Climate Change Finance In Bangladesh: A Way Towards Sustainable Development

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ABSTRACT

Bangladesh is widely known as one of the most climate vulnerable countries in the world and climate change is currently a major focus of the government and development agencies as it poses a continuous threat towards attaining sustainable development goals of the country. The present climate finance scenario of Bangladesh has not yet been studied from the perspective of sustainable development. If there is no study regarding this area, the gaps to identify and meet the vulnerability of the frontline would not be recognized. To attain sustainable development goals, Bangladesh needs to focus on the climate vulnerable people as important stakeholders, as they should build their resilience as a response to the diverse impacts of future change in climatic conditions. This specific correlation has not been mentioned in the existing literatures available to the researchers. This study mainly followed the secondary data analysis method. Some Key Informant Interviews were also done with experts from different institutions of Bangladesh. This paper examined the extent to which current policy and financial instruments in Bangladesh under broader purview of 'climate finance' can ensure the future sustainable development prospects in various sectors, systems, and regions, and whether the financing procedures follow a different fiscal framework for accountability and transparency. As financing is one of the major responses of climate change, this study focused on the climate change financing issues of the country which may have positive impacts on the prospects of sustainable development of Bangladesh. Under the present conditions of the climate finance of Bangladesh, the development of a national climate fiscal framework is a high priority to ensure allocative efficiency and effective transaction of strategy to both policy and budgets. Findings of this study are expected to be of use for academia, government and other practitioners working in the field of climate change and other relevant disciplines.

Keywords: Climate Change, Climate Change Response, Climate Vulnerability, Adaptation, Resilience, Fiscal Framework, Climate Finance, Sustainable Development

1. INTRODUCTION

This study deals with climate change financing issues of the country which may have positive impacts on the prospects of sustainable development of Bangladesh. Climate change impacts in Bangladesh are already adding significant stress to our human ability, the physical and environmental resources, and the economic activities of our country. Climate change is one of the most important global environmental challenges facing humanity with implications for food production, natural ecosystems, freshwater supply, health, etc. (Sathaye, Shukla, & Ravindranath, 2006). As Bangladesh is now regarded as one of the most climate vulnerable countries of the world (Department of Environment, 2007), it is quite evident that climate change impacts are posing continuous threat to the Sustainable Development Goals¹ of the country. This study focuses on Climate Change Finance (CCF) as an important part the climate change responses of the country to combat the current climate change impacts, as 'Climate Change Finance' can ensure the future sustainable development prospects in various sectors, systems, and regions of Bangladesh.

The present climate finance scenario of Bangladesh is yet to be studied from the perspective of sustainable development. To have the overall insights of the selected arena, the present study mainly followed the Secondary Data Analysis Method, with some Key Informant Interviews with experts from different institutions of Bangladesh. This study proposes to fill the gaps in the existing literatures regarding the climate finance and sustainable development of Bangladesh and provides a detailed analysis about the needs of establishing a climate fiscal framework. This will help researchers, educators, policy makers and others through its significance.

Climate change poses a serious risk to lives and livelihoods, particularly for the poorest and most vulnerable populations of the world. The impacts of climate change may reverse the progress towards achieving the Sustainable Development Goals. In this sense climate change is both a development and an environmental challenge (OECD, 2009). It is clear that the mobilization of 'adequate, predictable and sustainable' financing will be very crucial to address and combat climate change impacts in developing country like Bangladesh. From this perspective, this study examined the extent to which current policy and financial instruments of 'climate finance' can ensure the future sustainable development prospects of Bangladesh. This paper summarized these findings, placing them in the context of the broader experience relating to the delivery of climate change finance and principles of external development assistance while coming up with some policy recommendations regarding the development of a national climate fiscal framework, which has now become a high priority to ensure the transparency and accountability of the allocated budgets and policies to combat climate change impacts in Bangladesh.

