



# SDGs Financing Strategy

Bangladesh Perspective



General Economics Division (GED)  
Planning Commission  
Government of the People's Republic of Bangladesh  
June 2017



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*(Making Growth Work for the Poor)*

**Planning Commission**

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**General Economics Division (GED)**

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Bangladesh Planning Commission

Government of the People's Republic of Bangladesh

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## Message



**A H M Mustafa Kamal, FCA, MP**

Minister

Ministry of Planning

Government of the People's Republic of Bangladesh  
&

Deputy Chairman, Bangladesh Planning Commission

I am happy to know that the General Economics Division (GED), Bangladesh Planning Commission is publishing the study on "SDGs Financing Strategy: Bangladesh Perspective". It was important to assess the needs to implement SDGs and this significant document mapped out the financial strategies that would be required for the successful materialization of SDGs in our country context. This assessment will play a significant role in determining the financing needs for SDGs implementation and will also guide us in mobilizing necessary resources.

While starting our journey towards implementation of the SDGs, we draw inspiration from the ideals of the Father of the Nation, Bangabandhu Sheikh Mujibur Rahman. He envisaged a prosperous Bangladesh with equal opportunities for all. Honourable Prime Minister Sheikh Hasina envisions transforming Bangladesh into a middle-income country by 2021 and a developed country by 2041.

I believe that this needs assessment study will help us to identify the key development interventions and to develop a well-defined roadmap for long term planning. I am glad to see that this assessment provides us an estimate of the annual resource gap and an opportunity to assess the government interventions and financing strategies accordingly.

I would like to express my sincere gratitude to all the ministries, agencies and stakeholders who have been involved in preparation of this report by providing necessary inputs.

I take the opportunity to thank the GED officials for their efforts in preparing the report which, I am sure, will be immensely beneficial for the policy makers, researchers, academia, planners and development partners dealing with the SDGs.

**[A H M Mustafa Kamal, FCA, MP]**





**M. A. Mannan, MP**  
State Minister

Ministry of Finance and Ministry of Planning  
Government of the People's Republic of Bangladesh

## Message

I would like to take the opportunity to congratulate the General Economics Division (GED) of Bangladesh Planning Commission for successfully conducting the time-befitting SDGs Needs Assessment study and for publishing the document titled as "SDGs Financing Strategy: Bangladesh Perspective".

I am happy that Bangladesh has completed this much-needed financing needs assessment for goal specific demand of resources in implementing SDGs. In order for supplementing its regular budget for SDGs implementation, the Government plans to explore innovative ways of financing through intense bilateral and multilateral engagements and putting additional focus on resource mobilization.

It was really important for us to identify the sources of gap financing and I am glad to see that this report has identified five potential sources of gap financing, which are: Public Financing; Private Sector Financing; Public-Private Partnership (PPP); External Sources which include Foreign Direct Investment (FDI) and Foreign Aid and Grants; and lastly by the, Non-Government Organizations (NGOs).

I believe that this assessment report will be a significant document in the implementation of SDGs, which will guide us to adopt appropriate financing strategies to materialize the SDGs.

I like to thank the GED Officials for their efforts in preparing this important report.

(M. A. Mannan, MP)



## Message

**Md. Abul Kalam Azad**  
Principal Coordinator (SDG Affairs)  
Prime Minister's Office (PMO)  
Government of the People's Republic of Bangladesh

I am delighted to learn that the General Economics Division (GED) of Bangladesh Planning Commission is publishing the analytical report titled "SDGs Financing Strategy: Bangladesh Perspective".

I am pleased that the GED has taken a bold initiative to come up with a study that has sketched the requirements of resource as well as sources of funds for implementation of SDGs in Bangladesh. It is evident from the previous experience of the MDGs delineated that in order to ensure proper implementation of global goals, a country must have full political commitment, action plan for implementation, estimation of financing and robust monitoring and evaluation process. Therefore, a methodologically comprehensive study of estimation of financing for SDGs implementation was due which GED has successfully completed.

A "SDGs Monitoring Framework" is in the process of development to track the progress of implementation and achievement of SDGs. This framework will have a web based data repository system to facilitate data collection, analysis, progress tracking and reporting.

In order to reap the fruit of SDGs implementation, we are now in the process of prioritization of the goals, targets and indicators where we need to put more effort. In this context, we are about to begin the localization of SDGs in Bangladesh which will ensure bottom-up approach of implementation along with traditional top-down approach.

I express my sincere gratitude to General Economics Division (GED) of Planning Commission for discharging their duty very prudently as the secretariat of "SDGs Implementation and Monitoring Committee".

I would like to take this opportunity to thank officials and colleagues from different Ministries/Divisions and agencies for providing their intellectual inputs to make the report complete.

Lastly, I hope that this study will help us in taking suitable policy decisions regarding the mobilization of required resources as well as channelize those resources to the coveted areas of Agenda 2030. Our efforts would be intense in mobilizing domestic resource mobilization but side by side, we hope that the development partners will come forward with boosted commitments in the priority areas of SDGs that will ultimately fulfil the ethical imperative of new development agenda-no one is left behind-to be materialized.

(Md. Abul Kalam Azad)



**Dr. Shamsul Alam**  
Member (Senior Secretary)  
General Economics Division (GED)  
Bangladesh Planning Commission

## Prefatory Note

Bangladesh has conspicuous success stories in MDGs. The country is also set to become a frontrunner in implementing SDGs with some innovative initiatives that are yet rare elsewhere in the SDGs world community. The country has already integrated SDGs into national planning framework. The development approach of the country aims to effectively drive SDGs implementation by whole of society approach which incorporates the private sector, CSOs, NGOs, development partners, media among others.

Bangladesh has already aligned SDGs in its 7<sup>th</sup> Five Year Plan, the development blueprint of the country. To spearhead the process, the government has formed SDGs Implementation and Monitoring Committee under the leadership of Principal Coordinator of SDGs Affairs at Prime Minister's Office. The Committee is assigned to expedite the implementation of SDGs and monitor the progress. GED has done an exercise on mapping of Ministries/Divisions to identify responsible ministries/divisions for each corresponding indicator. The lead Ministries/Divisions are in the process of finalizing their own action plan to implement the SDGs in a coordinated manner. A Data Gap Analysis for SDGs has also been conducted to review indicators for which data are available, for which are not, and which indicators require modification of existing data system.

Now, it is crucial for Bangladesh to have a reasonable estimate of costing and mode of financing to develop a concrete roadmap for implementing and achieving the SDGs targets. To this end, GED, Planning Commission conducted a study to assess the additional cost of implementation of SDGs. The "SDGs Financing Strategy: Bangladesh Perspective" provides a well-defined framework that outlines the goal and target wise additional estimated cost at 2015-16 constant prices.

While conducting the study, a number of challenges have emerged. The major challenge for the costing exercise was that many of the proposed indicators are newly introduced and data for these indicators are unavailable. According to the data gap analysis of GED, data for 70 indicators are readily available, data for 63 indicators are not available and data for 108 indicators are partially available. For few indicators, targets to achieve within FY 2030 are not clearly specified and 33 targets are also not quantifiable. Moreover, interdependencies among the goals and targets constitute another major challenge.

In order to overcome the challenges, conceptual and methodological framework played a pivotal role in conducting the study. The goals and targets under SDGs are interconnected. Therefore, if cost of implementation for each goal is estimated separately, total cost will overestimate the actual cost of implementation. Overlapping issues have been addressed using a process of synchronization among overlapping goals and targets. Goal 8 is the center of this synchronization. Achieving most of the goals will depend on SDG 8 which aims to achieve decent job and sustainable and inclusive growth of the economy.

The study considers two possible scenarios in the SDGs Needs Assessment. Firstly, the Business As Usual Scenario assumes 7 percent average annual real GDP growth rate from FY 2017 to FY 2030. Secondly, the 7<sup>th</sup> Five-Year Plan extended growth scenario (7% plus) projects that the GDP growth rate would be at 9 percent by FY 2030.

The report estimates that an additional amount, over the current provision of cost related to SDGs by public sector, private sectors and external sources, would be USD 928.48 billion at 2015-16 constant prices required for SDGs in the period FY 2017-FY 2030, which is 19.75 percent of the accumulated GDP under 7<sup>th</sup> FYP extended scenario. The annual average cost of SDGs will be USD 66.32 billion (at constant prices) for this period.

Further, the study suggests five potential sources of gap financing; which are [i] Public Financing, [ii] Private Sector Financing, [iii] Public-Private Partnership (PPP), [iv] External Sources including Foreign Direct Investment (FDI) and Foreign Aid and Grants, and lastly, [v] Non-Government Organizations (NGOs). During the periods of FY 2017-FY 2030, on average, public sector would account for 34 percent of the financing requirement, whereas private sector has the share of 42 percent. The average share of PPP is 6 percent. The external source has an average share of around 15 percent. Finally, the contribution of NGOs is estimated to be around 4 percent of total additional cost.

I hope, if we work together collectively, we will be able to beat all odds and challenges on the path of implementation of SDGs. As we performed well in MDGs, this will be an inspiration for us to be a star performer in SDGs as well. I would like to take this opportunity to thank my colleagues in GED and Government Officials of the Ministries for their contribution in shaping this study to its final form. We all from GED are grateful to our Hon'ble Planning Minister Mr. A H M Mustafa Kamal, FCA, MP, and Hon'ble State Minister for Ministry of Planning and Ministry of Finance Mr. M. A. Mannan, MP, and Mr. Md. Abul Kalam Azad, Principal Coordinator (SDG Affairs) at Hon'ble Prime Minister's Office for their intimate support and inspiration in bringing out this report within a short time.

Last but not the least, I am also thankful to Dr. Selim Raihan and his team who worked relentlessly with GED officials in preparing this important document, first of its kind, I believe among the SDGs World Community. This analytical document can be used as the 'best practice' in assessing additional fund requirement by a country in SDGs implementation.

I acknowledge, with thanks, the technical and financial support provided by the UNDP through the Support to Sustainable and Inclusive Planning (SSIP) Project being implemented by GED.



(Shamsul Alam, Ph.D., M.A. Econs.)



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# Summary

# Summary

The Sustainable Development Goals (SDGs) include 17 goals and 169 targets that set out quantitative and qualitative objectives and illustrate an inspiring vision for the world in the years until 2030. Unlike Millennium Development Goals (MDGs), that focused primarily on the least developed or poor countries, the SDGs are more global and applicable for all countries. It is evident that challenges that concern countries worldwide irrespective of how developed they are, such as climate-change, migration, conflict, cannot only be dealt with isolated efforts from individual countries. This aspiring agenda is a reminder of the challenges the world faces to this date, as many countries were not able to make sufficient progress on every single goal under the MDGs. The newly incorporated goals in the SDGs are more comprehensive and expansive in nature and thus will explore development schemes of vital importance to humanity.

The "SDGs Financing Strategy: Bangladesh Perspective" provides a well-defined work plan that highlights all the actions necessary to attain significant progress in the SDGs in Bangladesh. A full-blown needs assessment study helps us to identify the key development interventions and to develop a well-defined roadmap for long term planning. This report provides an estimate of the annual resource gap and an opportunity to revise the government interventions and financing strategies accordingly.

Several thematic working areas have been identified for this study which cover all 17 goals of SDGs. Key Informants (KI) from various stakeholders have been contacted for consultation under these thematic working areas to assess and approach the challenges for Bangladesh to overcome by 2030. The methodologies used for the additional cost estimation and to determine the resource gap, as well as the financing strategy, have been adopted based on the suggestions offered by different stakeholders including government personnel and experts of the relevant sectors. Three broad annexes under each goal provide the details of coverage of SDG targets for the additional cost estimation exercise, data sources, methodology, and breakdown of total additional cost. **Annex 1** under each goal describes how each of the targets of SDGs is incorporated in the cost estimation. Around 80 percent of the 169 targets of SDGs have been covered in the costing exercise. **Annex 2** under each goal describes the detailed methodology of cost estimation used in this study. Diversified method has been applied in the cost estimation. In some cases, multiple methodologies are used for different targets under the same goal. For most of the goals,

Multiplicative Factor Analysis (MFA) procedure is applied to calculate the total cost per annum. This costing procedure takes into account the cost required to achieve certain targets, while considering several factors including quantity, quality, efficiency, sustainability and capacity building. The other methods applied for this study include poverty gap analysis, Incremental Capital-Output Ratio (ICOR) analysis, investment requirement for certain sectors and block allocation for some targets. For few goals and targets, current programs under national budget have been used as the base for the cost estimation and these programs are considered to scale up for better coverage. **Annex 3** under each goal shows the breakdown of annual additional cost in both current and constant (2015-16) prices. Additional cost is the cost that will be required over the Business As Usual (BAU) cost. The BAU cost is defined as the cost that will be incurred up to FY 2030 if the current provision of cost related to SDGs by all economic agents continues.

Most of the goals under SDGs are interconnected. Therefore, if cost of implementation for each goal is estimated separately, total cost will overestimate the actual cost of implementation. The overlapping issues have been addressed using a process of synchronization among overlapping goals and targets. Synchronizations are done for SDG 1, SDG 3, SDG 5, SDG 6, SDG 7, SDG 8, SDG 9 and SDG 17. The major synchronization is done among the SDG 7, SDG 8 and SDG 9, and SDG 8 is the center of this synchronization. Achieving most of the goals will depend on SDG 8 which aims to achieve decent job and sustainable and inclusive growth of the economy. The total cost after synchronization is the final cost to address the goals of SDGs.

Two possible scenarios have been considered to come up with the SDGs Needs Assessment. **Firstly**, the BAU scenario, where average annual growth rate of real GDP has been considered to be 7 percent from FY2017 to FY 2030. **Secondly**, the 7<sup>th</sup> Five Year Plan (7<sup>th</sup> FYP) extended growth scenario for achieving SDGs in Bangladesh<sup>1</sup>, where it is projected that the GDP growth rate would be 9 percent by FY 2030. This suggests that this report considers a SDG plus scenario where the growth rate of real GDP is more than the requirement under SDG 8.<sup>2</sup>

According to the 7<sup>th</sup> FYP extended growth scenario, the aggregate GDP at constant 2015-16 prices for the period FY 2017-FY 2030 would be BDT 498,900.3 billion (USD 5,004.99 billion)<sup>3</sup>. On an average, the annual GDP at constant prices during this period would be BDT 35,635.73 billion (USD 357.50 billion). In contrast, the total GDP at constant prices based on the BAU growth

**Table A: Summary of costing exercise (USD in billion)**

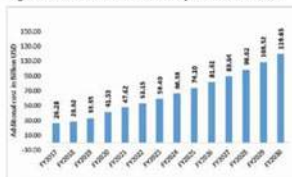
	FY 17-FY 20	FY 21-FY 25	FY 26-FY 30	FY 17-FY 30
Total additional synchronized cost	129.79	300.65	498.04	928.48
Annual average additional synchronized cost	32.45	60.13	99.61	66.32

Source: GED estimates

scenario during FY 2017-FY 2030 would be BDT 460,814.95 billion (USD 4,646.33 billion), and the annual average GDP would be BDT 32,915.35 billion (USD 331.88 billion).

The total additional unsynchronized cost for the SDGs has been estimated to be BDT 118,274.59 billion (USD 1162.76 billion) at constant 2015-16 prices during the period FY 2017-FY 2030. After removing overlaps through the process of synchronization for each year, the total additional synchronized cost for the implementation of SDGs has been estimated to be BDT 94,711.65 billion (USD 928.48 billion) at constant prices, which is 19.75 percent of the accumulated GDP under 7<sup>th</sup> FYP extended scenario during the period FY 2017-FY 2030. The additional synchronized cost is smaller for the initial period of implementation and the cost increases gradually for the later periods (Table A). The additional synchronized cost of implementing SDGs would be BDT 11,100.27 billion (USD 129.79 billion) during the period FY 2017-FY 2020, which would increase to BDT 54,466.91 billion (USD 498.04 billion) for the period FY 2026-FY 2030. Similarly, the annual average additional synchronized cost of SDGs will be BDT 6,765.12 billion (USD 66.32 billion) for the period FY 2017-FY 2030. However, for the FY 2017-FY 2020 period, the annual average figure would be BDT 2,775.07 billion (USD 32.45 billion), which would increase to BDT 10,893.38 billion (USD 99.61 billion) in the period FY 2026-FY 2030.

**Figure A: Year-wise additional synchronized cost**



Source: GED estimates

This study has considered the GDP growth rate projections from the 7<sup>th</sup> FYP for the period FY17-20. For the period FY21-30, it has been considered that the real GDP growth rate should be increased to 8.5% by 2025 and to 9% by FY30. The real GDP growth rates for each year in the period FY2017-FY2030 have been given in Annex 19.3.

