, Planning Commission
	Ms. Nishat Fahmi Hasan	ActionAid Bangladesh
	Mr. Md. Kamruzzaman	IUCN Bangladesh
	Mr. Md. Shahidul Islam	DEBTEC
	Ms. Dilara Zahid	Institute of Disaster Management and Vulnerability Studies, University of Dhaka
	Mr. Istiak Sobhan	IUCN Bangladesh
	Ms. Umme Habiba	HELVETAS Swiss Inter cooperation
	Ms. Sharmin Akter	IUCN Bangladesh
	Mr. Md. Touhiduzzaman	IUCN Bangladesh
	Mr. Abu Masud Sayeed	IUCN Bangladesh
	Ms. Nur Newaz Khan	ICCDDB
	Ms. Nadia Jabin Malik	Water Aid, Dhaka
	Mr. M.Mujibur Rahman	Shushilan
	Mr. Mahmud Hasan Tuhin	Bangladesh Center for Advance Studies
	Mr. Panchanon Dhali	GIZ
	Dr. Zakir Hossain	IUCN
	Mr. Pulakesh Mondal	Ministry of Fisheries and Livestock
	Dr. Ferdousi Begum	DEBTEC
	Ms. Amena Akter	DEBTEC
	Md. Abdul Mannan	NACOM
	Dr. Md. Atiqur Rahman	Ministry of Disaster Management and Relief

Mr. Syed Abdul Momin	Ministry of Water Resources
Mr. Aparup Chowdhuri	MoEF
Ms. Shakila Yasmin	Climate Change Trust, MoEF
Ms. Rafiq Sultana	IUCN Bangladesh
Md. Shajedul Qayyum Dulal	Ministry of Land
Ms. Khadija Khondker	UN Women, Dhaka
Md. Alamgir Hossain	Ministry of Women and Children Affairs
Md. Saifur Rahman	Ministry of Food
Md. Ejaj Ahmed Jaber	Ministry of Health and Family Welfare
Ms. Suraiya Nasrin	CEGIS
Mr. Kazi Md. Fazlul Haq	Department of Geography and Environment, University of Dhaka
Ms. Asma Huque	Energia
Ms. Lubna Seal	Bangladesh Centre for Advanced Studies
Mr. Mohammad Roqibul Islam	GIZ
Md. Masudur Rahman Biswas	Rural Development and Co-operative Division, Ministry of Local Government and Rural Development (LGRD) and Co-operative
Md. Shamsuddoha	CPRD
Ms. Dominica Rozario	IUCN Bangladesh
Mr. Ishtiaq Uddin Ahmad	IUCN Bangladesh
Ms. Shamim Ara Begum	IUCN Bangladesh
Md. Lokman Hossain	ESDO
Ms. Ferdousi Sultana	ADB
Ms. Ria Sen Gupta	ADB
Dr. Mahbuba Nasreen	Institute of Disaster Management and Vulnerability Studies, University of Dhaka
Ms. Meher Noshirwani	Trust for Conservation of Coastal Resources, Karachi, Pakistan
Dr. Md. Humayun Kabir	Department of Geography, University of Dhaka.
Ms. Mariam Jamila	IUCN Bangladesh
Ms. Nayela Akter	Helvetas Swiss Intercooperation, Bangladesh
Mr. Shadhona Mahal	ADB

Mr. Quamrul Islam Chowdhuri	Forum of Environmental Journalist of Bangladesh (FEJB)
Mr. Nasim Aziz	IUCN Bangladesh
Ms. Afroza Begum	Forest Department, Bangladesh
Ms. Hasna Moudud	Coastal Area Resource Development and Management Association
Ms. Nasrin Mukti	MoEF
Mr. Naved Ahmed	DFID
Ms. Hosne Ara	DEBTEC
Ms. Ruchira Tabassum Naved	Icddrb
Ms. Marufa Sultana	IUCN Bangladesh
Dilruba Ahmed, PhD	CEGIS

ANNEX IV

REQUEST LETTER FROM MINISTRY OF ENVIRONMENT AND FOREST FOR DEVELOPMENT OF NATIONAL CLIMATE CHANGE AND GENDER ACTION PLAN IN BANGLADESH

Government of the People's Republic of Bangladesh
 Ministry of Environment and Forests
 Environment Section-1
 web site: www.moef.gov.bd

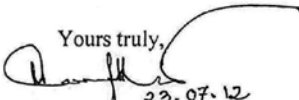
No. MoEF/Env.-1/10/Misc-7/2008/457

Date: 23/07/2012

Sub : Supporting the Mainstreaming of Gender in Climate Change Efforts in Bangladesh.

Greetings from the Ministry of Environment and Forests, Government of Bangladesh. We have been informed that IUCN is engaging itself to prepare National Strategy/Action Plan on Gender and Climate Change for developing countries. Back in 2009, Ministry of Environment & Forests, Bangladesh updated has formulated Climate Change Strategy and Action Plan 2009 (BCCSAP) in which Gender and Climate Change issues have been given substantial importance. The idea of protecting women and children has been highlighted in the thematic area of Food security, social protection and health of the BCCSAP. Therefore, Ministry of Environment and Forests would like to prepare National Strategy/Action Plan on Gender and Climate Change under the BCCSAP.

It will be highly appreciated if you please extend your support for preparing the National Gender-responsive Climate Change Strategy/Action Plan and let us know the next steps to be taken from our end.

Yours truly,

 23.07.12
 (Abu Nayeem Md. Maruf Khan)
 Senior Assistant Secretary
 Phone # 88-02-7160551
 E-mail: admin4@moef.gov.bd

Country Representative
 The IUCN Country Office
 House # 11, Road # 138,
 Dhaka, Bangladesh.

C.C:

1. Ms. M. Sc Lorena Aguilar, IUCN Senior Global Gender Advisor, Office of the OSGA.
2. Dr. Arzu Rana Deuba, IUCN Councilor (South and East Asia), Chair, IUCN Council Task Force On Gender and Biodiversity.

ANNEX V

OFFICE ORDER: DECLARATION OF MINISTRY OF ENVIRONMENT AND FOREST FOR FORMATION OF A STEERING COMMITTEE

Ministry of Environment and Forests
Environment Section-1
[web site: www.moef.gov.bd](http://www.moef.gov.bd)

No. MoEF/Env.-1/IUCN/MoU/64/2009/19

Date: 15/01/2013

Office Order

Formation of Steering Committee for the Project Titled: "National Climate Change and Gender Action Plan in Bangladesh", supported by IUCN Bangladesh

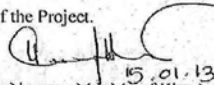
Ministry of Environment and Forests has hereby declared the formation of Steering Committee comprising following officials for the Project Titled: "National Climate Change and Gender Action Plan in Bangladesh", supported by IUCN Bangladesh :

Structure of the Committee :

Sl. No.	Designation		Position
1.	Secretary, Ministry of Environment and Forests	-	Convener
2.	Additional Secretary (Environment), Ministry of Environment and Forests	-	Member
3.	Deputy Secretary (Environment-1), Ministry of Environment and Forests	-	Member
4.	Deputy Secretary, Ministry of Woman and Children Affairs	-	Member
5.	Deputy Secretary, Ministry of Disaster Management and Relief	-	Member
6.	Deputy Secretary, Ministry of Social Welfare	-	Member
7.	Ms. Iliya Sumana, Senior Assistant Secretary, Ministry of Environment and Forests.	-	Member
8.	Senior Assistant Secretary (Env.-1), Ministry of Environment and Forests	-	Member
9.	Ms. Farah Kabir, Country Director, Action Aid	-	Member
10.	Dr. Nilufar Banu, Executive Director, Bangladesh Unnayan Parishad (BUP)	-	Member
11.	Mr. Md. Sanowar Hossain Sarker, Chair of National Committee of IUCN Members in Bangladesh	-	Member
12.	Ms. Ferdousi Begum PhD, Executive Director, DEBTEC, Dhaka.	-	Member
13.	Mr. Ishtiaq Uddin Ahmad, Country Representative, IUCN Bangladesh	-	Member Secretary

Terms of Reference :

- (a) The Committee will supervise the overall activities of the Project.
- (b) The Committee will co-opt new member if required.