2. BACKGROUND AND CONTEXT

Climate change is one of the greatest threats our world has ever faced. The atmospheric balance that sustains our lives is becoming incredibly fragile, and the damage people are doing to various ecosystems, will have drastic consequences. These consequences will cross geographic, ethnic, religious, and political boundaries. The world and its people will experience more poverty, hunger, disease, drought, flooding and so on. No nation will be spared. The only question is the degree by which we will have to adapt. Solutions and responses to this crisis vary from the simple to complex. Climate change crisis is now a reality for Bangladesh as well for the world (CCDE, 2010). This paper focuses on 'Financing' to combat the climate change impacts from the perspectives of both adaptation and mitigation, as finance apparatus is crucial for both to face and react the climate change challenges. Here we need to be grounded by the fact that we must prepare our communities right now for the harmful impacts that we know are coming. To proceed further, we need to focus on the background and context of climate change and sustainable development scenario of the country. We also need to know the available policy and finance responses regarding the adaptation and mitigation issues of climate change in Bangladesh.

2.1. Climate Change Scenario and the Sustainable Development Challenges in Bangladesh

Bangladesh is one of the largest deltas in the world which is highly vulnerable to Natural Disasters² because of its Geographical location, flat and low-lying landscape, population density, poverty, lack of institutional setup etc. In other words, the Physical, Social as well as Economic conditions of Bangladesh are very typical to any of the most vulnerable countries to Natural Disasters in the world (Denissen, 2012). The country is burdened by many social and economic problems such as low levels of literacy, poor health delivery systems, low per capita income and high unemployment and so on. So the country faces many difficulties in achieving sustainable development³. Possibilities of climate induced changes², including increases in frequency, duration and intensity of extreme events such as floods, droughts and cyclones, and their expected adverse impacts on the resource base and human activities, would bring the country into an even more difficult position (World Bank, 2000).

The total land area of Bangladesh is 147,570 sq. km. consisting mostly of Floodplains (almost 80%), leaving major part of the country (with the exception of the north-western highlands) prone to flooding during the rainy season. Moreover, the adverse effects of Climate Change – especially High Temperature, Sea-level Rise, Cyclones and Storm Surges, Salinity Intrusion, Heavy Monsoon Downpours etc. has aggravated the overall Economic Development scenario of the country to a great extent(Denissen, 2012).

However, many of the critical development components still depend to a large extent on the country's natural and human resource base, and are thus sensitive to climate induced changes. Vulnerable development components include the need to substantially to improve the health and living conditions of the country's human resource potential; importance of the agricultural production both for the country's economy and for the poverty reduction of its population; and the growing importance of the energy related developments in the coastal zone (World Bank, 2000). So it is evident that the alteration in the climate of the country will pose challenges to the sustainability of development initiatives in present and of course in the near future.

¹ Climate finance refers to financing channeled by national, regional and international entities for climate change mitigation and adaptation projects and programs. They include climate specific support mechanisms and financial aid for mitigation and adaptation activities to spur and enable the transition towards low-carbon, climate-resilient growth and development through capacity building, R&D and economic development (Wikipedia).

The country is prone to a multitude of natural hazards (example: floods, droughts, storm surge, salt water intrusion, river erosion, etc.) and vulnerable to the adverse impacts of future change in climatic conditions (Department of Environment, 2007).

³ Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs (IISD).