<sup>1</sup>Under SDG 8, the Target 8.1 postulates to "Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 percent gross domestic product growth per annum in the least developed countries".

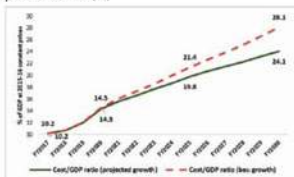
<sup>2</sup>The projected exchange rates for BDT against USD for the period during FY 2017 and FY 2030 are derived from Annex 19.3 of this report (Annex 19.3: Projection of Key Macroeconomic Indicators for 2015-2030 Consistent with 7<sup>th</sup> FYP Extended Scenario) and these rates have been considered throughout this report.

The year-wise additional synchronized cost is shown in Figure A, which suggest that the additional cost would increase from BDT 2,128.75 billion (USD 26.28 billion) in FY 2017 to BDT 13,630.40 billion (USD 119.65 billion) in FY 2030.

Figure B shows that the additional synchronized cost for all 17 goals would be 10.16 percent of the projected GDP (at 2015-16 constant prices) under 7<sup>th</sup> FYP extended growth scenario in FY 2017 which would increase to 24.06 percent in FY 2030. Under BAU growth scenario, the estimated total additional cost of SDGs would be 10.18 percent of the projected GDP (at 2015-16 constant prices) in FY 2017, which would increase to 28.14 percent in FY 2030.

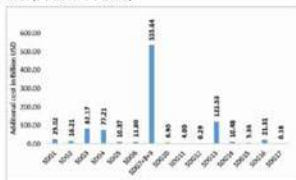
The highest cost would be incurred for the implementation of SDG 8 since economic growth is the core of development. Figure C shows that, since the major synchronization is done among the SDG 7, SDG 8 and SDG 9, an aggregated synchronized additional amount of BDT 55,135.27 billion (USD 535.64 billion) for SDG 7, SDG 8 and SDG 9 would be required during the period FY 2017-FY 2030, which would be about 59.12 percent of total additional cost of SDGs. In contrast, the least cost would be incurred for the implementation of SDG 17, which would be BDT 16.96 billion (USD 0.18 billion).

**Figure B: Synchronized additional SDGs costs as percent of GDP (%)**



Source: GED estimates

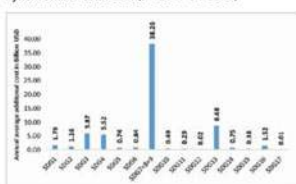
**Figure C: Goal-wise additional synchronized total cost (FY 2017-FY 2030)**



Source: GED estimates

The goal wise annual average figures of implementation cost, as shown in Figure D, suggest that the highest average cost would be for SDG 7, SDG 8 and SDG 9 together, which would be BDT 3,938.23 billion (USD 38.26 billion). In contrast, the least annual average cost would be for SDG 17, which would be BDT 1.21 billion (USD 0.01 billion).

**Figure D: Goal-wise annual average additional synchronized total cost (FY 2017-FY 2030)**



Source: GED estimates

Five potential sources of gap financing have been suggested in this report which are: Public Financing; Private Sector Financing; Public-Private Partnership (PPP); External Sources which include Foreign Direct Investment (FDI) and Foreign Aid and Grants; and lastly, Non-Government Organizations (NGOs). During the periods of FY 2017-FY 2030, on average, public sector would account for 34 percent of the financing requirement, whereas private sector has the share of 42 percent. The average share of PPP is 6 percent. The external source has an average share of around 15 percent. Finally, the NGOs would contribute around 4 percent.

Private sector has historically been playing an important role in economic development in Bangladesh. It is thus envisaged in this report that the largest portion of SDGs implementation resource gap would come from the private sector. Private sector is

considered to contribute about 37.03 percent of total additional cost in FY 2017 which will increase to 46.27 percent in FY 2030. The contribution of external sources is expected to decrease from 18.35 percent of total additional cost in FY 2017 to 13.25 percent in FY 2030 which indicates that external dependency of Bangladesh will decrease over time. PPP is considered to contribute about 4.53 percent in FY 2017 and 6.59 percent in FY 2030 of total additional cost. NGOs will finance about 7 percent in FY 2017 and 3 percent in FY 2030. Contribution of the public sector is estimated to be about one-third of total gap. Public sector will finance about 34.03 percent of additional cost in FY 2017 which is estimated to reduce to about 31.31 percent in FY 2030 with some fluctuations.

Table B suggests that during the period FY 2017-FY 2030, it has been estimated that a total of BDT 81,307.61 billion (USD 796.09 billion) is required to be financed from domestic sources. In contrast, BDT 13,404.04 billion (USD 132.38974 billion) is needed from external sources. On an average, annually, BDT 5,807.69 billion (USD 56.86 billion) is needed from the domestic sources during this period, while BDT 957.43 billion (USD 9.45641 billion) is needed annually from the external sources. Out of the total contribution of external sources, BDT 9,923.05 billion (USD 96.687493 billion) is expected to come from FDI and BDT 3,480.54 billion (USD 35.691415 billion) is expected from foreign aid and grants during the period FY2017-FY2030. The average additional amount required annually from FDI is BDT 708.79 billion (USD 6.91 billion), while the average amount required annually from foreign grants and aid is BDT 248.61 billion (USD 2.55 billion). In FY 2016, Bangladesh received FDI of around USD 2 billion. Therefore, the projection of annual average receipt of FDI of additional USD 6.91 billion seems to be ambitious. However, given government's initiative to set up 100 special economic zones (SEZs) by 2030 and the prospects of large FDI from China, Japan, India and other countries in those SEZs may fulfill much of this requirement.

One of the major challenges for the cost estimation was that many of the proposed indicators are newly introduced and data for this indicators are unavailable. For Bangladesh, unavailability of data is a major concern. Data are available only for one-third of the indicators. For few indicators, targets to achieve within FY 2030 are not clearly specified and few indicators are not quantifiable. Another major challenge is to address the overlapping issue. This issue has been addressed using the synchronization process reported in the Annexes 18.1 to 18.14.

**Table B: Summary of financing options (USD in billion)**

	FY17-FY20	FY21-FY25	FY26-FY30	FY17-FY30
Total additional amount from domestic sources [85.11% of total]	107.72	257.49	430.87	796.09
Total additional amount from external sources [14.89% of total]	22.07	43.15	67.17	132.39
Total additional amount from both domestic and external sources [100%]	129.79	300.65	498.04	928.48
Annual average additional amount from domestic sources	26.93	51.50	86.17	56.86
Annual average additional amount from external sources	5.52	8.63	13.43	9.46
of which FDI	2.73	6.45	10.70	6.91
Grants and aid	2.79	2.17	2.74	2.55

Source: GED estimates

Finally, one of the main challenges in achieving SDGs is vast improvement in implementation of projects and programmes. Delays in project implementation have deleterious impact on cost as well as on the intended benefits. Improving tax-effort by 9 percentage points over the next 13 years will not be easy. NBR must embark on new initiatives based on reforms; automation; capacity development and audit to improve revenue mobilization in Bangladesh.

Access to climate critically depends on our capacity to negotiate with the development partners. In this context, Bangladesh has identified areas of strengthening. These should be ensured on a priority

basis. The 7<sup>th</sup> FYP states that the international experience with the implementation of infrastructure PPPs suggests that this policy has worked best when the legal framework is well-thought out and when and the management of the initiative involves competent professional staff. In both regards, the Bangladesh PPP initiative is deficient. The legal framework needs to lay down clear rules of engagement, the incentive framework and dispute resolution mechanism that compares favourably with international good practice. Government needs to work on these two important areas.



# I. Introduction



# I. Introduction

In order to take the spirit and experiences of Millennium Development Goals (MDGs) further, 193 member states of the United Nations formally adopted the 2030 agenda for Sustainable Development in its 70<sup>th</sup> UN General Assembly meeting on 25 September 2015. The 17 new Sustainable Development Goals (SDGs) and 169 targets aim to address broader development issues than what MDGs were designed to do and will be monitored by 230 indicators. Unlike MDGs, SDGs are universal, applied to all countries and all people. The agenda also include issues that were not addressed in the MDGs such as economic growth, sustainable production and consumption, innovation and the importance of peace and justice for all. The new goals and targets came into effect on 1 January, 2016.

Governments of the developing countries have considered their commitments towards accomplishing the SDGs as one of their priority areas and have undertaken activities for developing the roll-out plans. Bangladesh, one of the success stories of the MDGs, has also become a frontrunner in implementing SDGs, setting an example of the best practice in mainstreaming global goals into the national plan with an effective SDGs Implementation Plan involving all the key relevant ministries of the government as well as the private sector and CSOs.

In this regard, the political commitment of Bangladesh from the highest level of government is evident from its pro-active measures. For example, the government of Bangladesh has contributed in the process of developing the SDGs with the proposal of 11 Goals, 58 targets and 241 indicators. Furthermore, the goals of SDGs were also given emphasis while

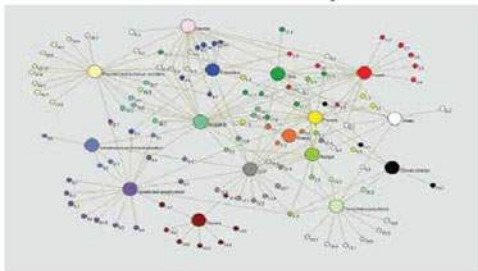
setting up the priority areas of the 7<sup>th</sup> FYP, as part of the process of preparing the action plan for implementation of SDGs. In addition, a Development Result Framework (DRF) for monitoring the 7<sup>th</sup> FYP has been prepared considering the indicators of SDGs and their identified targets of the Ministries.

Unlike the MDGs financial strategies and the need assessment for the period 2011-15, the planning horizon of SDGs spans for fifteen years. The projection of long term growth as well as other key variables such as government revenue, ADP, etc. for 15 years, which have direct bearing on the implementation of SDGs, is a daunting challenge. While some goals are cross-cutting, implying interventions for achieving one goal [e.g., poverty reduction] can also impact other goals [nutrition, inequality, etc.] some goals are very sector specific and well defined. Therefore, identifying the major interventions by the respective ministries and estimating the relevant cost is the mainstay for any need assessment exercise.

Few issues should be highlighted about the report findings. For most of the goals, Multiplicative Factor Analysis (MFA) method is applied to calculate the total cost per annum. It should also be noted that estimated costs for years 2017-2030 have been adjusted by the inflation adjustment factor to get the total cost.

Blanc [2015] presented the SDGs as a network of targets [Box 1]. The conceptual framework, used in the current exercise in synchronization of additional costing of different SDGs, presented in Box 2, has reflected this network of targets, based on the available information,

**Box 1: The SDGs as a network of targets**



Source: Blanc [2015]

In Box 2, the diagonal cells represent the own costing for any particular SDGs and 'syn' means how that particular SDG has been synchronized with other SDGs. Through this process, overlapping of costing among different SDGs has been avoided. Thus, the sum over columns for any particular row shows the total unsynchronized cost for any SDG. In contrast, the sum over rows for any particular column shows the total synchronized cost for any SDG. For example, if

For the calculation of additional costing of each SDGs this report provides a set of three annexes. The first annex presents an analysis of the targets covered in the calculation of additional costing of each SDG. The second annex provides the methodology of the calculation of additional costing of each SDG with the sources of data. Finally, the third annex provides a breakdown of total additional cost for each SDG.

**Box 2: Conceptual framework in synchronization of additional costing of different SDGs**

	SDG1	SDG2	SDG3	SDG4	SDG5	SDG6	SDG7	SDG8	SDG9	SDG10	SDG11	SDG12	SDG13	SDG14	SDG15	SDG16	SDG17
SDG1	Own				Syn												
SDG2		Own				Syn											
SDG3			Own														
SDG4				Own			Syn										
SDG5					Own												
SDG6						Own											
SDG7							Own		Syn								
SDG8	Syn						Own										
SDG9						Syn	Syn	Own									Syn
SDG10									Own								Syn
SDG11			Syn							Own							
SDG12							Syn				Own						Syn
SDG13	Syn											Own					
SDG14			Syn			Syn							Own				Syn
SDG15			Syn											Own			
SDG16							Syn								Own		Syn
SDG17																	Own
<b>Totals for Synchronized cost</b>																	

**Totals for Unsynchronized cost**

Note: Own means the cost for that particular SDG and Syn means synchronization with any other SDG.

we consider the row of SDG 1, the total amount would be the unsynchronized cost amount. However, the column of SDG 1 shows that that costing under this SDG has been synchronized with SDG 8 and SDG 13. The major synchronization has been done among SDG 7, SDG 8 and SDG 9, which are at the heart of this costing exercise. For details, please see Section IV of this report.

The outline of this report is as follows: **Section II** provides a review of literature; **Section III** provides the estimation of additional costs for implementation of SDGs; **Section IV** presents the estimate of total additional unsynchronized and synchronized costs for SDGs; **Section V** presents the SDGs financing options; and finally **Section VI** concludes.



## II. SDGs: Estimation of Resource Gap and Financing: Critical Issues

## II. SDGs: Estimation of Resource Gap and Financing: Critical Issues

A set of compound challenges is embraced into SDGs as a combination of economic development, social inclusion, and environmental sustainability (Box 3). In particular, the SDG agenda sets out five key opportunities for development that is inclusive, universal, integrated, locally-focused, and technology-driven.

### Box 3: Description of Sustainable Development

- 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 sustainably use the oceans, seas and marine resources for sustainable development
- Goal 15.** Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, 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
- Goal 17.** Strengthen the means of implementation and revitalize the global partnership for sustainable development

Source: <http://www.un.org/sustainabledevelopment/sustainable-development-goals/>

The SDGs with 17 goals are broader and more ambitious than the MDGs which had 8 goals. SDGs together constitute comprehensive agenda covering all three dimensions of sustainable development – economic, social and environmental. This integrated agenda considers all citizens in all countries ensuring that no one is left behind.

The SDGs emphasize on universal and comprehensive goals that equally push all countries and all levels of economic development, to ensure that no one is left behind. The SDGs with 17 goals and 169 targets are more comprehensive in scope for the same target than for MDGs, SDGs merge a comprehensive agenda with the social sector and thus use the concept of sustainability. The SDGs pursue a more integrative approach to development. The SDGs present a united and integrated agenda between its 17 goals.

SDGs are structured with comprehensive goals emphasizing well-being and healthy living including the pillars of human development, human rights and equity. For instance, seven targets explicitly refer to people with disabilities, six to people in vulnerable situations, and two to non-discrimination.

The SDGs focus on quality outcomes. For instance, Goal 4 particularly represents the first attempt by the world community to focus on the quality of education, SDG 3 specifically targets to ensure healthy lives and promote well-being for all at all ages.

Almost all the SDGs are directly related to health or will contribute to health indirectly and its 13 targets build on progress made on the MDGs and reflect a new focus on non-communicable diseases and the achievement of universal health coverage.

SDGs pay attention to how the implementation and review process will be developed. To keep the process trustworthy, country specific role for stakeholders other than the government, like private sector and civil society received attention in SDGs. Moreover, SDGs are redefining the duties of government and other players in the process with wider social norms about equal rights.

SDGs execution strategy encourages domestic resource mobilization rather than depending on foreign aids. CCC projected SDG costs to be 4.5 trillion USD per year in state spending, investment, and aid. However, SDGs advocate keeping an eye on developed country budgets and policies since aid is falling as a percentage of government revenue.

The encouraging consequences of MDGs in various countries around the world corroborates the consensus that global goals such as the MDGs and the SDGs complement international conventions that cultivate collaboration across countries, mobilize all stakeholders, and inspire action which applies correspondingly to all countries, developed and developing.

Accordingly, the SDGs framework has been designed keeping in mind the further complexity of the challenges faced today and the need for additional work to achieve some of the fundamental global goals, such as the goal of ending extreme poverty in all its form.

Since early 2015, the SDGs Agenda has become the standard tool to set development priorities and development gaps that previous strategies have been unable to close for countries of the world, including South Asia. Researchers and academicians have started to keenly study this new area that is yet to be explored in many dimensions. One recent report by UNESCAP identifies seven key strategic policy priorities for operationalizing integrated SDGs achievement in South Asian context<sup>1</sup>. Those are:

- Sustained job-creating rapid economic growth through industry-oriented structural transformation
- Universal access to education and health to harness South Asia's youth bulge
- Universal social protection and financial inclusion
- Addressing food security and hunger with sustainable agricultural productivity improvements
- Promoting gender equality and women's empowerment through entrepreneurship
- Enhancing environmental sustainability through low-carbon climate-resilient pathways

- To undertake the ambitious 2030 Agenda, including the key priorities outlined above, countries in South Asia will need supporting means of implementation.