15.01.13
(Abu Nayeem Md. Maruf Khan)
Senior Assistant Secretary
Phone: +88-02-9570017
E-mail: admin4@moef.gov.bd

Distribution (Not in the seniority basis) :

1. Secretary, Ministry of Environment and Forests, Bangladesh Secretariat, Dhaka
2. Secretary, Ministry of Woman and Children Affairs, Bangladesh Secretariat, Dhaka (Requested to nominate a representative).
3. Secretary, Ministry of Disaster Management and Relief, Bangladesh Secretariat, Dhaka (Requested to nominate a representative).
4. Secretary, Ministry of Social Welfare, Bangladesh Secretariat, Dhaka (Requested to nominate a representative).
5. Additional Secretary (Environment), Ministry of Environment and Forests and PD, CASE Project, Bangladesh Secretariat, Dhaka.
6. Deputy Secretary (Environment-1), Ministry of Environment and Forests.
7. Ms. Iliya Sumana, Senior Assistant Secretary, Ministry of Environment and Forests.
8. Senior Assistant Secretary (Env.-1), Ministry of Environment and Forests.
9. Mr. Md. Sanowar Hossain Sarker, Chair of National Committee of IUCN Members in Bangladesh
10. Mr. Ishtiaq Uddin Ahmad, Country Representative, IUCN Bangladesh, House-16, Road-2/3, Banani, Dhaka-1213.
11. Ms. Farah Kabir, Country Director, Action Aid
12. Ms. Ferdousi Begum PhD, Executive Director, DEBTEC, Dhaka.
13. Dr. Nilufar Banu, Executive Director, Bangladesh Unnayan Parishad (BUP).

ANNEX VI

MEETING NOTICE: STEERING COMMITTEE MEETING

Government of the People's Republic of Bangladesh
 Ministry of Environment and Forests
 Environment Section-I
 web site: www.moef.gov.bd

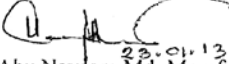
No. MoEF/Env.-I/IUCN/MoU/64/2009/46

Date: 23/01/2013

Meeting Notice

A *meeting* of the Steering Committee for "National Climate Change and Gender Action Plan in Bangladesh", supported by IUCN Bangladesh will be held on 24 January, 2013, Thursday at 4:00 p.m in the conference room (Building No-6, Level-13, Room No.1317-1319, Bangladesh Secretariat) of the Ministry of Environment and Forests. Mr. Md. Shafiqur Rahman Patwari, Secretary, Ministry of Environment and Forests is pleased to preside over the meeting.

You are, therefore, requested to kindly attend the meeting with necessary staff.


 (Abu Nayem Md. Maruf Khan)
 Senior Assistant Secretary
 Phone # 88-02-9570017
 E-mail: admin4@moef.gov.bd

Distribution (This List is not prepared in accordance with the seniority) :

1. Dr. Mahbooba Nasrin, Director, Disaster Management and Valnerability Studies, University of Dhaka.
2. Mr. Shamsuddoha, Executive Director, PRDI, House No-13/1, Flat G-A, Road No-2, Shaymoli, Dhaka. Fax: 9124395
3. Ms. Marufa Sultana, Project Assistant, IUCN, Dhaka.

C.C:

1. Private Secretary to Secretary, Ministry of Environment and Forests.
2. Deputy Secretary, Security-2, Ministry of Home Affairs. Dhaka.
3. Officer in Charge, Gate No-2, Bangladesh Secretariate, Dhaka (Please ensure the **Gate Pass** in favour of the **aforsaid invitees along with their car** to attend the meeting).

ANNEX VII

MAPPING OF KEY STAKEHOLDERS INVOLVED IN CDM IN BANGLADESH

The following Matrix is a result of a study on ‘Mapping Gender and Disaster Risk Reduction Interventions in Bangladesh’ conducted by Prof. Mahbuba Nasreen PhD in 2011 through review of existing literature and two consultation workshops with Government, Development partners, INGOs, NGOs and Academicians held in May, 2011 (organized by the Institute of Disaster Management of Vulnerability Studies, University of Dhaka and supported by Swiss Agency for Development and Cooperation/SDC).

Matrix on Gender and DRR interventions in Bangladesh by organizations

Government Organizations		
Organizations	Activities on Gender and Disaster	Implementing organization (s)
Disaster Management Bureau (DMB), Ministry of Food and Disaster Management (MoFDM)	<p>Established in 1992, Disaster Management Bureau (DMB) is a dynamic professional unit at national level to perform specialist support functions working in close collaboration with District and Upazila-level authorities and the concerned line ministries under the overall authority of high-level (IMDMCC) of MoFDM. Activities of DMB started with a project called ‘Support to Comprehensive Disaster Management’.</p> <p>DMB is a technical arm to the Disaster Management and Relief Division (DMRD) to overview and co-ordinate all activities related to disaster management from national to the grass-root level.</p> <p>Gender issues have been discussed in DMB since its inception (in 1992) through sharing the field work experiences of a national researcher (the researcher of present study) at a workshop. A project on ‘Rights based Planning and Monitoring: Disaster Preparedness has been completed with the support of UNICEF. Under these project women members of Union Parishad have been provided training on risks, ponse related to disaster. DMB was also involved in implementing tow components of CDMP: the advocacy and training programme for disaster management committees during phase I.</p> <p>DMB has introduced the Standing Orders on Disaster in 1997, which has been revised in 2010. In the SOD a National Platform for Disaster Risk Reduction has been formed in 2009.</p> <p>The National Plan for Disaster Management (2010-2015) published by DMB presented disaster management model to guide disaster risk and emergency response management efforts in Bangladesh. The plan has a focus reducing risks of vulnerable communities including women.</p>	DMB

<p>Department of Women Affairs, MoWCA</p>	<p>1. The NPWA, MoWCA, 2011 has incorporated women in Disaster as a separate theme</p> <p>2. With the support of CDMP phase II Department of Women Affairs (DWA), MoWCA very recently launched a program (2010-2012) in 413 <i>upazilas</i>, involving 1500 organizations.</p> <p>Major objective of the program: -to develop a DRR Action plan and contingency plan for DWA.</p> <p>The activities include: -Capacity building on disaster risk assessment to the district and Upazila level staff. -Development of the departmental risk reduction action plan -Development of the contingency plan of DWA. -Pilot/Implement 2 priority options identified in the risk reduction action plan -Review existing development projects and incorporate DRR issues by Involving DOWA local staff -Capacity development of registered Women Organizations of DWA for disaster preparedness and management at local level. -Produce IEC Materials for Awareness rising on DM. -safety net programs -women empowerment programs -support services to address gender and DRR as a cross cutting issue.</p> <p>Other Initiatives:</p> <p>3. A Project is under implementation to mitigate the impact of climate change in two costal Upazilas- Char Fashion and Borhanuddin by DWA funded by climate change trust fund.</p> <p>4. Implementing a pilot project to supply pure drinking water in two cyclone prone districts of Bangladesh where 1 or 2 sessions for DRR were held in field and in head office</p> <p>5. DM issue has been included in different training programs of DWA.</p>	<p>Department of Women Affairs (DWA) and local organizations</p>
<p>MoEF</p>	<p>MoEF recently published the 'Climate Change Strategy and Action Plan' as a living documents with 6 pillars. The second pillar of the documents has been termed as 'Comprehensive Disaster Management'. Included women issues in the 'Climate Change, Gender and Vulnerable Groups in Bangladesh' (DoE, 2009) in the Climate Change Cell in the Department of Environment (DoE) under the Comprehensive Disaster Management Programme. The fact sheet published by Climate Change Cell of DoE includes 'Climate Change and Women' as a distinct issue. Vulnerable conditions, Risks and Adaptation Strategies of women have been highlighted in the document (CCC and CNRS)</p>	<p>the Department of Environment (DoE)</p>