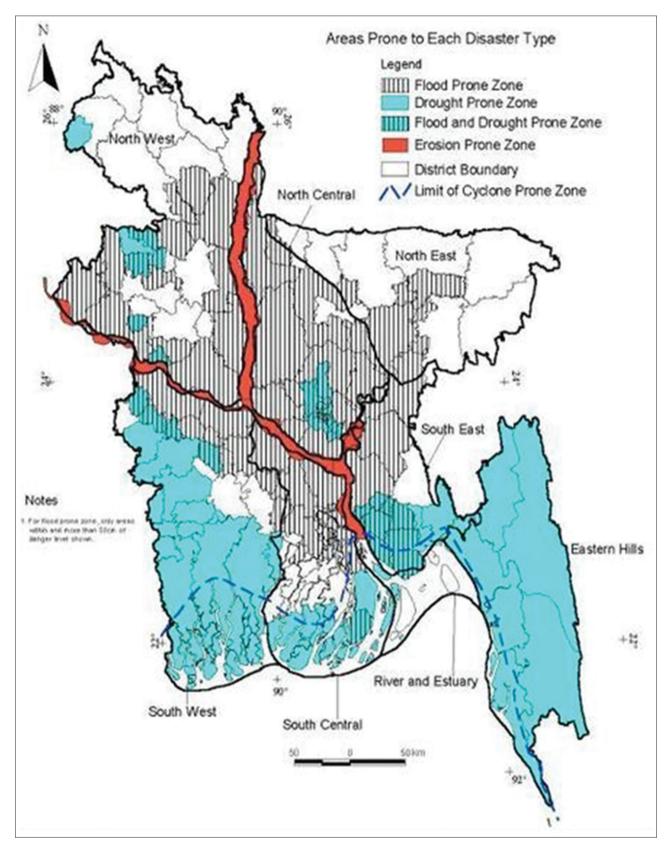


Figure 1: Bangladesh Map; Areas Prone to Each Disaster Type (Geography Educaion)

2.2. Response to Climate Change in Bangladesh: Climate Change Finance

In the last decades Bangladesh played important roles in the scientific and political arena of climate change. The country also made significant progress in formulating climate change related policy documents. In last few years all major national policy documents have addressed and incorporated climate change issue. These policy documents include:

- 1. National Adaptation Program of Action (NAPA)
- 2. Bangladesh Climate Change Strategy and Action Plan (BCCSAP)
- 3. Outline Perspective Plan (OPP)
- 4. Sixth Five Year Plan (SFYP)
- 5. Climate Change Trust Act, 2010
- 6. Climate Change Unit in Ministry of Environment & Forests
- 7. Climate Change focal points established in relevant ministries (Planning Commission, Ministry of Planning, Bangladesh, 2012)

Among many developing and least developed countries, Bangladesh is the one that has formulated and adopted such policy positions, though these policy documents have some limitations both in terms of process and subject matter.

For the implementations of the climate policies in our country, here comes the issue of Financing. So we can link the Climate Finance as a response to climate change in Bangladesh. This is a crucial co-ordination mechanism in the allocation of resources and it is essential that balanced policy influences operate to optimize resource allocation.

2.2.1. Climate Change Finance in Bangladesh

Besides the formulation of policy positions for domestic actions and international negotiations, the government has also established two financial mechanisms to support the implementation of 44 programs devised under six pillars of BCCSAP 2009 with a projected costing of an estimated amount of USD 5 billion for first five years. In addition to these two mechanisms, there are some existing traditional mechanisms as well to address climate change (Mukta, 2012).

Bangladesh Climate Change Trust Fund (BCCTF): Following the development of BCCSAP, the BCCTF was established in 2009 and resourced USD 100 million each year by the government since 2009. An amount equivalent to 66% of the total fund is being spent for the implementation of BCCSAP while the rest is held in reserve as 'fixed deposit' for tackling emergency situation and generating additional money to implement the BCCSAP. An amount of 10% of the mentioned 66% is being spent by NGOs under the overall supervision of Palli Karma-Sahayak Foundation (PKSF) and the rest by different ministries of the government (Shamsuddoha, 2010).

Bangladesh Climate Change Resilience Fund (BCCCRF): The BCCRF has been created with an amount of US\$110 million, funded principally by DFID (\$87 million), and also by Denmark (\$1.6 million), Sweden (\$11.5 million), EU (\$10.4 million) and Switzerland. The purpose of the BCCRF is to support the BCCSAP and provide funding for climate change management (primarily adaptation but also mitigation). It is to provide high-level coordination, eliminate overlaps, and ensure donor harmonization, flexible fund management and transparency. It aims to attract additional funding with the potential to become the "one-stop" mechanism. There will be two windows: an on-budget window for funding public section projects and a window for funding projects from the public sector and civil society (Hedger, 2011).