Another UNESCAP Survey report (UNESCAP-CSN, 2016)<sup>2</sup> identified priorities to be set within SDGs in selected countries with special needs (CSN) to find out how these countries can best adapt the 2030 Agenda to their unique national contexts. The country categories include least developed countries, landlocked developing countries and small island developing States; namely: Bangladesh, Kazakhstan and Fiji. Based on the survey result, recommendations for Bangladesh include priority on education, priority on inequalities reduction and priority on infrastructure.

Therefore, importance of human capital or other social pillars are considered to be as prime priority for a country like Bangladesh or any least developing country, to achieve sustainable development. On the other hand, the report advocate that landlocked developing countries should focus on the economic pillar and those from small island developing states should balance prioritization by integrating the social, economic and environmental pillars.

The year of 2016 begins the countdown to reach SDGs in time and national governments are dealing with how to implement them. Aid donors are also considering how they can best partner with national governments to see the goals achieved by 2030. Corresponding stakeholders have started working together to estimate cost of reaching the SDGs targets and to find ways so that countries can afford that. The ODI (2015) report sheds light on this by focusing on three key SDGs targets that will rely heavily on public expenditure.

The report examines developing countries that have populations over one million people and at least one per cent of their populations living in extreme poverty. They estimated the total cost for SDGs targets related to poverty, health and education is to be US\$148 billion a year in low income countries alone. ODI (2015) report announces three broad findings through some costing exercises. **First**, if potential government revenue is managed, aid will not be required for the low middle-income countries (LMICs) to finance SDGs targets. **Second**, generating more government revenue in addition to aid will not be sufficient for the low-income countries (LICs). The annual financing gap for low-income countries is over US\$70 billion making it difficult to afford these three SDG goals. **Lastly**, redistribution of aid from LMICs to LICs can be considered to narrow the financing gap since

<sup>1</sup><http://www.unescap.org/sites/default/files/SDGs%20South%20Asia%20report%202016%20rev%2014%20Apr%202016.pdf>  
<sup>2</sup><http://www.unescap.org/sites/default/files/CSN%20Report%202016.pdf>

available public finance is adequate for mostly all countries to reach SDGs targets, as LMICs will have surplus aid.

Another World Bank study (Hutton and Varughese, 2016) assesses the global costs of meeting the water, sanitation, and hygiene (WASH)-related targets of SDG 6. Two targets are assessed: [1] achieving universal and equitable access to safe and affordable drinking water for all [target 6.1]; and [2] achieving access to adequate and equitable sanitation and hygiene for all and ending open defecation [target 6.2]. **One of their findings** include that current levels of financing can cover the capital costs of achieving universal basic service for drinking water, sanitation, and hygiene by 2030, provided resources are targeted to the needs. **Second finding** reveals that the capital investments required achieving the water supply, sanitation, and hygiene SDGs [targets 6.1 and 6.2] amount to about three times the current investment levels. **Finally**, they report that sustained universal coverage requires more than capital inflows: financial and institutional strengthening will be needed to ensure that capital investments translate into effective service delivery.

Another study finding reveals that it will cost approximately an additional \$8.50 per child per year to meet the global stunting target [The World Bank, Results for Development Institute (R4D), and 1,000 Days, in partnership with the Bill & Melinda Gates Foundation and the Children's Investment Fund Foundation]. To scale up the package of interventions, about \$49.6 billion investment is required for the next 10 years with small investments for the first 5 years that will increase slowly.

Therefore, it is unmistakable that targeted SDGs are rather ambitious and necessitate substantial resources. UNCTAD's World Investment Report 2014 argues that SDGs will require a step-change in both public and private investment in developing countries, if an estimated annual \$2.5 trillion funding gap is to be filled. The report confidently offers a framework to understand and enhance the role of private sector contributions to the pursuit of positive economic, social and environmental outcomes in developing countries. The report enforces on the fact that public sector contributions are crucial but inadequate to achieve SDG targets. It also estimates that least developed countries (LDCs) need to double their private investment growth rates.

UNCTAD's report estimates that total investment required in developing countries range from \$3.3 trillion to \$4.5 trillion yearly, for essential infrastructure [roads, rail and ports; power stations; water and sanitation], food security [agriculture and rural development], climate change mitigation and adaptation, health, and education. Therefore, potential for increased private sector investment contributions is significant in these sectors.

UNESCAP (2016) estimated that by 2030 it will cost 10% of GDP in India and 20% of GDP in Bangladesh to initiate the social investment package. South Asian countries require greater resources to meet the infrastructure gap. Larger domestic and external resources can be stimulated through the following strategies: (i) Domestic Resource Mobilization: Improving the tax base and reinforcing tax administration and compliance can boost domestic resources.

Also, identifying the loopholes and closing them to prevent tax leakages is essential. (ii) Harnessing private investments and public-private partnerships for sustainable development: PPPs have shown considerable success in addressing specific urban infrastructure needs since they can contribute to enhancing public investments.

Countries have also stimulated private sector to contribute to the corporate social responsibility to increase public resources. (iii) Regional and international cooperation for sustainable financing: Potential for regional cooperation is immense in South Asia. This can be used to meet the resource financing needs of the relatively less developed capital markets from the more developed capital markets. SAARC Development Fund, South Asian Development Bank and the New Development Bank can all contribute to raising capital.

In a nutshell, SDGs with 17 goals are broader and more aspiring than the MDGs, which had 8 goals. SDGs cover all three dimensions of sustainable development that merge a comprehensive agenda with the social sector and thus practice the concept of sustainability.

Targeted SDGs are hence rather ambitious and require substantial resources as mentioned in existing literatures. A number of studies commonly advise on domestic resource mobilization and exploiting private investments and public-private partnerships for sustainable development.

# III. Estimation of Additional Costs for Implementation of SDGs



# III. Estimation of Additional Costs for Implementation of SDGs

The SDGs cost estimation is a complex exercise involving several different methods used to calculate costs of the 17 goals. Consultation with Key Informants (KI) from various stakeholders has been conducted for their expert opinion on appropriate methodology of cost estimation for each goal. Considering experts' opinion, total cost has been estimated for each goal. For most goals, simple Multiplicative Factor Analysis (MFA) method has been used, with some exception.

The successful implementation of the interventions to achieve SDGs will require massive institutional reform in all government and non-government agencies. Goal 16, in particular, calls for strong institutions at all levels of the society. The costs needed for strong institutions have been incorporated in goal 16. However, institutional reform is necessary for each implementing agencies related to the 17 goals. It is necessary to incorporate the potential costs of institutional reform in the total cost for each goal separately. However, it is yet to be decided how much institutional reform will be possible by 2030, and the potential cost for this purpose.

A major challenge for achieving SDGs in Bangladesh is raising awareness among the people about its significance. An important aspect of all 17 goals, especially goals that focus on issues such as nutrition, stunting, quality education, women empowerment, gender equality, communicable and non-communicable diseases, safety and security, responsible consumption and production, environmental sustainability etc., is goal-specific programs designed to raise awareness. In this study, the total costs of some goals (for example, goal 5 and goal 15) include potential expenditure on community based awareness programs. For the other goals, the costs of awareness raising programs are estimated to be around 2% of their total costs.

The cost estimation exercise for this study uses some data sources that are common in case of several goals. The 7<sup>th</sup> FYP and Bangladesh Delta Plan 2100 have been used as data sources in the cost estimation of several goals. The SDGs data gap analysis and mapping of government ministries/divisions by targets in the implementation of SDGs provided by GED have also been used for the purpose of available resource estimation. The Power System Master Plan 2010 by government has been used in the cost calculation for goal 7. The Statistical Yearbook Bangladesh 2015, Labour Force Survey 2010 and

Labour Force Survey 2013 have been used as common data sources for this costing exercise.

## 3.1. SDG 1: No Poverty

SDG 1 focuses on ending poverty in all its forms everywhere. It covers the areas critical for poverty eradication. The targets under this SDG emphasize on eradication of poverty for men, women, and children of all ages everywhere. In addition, they aim at ensuring social protection for the poor and vulnerable, increasing access to basic services and support people who are vulnerable to climate-related extreme events and other economic, social and environmental shocks and disasters.<sup>6</sup>

SDG 1 accommodates 7 targets and 12 indicators. Among 12 indicators, 11 indicators are quantifiable and 1 indicator is non-quantifiable.

Bangladesh has been successful in achieving a considerable reduction in poverty and extreme poverty rates. In 2010, the poverty rate and extreme poverty rate were 31.5 percent and 17.6 percent respectively, which declined to 24.8 percent and 12.9 percent respectively in 2015 (7<sup>th</sup> Five Year Plan, 2015). These numbers suggest that Bangladesh is on track in achieving SDG 1. It can be expected that the poverty-related targets for the upcoming years will be met if Bangladesh can produce effective efforts. Economic growth will take care of the moderate poverty. But Bangladesh has to increase its effort to help the extremely poor population to come out of the utmost poverty. Target 1.1 stresses on eradicating extreme poverty. An additional cost of 0.02 percent of GDP, on an average, needs to be spent in each of the years in the period FY 2017-FY 2030 for eliminating extreme poverty. This additional amount needs to be met by increasing the spending on safety net programs. Target 1.3 concentrates on improving the coverage of appropriate safety net programs. Bangladesh has been executing a wide range of safety net programs involving around 2.00 percent of GDP (7<sup>th</sup> Five Year Plan, 2015), which needs to be increased to 2.50 percent of GDP in order to successfully address the challenges. Therefore, Bangladesh needs additional 0.50 percent of GDP to be devoted to safety net programs.

Annex 1.1 shows how the targets have been incorporated in the costing analysis. Annex 1.2 presents an analysis of the methodology used in estimating the additional cost for SDG 1. Annex 1.3 shows the total additional cost for the FY 2017-FY 2030 in both current and constant prices.

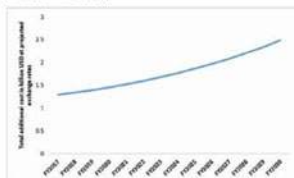
<sup>6</sup>Sustainable Development Knowledge Platform, UNDP

**Table 1: Total Additional costs for SDG 1 in FY 2017, FY 2020, FY 2025 and FY 2030**

Total Additional Cost\ Fiscal Year	FY 2017	FY 2020	FY 2025	FY 2030
Billion BDT at constant 2015-16 prices	104.75	129.47	189.32	283.30
Billion USD	1.29	1.46	1.87	2.49

Source: Annex 1.3

**Figure 1: Projection of total additional cost for SDG 1 (FY 2017-FY 2030)**



Source: Annex 1.3

Based on the costing exercise presented in Annex 1.2, Table 1 suggests the additional amount needed, both in BDT and USD, to achieve the targets of SDG 1 in FY 2017, FY 2020, FY 2025 and FY 2030. Figure 3 presents the projection for all the years during FY 2017 and FY 2030.

### 3.2. SDG 2: Zero Hunger

SDG 2 emphasizes on ending hunger, achieving food security and improved nutrition and promoting sustainable agriculture. It concentrates on ending hunger by ensuring access to safe, nutritious and sufficient food all year round for all people with the aim of ending all forms of malnutrition. The focused people here are the poor and people in vulnerable situations which includes the infants as well. It is very important to ensure sustainable food production

system and materialize resilient agricultural practices if zero hunger with improved nutrition is expected to achieve. That is why, sustainability of agriculture has been endorsed in this goal. The targets focus on ending hunger by 2030 through increase in food productivity, food access and food utilization.

SDG 2 accommodates 7 targets and 14 indicators. Among 14 indicators, 13 indicators are quantifiable and 1 indicator is non-quantifiable.

According to the 7<sup>th</sup> FYP, prevalence of stunting among children under five years of age is 36.1 percent. Government of Bangladesh has targeted to reduce this rate to 25 percent by 2020. Proportion of population below minimum level of dietary energy consumption [1805 kcal] is 16.4 percent [estimate for 2015 by UNSD]. There are twelve programs under Country Investment Plan (CIP) to take care of the targets of SDG 2.

Annex 2.1 shows how the targets have been incorporated in the costing analysis, Annex 2.2 presents an analysis of the methodology used in the costing of SDG 2, Annex 2.3 shows the total additional cost for the FY 2017-FY 2030 in both current and constant prices,

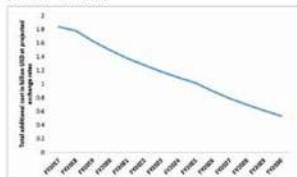
Based on the costing exercise presented in Annex 2.2, Table 2 suggests the amount of resources needed, both in BDT and USD, to achieve the targets of SDG 2 in FY 2017, FY 2020, FY 2025 and FY 2030. Figure 2 presents the projection for all the years during FY 2017 and FY 2030.

**Table 2: Total Additional costs for SDG 2 in FY 2017, FY 2020, FY 2025 and FY 2030**

Total Additional Cost\Fiscal Year	FY 2017	FY 2020	FY 2025	FY 2030
Billion BDT at constant 2015-16 prices	148.63	132.91	103.05	60.91
Billion USD	1.83	1.49	1.02	0.53

Source: Annex 2.3

**Figure 2: Projection of total additional cost for SDG 2 (FY 2017-FY 2030)**



Source: Annex 2,3

### 3.3. SDG 3: Good Health and Well-being

SDG 3 seeks to ensure healthy lives and promote well-being for all at all ages. Targets under this SDG try to address all major health priorities, including reproductive, maternal and child health; communicable, non-communicable and environmental diseases; universal health coverage; and access to safe, effective, quality and affordable medicines and vaccines for all. The targets also call for more research and development, increased health financing, and strengthened the capacity of all countries in health risk reduction and management. Women and children have received special attention in this goal.

SDG 3 accommodates 13 targets and 25 indicators. Among 25 indicators, 22 indicators are quantifiable and 3 indicators are non-quantifiable.

Bangladesh has shown good progress in attaining some of the targets under the MDG health goals (MDG4, MDG5, and MDG6) and is on track for achieving others. Highlights of some of the advancements are the reduction in under-5 mortality rate, maternal mortality ratio, prevalence and death rates associated with malaria and tuberculosis, prevalence of underweight children under 5 years of age, etc. Though Bangladesh had achievements in the MDG period, a vast task is waiting for Bangladesh in coming years since SDG 3 covers a wide range of areas. Bangladesh will have to work on achieving the targets that were not achieved during the MDG period and reach the new targets that have been set by SDG 3. In addition, achieving the targets relevant to non-communicable diseases will be a big challenge for Bangladesh. For accomplishing this vast task, Bangladesh needs to revise its average total health spending from around 3.00 percent of GDP to 5.25 percent of GDP.

Annex 3.1 shows how the targets have been incorporated in the costing analysis. Annex 3.2 presents an analysis of the methodology used in estimating the additional cost for SDG 3. Annex 3.3 shows the total additional cost for the FY 2017-FY 2030 in both current and constant prices.

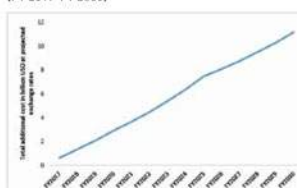
Based on the costing exercise presented in Annex 3.2, Table 3 suggests the additional amount needed, both in BDT and USD, to achieve the targets of SDG 3 in FY 2017, FY 2020, FY 2025 and FY 2030. Figure 3 presents the projection for all the years during FY 2017 and FY 2030.

**Table 3: Total Additional costs for SDG 3 in FY 2017, FY 2020, FY 2025 and FY 2030**

Total Additional Cost\Fiscal Year	FY 2017	FY 2020	FY 2025	FY 2030
Billion BDT at constant 2015-16 prices	52.27	258.82	757.09	1274.57
Billion USD	0.65	2.91	7.47	11.19

Source: Annex 3,3

**Figure 3: Projection of total additional cost for SDG 3 (FY 2017-FY 2030)**



Source: Annex 3.3

### 3.4. SDG 4: Quality Education

SDG 4 confers about ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all. It focuses on net enrolment at primary, secondary and tertiary education by sexes, vocational education, facilities provided at schools. IT skill development, number of trained teachers in primary schools, etc. The children with disabilities have been given priority in this goal.

SDG 4 accommodates 10 targets and 24 indicators. Among 24 indicators, 20 indicators are quantifiable and 4 indicators are non-quantifiable.