Development Partners		
<p>CDMP supported by DFID, UNDP, EU, UKaid, Ausaid, Sida, Norwegian Emabassy</p>	<p>The Comprehensive Disaster management Programme (CDMP) of the Government of Bangladesh (GoB) is mainly being implemented by MoFDM. After the completion of Phase I (2005-2009), Phase II of the CDMP designed for another five-year initiative from January, 2010 to December, 2014. The overall aim of CDMP is to contribute to poverty alleviation in Bangladesh through disaster risk reduction. Mainstreaming gender in DRR activities has been introduced in CDMP from phase I. CDMP works with the following specific agenda on Gender and DRR related activities:</p> <ol style="list-style-type: none"> 1. Promoting Gender in National Risk Reduction Policies, institutional structures and planning procedures 2. Promoting gender in Risk Reduction Programmes 3. Promoting Gender in Community Risk Assessments 4. Addressing Gender in Emergency Response 5. Research on gender and disaster specific risks and adaptations, 2009 6. Involve socially disadvantaged and vulnerable groups irrespective of sex, age, occupation, religion and caste from the community in the process of disaster management and to raise coping capacity for minimizing risk of hazards. 7. Published ‘ Gender and Social Inclusion Framework Guidebook’ 8, Promoted gender in Risk Reduction Programmes through mitigation, preparedness and recovery stages 9. Addresses Gender in Emergency Response through: <ul style="list-style-type: none"> - Early Warning (Gender disaggregated information), -Community Alerting, -Search and Rescue(Gender/women representation in rescue team), -Gender and diversity friendly shelters, -Relief Management (Relief packages are demand driven and meet the needs of women, adolescent girls, children, elderly and the disabled), -Loss, Damage & Need Assessment and Information Management (Women representation in assessment teams Collection and compilation of gender disaggregated information) 10. 65% of the total (US\$3.2 million) LDRRF fund is utilized for household level risk reduction interventions benefiting mainly women and PWD 	<p>Ministry of Food and Disaster Management (MoFDM), GoB, DMB, DoRR and CPP; MoP; NCTB, Ministry of Education; DPHE; Ministry of Local Government; Rural Development & Cooperatives; DAE, MoA; DoF and DLS; MoFL; DoE, MoEF; FS&CD, Ministry of Home Affairs; BMD, Ministry of Defence; MoL; DWA, MoWCA; DGHS; MoHFW; FFWC; MoWR; GSB; Ministry of power Energy and Mineral resources; Institutes and Universities including Education Research and Training Networks</p>
<p>European Union (EU)</p>	<ol style="list-style-type: none"> 1. Other than providing support to CDMP, EU launched a specific programme, DIPECHO (Disaster Preparedness ECHO) dedicated to disaster preparedness. The main component of ECHO’s contribution to the global Disaster Risk Reduction efforts remains the DIPECHO programme which now covers 7 disaster-prone regions. 2. EU DRR Strategy has been adopted by the European Union in May 2009 with an orall objectives to “contribute to sustainable development and poverty eradication by reducing the burden of disasters on the poor and the most vulnerable countries and population groups, by means of improved DRR” 	<p>CDMP, Concern Universal, Action Aid, Islamic Relief, Plan Bangladesh, IFRC and Oxfam and local NGOs</p>

3. Five priority areas for intervention - in line with the Hyogo Framework for Action Covers all developing countries Covers disasters caused by natural & technological Hazards:

- Political dialogue on DRR
- Regional Action Plans on DRR
- Integration of DRR and support for National DRR investment
- Integration of DRR at EU level
- Ensure that linkages to climate change are made in the above EU Member States committed

4. DIPECHO

European Commission Humanitarian Aid department (ECHO) & DRR:

- 1) Integration of disaster preparedness measures in humanitarian response and relief
- 2) Advocacy
- 3) Disaster Preparedness Programme (DIPECHO)
- 4) Funding of Capacity-Building measures for humanitarian actors, incl. for disaster preparedness
- 5) A DRR strategy is being prepared, in line with the EU strategy: aim to position and “task” DG ECHO in its contribution to the DRR agenda and the HFA
- 6) Natural Disaster Preparedness Programme of ECHO Work through EU-NGOs, IOs/UN, Red Cross but with local partners DIPECHO in 2009 = about €34 mln world-wide DIPECHO in South East Asia: €10 mln (2008-2009)
- 7) The Fifth DIPECHO Action Plan for South Asia was launched in 2009. The project implementation timeframe was 15 months (June 2009 to September 2010). European Commission is supporting six DIPECHO projects in Bangladesh through its partners namely Action Aid Bangladesh, Islamic Relief, Concern Universal, Plan Bangladesh, IFRC and Oxfam. The Partners are working together to develop a coordination forum to promote higher involvement, greater coordination and collaboration and are hereby collectively called DIPECHO Partners Bangladesh (DPB).

Area coverage:

The project activities are being carried out in Dhaka, Chittagong, Pabna, Cox'sBazar, Shariatpur, Faridpur, Barguna, Netrokona, Sylhet and Patuakhali with the help of the local NGOs of these regions

-Focus on preparedness measures incl. -demonstrative small-scale mitigation, in particular through CBDRR Promotes regional & international DRR agenda & HFA Links with other EC instruments and other donors. Complements humanitarian aid actions: part of DG ECHO's humanitarian mandate to save lives.

8. DIPECHO (6th Action Plan, 2011-2012)

ActionAid Bangladesh along with five other INGOs has initiated a concerted Disaster Risk Reduction and Humanitarian Assistance under one umbrella named NARRI (National Alliance for Risk Reduction Initiative) Consortium to ensure that different development actors work together for better synergy and effectiveness from local to national level. These six partners with support from European Commission Directorate General for Humanitarian Aid – DG ECHO is implementing a disaster risk reduction project in Bangladesh which aims to enhance the capacities of communities and institutions to overcome various disasters.