The Pilot Program for Climate Resilience (PPCR): It is a part of the global Strategic Climate Fund. Currently, United Kingdom contributes 55.5% of the total global contributions to the PPCR. In proportion to global contribution, UK funding to the PPCR in Bangladesh equates to \$39.67 million (DFID, 2011).

The Global Environment Facility (GEF): Established in 1991, the GEF is implemented by 10 agencies in partnership with 182 countries worldwide. Nine projects in Bangladesh are run by the GEF which include improving kiln efficiency for brick-making and community based adaptation projects. The UK globally contributes \$6.96 million to the GEF's work in Bangladesh (Planning Commission, Ministry of Planning, Bangladesh, 2012).

2.2.2. Funding Mechanisms of Climate Finance in Bangladesh

Currently, the responsibility of the implementation of climate related funds lies with the Ministry of Environment and Forest (MoEF). This ministry plays a leading role in the maintenance of BCCTF and BCCRF. These two funds are the main funding sources of present climate finance of Bangladesh. So it can be said that this ministry has the leading role in the incorporation of these funds. But according to the CPEIR, 37 ministries/divisions have some link with climate change related activities of either non-development or development nature or both. The reason behind the leading role of MoEF is the rule of the Allocation of Business among the Different Ministries and Divisions (1996, revised up to August 2000), the Planning, regulation and coordination of environmental and forestry programmes are the major activities of Ministry of Environment and Forest (Cabinet Division, Government of the People's Republic of Bangladesh, 2000). Climate Change is seen as an environmental issue here,

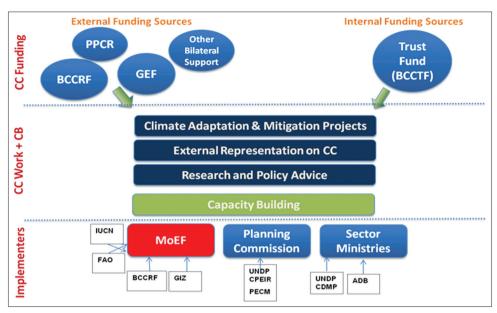


Figure 2: Climate Change Initiatives in Bangladesh

so the leading ministry to deal with the climate finance is the MoEF. But now a day, climate change issues are no more being seen as an environmental issue, rather a development issue.

In the existing development planning process, projects are first approved by the Planning Commission of Ministry of Planning, and then the executing agency implements them. But for climate change projects, the MoEF applies for support from either of the two main funds and the application is reviewed by the climate change cell. If the project is below US\$250 million it will not need to go to the Executive Committee of National Economic Council (ECNEC), which is the highest authority for approving development activities. In that case, the Ministry of Planning can approve it directly, to avoid delay and increase flexibility.

3. ADDRESSING VULNERABILITIES WITH AVAILABLE CLIMATE FUNDS

Perhaps the greatest challenge our country is facing is sustaining the progress made on the Sustainable Development Goals (SDGs) and poverty reduction. In this regard, Bangladesh should focus on strengthening the understanding of the linkages between responding to climate change and accelerating development.

In Bangladesh, Government has taken different policies in formulating climate change related strategies and actions plans for undertaking adaptation as well as mitigation measures. In this regard the policy makers of Bangladesh with the supervision of government develop the policies regarding climate change. Climate Financing is a part of climate policy.