Bangladesh has made significant progress in achieving MDG 2, which mainly focuses on universal primary education. Bangladesh has been successful

**Table 4: Total Additional costs for SDG 4 in FY 2017, FY 2020, FY 2025 and FY 2030**

Total Additional Cost/Fiscal Year	FY 2017	FY 2020	FY 2025	FY 2030
Billion BDT at constant 2015-16 prices	52.37	258.94	757.28	1161.54
Billion USD	0.65	2.91	7.47	10.20

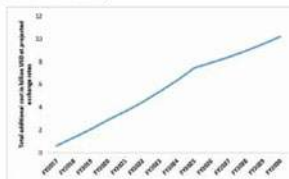
Source: Annex 4.3

in increasing the number of enrolment in primary education. Net primary enrolment rate in Bangladesh is around 98 percent (7<sup>th</sup> Five Year Plan, 2015) but the amount is not sufficient to grow as a nation. Bangladesh will have to work on reducing the dropout rate in primary education, raising the participation rate in secondary and tertiary education, providing skill based training, building and upgrading education facilities, increasing the supply of qualified teachers, etc. Overall, Bangladesh will have to ensure quality education for all. This will require significant investment in the educational sector. The current public spending on education for Bangladesh, on an average, is 1.98 percent of GDP. However, for completing the mammoth task of achieving SDG 4, Bangladesh will need to increase its public spending on education from its current level to 4.00 percent of GDP.

Annex 4.1 shows how the targets have been incorporated in the costing analysis. Annex 4.2 presents an analysis of the methodology used in estimating the additional cost for SDG 4. Annex 4.3 shows the total additional cost for the FY 2017-FY 2030 in both current and constant prices.

Based on the costing exercise presented in Annex 4.2, Table 4 suggests the additional amount needed, both in BDT and USD, to achieve the targets of SDG 4 in FY 2017, FY 2020, FY 2025 and FY 2030. Figure 4 presents the projection for all the years during FY 2017 and FY2030.

**Figure 4: Projection of total additional cost for SDG 4 (FY 2017-FY 2030)**



Source: Annex 4.3

### 3.5. SDG 5: Gender Inequality

Although Bangladesh has achieved remarkable progress towards gender equality and women's empowerment under the Millennium Development Goals (MDGs), there remain huge inequalities in the labour markets and some other sectors. The current scenario of the indicators poses some serious challenges for Bangladesh to achieve SDG 5 by FY 2030, which aims for eliminating gender gap and ending all forms of discrimination against women and girls of all ages, everywhere. The targets focus on eliminating all forms of violence against women and girls, undertaking reforms to ensure equal rights for women in the areas where women are at a disadvantage, eliminating early and forced marriages as well as women trafficking, ensuring access to information technology and reproductive health care for women and ensuring equal participation of women in public services and parliament.

SDG 5 accommodates 9 targets and 13 indicators. Among 13 indicators, 12 indicators are quantifiable and 1 indicator is non-quantifiable.

According to the Violence Against Women Survey 2015, almost 50 percent of ever-married women experience partner physical violence and 27.3 percent experience partner sexual violence in their lifetime. Around 27 percent women reported lifetime physical violence by someone other than the husband/non-partner. Three percent of the women experience non-partner sexual violence during their lifetime. According to the Setting Priorities for Data Support to 7<sup>th</sup> FYP and SDGs: An Overview report, 65 percent women aged 20-24 were married before age 18, which is targeted to be brought down to 30 percent by 2020. SDG 5 aims to eliminate all forms of violence against women and all harmful practices, such as child, early and forced marriages.

Annex 5.1 shows how the targets have been incorporated in the costing analysis. Annex 5.2 presents an analysis of the methodology used in the costing of SDG 5. Annex 5.3 shows the total additional cost for the FY 2017-FY 2030 in both current and constant prices.

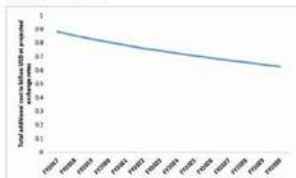
Based on the costing exercise presented in Annex 5.2, Table 5 suggests the amount of resources needed, both in BDT and USD, to achieve the targets of SDG 5 in FY 2017, FY 2020, FY 2025 and FY 2030. Figure 5 presents the projection for all the years during FY 2017 and FY 2030.

Table 5: Total Additional costs for SDG 5 in FY 2017, FY 2020, FY 2025 and FY 2030

Total Additional Cost\Fiscal Year	FY 2017	FY 2020	FY 2025	FY 2030
Billion BDT at constant 2015-16 prices	71.39	71.53	71.53	71.53
Billion USD	0.88	0.80	0.71	0.63

Source: Annex 5.3

Figure 5: Projection of total additional cost for SDG 5 (FY 2017-FY 2030)



Source: Annex 5.3

### 3.6. SDG 6: Clean Water and Sanitation

SDG 6 emphasizes on pure drinking water and affordable sanitation critical for the survival of people and the planet. Targets address the issues relating to drinking water, sanitation, and hygiene. They also stress on ensuring the quality and sustainability of water resources worldwide.

SDG 6 accommodates 8 targets and 11 indicators. Among 11 indicators, 6 indicators are quantifiable and 5 indicators are non-quantifiable.

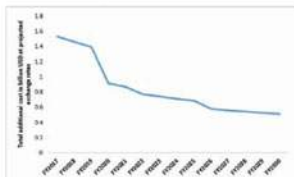
Bangladesh has achieved significant progress in the areas of access to safe drinking water and sanitary latrine. However, the main challenge will be ensuring enough uncontaminated water in the future. More specifically, tackling arsenic is a major challenge. Bangladesh is heavily dependent on ground water. For instance, more than 80 percent of the total supplied water in Dhaka is currently coming from ground water abstraction (Dhaka WASA, 2017). This huge dependency on ground water needs to be reduced and the country

has to increase the usage of surface water. In this case, surface water treatment will be the key. Bangladesh will need to build enough numbers of water treatment plants in next 14 years. Every division will be required to have at least one water treatment plant to meet the challenge of ensuring the supply of sufficient pure water. Besides, building capacity to manage water resources and developing awareness through the participation of local community will be equally important. Hence, investment in these areas is also necessary.

Annex 6.1 shows how the targets have been incorporated in the costing analysis, Annex 6.2 presents an analysis of the methodology used in estimating the additional cost for SDG 6, Annex 6.3 shows the total additional cost for the FY 2017-FY 2030 in both current and constant prices.

Based on the costing exercise presented in Annex 6.2, Table 3 suggests the additional amount needed, both in BDT and USD, to achieve the targets of SDG 6 in FY 2017, FY 2020, FY 2025 and FY 2030. Figure 3 presents the projection for all the years during FY 2017 and FY 2030.

Figure 6: Projection of total additional cost for SDG 6 (FY 2017-FY 2030)



Source: Annex 6.3

Table 6: Total Additional costs for SDG 6 in FY 2017, FY 2020, FY 2025 and FY 2030

Total Additional Cost\Fiscal Year	FY 2017	FY 2020	FY 2025	FY 2030
Billion BDT at constant 2015-16 prices	124.06	81.25	69.48	58.30
Billion USD	1.53	0.91	0.69	0.51

Source: Annex 6.3

**Table 7: Total Additional costs for SDG 7 in FY 2017, FY 2020, FY 2025 and FY 2030**

Total Additional Cost/Fiscal Year	FY 2017	FY 2020	FY 2025	FY 2030
Billion BDT at constant 2015-16 prices	390.25	390.98	390.99	390.98
Billion USD	4.82	4.40	3.86	3.43

Source: Annex 7.3

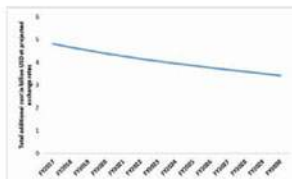
### 3.7. SDG 7: Affordable and Clean Energy

Energy sector has important role to play in achieving almost all Sustainable Development Goals (SDGs). As the demand for electricity rises with the growing population, a substantial increase in the share of renewable energy in total energy consumption is needed. The SDG 7 emphasizes on intensifying the use of clean and renewable energy and reducing the consumption of non-renewable energy. The targets under this SDG also focus on improving the efficiency in production and consumption of energy, increasing the share of renewable energy in total energy consumption and upgrading the infrastructure for sustainable supply of energy.

SDG 7 accommodates 5 targets and 6 indicators. Among 6 indicators, 5 indicators are quantifiable and 1 indicator is non-quantifiable.

Bangladesh has been able to ensure access to electricity for 72 percent of the households. The 7<sup>th</sup> FYP targets to ensure that 96 percent of the households will have access to electricity by FY 2020, which aligns well with the SDG target of ensuring universal access to affordable, reliable and modern energy services by FY 2030. The share of renewable energy consumption as a percentage of total final energy consumption was 38.3 in 2012, which needs to be increased substantially to achieve SDGs. According to the Energy Efficiency and Conservation Master Plan up to 2030<sup>1</sup>, the government aims to improve energy intensity<sup>2</sup> by 20 percent within 2030 compared to the level of energy intensity in 2013.

**Figure 7: Projection of total additional cost for SDG 7 (FY 2017-FY 2030)**



Source: Annex 7.3

Annex 7.1 shows how the targets have been incorporated in the costing analysis. Annex 7.2 presents an analysis of the methodology used in the costing of SDG 7. Annex 7.3 shows the total additional cost for the FY 2017-FY 2030 in both current and constant prices.

Based on the costing exercise presented in Annex 7.2, Table 7 suggests the amount of resources needed, both in BDT and USD, to achieve the targets of SDG 7 in FY 2017, FY 2020, FY 2025 and FY 2030. Figure 7 presents the projection for all the years during FY 2017 and FY 2030.

### 3.8. SDG 8: Decent Work and Economic Growth

Sustained and inclusive economic growth is a precondition for achieving the targets under the SDG agenda. The global annual growth rate of real GDP per capita increased by 1.3 percent in 2014, a significant slowdown compared to 2010 (2.8 percent growth) and 2000 (3.0 percent growth). The real GDP growth rate in Bangladesh was 6.1 percent in FY 2010, which remained 6.5 percent on an average in the period FY 2010-FY 2015. Bangladesh experienced its highest real GDP growth rate of 7.05 percent in FY 2015-16. The 7<sup>th</sup> FYP sets the target of achieving 8% real GDP growth rate by FY 2020.

According to the Labour Force Survey 2013, total employment increased from 54 million in FY 2010 to 58 million in FY 2013. The national unemployment rate stands at 4.3 percent, where the unemployment rate is 3.7 percent in rural areas and 5.7 percent in urban areas. Also 25.4 percent of all youth (aged 15-29) are not in education, employment and training (NEET) in Bangladesh. The SDG 8 aims at achieving decent work for all by FY 2030 and reducing the number of youth not in education, employment and training (NEET) substantially by FY 2030.

SDG 8 accommodates 12 targets and 17 indicators. Among 17 indicators, 14 indicators are quantifiable and 3 indicators are non-quantifiable.

Annex 8.1 shows how the targets have been incorporated in the costing analysis. Annex 8.2 presents an analysis of the methodology used in the costing of SDG 8. Annex 8.3 shows the total additional cost for the FY 2017-FY 2030 in both current and constant prices.

<sup>1</sup>Energy Efficiency and Conservation Master Plan up to 2030, published by Sustainable and Renewable Energy Development Authority (SREDA) and Power Division, Ministry of Power, Energy and Mineral Resources, Government of the People's Republic of Bangladesh March 2015.

<sup>2</sup>National primary energy consumption per gross domestic product (GDP)

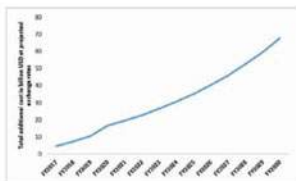
Table 8: Total Additional costs for SDG 8 in FY 2017, FY 2020, FY 2025 and FY 2030

Total Additional Cost\Fiscal Year	FY 2017	FY 2020	FY 2025	FY 2030
Billion BDT at constant 2015-16 prices	381.96	1480.44	3572.88	7730.03
Billion USD	4.72	16.65	35.25	67.85

Source: Annex 8.3

Based on the costing exercise presented in Annex 8.2, Table 3 suggests the amount of resources needed, both in BDT and USD, to achieve the targets of SDG 8 in FY 2017, FY 2020, FY 2025 and FY 2030. Figure 8 presents the projection for all the years from FY 2017 to FY 2030.

Figure 8: Projection of total additional cost for SDG 8 (FY 2017-FY 2030)



Source: Annex 8.3

### 3.9. SDG 9: Industry, Innovation and Infrastructure

SDG 9 encompasses three important aspects of sustainable development: infrastructure, industrialization and innovation. Infrastructure provides the basic physical systems and structures essential to the operation of a society or enterprise. Industrialization drives economic growth, creates job opportunities and thereby reduces income poverty. Innovation advances the technological capabilities of industrial sectors and prompts the development of new skills.<sup>13</sup>

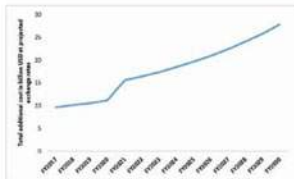
SDG 9 accommodates 8 targets and 12 indicators. Among 12 indicators, 11 indicators are quantifiable and 1 indicator is non-quantifiable.

Share of manufacturing sector of GDP was only 18 percent in 2015. Manufacturing employment as a percentage of total employment was only 16.4 percent in 2013. In order to increase the contribution of manufacturing in GDP, industrialization is a must. The national expenditure on R&D as a percentage of GDP is only 0.6% in Bangladesh<sup>14</sup>. Moreover, the country spend only \$3-3.5 billion (about 1.67 percent of GDP) in power and communication sector<sup>15</sup>.

Annex 9.1 shows how the targets have been incorporated in the costing analysis, Annex 9.2 presents an analysis of the methodology used in the costing of SDG 9. Annex 9.3 shows the total additional cost for the FY 2017-FY 2030 in both current and constant prices.

Based on the costing exercise presented in Annex 9.2, Table 9 suggests the amount of resources needed, both in BDT and USD, to achieve the targets of SDG 9 in FY 2017, FY 2020, FY 2025 and FY 2030. Figure 9 presents the projection for all the years during FY 2017 and FY 2030.

Figure 9: Projection of total additional cost for SDG 9 (FY 2017-FY 2030)



Source: Annex 9.3

Table 9: Total Additional Costs for SDG 9 in FY 2017, FY 2020, FY 2025 and FY 2030

Total Additional Cost\Fiscal Year	FY 2017	FY 2020	FY 2025	FY 2030
Billion BDT at constant 2015-16 prices	779.49	996.70	1993.43	3166.04
Billion USD	9.62	11.21	19.67	27.79

Source: Annex 9.3

<sup>13</sup>Sustainable Development Knowledge Platform, UNDP

<sup>14</sup>7<sup>th</sup> FYP, Government of the People's Republic of Bangladesh.

<sup>15</sup>Government currently spends about 5% of GDP on ADP, one third of which is allocated for communications and power. \* pp-103, 7<sup>th</sup>FYP, Government of the People's Republic of Bangladesh.



### 3.10. SDG 10: Reduced Inequalities

SDG 10 is targeted to reduce inequality within and among countries. Income and wealth redistribution is a major issue of this goal. Inequality can be reduced through capacity building and income support for poor and lower income population. Government should take progressive tax structure and spend on education, health, empowerment and social protection. The first target of this goal is to achieve and sustain income growth of bottom 40 percent of the population at a rate higher than the national average by 2030. The other targets include promoting social, economic and political inclusion of all, adopting wage and social protection policies, facilitating responsible migration and mobility of people, ensuring enhanced representation and voice for developing countries in decision-making in global economic and financial institutions.

SDG 10 accommodates 10 targets and 11 indicators. Among 11 indicators, 8 indicators are quantifiable and 3 indicators are non-quantifiable.

Statistics shows that average real growth rate of per capita income for bottom 40 percent of population was on average 4 percent for the years 2000-2010<sup>13</sup>. According to the target 10.1 of SDG, each country should achieve income growth of bottom 40 percent at a rate higher than national average to address inequality. It is considered that Bangladesh will achieve income growth of these branch of population at least equal to national average by 2030 which is projected to be 9 percent.

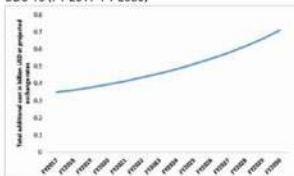
Achieving this goal is a major challenge since income inequality is on rise in recent years. Designing programs and policies and their implementation to

address the targets are also critical. Besides targets and indicator are not well defined. Addressing across country inequality is the most difficult issue.

Annex 10.1 shows how the targets have been incorporated in the costing analysis. Annex 10.2 presents an analysis of the methodology used in the costing of SDG 10. Annex 10.3 shows the total additional cost for the FY 2017-FY 2030 in both current and constant prices.