<p>DFID</p>	<p>1. DFID works with governments of developing countries as well as charities, businesses and international bodies, including the World Bank, UN agencies and the European Commission to achieve the MDG goals</p> <p>2. GFDRR is the key multilateral organisation responsible for delivery of the Hyogo Framework for Action's objective to mainstream Disaster Risk Reduction (DRR) into national development strategies. GFDRR is undertaking important economic analysis on DRR and mainstreaming DRR and climate change at national level.</p> <p>3. GFDRR promotes a gender-inclusive approach to disaster risk management both at policy and community levels. All strategy and operations integrate climate change adaptation measures.</p> <p>4. In Bangladesh DFID is one of the implementing partners of CDMP. There have been five focus areas and ten sub-components in CDMP:</p> <ul style="list-style-type: none"> • Capacity building of MoFDM • Partnership development and mainstreaming • Enhancing community empowerment • Expanding risk reduction across a broader range of hazards • Response management <p>5. Gender was considered as a cross-cutting issue across the components of CDMP.</p> <p>The DFID funded activities has made significant progress addressing gender as a core theme in the development of project component designs, methodologies and more broadly as an integral part of its approach to understanding risk reduction. Promising examples of this progress include:</p> <ul style="list-style-type: none"> • The inclusion of gender analysis as a core activity in the CRA, methodology and operational guidelines; • Promoting gender awareness in core staff training and orientation activities; • Promoting equal opportunity access under the new scholarship programme (supported by AusAid); • Collaboration with UNDP on its gender mainstreaming project; • Collaboration with the DER working group on gender and diversity; • Developing disaggregated data formats for the new DMIC database; • Promoting gender as a key criteria for the design of LDRRF proposals, as well as an assessment criteria for potential partner organizations • Organized a national seminar on gender issues in risk reduction etc. 	<p>CDMP and others</p>
<p>GIZ</p>	<p>1. Runs a relief and rehabilitation project entitled 'Disaster Preventive Coastal Area Rehabilitation Project (CARP)' for AILA affected people (2009-2012) and the budget is 1,350,000 EURO and 11,350 people has been targeted as direct beneficiary of the project. Large number of female headed or female managed households have been selected as a participants of the project</p>	<p>DMB, GoB and local NGOs</p>

	<p>2. Interventions on Gender and DRR through the Project</p> <ul style="list-style-type: none"> -Working at community, self-help-group and household level with the explicit aim to increase communication and co-operation between male and female actors/family members concerning disaster preparedness -Training to both men and women on Community-Based First Aid, Disaster Preparedness, Search & Rescue with emphasis on gender issues -Raising awareness on the impact of climate change and possible coping mechanisms -Involving women in rehabilitation and strengthening of infrastructure (e.g. roads, small dams, etc.) through cash-for-work-measures -Strengthening livelihoods of female-headed/female-managed households -Involving women in tree plantation as care-givers -Involving women in reforestation by promotion of community nurseries 	
JICA	<p>1. JICA has provided 9 different training courses to the Government officials to build their capacity in disaster management. Around 30 participants from Bangladesh received training on disaster issues in different sectors of DRR</p> <p>2. Since 1986 to present Japan invested more than US\$207.32 million. The projects are:</p> <ul style="list-style-type: none"> -establishing Meteorological Radar System in six districts, -constructing of multipurpose cyclone shelters ensuring gender friendly environment -Improving of the Storm Water Drainage System in Dhaka city etc. <p>3. Japan government would provide Bangladesh government recovery loan after any disaster at a interest rate of 0.01%</p>	GoB
SDC	<p>1. SDC has been active in Bangladesh since the country gained independence in 1971.</p> <p>2. The Cooperation Strategy Bangladesh 2008-2012 of SDC focuses on the two thematic areas of “employment and income” and “local governance”.</p> <p>3. Implementing a specific Disaster Risk Reduction programme in Bangladesh. The goal of the DRR programme is to protect lives and livelihoods and reduce economic losses resulting from the exposure to disasters (including the challenges of climate variability and climate change), thus contributing to less human suffering, poverty reduction and a more sustainable and equitable development in the region.</p> <p>4. Guiding Principles:</p> <p>a) The SDC programme is aligned with the “Hyogo Framework for Action 2005 - 2015” and promotes its implementation as reference for disaster risk reduction efforts, in collaboration with national and international partners</p>	Different national and international organizations (Intercooperation, Swiss contact, Ashroy Foundation, Rupantor, DU and other NGOs)

	<p>b) Alignment with national strategies and systems will be sought for to the largest possible extent.</p> <p>c) Realizing the strong need to move the focus away from merely responding to disasters to disaster prevention and preparedness activities, SDC integrated disaster risk management uses a multi-risk approach, includes all relevant stakeholders and considers the risk management cycle</p> <p>d) A special focus is given to the needs and concerns of women before during and after disasters</p> <p>e) Emphasizes that a key factor to achieve gender equity is women’s empowerment, in particular their participation in decision-making in formal as well as in informal political structures. The gender equity approach is planned to be integrated into the programme and the project management cycle.</p> <p>5. Supporting different national and international organizations (Intercooperation, Swiss contact, Ashroy Foundation, Rupantor) to implement SDC programme on Disaster Risk Reduction.</p> <p>6. Gender and DRR:</p> <p>a) Gender Sensitive Community Based Disaster Awareness and Preparedness Programme is being implemented by Ashroy Foundation, Khulna</p> <p>b) Katalyst (Swiss contact): Approach: facilitate systemic changes in selected markets which allow a pro-poor oriented growth. Specific outcome for women:</p> <ul style="list-style-type: none"> -Improving and safeguarding women’s access to income and jobs. -Enhancing women’s participation in the markets of services, inputs, products <p>c) Gender Mainstreaming In Intercooperation: Goal: To contribute to sustainable well-being and resilience of poor and extreme poor households of Rajshahi and Rangpur Division and Sunamganj District through social and economic empowerment</p>	
<p>UNDP</p>	<p>1. The UNDP gender equality strategy for 2008-2011, based on its 2006-2007 Gender Action Plan, emphasizes rights-based actions and underlines operational and institutional priorities.</p> <p>2. Adopted the Eight Point Agenda to focus specifically on gender issues in disaster contexts: Practical, positive outcomes for girls and women in crisis (8PA) in which one point listed is ‘Promote gender equality in disaster risk reduction: Value women’s knowledge and experience.’</p> <p>3. Through advocacy work on Security Council Resolutions 1325 and 1820 and the roll-out of the 8PA, gender issues, particularly Gender- Based Violence and women’s needs during and after crises have been recognized by the donor community, policy makers and crisis prevention and recovery practitioners</p> <p>4. Focuses on capacity building and integration of DRR into development planning and programming particularly at country level</p>	<p>CDMP and Others</p>

	<p>5. Aims to strengthen national capacity in this regard, such as in crisis-related gender analysis, including gender statistics into disaster risk, impact and need assessments.</p> <p>6. Aims to ensure women's participation in all dialogues on generating solutions for disaster risk management.</p> <p>7. As part of the Cluster Working Group on Early Recovery, the United Nations Population Fund (UNFPA) and UNDP are leading a project to develop gender aware profiles for countries at risk of disaster and conflict.</p> <p>8. Advocated for and facilitated technical support for mainstreaming gender sensitive disaster risk reduction in climate change adaptation, UNDAF, PRSP, national policies in Bangladesh through supporting CDMP</p> <p>9. Developed a unique set of resources to assist high-risk countries in gender-sensitive DRR and recovery planning and programming: Awareness and advocacy; Analysis and review; Capacity development; Gender aware DRR knowledge products; Gender-sensitive risk assessment; Gender-responsive recovery</p> <p>10. Introduced a global network DRR to be formally launched in May 2011</p>	
UNFPA	<p>1. United Nations Population Fund (UNFPA) jointly with UNDP is leading a project to develop gender aware profiles for countries at risk of disaster and conflict.</p> <p>2. UNFPA works to ensure that gender concerns are mainstreamed across emergency response programming programmes. By mainstreaming gender issues into humanitarian programming, UNFPA works to ensure that no one is excluded, marginalized or discriminated against because of their sex in the distribution of assistance to address basic needs (water, food, shelter, health, sanitation), in the implementation of protection measures, services (e.g. education) nor opportunities (e.g. loans and employment). It is also a way of protecting the rights and freedoms of women, girls, boys and men, and promoting equal opportunities and rights of all free from any discrimination based on sex and gender ascribed roles due to social norms.</p>	GoB and local NGOs
USAID	<p>Disaster Risk Reduction (DRR) Programs June 1, 2010</p> <p>1. Incorporating Gender Issues into DRR: In FY 2009, USAID/OFDA provided assistance to IOM to support workshops in the LAC region focused on the incorporation of protection and gender issues into DRR planning and activities. IOM is conducting three workshops in 2010, designed to promote interaction and dialogue to ensure the comprehensive integration of humanitarian response, gender equality, and environmental analysis into DRR programming.</p>	CARE Bangladesh and NGOs