Here the policy makers need to focus on Proper Climate Financing which will highlight the actual vulnerable situations of frontline people who should be marked as the most important stakeholder of this overall process. The policy implementation process and the funding mechanisms should follow the bottom up approach⁴, rather than being top-down⁵ always. There should be a proper need assessment of the people of the affected areas where they need more support for their adaptation. This will help them to build their resilience in future. With the available climate funds, Bangladesh now has to address the vulnerability of local people, which will enhance the local capacity towards resilience. As poverty, Illiteracy, Climate induced disasters, Improper Planning etc. are posing threat to attain sustainable development goals, the proper financial support should be there to address the vulnerability of the affected people.

Following activities can be addressed properly with appropriate climate financing in Bangladesh to response against climate vulnerabilities:

⁴ The bottom-up approach means that local actors participate in decision-making about the strategy and in the selection of the priorities to be pursued in their local area (ELARD).

⁵ A top-down approach is an autocratic and hierarchical style of decision making, organizational change and leadership, in which strategies or plans are first conceived by one or a few top managers, and then disseminated (cascaded) further down the organizational structure (MBA Brief, 2016).



Picture 1: Sea Level Rise



Picture 2: Coastal Flooding



Picture 3: Vulnerable Frontline People

- Food Security and Social Protection
- Comprehensive Disaster Risk Management
- Resilient Infrastructure
- Mitigated Carbon Emissions
- Capacity Building
- Strengthening Institutions

Bangladesh is a developing country with nearly two-thirds of the population depending directly on the climate sensitive sectors such as agriculture, fisheries and forests. The projected climate change under various scenarios is likely to have implications on food production, water supply, bio-diversity and livelihoods. Thus, Bangladesh has significant stake in understanding to

promote mitigation and adaptation. This requires improved financial understanding, capacity building, networking and broad consultation processes regarding the available climate funds.

4. RESPONDING WITH CLIMATE FINANCE TO ATTAIN SUSTAINABLE DEVELOPMENT GOALS

Climate change is affecting people's livelihood by way of sea level rise threatening to inundate up to one-fifth of Bangladesh creating up to 30 million homeless, cyclone and floods destroying human and animal lives and property, draughts causing crop failure, intrusion of saline waters causing crop failure, causing food security problems among a list of so many other factors destabilizing life on earth. For responding efficiently to these climate induced vulnerabilities, Climate Finance is important to support mitigation, adaptation, investment in technology and such other innovative programs to help affected communities to secure remedial actions which will lead to attain Sustainable Development Goals⁶, as SDGs³ represent a bold new agenda to end poverty, fight inequality, tackle the adverse effects of climate change and ensure a sustainable future for all. From this perspective, adequate funding is important to help people and affected communities to manage threats.

In order to truly assist vulnerable communities facing the impacts of climate change, a substantial proportion of the funding should be made available to local government institutions to support grassroots adaptation efforts. This way, local government institutions could serve as key elements of a bottom-up approach and as gateways to help communities' access to financial resources for adaptation.

Bangladesh has had significant successes in securing financial resources for climate change at the national level, in particular through two funds that accept project applications from government agencies and civil society: the Bangladesh Climate Change Trust Fund (BCCTF) and the Bangladesh Climate Change Resilience Fund (BCCRF). If local government institutions could access these funds, substantial new resources could be made available to local communities for climate change adaptation which will ensure to reach those SDGs which are facing obstacles due to climate change effects in the country. It should be noted that Bangladesh also has a third major climate funding source, the Strategic Program for Climate Resilience (SPCR), which is a component of the World Bank's multi-country Pilot Program for Climate Resilience (PPCR).

Greater efforts are needed to ensure complementarity between climate change and existing development finance. It is crucial that climate change financing contributes to poverty reduction and other sustainable development objectives. Bangladesh therefore needs to commit for better link between climate change and development planning and maximize synergies between poverty reduction and climate change mitigation and adaptation. Mobilizing sufficient resources to address both climate change adaptation and mitigation will require significant innovation and political will – particularly in the current economic climate of Bangladesh.