Based on the costing exercise presented in Annex 10.2, Table 10 suggests the amount of resources needed, both in BDT and USD, to achieve the targets of SDG 10 in FY 2017, FY 2020, FY 2025 and FY 2030. Figure 10 presents the projection for all the years during FY 2017 and FY 2030. Annex 10.3 represents breakdown of total additional cost for SDG 10.

Figure 10: Projection of total additional cost for SDG 10 (FY 2017-FY 2030)



Source: Annex 10.3

Table 10: Total Additional costs for SDG 10 in FY 2017, FY 2020, FY 2025 and FY 2030

Total Additional Cost/Fiscal Year	FY 2017	FY 2020	FY 2025	FY 2030
<b>Billion BDT at constant 2015-16 prices</b>	28.44	35.14	51.96	80.86
<b>Billion USD</b>	0.35	0.40	0.51	0.71

Source: Annex 10.3

<sup>13</sup>Estimated from Household Income and Expenditure Survey (HIES 2000 and HIES 2010)



### 3.11. SDG 11: Sustainable Cities and Communities

In Bangladesh, 34.3 percent [WDI, 2015] of total population live in the urban areas. This proportion keeps growing every year as more people migrate to the cities in search of better job opportunities and better lives. The growing population density in the cities intensifies the planning challenges regarding housing issues, waste management and security issues. SDG 11 stresses the need for inclusive development planning and improved management of cities and human settlements. The targets under this goal emphasize on ensuring sustainable and inclusive urban planning, affordable housing and developing the slums in the cities, ensuring safety in the urban areas, improving the transport system and road safety, increasing the efficiency in waste management and preservation, protection and conservation of national and cultural heritage.

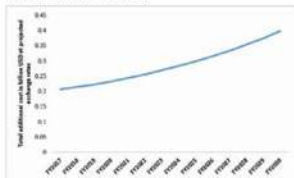
SDG 11 accommodates 10 targets and 16 indicators. Among 16 indicators, 10 indicators are quantifiable and 6 indicators are non-quantifiable.

A significant percentage of the urban population in Bangladesh lives in the slums. The SDGs aim to ensure access for all people to adequate, safe and affordable housing and basic services and upgrade slums by 2030. The average waste collection efficiency in Bangladesh is 56 percent (Waste Data Base of Bangladesh, Waste Concern, 2009), which needs to be increased sufficiently to ensure sustainable and efficient waste management in the cities.

Annex 11.1 shows how the targets have been incorporated in the costing analysis. Annex 11.2 presents an analysis of the methodology used in the costing of SDG 11. Annex 11.3 shows the total additional cost for the FY 2017-FY 2030 in both current and constant prices.

Based on the costing exercise presented in Annex 11.2, Table 11 suggests the amount of resources needed, both in BDT and USD, to achieve the targets of SDG 11 in FY 2017, FY 2020, FY 2025 and FY 2030. Figure 11 presents the projection for all the years during FY 2017 and FY 2030.

Figure 11: Projection of total additional cost for SDG 11 (FY 2017-FY 2030)



Source: Annex 11.3

### 3.12. SDG 12: Responsible Consumption and Production

Sustained economic growth and development is related to, how the production of goods and services improve the quality of life, how countries minimize the use of toxic materials, how countries manage the waste and pollutions generated, throughout the entire production and consumption process.

SDG 12 accommodates 11 targets and 12 indicators. Among 12 indicators, 4 indicators are quantifiable and 8 indicators are non-quantifiable.

Annex 12.1 shows how the targets have been incorporated in the costing analysis. Annex 12.2 presents an analysis of the methodology used in the costing of SDG 12. Annex 12.3 shows the total additional cost for the FY 2017-FY 2030 in both current and constant prices.

Based on the costing exercise presented in Annex 12.2, Table 12 suggests the amount of resources needed, both in BDT and USD, to achieve the targets of SDG 12 in FY 2017, FY 2020, FY 2025 and FY 2030. Figure 12 presents the projection for all the years during FY 2017 and FY 2030.

Table 11: Total Additional costs for SDG 11 in FY 2017, FY 2020, FY 2025 and FY 2030

Total Additional Cost\Fiscal Year	FY 2017	FY 2020	FY 2025	FY 2030
Billion BDT at constant 2015-16 prices	16.76	20.71	30.29	45.33
Billion USD	0.21	0.23	0.30	0.40

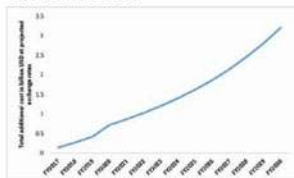
Source: Annex 11.3

Table 12: Total Additional costs for SDG 12 in FY 2017, FY 2020, FY 2025 and FY 2030

Total Additional Cost\Fiscal Year	FY 2017	FY 2020	FY 2025	FY 2030
Billion BDT at constant 2015-16 prices	11.31	64.11	164.55	364.85
Billion USD	0.14	0.72	1.62	3.20

Source: Annex 12.3

Figure 12: Projection of total additional cost for SDG 12 (FY 2017-FY 2030)



Source: Annex 12.3

### 3.13. SDG 13: Climate Action

Climate change presents the single biggest threat to development, and its widespread unprecedented impacts disproportionately burden the poorest and the most vulnerable. Urgent action to tackle climate change and minimize its disruptions is integral to the successful implementation of the Sustainable Development Goals (SDGs). SDG 13 focuses on the impacts of climate change and urgent measures to combat climate change. Therefore, targets under SDG 13 concentrate on capacity building, pragmatic national policies and strategies, strong institutions, etc.

SDG 13 accommodates 5 targets and 7 indicators. Among 7 indicators, 2 indicators are quantifiable and 5 indicators are non-quantifiable.

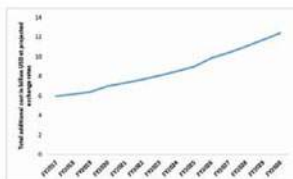
Since Bangladesh will be one of the highly affected countries by climate change, tackling climate change is going to be a major challenge for Bangladesh. Statistics depict a gap between requirement and supply for a sustainable climate. Forest land accounts for 17 percent (Bangladesh Delta Plan 2100, 2016) of

Bangladesh where the ideal coverage is 20 percent (7<sup>th</sup> Five Year Plan, 2015). Bangladesh needs to adapt medium and long-term actions focusing mitigation and adaptation measures for developing resilience to climate shocks and make low-carbon, sustainable growth. On an average, Bangladesh will require a massive additional investment of 2.40 percent of GDP in the coming years (FY 2017-FY 2030) to encounter the challenge of climate change.

Annex 13.1 shows how the targets have been incorporated in the costing analysis. Annex 13.2 presents an analysis of the methodology used in estimating the additional cost for SDG 13. Annex 13.3 shows the total additional cost for the FY 2017-FY 2030 in both current and constant prices.

Based on the costing exercise presented in Annex 13.2, Table 13 suggests the additional amount needed, both in BDT and USD, to achieve the targets of SDG 13 in FY 2017, FY 2020, FY 2025 and FY 2030. Figure 13 presents the projection for all the years during FY 2017 and FY 2030.

Figure 13: Projection of total additional cost for SDG 13 (FY 2017-FY 2030)



Source: Annex 13.3

Table 13: Total Additional costs for SDG 13 in FY 2017, FY 2020, FY 2025 and FY 2030

Total Additional Cost\Fiscal Year	FY 2017	FY 2020	FY 2025	FY 2030
Billion BDT at constant 2015-16 prices	481.84	621.46	908.74	1416.51
Billion USD	5.95	6.99	8.97	12.43

Source: Annex 13.3

Table 14: Total Additional costs for SDG 14 in FY 2017, FY 2020, FY 2025 and FY 2030

Total Additional Cost\Fiscal Year	FY 2017	FY 2020	FY 2025	FY 2030
Billion BDT at constant 2015-16 prices	60.03	65.09	76.25	89.32
Billion USD	0.74	0.73	0.75	0.78

Source: Annex 14.3

### 3.14. SDG 14: Life below Water

SDG 14 mainly targets the sustainable management and use of ocean, sea, marine and coastal areas and protection of these areas. Coastal and marine areas of Bangladesh are extremely vulnerable to natural disasters. These areas need to be protected as coastal and marine areas are becoming increasingly important because of offshore and inshore natural gas, tourism industry and agriculture.

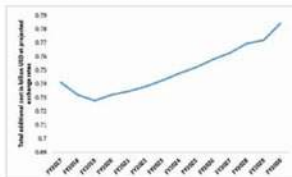
SDG 14 accommodates 10 targets and 10 indicators. Among 10 indicators, 4 indicators are quantifiable and 6 indicators are non-quantifiable.

In 2013-2014, protected coastal and marine areas were 1.22 percent and 0 percent respectively [7<sup>th</sup> Five Year Plan]. According to SDG 14, each country should conserve at least 10 percent of coastal and marine areas, consistent with national and international laws and based on the best available scientific information by 2020. Achieving these targets can be a major challenge for Bangladesh.

Annex 14.1 shows how the targets have been incorporated in the costing analysis. Annex 14.2 presents an analysis of the methodology used in the cost estimation of SDG 14. Annex 14.3 shows the total additional cost for the FY 2017-FY 2030 in both current and constant prices.

Based on the costing exercise presented in Annex 14.2, table 14 suggests the amount of resources needed, both in BDT and USD, to achieve the targets of SDG 14 in FY 2017, FY 2020, FY 2025 and FY 2030. Figure 14 presents the projection for all the years during FY 2017 and FY 2030. Annex 14.3 shows the breakdown of total additional cost for SDG 14.

Figure 14: Projection of total additional cost for SDG 14 (FY 2017-FY 2030)



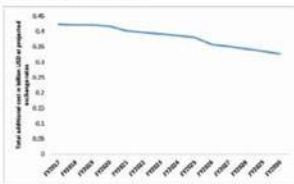
Source: Annex 14.3

Based on the costing exercise presented in Annex 14.2, table 14 suggests the amount of resources needed, both in BDT and USD, to achieve the targets of SDG 14 in FY 2017, FY 2020, FY 2025 and FY 2030. Figure 14 presents the projection for all the years during FY 2017 and FY 2030. Annex 14.3 shows the breakdown of total additional cost for SDG 14.

### 3.15. SDG 15: Life on Land

Sustainable management of land and protecting and promoting sustainable use of terrestrial ecosystems, protecting forests through plantation and combating deforestation are priorities in this goal. Major targets of this goal comprise protecting forest area, restoring degraded land and soil, restoring terrestrial and inland freshwater ecosystems and their services, ensuring the conservation of mountain ecosystem and taking urgent action to end poaching and trafficking of protected species and to reduce degradation of natural habitats.

Figure 15: Projection of total additional cost for SDG 15 (FY 2017-FY 2030)



Source: Annex 15.3

SDG 15 accommodates 12 targets and 13 indicators. Among 13 indicators, 8 indicators are quantifiable and 5 indicators are non-quantifiable.

Forest area of Bangladesh covers only 17 percent of total land area including hill forest, Sal forest, village forest, mangrove forest and coastal plantation [Bangladesh Delta Plan 2100]. Deep forest has been degraded significantly over the past 50 years. SDG 15 emphasizes on substantially increasing afforestation and reforestation and protection of these area. Only 1.81 percent of forest area of Bangladesh was protected in 2013-2014 which is aimed to promote to at least 5 percent by 2020 [7<sup>th</sup> Five Year Plan].

**Table 15: Total Additional costs for SDG 15 in FY 2017, FY 2020, FY 2025 and FY 2030**

Total Additional Cost\Fiscal Year	FY 2017	FY 2020	FY 2025	FY 2030
<b>Billion BDT at constant 2015-16 prices</b>	34.33	37.16	38.50	37.31
<b>Billion USD</b>	0.42	0.42	0.38	0.33

Source: Annex 15.3

Annex 15.1 shows how the targets have been incorporated in the costing analysis, Annex 15.2 presents an analysis of the methodology used in the costing of SDG 15, Annex 15.3 shows the total additional cost for the FY 2017-FY 2030 in both current and constant prices.

Based on the costing exercise presented in Annex 15.2, Table 15 suggests the amount of resources needed, both in BDT and USD, to achieve the targets of SDG 15 in FY 2017, FY 2020, FY 2025 and FY 2030. Figure 15 presents the projection for all the years during FY 2017 and FY 2030. Annex 15.3 represents breakdown of total additional cost for SDG 15.

### 3.16. SDG 16: Peace, Justice and Strong Institutions

SDG 16 aims to promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions. Many countries are experiencing conflict and ferocity and are struggling to stimulate peace, justice and access to basic freedom. This goal enforces the need for protection and security of human lives particularly the ones that are subjected to homicides, trafficking and violence. It also takes into account the police and judiciary system that are mostly affected by corruption. Law and Order situation of a country and economic development are connected and stand strongly for promoting sustainable development. Targets of this goal include reducing violence and related deaths, promoting the rule of law and ensuring equal access to justice for all, developing effective, accountable and transparent institutions and reducing corruption.

SDG 16 accommodates 12 targets and 23 indicators. Among 23 indicators, 14 indicators are quantifiable and 9 indicators are non-quantifiable.

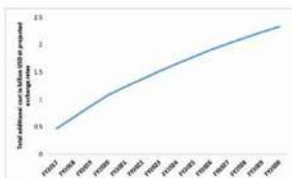
In Bangladesh, against around 100 Judges of the Supreme Court around 0.38 million cases and against 1400 District Court Judges around 2.7 million cases are pending (Sinha, 2015). It is hard to dispose of all

pending cases with the existing insufficient number of Judges. On average 2.8 persons are victim of intentional homicides per one lakh population (World Development Indicator, 2014) and 50.7 percent of women aged 15-49 are subject to physical and/or sexual violence (World Development Indicator, 2011). All these factors will be addressed by improving law and order situation and institutional strength and employing more judges.

Annex 16.1 shows how the targets have been incorporated in the costing analysis, Annex 16.2 presents an analysis of the methodology used in the costing of SDG 16. Annex 16.3 shows the total additional cost for the FY2017-FY2030 in both current and constant prices.

Based on the costing exercise presented in Annex 16.2, Table 16 suggests the amount of additional resources needed, both in BDT and USD, to achieve the targets of SDG 16 in FY 2017, FY 2020, FY 2025 and FY 2030. Figure 16 presents the projection of additional cost for all the years during FY 2017 and FY 2030.

**Figure 16: Projection of total additional cost for SDG 16 (FY 2017-FY 2030)**



Source: Annex 16.3

**Table 16: Total Additional costs for SDG 16 in FY 2017, FY 2020, FY 2025 and FY 2030**

Total Additional Cost\Fiscal Year	FY 2017	FY 2020	FY 2025	FY 2030
<b>Billion BDT at constant 2015-16 prices</b>	38.26	95.99	180.75	265.96
<b>Billion USD</b>	0.47	1.08	1.78	2.33

Source: Annex 16.3

### 3.17. SDG 17: Partnerships for the Goals

Achieving the ambitious targets of the 2030 Agenda requires a revitalized and enhanced global partnership that brings together governments, civil society, the private sector, the United Nations system and other actors and mobilization of all available resources. Enhancing support to developing countries is fundamental to equitable progress for all. Targets under SDG 17 emphasize on this. They focus on strengthening the means of implementation and encouraging the global partnership for sustainable development and highlight on international support in the areas of finance, technology, capacity building, trade, policy and institutional coherence, data, etc.

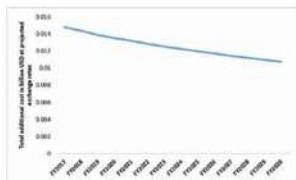
SDG 17 accommodates 19 targets and 25 indicators. Among 25 indicators, 23 indicators are quantifiable and 2 indicators are non-quantifiable.

Along with the areas such as finance, trade and multi-stakeholders' partnerships, capacity building for data support is one of the focused areas in SDG 17. Accurate data and information are essential for achieving the SDGs. Building data capacity with local and international cooperation is crucial for materializing the SDGs. According to the data gap analysis of General Economics Division (GED), data for 70 indicators are readily available, where data for 63 indicators are not available and data for 108 indicators are partially available. Bangladesh Bureau of Statistics (BBS) is solely responsible for the data of 93 indicators. Therefore, data collection and budgetary allocation for data collection are vital.

Annex 17.1 shows how the targets have been incorporated in the costing analysis. Annex 17.2 presents an analysis of the methodology used in estimating the additional cost for SDG 17. Annex 17.3 shows the total additional cost for the FY 2017-FY 2030 in both current and constant prices.

Based on the costing exercise presented in Annex 17.2, Table 17 suggests the additional amount needed, both in BDT and USD, to achieve the targets of SDG 17 in FY 2017, FY 2020, FY 2025 and FY 2030. Figure 17 presents the projection for all the years during FY 2017 and FY 2030.