	<p>2. Priority Areas in Bangladesh:</p> <ul style="list-style-type: none"> - Identify, assess, and monitor disaster risks and enhance early warning - Use knowledge, innovation, and education to build a culture of safety and resilience at all levels - Reduce underlying risk factors - Strengthen disaster preparedness for effective response at all levels. - Program for Hydro meteorological Risk Mitigation in Asian Cities (PROMISE) <p>3. Support to SHOUHARDO of CARE BD</p>	
<p>World Bank</p>	<p>Allocated budget in ten ministries in Bangladesh.</p> <p>Conducted a gender review in 2006</p> <p>Allocated budget for long term recovery in SIDR affected areas, reconstruction in agriculture sector, structural development (embankment, shelter etc.) and strengthening DRR sector through these activities (On 6th November 2008 The World Bank approved a US\$109 million IDA credit to Bangladesh to support the Government's efforts to repair infrastructure and restore the livelihoods for thousands of families affected by last year's Cyclone Sidr.</p> <p>The Emergency 2007 Cyclone Recovery and Restoration Project will finance reconstruction and improvement of some 300 multi-purpose shelters and rehabilitation of 100 km of coastal embankments, using cyclone-resistant building techniques. It will also support activities in the agriculture sector that will help farmers prepare for the next growing season and strengthen their ability to cope with future disasters, WB)</p> <p>Project Components: Component A: Recovery of Agriculture Sector and Improvement Program Component B: Reconstruction and Improvement of Multipurpose Shelters Component C: Rehabilitation of Coastal Embankments Component D: Long-Term Disaster Risk Management Program Component E: Monitoring and Evaluation of Project Impact Component F: Project Management, Technical Assistance, Strategic Studies and Training, and Emergency Support for Future Disasters</p>	<p>GoB, Local NGOs</p>
<p>International Non- Government organizations (INGOs)</p>		
<p>ActionAid Bangladesh</p>	<p>1. ActionAid has been working in Bangladesh since 1985. It is one of the leading agencies advocating for better disaster risk reduction policies and practices across many countries including Bangladesh.</p> <p>2. Played a key role in lobbying at the Kobe Conference in January 2005, as well as participation in the follow-up and implementation mechanisms.</p> <p>3. In October 2005 Action Aid was awarded funding from the Department for International Development (DFID) to implement a five-year project in 7 countries on disaster risk reduction through schools including Bangladesh</p>	

	<p>4. Gender_dimensions of Action Aid Bangladesh:</p> <ul style="list-style-type: none"> -Recognizes that gender inequality is a fundamental cause of poverty and has therefore prioritizes gender equality as one of its four major goals. -Adopt “Rights Based Approach” (work on improving the structural, the ideological and practical aspects of women and girls’ lives, enabling them to claim their rights as full and equal citizens) -Commissioned research on ‘Violence against Women during Flood and Post-flood Situations in Bangladesh’ after 2007 flood. -Commissioned another study on ‘Disaster management and People’s Experiences in Bangladesh’ in 2008 highlighting the policy on disaster management and DRR activities in Bangladesh including gender dimensions -Action aid has identified WASH impact of climate change (CC) on Women separately in Urban, Rural and Char lands The key impacts of WASH will be assessed through: Infrastructure Associated with WatSan, Water source, Water quality, Water collection, Consumption and intra household distribution, Personal Hygiene and Health and Violence against Women <p>5. ActionAid anchors the secretariat of DIPECHO Action Plan (6th Action Plan, 2011-2012), which is for a duration of 18 months started from 15 March, 2011. ActionAid is coordinating the work between INGOs and ensures compliance to donor and effective implementation of the program</p>	
Bangladesh Red Crescent Society	<p>Programmes on DRR:</p> <ol style="list-style-type: none"> 1. Building Community Disaster Preparedness 2. Community-based Development Initiatives(CDI) 3. Community Based Disaster Management 4. Cyclone Preparedness Programme 5. BDRCS Earthquake Preparedness and Response Programme 	
CARE Bangladesh	<ol style="list-style-type: none"> 1. CARE has been working in Bangladesh for 60 years. Delivered relief to more than a million cyclone victims in the coastal districts in 1991. 2. Gender and DRR Activities: <ul style="list-style-type: none"> <i>Previous</i> -Established a Disaster Management Unit (DMU) in the mid-nineties. -Formulated a Policy on Gender and Disaster Management in 1999 involving gender and disaster management experts from Bangladesh and Asian Disaster Preparedness Centre (ADPC) -Formed network of NGOs on disaster <i>Contemporary</i> - Assessment of SIDR Response December 2007 - Independent Evaluation of CARE-B’s Cyclone Sidr Response Programme August 2008 -SHOUHARDO (a Title II program of USAID). SHOUHARDO include the following activities involving both women and men: homestead raising (7832), mound extension, market ground raising, road maintenance and construction, embankment maintenance, flood shelter construction (19), wave protection wall building etc. -10 thousand Disaster Volunteers` (DVs) works under CARE, 50% of them are women 	Local NGOs

<p>Concern Universal</p>	<p>1. Concern Universal is helping local communities in Bangladesh to develop their ability to prepare for the worst</p> <p>2. Concern Universal Bangladesh has been implementing Disaster Risk Reduction Projects in the most disaster-prone communities of Bangladesh in partnership with DIPECHO under DIPECHO's 3rd, 4th and 5th Plans of Actions for South Asia</p>	<p>Local NGOs</p>
<p>Intercooperation</p>	<p>Intercooperation is working in Bangladesh since 2000 to contribute to sustainable well-being and resilience of poor and extreme poor households of Rajshahi and Rangpur Division and Sunamganj District through social and economic empowerment.</p> <p>Gender Mainstreaming In Intercooperation:</p> <p>1. "Participatory Gender Analysis" (at community and UP level). The key objective of this tool is to contribute in reducing gender inequalities from the community through developing joint action plan and undertaking joint development interventions by women and men of the community to address gender issues.</p> <p>2. Promotion of "Female Mentor" at community.</p> <p>3. "Gender Focal Point" at organisation structure.</p> <p>4. "Gender Task Force" at regional and central level (To provide strategic direction and technical inputs for gender mainstreaming in IC Bangladesh). (for more see SDC)</p>	<p>Local NGOs</p>
<p>IUCN</p>	<p>1. Bangladesh became a state member of IUCN in 1972. However, IUCN has formally started its operational activities in Bangladesh from 1989 through a liaison office and a formal country office was established in 1991.</p> <p>2. IUCN Bangladesh Country Office rivets its activities in the four priority areas, namely: haor and beel, mangrove ecosystem, Chittagong Hill Tracts and coastal and marine, in line with the Inter Sessional Programme 2005 – 2008</p> <p>3. IUCN have been working jointly with UNDP and UNISDR to integrate gender issues into disaster risk reduction across the board. For IUCN, the growing impact of climate change-related disasters on women is of immense concern</p>	<p>Local NGOs</p>
<p>Swiss Contact</p>	<p>1. Katalyst program stated that they started their work since 2008 in Bangladesh. Thirty to 40 percent of their beneficiaries are women. They mainly works in commercial sectors suppose Readymade Garment sector of BD. At the same time they are trying to make market oriented activities by selecting some markets and provided training and financial assistance to the women that would indirectly help women in DRR as the monetary strength is a tool for risk reduction in any disaster.</p> <p>2. Not directly involved in gender and DRR related activities but there are some challenges in women empower programs, such as, limited women oriented income generating activities in BD society, lack of policy in private sector and social barrier. To overcome these, Katalyst are adapting the techniques to send message about any income generating activities through husbands of women. (for more see SDC)</p>	