The new Sustainable Development Goals (SDGs) aim to put countries and the planet on a more sustainable path by 2030. These goals are the foundation of an ambitious new development agenda that seeks to end poverty, help the vulnerable, transform lives and protect the planet. The 17 new SDGs, also known as Global Goals, are comprised of 169 targets and will guide policy and funding for the next 15 years. The SDGs build on the success of the Millennium Development Goals (MDGs)(UNDP in Bangladesh, 2015).



Picture 4: Sustainable Development Goals (SDGs)

Yet an equally great challenge is how to manage these funds. There is a need to pay greater attention to the lessons learned from decades of experience with development. Furthermore, as development objectives and climate change strategies are strongly intertwined, policymakers will also need to ensure complementarity between development and climate change objectives in order to achieve effective results on the ground of Sustainable Development of Bangladesh.

Here the proper transparency and accountability of the climate financing procedures are needed to meet the need of the local people who are vulnerable due to climate change. Proper climate change financing procedures need to be recognized as part of development at the department level under the line ministries. More attention will be needed on this issue with a view to achieving a consensual approach and settled will.

At present the climate financing procedures of our country need three aspects of co-ordination within the Government to attain Sustainable Development Goals. Those are:

- a) Policy Co-ordination
- b) Institutional or Technical Co-ordination
- c) Financial and Performance Co-ordination.

5. DEVELOPING A SYSTEMATIC FISCAL FRAMEWORK FOR TRACKING AND ACCOUNTABILITY OF CLIMATE FINANCE

In 2010, the Planning Commission's Poverty-Environment-Climate Mainstreaming (PECM) project, aimed at institutionalizing the mainstreaming of environment and climate change issues into the planning process, was adopted by the government of Bangladesh. The project as a part of an Asia Pacific regional and Global Poverty Environment Initiative (PEI) financed by UNDP and UNEP is intended to provide targeted support to development planning and budgeting process through establishment of poverty-environment-climate linkages. Under the PECM Project, a Bangladesh Climate Public Expenditure and Institutional Review (CPEIR) was conducted in 2012. This came up with a number of recommendations; one key recommendation was to develop a Climate Fiscal Framework (CFF) which would incorporate-

- I. a set of climate fiscal codes for Bangladesh to track climate change expenditures for policy analysis and reporting, and
- II. an estimate of long term climate finance needs of Bangladesh through identifying potential climate related public expenditures across Government Ministries.

Under the present conditions of the climate finance of Bangladesh, the development of a National Climate Fiscal Framework7 is a high priority to ensure allocative efficiency and effective transaction of strategy to both policy and budgets. The framework should recognize the following as critical factors:

- a) The risks, roles and responsibilities that should be allocated to each institutional sector within Bangladesh including Central Government, Local Government, Donors, NGOs, households and the private sector.
- b) The allocation of funding responsibilities to all aspects of climate finance and activity.
- c) The need for a focal point financial framework that ensures the long term sustainability of funding streams.
- d) Ensuring that long terms plans for funding on a rational basis within a climate fiscal framework.
- e) The capacity on an institutional basis to implement the framework on a sustainable and achievable basis.

The Climate Fiscal Framework could be a possible solution toward a sustainable climate financing in Bangladesh. It is a concept that is still nascent and at the evolving stage. Bangladesh has been spending a significant amount of its resources in the fight against climate change related effects for years now. A clear idea about the amount of resources being expended has now become a vital necessity.

6. POLICY RECOMMENDATIONS

This study has come up with some policy recommendations for the policy makers and activists who are working in this specific sector. These recommendations are given below:

- Strengthening the understanding and knowledge on complex climate issues.
- Need for setting up appropriate national institutions to promote skillful negotiations regarding funding procedures and put right persons at the right place.
- NGO participation is highly needed to use climate fund which need to be enhanced.

⁷ Fiscal Framework comprises all arrangements, procedures, rules and institutions that underlie the conduct of budgetary policies of general government. The term fiscal framework can be used interchangeably with fiscal governance (Defined Term, 2015).