**Figure 17: Projection of total additional cost for SDG 17 (FY 2017-FY 2030)**



Source: Annex 17.3

**Table 17: Total Additional costs for SDG 17 in FY 2017, FY 2020, FY 2025 and FY 2030**

Total Additional Cost\Fiscal Year	FY 2017	FY 2020	FY 2025	FY 2030
<b>Billion BDT at constant 2015-16 prices</b>	1.20	1.20	1.22	1.23
<b>Billion USD</b>	0.01	0.01	0.01	0.01

Source: Annex 17.3

# IV. Total Additional Costs for SDGs: Unsynchronized and Synchronized

## IV. Total Additional Costs for SDGs: Unsynchronized and Synchronized

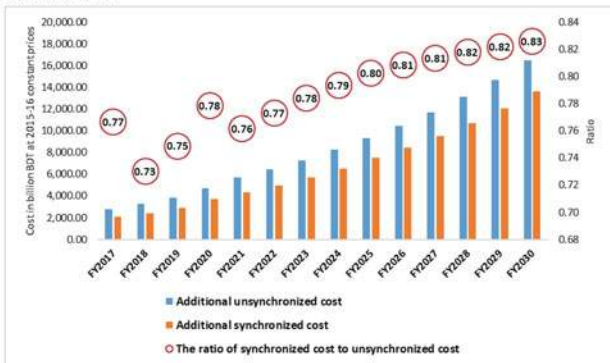
The estimated costs for individual SDGs, presented in Section III, are stand-alone cost and there are significant overlaps among them. Therefore, there is a need to synchronize among these costs to derive a total cost for the SDGs. The total cost of 17 SDGs has been derived by synchronizing the overlaps among different SDGs. The synchronization process has followed the following procedure:

- **SDG 1:** The estimated additional costs for targets 1.1 and 1.3 have been taken as the total additional cost for SDG 1 and it has not been synchronized with any other SDG. Target 1.2 is taken care of by target 8.1 and target 1.5 has been addressed by SDG 13.
- **SDG 2:** The estimated total additional cost for achieving SDG 2 has been considered as the synchronized total additional cost. Therefore, there is no synchronization for this SDG.
- **SDG 3:** The estimated total additional cost for achieving all the targets under SDG 3 except targets 3.6 and 3.9 has been considered as the synchronized total additional cost. Target 3.6 has been covered by SDG 11 and target 3.9 has been addressed by both SDG 14 and SDG 15.
- **SDG 4:** The synchronized total additional cost for SDG 4 has been received after harmonizing it with target 8.6.
- **SDG 5:** The estimated total additional cost for all the targets except target 5.4 has been considered as the synchronized total additional cost. Target 5.4 has been covered by SDG 1.
- **SDG 6:** Estimated additional cost for targets 6.1, 6.2, 6.3, 6.5 and 6.b has been considered as the total additional cost for SDG 6 and it has not been synchronized with any other SDG. Target 6.4 has been covered by both SDG 2 and SDG 14. Targets 6.6 and 6.a have been covered by SDG 14.
- **SDG 7:** Total additional cost for SDG 7 has been synchronized with SDG 9 by 70%. Therefore, the synchronized total additional cost for SDG 7 is 30% of the unsynchronized total additional cost for SDG 7. Target 7.b has been covered by SDG 9.
- **SDG 8:** SDG 8 is the heart of this costing exercise. The synchronization for SDG 8 has been done within the goal and across the goals. Additional costs for targets 8.5 and 8.9 have been synchronized with target 8.1 by 70%. SDG 9 and SDG 12 have been synchronized with SDG 8. For SDG 9, 70% of the total additional cost of SDG 9 or the amount equal to the final additional cost (additional cost after intra-goal synchronization) for SDG 8 has been

synchronized with SDG 8. For SDG 12, the amount equivalent to the 5% of the additional cost for target 8.1 has been synchronized with SDG 8. Target 8.6 has been synchronized with SDG 4. The synchronized (intra-goal) total additional cost for SDG 8 includes the cost of target 8.6.

- **SDG 9:** For SDG 9, 70% of the total additional cost for SDG 9 or the amount equivalent to the final additional cost (additional cost after intra-goal synchronization) for SDG 8 has been synchronized with SDG 8. On the other hand, 70% of the total additional cost for SDG 7 has been synchronized with SDG 9.
- **SDG 10:** The estimated total additional cost for achieving SDG 10 has been considered as the synchronized total additional cost. Therefore, there is no synchronization for SDG 10.
- **SDG 11:** The estimated total additional cost for achieving SDG 11 has been considered as the synchronized total additional cost. Therefore, there is no synchronization for SDG 11.
- **SDG 12:** For SDG 12, the amount equivalent to the 5% of the additional cost for target 8.1 has been synchronized with SDG 8.
- **SDG 13:** The estimated total additional cost for achieving SDG 13 has been considered as the synchronized total additional cost. Therefore, there is no synchronization for SDG 13.
- **SDG 14:** The estimated total additional cost for achieving SDG 14 has been considered as the synchronized total additional cost. Therefore, there is no synchronization for SDG 14.
- **SDG 15:** The estimated total additional cost for achieving SDG 15 has been considered as the synchronized total additional cost. Therefore, there is no synchronization for SDG 15.
- **SDG 16:** The estimated total additional cost for achieving SDG 16 has been considered as the synchronized total additional cost. Therefore, there is no synchronization for SDG 16.
- **SDG 17:** The estimated total additional cost for achieving SDG 17 has been considered as the synchronized total additional cost. Therefore, there is no synchronization for SDG 17. Targets 17.1 and 17.8 have been taken care of by SDG 16. Target 17.6 has been covered by both SDG 10 and SDG 14. Target 17.7 has been covered by SDG 12. On the other hand, target 17.16 has been covered by SDG 10 where target 17.11 has been addressed by SDG 9 here.

Figure 18: Additional unsynchronized and synchronized SDGs costs and the ratio of synchronized cost to unsynchronized cost



Source: Annex 18.1-18.14

Annex 18.1-18.14 present the additional unsynchronized and synchronized SDG costs for the years between FY 2017 and FY 2030 in Billion BDT at current prices. Annex 19.1 presents the summary of total additional unsynchronized SDGs cost in Billion BDT and Annex 19.2 presents the summary of total additional synchronized SDGs cost in Billion BDT at both current and constant prices. Figure 18 shows the ratio of synchronized cost to unsynchronized cost for the years during FY 2017 and FY 2030. It appears that gradually the ratio would increase from 77% in FY 2017 to 83% in FY 2030.

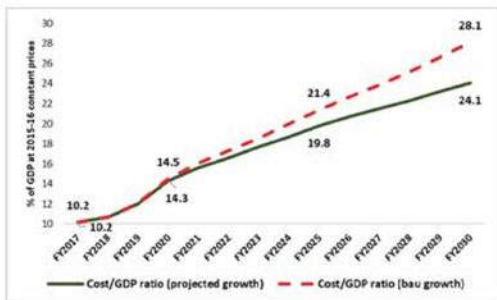
Total additional synchronized SDGs cost as percent of GDP at constant 2015-16 prices has been presented in Figure 19 considering two alternative growth scenarios. (i) In the Business As Usual scenario (BAU) 7% real economic growth rates have been assumed. (ii) The second scenario is an extension of the 7<sup>th</sup> FYP. More specifically, the real economic growth rate has been projected to increase to about 9 percent in 2030

from 7.0 percent in 2016 (first year of the 7<sup>th</sup> FYP) under the 7<sup>th</sup> FYP extended scenario. Annex 19.3 presents the key macroeconomic indicators during 2015 and 2030 which are consistent with the 7<sup>th</sup> FYP extended scenario.

Impact of higher GDP growth is evident from the estimate provided below. Under the BAU scenario, total additional synchronized SDGs costs as percent of GDP would increase from 10.2 percent in FY 2017 to 14.5% in FY2020, 21.4% in FY 2025 and finally to 28.1% in FY 2030. Thus, over the 14-year period, total additional synchronized SDGs cost as percent of GDP would increase by about 17.9 percentage points under the BAU scenario. Under the 7<sup>th</sup> FYP extended scenario, the total additional synchronized SDGs cost as percent of GDP would increase by 13.9 percentage points between FY 2017 and FY 2030. Attaining higher growth as suggested in the 7<sup>th</sup> FYP extended scenario would save about 4 percentage points of resources.



Figure 19: Synchronized additional SDG costs as percent of GDP [%]



Source: Annex 19.2

The BAU cost of SDGs has been calculated separately for each goal (Annex 19.4 provides the estimates of the BAU costs). The total unsynchronized BAU cost is estimated to be BDT 350,141.37 billion at constant 2015-16 prices during the period FY 2017-FY 2030. After addressing the overlapping issues, the total synchronized BAU cost has been estimated to be BDT 277,660.39 billion for this period. The synchronized

BAU cost has been estimated to be BDT 58,183.65 billion for the period FY 2017-FY 2020, which will be BDT 93,717.72 billion during the period FY 2021-2025. This cost is expected to increase to BDT 125,759.03 billion for the period FY 2026-2030. The estimated BAU cost is 65.41 percent of projected nominal GDP under the 7<sup>th</sup> FYP extended scenario in FY 2017 which will gradually decrease to 49.57 percent in FY 2030.

# V. SDGs Financing Options

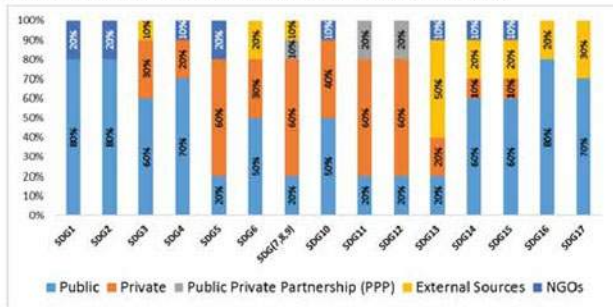
# V. SDGs Financing Options

## 5.1. Sources of Financing the Additional Synchronized Costs for SDGs

In Figure 20 we propose a matrix of shares of financing for goal-wise total additional synchronized costs. It is evident that in some goals, i.e. SDG 1, SDG 2, SDG 3, SDG 4, SDG 14, SDG 16 and SDG 17,

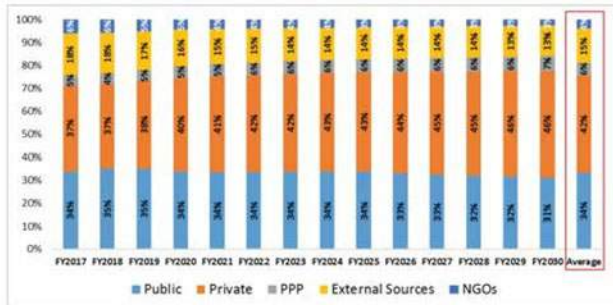
public sector has the major responsibility. In contrast, for SDG 5, SDG [7,8,9], SDG 10 and SDG 11, private sector has the major role. There are few SDGs, i.e., SDG [7,8,9], SDG 11 and SDG 12, where PPP is an option. Furthermore, external sources can play important role in SDG 3, SDG 6, SDG [7,8,9], SDG 13, SDG 14, SDG 15, SDG 16 and SDG 17.

Figure 20: Matrix of sources in financing for goal-wise total additional synchronized costs



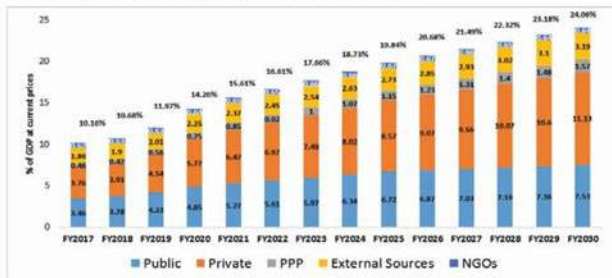
Source: Annex 20.1

Figure 21: Sources of financing total additional synchronized costs of SDGs (FY 2017-FY 2030)



Source: Annex 20.2

Figure 22: Shares of different sources in financing the total additional synchronized costs of SDGs (FY 2017-FY 2030), as % of projected GDP at 2015-16 constant prices



Source: Annex 20.3

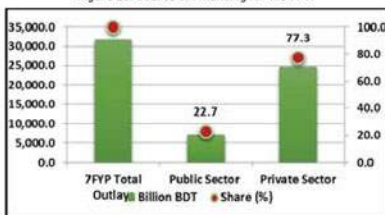
Based on the matrix presented in Figure 20, we can calculate the shares of different sources in financing the total additional synchronized costs of SDGs for the years FY 2017 to FY 2030 (Figure 21). On average, public sector would account for around 34% of the financing requirement, whereas private sector has the share of around 42%. The average share of PPP is 6%. The external source has an average share of around 15%. Finally, the NGOs would contribute around 4%.

Figure 22 presents the shares of different sources in financing the total additional synchronized costs of SDGs (FY 2017-FY 2030), as percentage of projected GDP at 2015-16 constant prices under the 7<sup>th</sup> FYP extended scenario. It is apparent that the government has to spend additional amount of 3.46% of the GDP in FY 2017, which will increase to 7.53% by FY 2030.

## 5.2. Private Sector Financing

Private sector has historically been playing an important role in economic development in Bangladesh. Almost all past medium term development plans have relied on private financing to implement the plans. SDGs are also goals that Bangladesh would pursue through her short (annual budget), and medium (five year plans). In the case of Bangladesh, SDGs will be implemented under three five year plans – namely 7<sup>th</sup> FYP (2016-2020); 8<sup>th</sup> FYP (2021-2025); and 9<sup>th</sup> FYP (2026-2030). In the 7<sup>th</sup> FYP, private sector is expected to finance 77.3% of the total outlays (Figure 23). However, since scopes and coverage of SDGs are larger than the Five Year Plan, as shown in Figure 21, private sector would bear between 37% and 46% of the total additional SDGs costs during the period FY 2017 and FY 2030. The major contribution of the private sector would in SDG 7, SDG 8 and SDG 9.

Figure 23: Source of Financing for the 7FYP



Source: 7<sup>th</sup> FYP

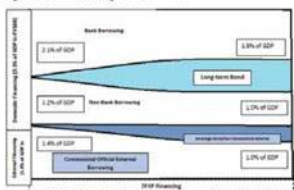


### 5.3.2. Bond Financing

An important source will be the funds raised through bond market. Bangladesh government has recently approved a proposal for launching a Bangladesh Sovereign Wealth Fund of \$10 billion. The authorized capital will be \$10 billion and the primary capital will be \$2 billion. The government will buy foreign exchange reserves in the local currency and convert it into bonds and treasury bonds. The bonds will be traded in the Bangladesh Bank's auctions under the existing legal framework of the bond market. The fund will primarily be used for big infrastructure projects. It is expected the bond will hit the market on July 1, 2017.

However, the idea of financing through issuing bond is not new in Bangladesh. There were attempts to launch bonds in 2011 and 2014.<sup>15</sup> Seventh Five Year Plan also advocated for the financing of big projects through issuance of bond. With the projected rise in per capita income, it may be possible to raise additional resources through bond market for SDGs implementation.

Figure 25: Financing of the 7<sup>th</sup> FYP



Source: 7FYP

Table 19: Fuel subsidies and pricing in Bangladesh

Major Items	FY 2011	FY 2012	FY 2013	FY 2014	FY 15(R)
Total energy subsidies* (billion Tk.)	80.00	149.07	180.44	85.78	96.00
Percent of GDP	0.10	1.40	1.50	0.10	0.10
Cash loan and subsidy received by BPC (billion Tk.)	40.00	85.50	135.60	24.78	6.00
BPC profit/loss (billion Tk.)	-97.90	-117.90	-53.70	-24.80	52.70
Crude oil price [US\$/bbl.]	93.13	112.95	109.20	109.60	75.20
[US\$/Ltr]	0.59	0.71	0.69	0.69	0.47
BPC supply costs [US\$/Ltr]	0.80	0.96	0.94	0.94	0.64
[Tk/Ltr]	57.10	76.30	74.95	72.90	49.60
Domestic selling price [US\$/Ltr]	0.66	0.79	0.85	0.87	0.88
[Tk/Ltr]	47.20	62.56	67.91	67.80	68.27

Source: PRI (2015), Fuel oil subsidy reforms and oil market deregulation in Bangladesh and BPC

### 5.3.3. Deregulation of Energy Prices

In Bangladesh fossil fuel energy prices are set by administration. The administrative price setting led to misallocation resources and fiscal drag in the form of subsidy etc. Fuel subsidy as percent of GDP increased to as high as 1.4 percent in 2011 due to exorbitant global oil price. However, the main objective of fuel subsidy – providing assistance to low income households – was never achieved as energy constitutes an insignificant part of low income household's budget.