Oxfam GB	<p>1. Oxfam has been working in Bangladesh since 1971, during the country's war of independence.</p> <p>2. Disaster and Emergency Response (DER) Group has made a Gender and Diversity Checklist for Disaster and Emergency Response (Started in 2001) where the General principles in disaster and emergency response activities have been described:</p> <ol style="list-style-type: none"> 1. Assess specific needs due to Gender and vulnerabilities, and address them in any emergency relief and recovery programmes. 2. Inbuilt a provision of gender disaggregated data collection in project management tools, so that analysis can be done to ascertain how many women and men have been assisted under any intervention. 3. Promote equitable participation of women, men, and people at higher risk in decision-making and its benefit, in a demonstrative way where equal participation of women, men, and higher risk groups is visualized. 4. Provide women and higher risk groups with an access to economic and natural resources and basic social services, and support them to gain more control over resources and entitlements. 5. Empower women and higher risk groups with greater skills and knowledge to exercise their rights in a crisis situation. 6. Contribute to the reduction of violence against women, girls, boys and people at high risk in a crisis situation. 7. Support women's control over their reproductive decisions in a crisis situation. 8. Challenge Gender and Diversity stereotypes and discriminatory attitudes towards women and girls/people at higher risks. 9. Support women and girls to enhance their self-confidence, leadership skills, and capacity to organize and support their roles as agents of change. 10. Strengthen transparency and accountability in managing an emergency programme in the process of resources allocation, decision-making, implementation, monitoring and evaluation. <p>Programme:</p> <ol style="list-style-type: none"> 1. Oxfam Response to the UNISDR Mid-term Review of the Hyogo Framework for Action, December 2010 2. Evaluation of the River Basin Programme in Bangladesh, June 2008 3. Gender specific Risk Environment: - Hazard Assessment, Vulnerability Assessment and Risk Consideration 4. Gender specific Risk Environment Management: Prevention and Mitigation; Adaptation and Preparedness 5. Gender specific Emergency Response: Early Warning; Evacuation, Search and Res.; Coping; Response and medical; Rehabilitation 	Local NGOs
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<p>UNISDR</p>	<ol style="list-style-type: none"> 1. UNISDR has the mandate for coordinating the implementation of the International Strategy for Disaster Reduction (ISDR) and Hyogo Framework within UN agencies and governments. 2. Following the January 2005 World Conference on Disaster Reduction, both UNDP and UNISDR have increased their efforts to support governments in mainstreaming gender into DRR. 3. Focuses in integrating gender into DRR in three-folds: <ol style="list-style-type: none"> a) Advocating the importance and necessity of gender-equality in achieving the overarching goal of the Hyogo Framework b) Educating and mobilizing both men and women to promote gender equality in DRR c) Providing guidance and good practices for gender-sensitive policies and programmes related to DRR. 3. In 2006 published Words into Action, containing DRR policy guidelines for government. 4. Helped to bring gender perspectives into the government session of the June 2007 Global Platform for DRR, opening the door for developing policy guidance for governments on gender and DRR. UNISDR has also published good practices from various stakeholders, including UN agencies, donor agencies, NGOs and governments, in an effort to highlight that: <p>A gender-inclusive approach to DRR can achieve win-win results for families and communities;</p> <p>Women, if given equal opportunities, can perform multifunctional roles well - as participants, managers, decision makers and leaders in the field of DRR.</p> 5. In 2008 at the 63rd General Assembly, the UN Secretary-General reported on the increased promotion of gender mainstreaming by UNISDR 6. In early 2007, UNISDR launched an initiative to build global partnerships for mainstreaming gender concerns and needs into DRR. The initiative provides a platform for gender activists and different stakeholders to: <p>Share information, knowledge and experience in addressing gender issues;</p> <p>Increase the voice of women and the visibility of women's roles in and contributions to DRR;</p> <p>Develop policy guidelines on gender and DRR.</p> 7. In 2008 organized a multi-stakeholder expert group to advance policy guidance and develop training modules for capacity building. 	<p>IUCN and others</p>
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ANNEX VIII

STRENGTHS AND WEAKNESSES OF EXISTING GENDER AND DRR INITIATIVES IN BANGLADESH

A study¹⁸⁷ on *Mapping Gender and Disaster Risk Reduction Initiatives in Bangladesh* has compiled the activities of different actors and sharing the best practices on the issue of gender and DRR activities in Bangladesh. Of the different government actors in Bangladesh Department of Disaster Management (DDM, former Disaster Management Bureau/DMB and Disaster Relief and Rehabilitation, the two wings used to serve the MoFDM merged into DDM in September, 2012 after the MoFDM changed to MoDMR). In 2004 MoFDM, with the support of UNDP, launched the Comprehensive Disaster Management Programme (CDMP) to facilitate the reform of the disaster management approach by expanding its focus from reactive emergency response to proactive risk reduction. Bangladesh has created a simplistic model to guide disaster risk reduction and emergency response management efforts in the country. The model has three key elements and ensures that the move to a more comprehensive disaster risk reduction (DRR) culture remains central to all efforts. The second Phase of CDMP (commenced in January 2010 to be completed in December, 2014) is functioning with the financial support from multi-donors (UNDP, UKaid, AusAid, DFID, EU, Norwegian Embassy, Sida). Both the phases of CDMP have a focus on vulnerability, risks associated with poor and women.

However, although gender issues are getting attention in the disaster management efforts of different actors, concise efforts are yet to be given in a systematic manner. Development partners (other than CDMP donors) such as ADB, GiZ, Netherlands, Swiss Agency for Development and Cooperation (SDC), USAID, World Bank and others as well as different INGOs, for example Oxfam GB, Care Bangladesh, Concern Universal, Actionaid, Intercooperation, Swiss Contact, IUCN, including other organizations are providing supports to GoB and partner NGOs to address disaster risk reduction issues since long. Almost all of them have a focus on gender. Academic institutions and individual researchers are also been involved in disaster management and risk reduction issues¹⁸⁸.

The following section is based on the study findings on 'Mapping Gender and Disaster Risk Reduction Initiatives in Bangladesh' to highlight the strengths and weaknesses of various actors working in Gender and DRR and Climate change and DRR issues. The study recommendations are also highlighted here.

Strengths of the existing gender and DRR activities

A. Government initiatives:

The National Plan for Disaster Management (2010-2015, drafted in 2007 and revised in 2010) of DMB, MoDMR¹⁸⁹, GoB is an outcome of the HFA and of the SAARC process. The National Plan for Disaster Management focus on disaster management vision of Bangladesh; Hazards in Bangladesh; Climate Change; Disaster-Development linkages: National and International Drivers for Change (MDGs, PRSP, Hyogo Framework of Action (HFA), SAARC Framework of Action (SFA), Bangladesh Climate Change Strategy and Action Plan (BCCSAP, 2009); Methods, objectives, strategic goals of the plan; Conceptualizing disaster management in Bangladesh; Disaster Management Regulatory Framework, Disaster Management Plans, Disaster Management Action Matrix 2010-2015; Implementation and follow up; Monitoring and evaluation and Financing the plan. All the issues are planned to address in collaboration with stakeholders including INGOs and NGOs.