- Fund guidelines and projects approval procedures need to be simplified.
- Multimodal professional and diplomatic exchanges need to be promoted at global levels to secure due share from climate fund; at the same time, international community should recognize that Bangladesh is at a high risk level.
- Climate education and public awareness campaign must get new fillip.
- Research and development on new adaptation techniques need to be geared up, especially in areas of sustainable development goals.
- Mitigation measures should be enhanced and capacity for prompt mobilization must go up to address the adverse impacts of climate change.
- Participation of civil society in climate management needs to be inclusive.
- Strong Political commitment and pragmatic focus in climate financing should be visible.

7. CONCLUSION

This study has tried to examine the current policy and financial instruments in Bangladesh under broader purview of 'Climate Finance', which can ensure the future sustainable development prospects in various sectors, systems, and regions. As Bangladesh has been spending a significant amount of its resources in the fight against effects of climate change, a clear idea about the expense has now become a vital necessity. The proposed Climate Fiscal Framework is a new introduced framework which proposes to incorporate the roles of the related ministries in the policy making procedures of the climate change finance in Bangladesh. The Government of Bangladesh needs to manage climate related challenges by adopting budget priorities, pricing policies, and financial market rules. Government of Bangladesh has accorded high priority to address short, medium and long term climate change issues. To successfully deal with multi-dimensional adverse impacts arising out of climate change, establishment of an appropriate funding mechanism framework has become a necessity. Generating information on climate expenditure that would help tracking climate expenditure and maintaining financial records would eventually help build up a climate financial framework.

END NOTES

- 1. At the Sustainable Development Summit on 25 September, 2015, UN Member States will adopt the 2030 Agenda for Sustainable Development, which includes a set of 17 Sustainable Development Goals (SDGs) to end poverty, fight inequality and injustice, and tackle climate change by 2030. The SDGs, otherwise known as the Global Goals, build on the Millennium Development Goals (MDGs), eight anti-poverty targets that the world committed to achieving by 2015. The MDGs, adopted in 2000, aimed at an array of issues that included slashing poverty, hunger, disease, gender inequality, and access to water and sanitation. Enormous progress has been made on the MDGs, showing the value of a unifying agenda underpinned by goals and targets. Despite this success, the indignity of poverty has not been ended for all. The new Global Goals, and the broader sustainability agenda, go much further than the MDGs, addressing the root causes of poverty and the universal need for development that works for all people (UNDP in Bangladesh, 2015).
- 2. Changes in the climate of our country have been observed. Such as: Summers are becoming hotter, monsoon irregular, untimely rainfall, heavy rainfall over short period causing water logging and landslides, very little rainfall in dry period, increased river flow and inundation during monsoon, increased frequency, intensity and recurrence of floods, crop damage due to flash floods and monsoon floods, crop failure due to drought, prolonged cold spell, salinity intrusion along the coast leading to scarcity of potable water and redundancy of prevailing crop practices, coastal erosion, riverbank erosion, deaths due to extreme heat and extreme cold, increasing mortality, morbidity, prevalence and outbreak of dengue, malaria, cholera and diarrhea, etc. (Department of Environment, 2007).
- 3. The 17 Sustainable Development Goals are in precise as follows: Goal 1. End poverty in all its forms everywhere; Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture; Goal 3. Ensure healthy lives and promote well-being for all at all ages; Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all; Goal 5. Achieve gender equality and empower all women and girls; Goal 6. Ensure availability and sustainable management of water and sanitation for all; Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all; Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all; Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation; Goal 10. Reduce inequality within and among countries; Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable; Goal 12. Ensure sustainable consumption and production patterns; Goal 13. Take urgent action to combat climate change and its impacts; Goal 14. Conserve and use the oceans, seas and marine resources for sustainable development; Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, manage forests in a sustainable manner, combat desertification, and halt and reverse land degradation and

halt biodiversity loss; Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels and Goal 17. Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development.

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