Since much of the loss of Bangladesh Petroleum Corporation (BPC) has been recovered by setting significantly higher fuel prices in the domestic in comparison to the low global fuel prices, it is argued that time is now appropriate to embark on energy price deregulation.

A full deregulation involves – (i) determination of fuel prices according to the market demand and supply condition; and (ii) opening up the market to more than one agency. It is also suggested that in the first stage Bangladesh may adopt option 1 whereby fuel prices would be determined by the market forces. Such a move would not only reduce fiscal burden – releases public funds other priority activities (including SDGs); improve balance of payment situation; but also pave way for carbon tax or infrastructure tax.

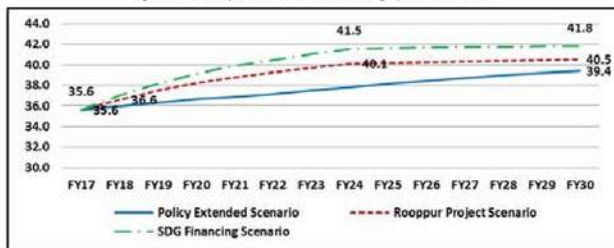
<sup>15</sup>In 2014, the Ministry of Finance decided in principle to issue \$2bn-worth of sovereign bonds from 2015, to collect funds for major infrastructure projects like the Padma Bridge. In 2011, the government made attempt to float sovereign bonds to raise \$500m from the international market to implement development projects. The plan was however aborted considering risks which included appreciation of local currency against the dollar.

### 5.3.4. Debt-Financing

A debt level of 37-42 percent perhaps suggests that SDG resource gap financing may be accomplished through increased debt financing. Using the debt-sustainability model it is found that \$ 1 billion additional resources may be mobilized from global financial market with small impact on the debt-level and debt servicing. Three scenarios are considered: (i) Extended Policy Scenario is an extension of the 7<sup>th</sup> FYP to 2030, where average external effective interest rate 2 percent per year; (ii) Rooppur Scenario, where it has been assumed that government will borrow 12 billion of USD from FY 18 to FY 24 for the power plant project,

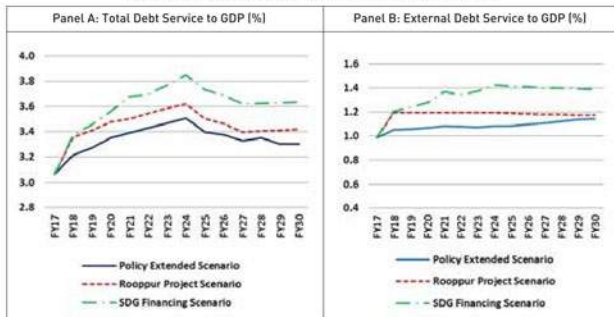
From the year of FY 25 to FY 30, external borrowing would remain same as extended policy scenario. The average external effective interest rate is assumed at 3 percent per year because government would borrow from Russia with relatively higher cost; and (iii) SDG Financing Scenario where it has been assumed that Bangladesh will borrow additional \$ 1 billion for 12 years starting from FY 18 to FY 30. This scenario also includes the external finance of \$12 billion on Rooppur account. The average external effective interest rate is assumed at 4 percent per year because government would borrow from the international money market. The implications of debt-level and services are provided below,

Figure 26: Debt Dynamics for Three Financing Options [% of GDP]



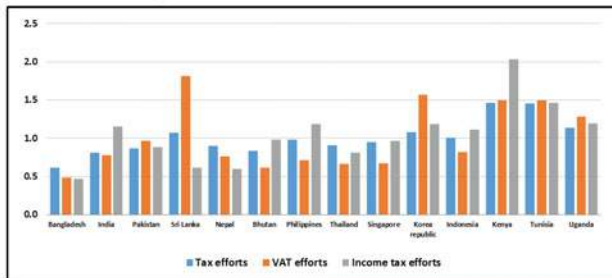
Source: Bangladesh debt sustainable model

Figure 27: Debt Servicing under Three Financing Options [% of GDP]



Source: Bangladesh debt sustainable model

Figure 28: Tax Potential and Efforts for Selected Countries



### 5.3.5. Enhanced Tax Effort

Bangladesh has set an ambitious revenue growth rate target for the 7<sup>th</sup> FYP. Although implementation of 7<sup>th</sup> FYP depend on the realization revenue targets, it would not be easy to achieve. Yet, a closer review at the revenue mobilization performance of comparable countries suggests that there is further scope for raising the revenue target. Average tax effort indices show that our tax effort is lowest among comparators implying that Bangladesh lags far behind its tax revenue potential (please see tables below in annex). Thus, tax effort may be increased further by 1 or 2 percent of GDP through invoking appropriate reforms.

### 5.3.6. Savings from Efficiency Gains

Analyses of public expenditures in Bangladesh tend to suggests scopes for efficiency gains through reduction of waste, reduction of quasi-subsidy (i.e. resources spent for state of own enterprises), timely completion of projects, and prudent selection of development projects. For instance, state owned enterprises (SOEs) have been continuously underperforming in Bangladesh with persistent losses and burgeoning debt commitments creating a huge burden on the country's budget. Forty-six non-financial state-owned enterprises in Bangladesh are distributed under seven key sectors of industry, power, gas and water sector, transport and communication, trade, agriculture, construction and the service sector. Outstanding debt of SOEs and NPL of public sector banks stood at BDT 1,920 billion and BDT 282 billion respectively in FY 2015. Moreover, the government has extended subsidy amounting to BDT 13,29 billion in FY 14-15 and BDT 18,24 billion FY 2015-16 (till April) to 11 public entities. Considering Bangladesh's limited revenue mobilization capacity, the large fiscal costs associated with inefficient enterprises represent a major fiscal drain, which crowds out spending for more productive purposes.

### 5.4. Public-Private Partnership (PPP)

Public-private Partnership (PPP) can be a possible contributor in the coming years for Bangladesh in order to achieve the SDGs. The potential areas for PPP are the power generation, infrastructure, urbanization and sustainable production. The PPP Policy and Strategy 2010 were formulated in August 2010 and PPP Authority was established as a separate office under the Prime Minister Office. Furthermore, in 2012 Guideline for Public-Private Partnership Technical Assistance Financing (PPPTAF) and Scheme for Public-Private Partnership Technical Assistance Financing (PPPTAF) were issued by the government. Most importantly, Public-Private Partnership Act, 2015 (PPP Act) was enacted in 2015. The PPP program is part of the Government's Vision 2021 to ensure a more rapid, inclusive growth trajectory, and to better meet the need for enhanced, high quality public services in a fiscally sustainable manner.

Despite these positive developments, PPP has yet to emerge as a major financing avenue in Bangladesh. Experts have identified three factors for slow progress in PPP. These include: (i) absence of a well-thought out legal framework; (ii) lack of internationally competent professional and management staff; and (iii) lack of PPP related capacity in most Ministries, including the Ministry of Road Transport and Bridges and its concerned Departments. Thus, in coming years, Bangladesh will need to take the right policies, strategies and steps for supporting the PPP projects.

### 5.5. External Financing

#### 5.5.1. Foreign direct investment

Foreign direct investment (FDI) plays an important role in the long-run economic growth of an economy. FDI develops productive capacity through transfer in technology, enhances domestic labor skills through global managerial practices and contributes to



human capital development, FDI assists in integrating the domestic markets with the global market. Furthermore, FDI bridges the gap between domestic savings and investment and spurs economic growth which is a powerful tool for alleviating poverty. Although developing countries understand the need for FDI to boost economic growth in their countries, not all countries have been successful in attracting FDI equally. Bangladesh with a FDI-GDP ratio of 1.4% ranks 149<sup>th</sup> with FDI-out of 179 countries ranked on the basis of their FDI-GDP ratio calculated using five-year data (2011-2015). As Raihan (2016) argued, there are certain factors are important to attracting FDI, and policies should be designed to take into account these factors. To attract FDI, relevant trade policy reforms leading to higher degree of openness are essential. With the increased importance of globalization, trade openness has become a key component to growth. Liberalization of trade leads to greater specialization and division of labor leading to higher productivity and export capabilities. Also, infrastructural development is needed to attract larger FDI in an economy. A major component of infrastructure is electricity, and analysis shows that electric power consumption is strongly and positively associated with inflow of FDI. Infrastructure also includes roads and highways, railways and waterways, telecommunication services, etc. These services assist in smooth operation of the businesses and promote greater productivity with the possibility of further investment. Moreover, FDI is positively associated with the magnitude of domestic investment. Low or stagnant domestic investment may show lack of business confidence by the domestic investors, which may convey negative messages to the foreign investors. Therefore, government needs to improve the business environment, reduce the cost of doing business and facilitate domestic investment through eliminating policy induced and supply side constraints.

The government has invited Japan, China and India to set up SEZs, and these countries have also shown their interests in doing so. If properly materialized, these SEZs will have the potentials of receiving substantial FDI from these countries.

#### 5.5.2. Green Climate Fund and the Paris Agreement<sup>14</sup>

Environment related SDGs goals and targets could potentially be covered by fund from climate adaptation funds. In particular, The GCF has been established with the objective to mobilize climate finance to support scaled-up mitigation and adaptation action in developing countries. It was first mentioned in the Copenhagen Accord in 2009 and was formally established one year later during the COP 16 held in

Cancun, Mexico. In 2011 the GCF adopted its governing instrument, in which it recognized its objective to 'promote the paradigm shift towards low emission and climate-resilient development pathways by providing support to developing countries to limit or reduce their greenhouse gas emissions and to adapt to the impacts of climate change'.

The Fund has identified 5 investment priorities which will deliver major mitigation and adaptation benefits:

- Transforming energy generation and access
- Creating climate-compatible cities
- Encouraging low-emission and climate-resilient agriculture
- Scaling up finance for forests and climate change
- Enhancing resilience in Small Island Developing States (SIDS)

Adopted as an operating entity of the Financial Mechanism of the UNFCCC and confirmed in this function for the Paris Agreement, the fund has the ambition to channel a significant portion of future climate finance from both the public and private sector.

With USD 10.2 billion of climate finance pledged to the GCF and USD 5.9 billion confirmed as of January 2016, the GCF and its funders still have a long way to go to get close to the climate finance target of USD 100 billion annually. The fund has however come a long way since its conceptualization in 2009 – it has found its home in South Korea, defined its scope of activities and its mission, developed proposal templates, investment criteria and approval procedures, initiated readiness programs and accredited 20 international and domestic entities through which disbursements can be channeled. Just before the COP in Paris, the GCF approved funding for the first set of eight projects for a total of USD 0.17 billion. The fund is ready to scale-up its funding allocations and intends to award up to USD 2.5 billion in 2016.

The outcome of Paris agreement is relevant to the modus operandi of the GCF as it reiterates the key role the fund is to have in a post-2020 framework, highlighting the fund as a key provider of predictable financial resources (Box 4). The Paris Agreement and the accompanying decision provide additional provisions on finance those are relevant to the GCF, including on funding ambitions, its contributors, earmarking of funds and its subsequent accounting and reporting.

<sup>14</sup>This section is drawn heavily from Bangladesh Delta Plan (2100), Chapter 11, Investment Planning, Financing and Implementation Strategy.

#### **Box 4: Green Climate Fund for Climate Change Adaptation in Developing Countries**

##### **Green Climate Fund and the Paris Agreement**

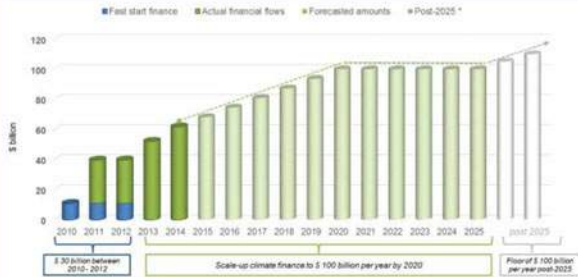
- The Paris Agreement and the supporting Decision include provisions on finance that both directly and indirectly relate to the role and operation of the Green Climate Fund (GCF).
- The Agreement emphasizes the GCF's role as a key provider of predictable financial resources in the post-2020 framework.
- The introduction of a floor of USD 100 billion annually on the level of climate finance going forward post-2025 acknowledges that climate finance needs to be further scaled-up.
- A roadmap to achieve this funding level is expected to introduce clarity on Parties' pledges, supporting the GCF in making future funding decisions.
- Development of modalities for the accounting of financial resources and the requirement to provide biannual reporting will introduce further transparency to the funding and operating of the GCF.
- Developed countries are to continue taking a leading role in mobilizing climate finance, which is already reflected in the contributions made into the GCF to date.
- Funding is to be balanced between mitigation and adaptation initiatives, acknowledging the importance of sustainable development co-benefits and prioritizing action in least developed countries (LDCs) and Small Island Developing States (SIDS).

##### **Funding ambitions**

The Paris Agreement does not explicitly refer to the GCF and the amount of funding that it is to mobilize. The text recognizes however that 'the Financial Mechanism of the Convention, including its operating entities, shall serve as the financial mechanism of this Agreement' (Art. 9.8). The Financial Mechanism was established under the Convention [Art. 11] to formalize and streamline efforts to provide concessional financial resources to developing country Parties. Designated bodies – the operating entities – are entrusted to realize the goals of the Mechanism. The GCF, together with the GEF, are the two operating entities of the Financial Mechanism of the Convention and the Paris Agreement and as such represent the main channels through which future sources of international climate finance are expected to flow in the years to come.

The Paris Decision, serving as guidance for the implementation of the Paris Agreement and pre-2020 action, 'strongly urges developed country Parties to scale up their level of financial support, with a concrete roadmap to achieve the goal of jointly providing USD 100 billion annually by 2020 for mitigation and adaptation' (para 115). The Decision furthermore mentions that prior to 2025 the COP shall set a new 'collective quantified goal from a floor of USD 100 billion per year' (para 54). The reason both quantitative targets are missing from the actual Agreement is a pragmatic one – in doing so the COP has enabled the US President to adopt the Agreement as a 'sole-executive agreement' under the US law, without the requirement for the US Senate to approve.

### Overview of Current and Foreseen Climate Finance Flows



From the perspective of the GCF, while the annual target of USD 100 billion is in itself not new, the introduction of a floor on the level of climate finance going forward post-2025 presents an acknowledgment that climate finance needs to be further scaled-up in order for the Agreement's objectives to be realized (see Figure xx). The GCF is explicitly recognized in the Decision as a key multilateral funding source that is to support the flow of 'adequate and predictable financial resources' [para 55]. The urge to develop a roadmap for reaching the stated financing target by 2020 and beyond is also a significant development given the current ambiguity revolving around the magnitude and origin of future finance flows. More certainly and clarity on Parties' future funding pledges and its underlying terms and conditions will support the GCF in making funding decisions going forward.

The GCF is split between two pots of funding: mitigation and adaptation. Half of the adaptation funding will go to Least Developed Countries (LDCs). Upon request, governments can access grants or concessional loans for both adaptation and mitigation, and to finance the cost of overcoming policy barriers, address information gaps, and capacity constraints that impede local private sector activity.

The fund also seeks to minimize the transaction costs of working with SMEs by having accredited entities originate, approve, administer, and manage financing on behalf of the GCF through a programmatic approach. The accredited entities can be national, regional or international intermediaries that are accredited by the GCF for project management purposes and for the purpose of approving grants and loans.

To access to the GCF the recipient countries have to ready themselves by meeting certain criteria and standards. Necessarily countries have to appoint a National Designated Authority (NDA) to operate the Fund and criteria based National Implementation Entity (NIE)/Multilateral Implementation Entity (MIE) to access to the Fund.

As of 6th February 2015, the GCF has received 96 initial NDAs or Focal Point Designations (GCF 2015), where Bangladesh has nominated its Economic Relations Division (ERD) of the Ministry of Finance as NDA or Focal Point, the apex body to facilitate access to the Fund.

**Bangladesh's Approach and Preparation:** The NDA in Bangladesh has launched an inclusive consultation process and short-listed 14 national institutions considering their potential of being NIE/NIEs while meeting basic and specialized standards set by the GCF. The NDA also completed a 'self-assessment' process to identify strengths, gaps of the prioritized institutions. To help out the selection process Bangladesh Government, in close partnership with GIZ, appointed an international consultant who meantime completed 'one to one' meeting sessions with the potential institutions (UNDP Press release, 2015).

Following the self-assessment process, during 28-29 January 2015, country's NDA focal point, (Senior Secretary of Economic Relations Division of the Ministry of Finance) organized a consultation workshop titled 'NIE Accreditation Process: Getting

Bangladesh Ready for the Green Climate Fund". The workshop discussed the outcomes of the self-assessment process; discussed capacity/eligibility gaps of the potential institutions and explored required technical assistance to make Bangladesh ready for gaining access to GCF.