187 Nasreen, Mahbuba, 2011. *Mapping Gender and Disaster Risk Reduction initiatives in Bangladesh*, SDC

188 Nasreen, Mahbuba, 2011. *Mapping Gender and Disaster Risk Reduction initiatives in Bangladesh*, SDC

189 In 2012 MoDMR has been separated in two Ministries- Ministry of Food and Ministry of Disaster Management and Relief. The two wings Disaster Rehabilitation and Relief and Disaster Management Bureau of MoDMR has been merged to the Directorate of Disaster Management under the Disaster Management and Relief.

Although there is no independent section on gender and disaster management in the National Plan for Disaster Management, (2010-2015) the Disaster Management Action Matrix 2010-2015 include mainstreaming disaster risk reduction and climate change adaptation issues as well as empowering risk communities to reduce vulnerabilities of the risk communities as key targets including women.

The revised Standing Orders on Disaster Management (2010) of includes MoWCA in Risk Reduction activities including emergency responses during Normal, Warning, Disaster and Rehabilitation stages. Department of Women Affairs is assigned to carry out specific activities such as ensuring participation of DWA representative in different disaster management committee, ensuring women's participation in the preparedness and disaster management activities, play active role in identifying the gender gap and ensure its implementation in all disaster management activities, provide livelihood support to women and children affected by disaster. The NPWA, 2011 has endorsed women in disaster as a separate theme for the first time in Bangladesh. With the support of CDMP, DWA has launched a program (2010-2012) on gender and disaster in 413 *upazilas*, involving 1500 organizations in Bangladesh.

The strategic goals of the Bangladesh Climate Change Strategy and Action Plan focus on 'Mainstreaming Risk Reduction', 'Empowering risk communities' along with other goals which has a gender focus.

B. Initiatives of Development Partners

A considerable number of development partners have been supporting the effort of the Government of Bangladesh including INGOs and NGOs to carry out gender and disaster related activities, which have been mentioned in the Matrix prepared in section 1.

Support to Government, INGOs and NGOs:

The Comprehensive Disaster management Programme (CDMP I, II): (Supported by UNDP, EU, DFID, UKaid, Ausaid, Sida, Norwegian Embassy). CDMP is popularly known as the disaster management programme of the Government of Bangladesh (GoB), especially of the MoFDM. However, there are other partners of CDMP including DMB, DoRR and CPP; MoP; NCTB, Ministry of Education; DPHE; Ministry of Local Government; Rural Development & Cooperatives; DAE, MoA; DoF and DLS; MoFL; DoE, MoEF; FS&CD, Ministry of Home Affairs; BMD, Ministry of Defence; MoL; DWA, MoWCA; DGHS; MoHFW; FFWC; MoWR; GSB; Ministry of power Energy and Mineral resources; Institutes and Universities including Education Research and Training Networks.

After the completion of Phase I (2005-2009), CDMP Phase II is designed for another five-year initiative from January 2010 to December, 2014. The overall aim of CDMP is to contribute to poverty alleviation in Bangladesh through disaster risk reduction. Attempt to mainstream gender in DRR activities has been introduced in CDMP since phase I. CDMP works with the specific agenda on Gender and disaster related activities, which have been mentioned earlier. In Phase I CDMP developed a tool for Community Risk Assessment (CRA) with specific guideline, which also has a focus on gender. CDMP II is an example of harmonization among the development partners to avoid overlapping and isolating of activities related to gender and DRR. The other activities of CDMP mentioned by DFID are: inclusion of gender analysis as a core activity in the CRA, methodology and operational guidelines; Promoting gender awareness in core staff training and orientation activities; Promoting equal opportunity access under the new scholarship programme (supported by AusAid); Collaboration with UNDP on its gender mainstreaming project; Collaboration with the DER working group on gender and diversity; Developing (gender) disaggregated data formats for the new DMIC database; Promoting gender as a key criteria for the design of LDRRF proposals, as well as an assessment criteria for potential partner organizations. Risk assessments have been conducted for 622 unions of 16 districts following CRA guidelines. A total of 18 women, PWD and the socially disadvantaged groups from each union participated in the risk assessments process

It has been revealed that development partners are keen to work in a group rather than providing separated effort. For example, DIPECHO of EU is a good practice of bringing different actors working in DRR issues. Six INGOs have

been working with DIPECHO in a concerted way on Disaster Risk Reduction and Humanitarian Assistance under one umbrella named NARRI (National Alliance for Risk Reduction Initiative) Consortium to ensure that different development actors work together for better synergy and effectiveness from local to national level.

Other efforts include the inclusion of Humanitarian assistance, empowering women through making access to food security in the disaster prone areas (UNFPA), Initiatives of SDC through gender and disaster risk reduction activities at community level. The Katalyst Approach is an indirect initiative to bring systemic changes through improving and safeguarding women's access to income and jobs and enhancing their participation in the male domain, e.g. markets of services, inputs, products. Some of the good practices of involving women in adaptation activities include: dissemination of early warning by young women volunteers and also work in response and recovery; women are exchanging views with family member and neighbours; women are planting more trees than before; taking necessary steps for prepare houses before the disaster risk; during cyclone AILA most of the women took shelter earlier (SDC initiatives).

Other than supporting CDMP, UNDP developed a unique set of resources to assist high-risk countries in gender-sensitive disaster risk reduction and recovery planning and programming: Awareness and advocacy; Analysis and review; Capacity development; Gender aware DRR knowledge products; Gender-sensitive risk assessment; Gender-responsive recovery. UNDP is also going to develop a global network DRR formally launched in 2011. Other development partners, e.g. ADB, GIZ, JAICA, Netherlands, USAID, World Bank and so on are either directly or indirectly supporting disaster management or risk reduction activities, with or without providing specific focus on gender.

C. Initiatives of International Non-Government Organizations

INGOs such as Bangladesh Red Crescent Society, Oxfam GB, CARE Bangladesh, ActionAid, IUCN and others have been working in the fields of disasters since long. Though not from the beginning, most have policy on gender and mandate for disaster risk reduction.

Bangladesh Red Crescent Society works through building community disaster preparedness, community-based development initiatives (CDI) and community based disaster management etc. Though the specific agenda on gender and disaster management has not been incorporated in the organization, through the community based programme and CPP activities vulnerable group of the communities including women get priority over others.

ActionAid focuses on "Rights Based Approach" and works on improving the structural, the ideological and practical aspects of women and girls' lives, enabling them to claim their rights as full and equal citizens. ActionAid anchors the secretariat of DIPECHO Action Plan (6th Action Plan, 2011-2012), which is for a duration of 18 months started from 15 March, 2011. ActionAid is coordinating the work between INGOs and ensures compliance to donor and effective implementation of the program.

CARE Bangladesh has formulated a Policy on Gender and Disaster Management in 1999. Since then incorporating gender issues in DRR. It has provided support to form a network of NGOs (NIRAPAD) working on disaster issues.

SHOUHARDO (a Title II program of USAID includes activities in the disaster prone areas involving both women and men: homestead raising , mound extension, market ground raising, road maintenance and construction, embankment maintenance, flood shelter construction, wave protection wall building etc.

Concern Universal Bangladesh has been implementing Disaster Risk Reduction Projects in the most disaster-prone communities of Bangladesh in partnership with DIPECHO under DIPECHO's 3rd, 4th and 5th Plans of Actions for South Asia.

Oxfam GB Disaster and Emergency Response (DER) Group has made a Gender and Diversity Checklist for Disaster and Emergency Response (Started in 2001) where the General principles in disaster and emergency response activities have been highlighted. Oxfam responses to the UNISDR Mid-term Review of the Hyogo Framework for Action, December 2010; Evaluated the River Basin Programme in Bangladesh, June 2008; works with Gender specific Risk Environment: - Hazard Assessment, Vulnerability Assessment and Risk Consideration; Gender specific Risk Environment Management: Prevention and Mitigation; Adaptation and Preparedness; Gender specific Emergency Response: Early Warning; Evacuation, Search and Res.; Coping; Response and medical; Rehabilitation.

IUCN have been working jointly with UNDP and UNISDR to integrate gender issues into disaster risk reduction across the board. For IUCN, the growing impact of climate change-related disasters on women is of immense concern. IUCN also involved in policy formulation process of the GoB and currently (2013) is working on the Climate Change Gender Action Plan (ccGAP)

In early 2007, UNISDR launched an initiative to build global partnerships for mainstreaming gender concerns and needs into DRR. The initiative provides a platform for gender activists and different stakeholders to: share information, knowledge and experience in addressing gender issues.

Most of the programmes run by NGOs in Bangladesh are related to the micro level community based disaster risk reduction. These organizations have been working on disaster preparedness and mitigation activities with community and some from an inclusive and gender focused strategies.

D. Contributions of Academia

An independent department in the Potuakhali Science and Technology University has been launched in 2009. University of Dhaka has introduced professional degree courses on disaster management through establishing a center named Centre for Disaster and Vulnerability Studies (CDVS) under Department of Sociology in 2009. In 2012 the CDVS has been turned to an independent institute-Institute of Disaster Management and Vulnerability Studies (IDMVS). It offers Certificate course, Post graduate Diploma course, Masters on Disaster Management and Bachelor degrees. Gender and Disaster Risk Reduction has been one of the central themes from the very beginning of the courses offered. The Department of Geography and Environment also has a centre named Center for Disaster Research, Training and Management. Recently (2010) the department is offering courses on disaster management under a Master Programme. BRAC University is the only private university offering a post graduate course on Disaster Management. CDMP has been involved in sponsoring professional training programme on disaster management to both the public and private universities in Bangladesh since 2008. Under the CDMP (first phase) initiatives three universities: University of Dhaka, Khulna University and Potuakhali Science and Technology offered Diploma courses and a total of 13 universities (8 during CDMP I and 5 during CDMP II) have been getting Professional Training Courses on disaster management. All of the programmes keeping courses on gender and disaster management.

Weaknesses of the programmes/projects:

Despite attempts, a gap has been observed in sharing the experiences of gender and disaster management and risk reduction activities of different actors due to absence of concise analysis of the existing initiatives. The initiatives those have been taken by Government and other actors are not always functioning as expected. There are many social, economic and political factors which are contributing to the challenges which are encountered by the country's policy. The challenges of gender and disaster management should be looked from the Key elements governance and disaster risk reduction (DRR) which includes participation, accountability, decentralization, legally enforceable obligation, national coordination and cooperation, international cooperation and coordination. There are some challenges of achieving the disaster management goals of Bangladesh.

The following weaknesses have been identified through the experiences of researchers,

In most cases the initiatives (programme/projects) taken by different government agencies, development partners, INGOs and non-government organizations are implemented in isolation. Although an interface between MoDMR and MoEF is expected, in practice the collaborative efforts are not that much visible. As there is separate ministry and a programme i.e. Comprehensive Disaster Management Programme (CDMP I and II), the second pillar of BCCSAP is not that much elaborative and activity oriented. Moreover, close collaboration between the two ministries is yet to be established.

The institutional framework of Bangladesh does not have the full capacity to adopt the participatory approach because reducing incidence and severity of disasters depend on many factors, of which most important is the devolution of power and channeling adequate resources to the local governance.

NPDM was not widely shared with public before the development.

There is no separate section on gender and disaster management and disaster and risk reduction in the NPDM or BCCSAP

Development policy of the country does not emphasize on the in-country regional variation of types of disasters and severity and apply similar policy for all over Bangladesh

The CRA guideline developed by CDMP does not have a template to be followed in all locations. For the analysis of the results of the Disaster Risk Assessment, one have to wait till the information is shared at national level. Moreover, mainstreaming effort has yet to be ensured for sustainability.

Lower representation in the policy and decision making bodies in gender and DRR activities

Absence of gender friendly infrastructure in conducting DRR activities

Whatever support is provided by the government and non-government organizations, this is not adequate for the disaster affected people. The area coverages of NGOs are very limited and services are limited only to their participants.

The short-term and project based disaster management approach used over the last few decades by Govt. and different NGOs in Bangladesh has made the community more 'Relief Oriented' and it therefore takes time to make them committed towards community development and resilience building for better adaptation to the impacts of DRR & climate change

Dealing with rural power structures to implement DRR options is a challenge as well as a threat, to ensure the participation and control of vulnerable people over decision making and the implementation process

Minimizing the opportunity cost of project participants is crucial for the project; and particularly Community based activities, because they require time consuming participation

Absence of any asset base excludes poor people/women from adaptation choices and initiatives. It is difficult to include landless people in the development process without ensuring their rights over land

The social barrier towards women's participation in DRR activities (Ashroy Foundation)

Disaster risk was never in the political parties' manifesto

Absence of a civil society forum on DM in Bangladesh

Overcoming bias towards relief and response

Absence of mainstreaming disaster risk reduction across sectors

Limited resources (OECD and WB suggested for 40% allocation of overseas development assistance to DM)

The findings of a study¹⁹⁰ (Nasreen, 2008) based on wide community consultation argue that local community, especially women are not benefited from the existing disaster management policy and there are many forms of violations of their human rights. The study pointed out that during disaster women continue to be bearers and socializers of children, collectors and providers of food, fuel, water, fodder, building materials and keepers of household belongings: they also represent a productive potential which is not discussed earlier. The study maintained that it is poor women's strategies, developed over the last few years, those are vital in enabling the rural people to cope with disaster. It must be mentioned that CRA is including a women group in each location, however, there is no gender specific issues highlighted in the guideline for all stakeholders.

It has been argued in the study that although Bangladesh has a comprehensive disaster management programme, a well developed plan, mainstreaming strategies, CRA guideline and disaster management institutions etc. the whole operation of the disaster management is highly centralized. In case of emergency responses committees become dysfunctional. Control of the budget, relief items, disaster management mechanisms are in the hands of higher authorities at central level. The local government institutions completely depend on the decision and resources of the central disaster management authority to response to the victims.

Gender issues are not taken care of with due attention at the time of designing DRR activities for pre, during and post disasters periods. Women's issues are only seen in case of vulnerability perspective and their names are listed in the relief distribution during disaster. In fact disaster management in Bangladesh has become concomitant to relief. Other activities related to risk reduction mostly remain silence throughout the year. None of the document of disaster management mentioned about women's contributions or capabilities pre, during and post disaster situations. It must be mentioned here that despite research (Nasreen, 1995, 1998, 2008) available in the country on women's heroic efforts, since long, it have always been ignored in the government policy.

It is also evident that in the standing order there is not clear instruction for inclusion of women elected representatives of the local government institutions and as a result they are ignored at both national and sub-district levels disaster management activities. To ensure effective planning and coordination of disaster risk reduction and emergency response management, involvement of women elected representatives in local government is a demand since late 90's but they are still been left out by the men elected representatives. The institutional framework of disaster management may be viewed as decentralized, however, devolution of power is the most important element of decentralization, which must be given proper attention. It is also argued that corruption associated with emergency relief distribution discourages or discard women elected representatives to be involved in during disaster activities (Nasreen, 2008, 2011). The elected women representatives are seen proactive in DRR issues during disaster free time.

190 Nasreen, Mahbuba, 2008. Violence against women in flood and post flood situations in Bangladesh, ActionAid