In fact, the requirement of establishing of NIE comes whenever the concept of direct access comes. While multilateral institutions (e.g. intermediaries) do play a major role in implementing other climate funds (e.g. Least Developed Countries Fund, Special Climate Change Fund) the GCF put significant concern to channel fund directly to the eligible countries.

Hence, it is crucial for the country to "expedite the process" of selecting its national entity or entities and facilitate their engagement with the GCF.

### 5.6. Non-Government Organization (NGO)

There are around 2,450 NGOs in Bangladesh<sup>11</sup> which are actively working with the aim of achieving economic and social development.

According to the NGO Affairs Bureau, numbers of approved project in FY 15-16 was 986 in FY 15-16 with an inflow foreign grant amounting to BDT 49.32 billion. The inflow as percent of FY 15-16 GDP has been 0.33 percent.

In addition to micro-finance services, NGOs have been concentrating in following sectors: [1] Health, Nutrition and Population; [2] Education; [3] Water, Sanitation and Hygiene; [4] Skill Development; [5] Disaster, Environment and Climate Change; [6] Rural Development; [7] Urban Development; [8] Agriculture and Food Security; [9] Migration; [10] Gender Justice and Women Empowerment; and [11] Poverty eradication. Given their portfolios, it may be argued that there are substantial scopes of contribution from NGOs in the SDGs related to poverty reduction, good health, quality education, gender equality, climate change, environmental sustainability and reducing inequalities.

Moreover, the NGOs can play a significant role in implementing SDGs at the grass root levels by operating in the remote areas and helping people to combat the adverse effects of climate change. Furthermore, the collaboration of government with NGOs in the areas of education, health and micro finance can synergize to achieve other SDGs.

It has been estimated that around 5 percent (on average) of the total additional resource requirement may be contributed by the NGOs.

<sup>11</sup>Source: List of NGOs as on 24 February, 2016, NGO Affairs Bureau, GOB.



# VI. Up-Shot

## VI. Up-Shot

The SDGs Financing Strategy for Bangladesh report aims to provide a full-blown study of the estimation of total additional cost required to achieve the SDGs in Bangladesh. The estimation of additional cost for each of the 17 goals for the SDGs period has been presented separately in the report. The synchronized additional costs for the goals have also been provided in the report to help everyone understand the bigger picture.

In this report, it has been estimated that an additional amount, over the current provision of cost related to SDGs by public sector, private sectors and external sources, of BDT 94,711.65 billion [USD 928.48 billion] at 2015-16 constant prices will be required for SDGs in the period FY 2017-FY 2030, which is 19.75 percent of the accumulated GDP under 7<sup>th</sup> FYP extended scenario. The annual average cost of SDGs will be USD 66.32 billion [at constant prices] for this period. The additional financing requirement will be 10.16 percent of the projected GDP at 2015-16 constant prices in FY 2017, which will gradually increase to 24.06 percent in FY 2030. It has been estimated that, on an average, 33.5 percent of the financing will come from the public sector; 42.09 percent will come from the private sector which comprises of households and private businesses; and external sources, comprising of foreign direct investment and foreign aid, will finance 14.89 percent of the total additional cost requirement.

During the period FY 2017-FY 2030, it has been estimated that out of the total additional amount, a total of BDT 81,307.61 billion [USD 796.09 billion] is required to be financed from domestic sources. In contrast, BDT 13,404.04 billion [USD 132.39 billion] is needed from external sources. On an average, annually, BDT 5,807.69 billion [USD 56.86 billion] is needed from the domestic sources during this period, while BDT 957.43 billion [USD 9.46 billion] is needed annually from the external sources. Out of the total contribution of external sources, BDT 9,923.05 billion [USD 96.687493 billion] is expected to come from FDI and BDT 3,480.54 billion [USD 35.691415 billion] is expected from foreign aid and grants during the period FY 2017-FY 2030. The average additional amount required annually from FDI is BDT 708.79 billion [USD 6.91 billion], while the amount required annually from foreign grants and aid is BDT 248.61 billion [USD 2.55 billion] on an average.

The Business As Usual (BAU) cost has also been estimated separately for each goal. It shows that if the current provision of cost continues up to FY 2030, it will require BDT 277,660.39 billion [USD 2807.39 billion] at 2015-16 constant prices after synchronization. The estimated BAU cost will be 65.41 percent of the GDP at 2015-16 constant prices in FY 2017 which will decline to 49.57 percent in FY 2030.

This study also sheds light on the challenges regarding the monitoring of SDGs progress in Bangladesh. Many of the globally proposed indicators to track the progress in SDGs targets have been newly introduced and the baseline data for these indicators are unavailable.

According to the Data Gap Analysis in the Context of Bangladesh for the UN proposed indicators to measure the Targets of Sustainable Development Goals (SDGs), by General Economics Division (GED), data on only 70 indicators are readily available while data on 108 indicators are partially available and 63 indicators are not available at all. This shows that there is an immediate need to develop the capacity to collect and monitor the data related to all the proposed indicators in the coming years. GED has used 241 indicators for this analysis although the UN has set 230 indicators globally to monitor the targets of SDGs. Another major challenge is to clearly specify the targets to be achieved within FY 2030 in Bangladesh for all the indicators. For some indicators, there is no specific target provided in the SDGs for least developed countries to achieve. It is important to determine a clearly specified set of targets for Bangladesh to achieve in the indicators of SDGs which will show how far Bangladesh is from achieving the SDGs. Besides, few indicators are not quantifiable. It is very difficult to keep track of the progress of these indicators.

One of the major challenges in conducting this study was to address the overlapping issues within the SDGs targets. The goals of SDGs are interconnected and estimating additional cost for each of the 17 goals separately was a challenging task. The overlapping issue has been addressed using a process of synchronization in this study. Most of the synchronization occurs among SDG 1, SDG 7, SDG 8 and SDG 9 since sustainable energy and infrastructure are most important to generate higher economic growth and higher growth contributes to reduce poverty.

Finally, one of the main challenges in achieving SDGs is vast improvement in implementation of projects and programmes. Delays in project implementation have deleterious impact on cost as well as on the intended benefits. Improving tax-effort by 9 percentage points over the next 13 years will not be easy. NBR must embark on new initiatives based on reforms; automation; capacity development and audit to improve revenue mobilization in Bangladesh. Access to Green Climate Fund critically depends on our capacity to negotiate with the development partners. In this context, Bangladesh has identified areas of strengthening. These should be ensured on a priority basis. The 7<sup>th</sup> FYP states that the international experience with the implementation of infrastructure PPPs suggests that this policy has worked best when the legal framework is well-thought out and when and the management of the initiative involves competent professional staff. In both regards, in Bangladesh, PPP initiative is deficient. The legal framework needs to lay down clear rules of engagement, the incentive framework and dispute resolution mechanism that compares favourably with international good practice. Government needs to work on these two important areas.

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# Annex

## Annex 1.1: Targets Covered in the Calculation of Additional Costing of SDG 1

Targets in SDG 1	Targets covered in this report	Comments
<p>1.1 By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day.</p> <p>1.2 By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions</p>	<p>1.1 By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day</p> <p>1.2 By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions</p>	<p>Additional cost has been estimated by using the concepts of per capita transfer and net growth elasticity of extreme poverty. It has been addressed by economic growth.</p>
<p>1.3 Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable</p>	<p>1.3 Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable</p>	<p>Public spending on safety net programmes has been increased.</p>
<p>1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance</p> <p>1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters</p>	<p>1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and disasters</p>	<p>Non-quantifiable</p> <p>It has been synchronized with SDG 13.</p>
<p>1.a Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least developed countries, to implement programmes and policies to end poverty in all its dimensions</p>		<p>Non-quantifiable</p>
<p>1.b Create sound policy frameworks at the national, regional and international levels, based on pro-poor and gender-sensitive development strategies, to support accelerated investment in poverty eradication actions</p>		<p>Non-quantifiable</p>

## Annex 1.2: Methodology of the Calculation of Additional Costing of SDG 1

Targets covered in this report	Methodology of calculation	Data sources
<p>1.1 By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day</p>	<p>Target 1.1 describes the focus of this goal, which is eradication of extreme poverty. The additional cost for achieving the target 1.1 has been calculated by using the concept of per capita transfer and growth effect.</p> <p><b>Step 01:</b> For a particular year <math>t</math>,</p> $z = (x - y) * 12,$ <p>where</p> <p><math>x</math> = Per capita expenditure of the poor for a month by using the upper poverty line,  <math>y</math> = Per capita expenditure of the poor for a month by using the lower poverty line,  and  <math>z</math> = Per capita transfer for a particular year.</p> <p>Here, both expenditures are at current prices. Per capita transfer is the amount that needs to be given to one who is living in extreme poverty.</p> <p><b>Step 02:</b> Once the per capita transfer is calculated for each year, the extreme poverty rate for each of the FY 2017-FY 2030 has been projected by using the data of GDP growth-consumption growth ratio and net growth elasticity of extreme poverty. The formula says</p> $y_t = y_{t-1} + (y_{t-1} * (N/100)) * (\alpha/\beta),$ <p>where</p> <p><math>t</math> = FY2017, FY2018,.....,FY2030,  <math>y_t</math> = Extreme poverty rate for current fiscal year,  <math>y_{t-1}</math> = Extreme poverty rate for immediate previous fiscal year,  <math>\lambda</math> = Net growth elasticity of extreme poverty,  <math>\alpha</math> = GDP growth rate for current fiscal year, and  <math>\beta</math> = Consumption growth rate.</p> <p>The numbers for consumption growth rate and net growth elasticity rate are 1.84 and -2.05 respectively [Ending Extreme Poverty in Bangladesh During the Seventh</p>	<p>Household Income and Expenditure Survey 2010, Bangladesh Bureau of Statistics, Planning Commission, Bangladesh</p> <p>7<sup>th</sup> FYP, General Economics Division, Planning Commission, Bangladesh</p> <p>Bangladesh Delta Plan 2100, General Economics Division, Planning Commission, Bangladesh</p> <p>Ending Extreme Poverty in Bangladesh During the Seventh Five Year Plan: Trends, Drivers and Policies, General Economics Division, Planning Commission, Bangladesh</p> <p>World Population Prospects: The 2015 Revision, Population Division (2015), Department of Economic and Social Affairs, United Nations</p>

Targets covered in this report	Methodology of calculation	Data sources
<p>1.2 By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions</p> <p>1.3 Implement nationally appropriate social protection systems and</p>	<p><b>Five Year Plan: Trends, Drivers and Policies, 2015).</b> Here, the net growth elasticity rate, taken from the abovementioned background paper, has been adjusted by 0.9 after seeing the historical trend. After adjustment, -1.85 has been taken as the net growth elasticity rate.</p> <p><b>Step 03:</b> Extreme poor population has been estimated by using the data of projected total population and calculated extreme poverty rate. Then, the targeted extreme poor population that will come out of the extreme poverty has been estimated for each fiscal year.</p> $P_{t+1} = P_t + P_{t-1} \times \alpha$ <p>where</p> <p><math>t = \text{FY2017, FY2018, …, FY2030.}</math>  <math>P_t = \text{Targeted extreme poor population for current fiscal year,}</math>  <math>P_{t-1} = \text{Extreme poor population for current fiscal year, and}</math>  <math>P_{t+1} = \text{Extreme poor population for immediate next fiscal year.}</math></p> <p><b>Step 04:</b> This targeted extreme poor population has been multiplied by the respective fiscal year's per capita transfer in order to get the additional cost that will be needed to achieve the target.</p> $C_t = P_{t+1} \times Z_t$ <p>where</p> <p><math>t = \text{FY2017, FY2018, …, FY2030,}</math>  <math>C_t = \text{Additional cost for current fiscal year,}</math>  <math>P_{t+1} = \text{Targeted extreme poor population for current fiscal year, and}</math>  <math>Z_t = \text{Per capita transfer for current fiscal year.}</math></p> <p>The additional cost for target 1.2 has been addressed by economic growth.</p>	
	<p><b>Step 01:</b></p>	

Targets covered in this report	Methodology of calculation	Data sources
<p>measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable</p>	<p>Currently, around 2.0% of GDP is being invested on safety net programmes (7<sup>th</sup> Five Year Plan, 2015). Since Bangladesh will need to undertake more safety net programmes focusing the poor and vulnerable people, this business-as-usual spending should be increased to 2.50% of GDP. Therefore, the additional cost for this target is 0.50% of GDP.</p> <p><b>Step 02:</b> This 0.50% has been multiplied by the respective fiscal year's GDP at current prices in order to get the absolute value of additional cost for each fiscal year.</p> $C_i = \text{NGDP}_i * (0.50/100),$ <p>where</p> <p><math>C_i</math> = Additional Cost for current fiscal year, and  <math>\text{NGDP}_i</math> = Nominal GDP for current fiscal year.</p>	
<p>1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters</p>	<p>The additional cost for target 1.5 has been synchronized with the additional cost of SDG 13.</p>	



## Annex 1.3: Breakdown of Total Additional Cost for SDG 1

## In Current Prices

Total Additional Cost/Fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Additional Cost for Target 1.1 (Billion BDT at current prices)	4.53	4.66	4.91	4.91	4.89	4.85	4.81	4.75	4.68	4.61	4.52	4.43	4.33	4.22
Additional Cost for Target 1.3 (Billion BDT at current prices)	110.93	125.79	142.52	161.76	183.44	208.02	235.90	267.51	303.62	344.61	391.48	444.72	505.64	574.92
<b>Total Additional Cost (Billion BDT at current prices)</b>	<b>110.93</b>	<b>125.79</b>	<b>142.52</b>	<b>161.76</b>	<b>183.44</b>	<b>208.02</b>	<b>235.90</b>	<b>267.51</b>	<b>303.62</b>	<b>344.61</b>	<b>391.48</b>	<b>444.72</b>	<b>505.64</b>	<b>574.92</b>
<b>Total Additional Cost (Billion USD)</b>	<b>1.37</b>	<b>1.50</b>	<b>1.65</b>	<b>1.82</b>	<b>2.01</b>	<b>2.21</b>	<b>2.45</b>	<b>2.71</b>	<b>3.00</b>	<b>3.32</b>	<b>3.68</b>	<b>4.09</b>	<b>4.54</b>	<b>5.05</b>

Source: GED estimates

## In Constant 2015-16 Prices

Total Additional Cost/Fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Additional Cost for Target 1.1 (Billion BDT at constant 2015-16 prices)	4.28	4.16	4.15	3.93	3.72	3.50	3.31	3.11	2.92	2.74	2.56	2.40	2.23	2.08
Additional Cost for Target 1.3 (Billion BDT at constant 2015-16 prices)	104.75	112.27	120.34	129.47	139.43	150.30	162.17	175.14	189.32	204.84	221.83	240.46	260.88	283.30
<b>Total Additional Cost (Billion BDT at constant 2015-16 prices)</b>	<b>104.75</b>	<b>112.27</b>	<b>120.34</b>	<b>129.47</b>	<b>139.43</b>	<b>150.30</b>	<b>162.17</b>	<b>175.14</b>	<b>189.32</b>	<b>204.84</b>	<b>221.83</b>	<b>240.46</b>	<b>260.88</b>	<b>283.30</b>
<b>Total Additional Cost (Billion USD)</b>	<b>1.29</b>	<b>1.34</b>	<b>1.39</b>	<b>1.46</b>	<b>1.52</b>	<b>1.60</b>	<b>1.68</b>	<b>1.77</b>	<b>1.87</b>	<b>1.97</b>	<b>2.09</b>	<b>2.21</b>	<b>2.34</b>	<b>2.49</b>

Source: GED estimates

\*The additional cost for target 1.1 will be covered by the cost of safety net programmes. Therefore, total additional cost for SDG 1 excludes the additional cost for target 1.1 since this cost is already included in the additional cost for target 1.3.

## Annex 2.1: Targets Covered in the Calculation of Additional Costing of SDG 2

Targets in SDG 2	Targets covered in this report	Comments
<p>2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round</p>	<p>2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round</p>	<p>CIP interventions 06, 07, 08, 09, 10, 11 and 12 will ensure Food Access by all people, through better marketing, monitoring, community based nutrition programmes etc.</p> <p><b>Intervention 06:</b> Improved access to market, value addition in agriculture and nonfarm incomes.</p> <p><b>Intervention 07:</b> Strengthened capacities for implementation and monitoring of NFP and CIP actions.</p> <p><b>Intervention 08:</b> Enhanced public food management system.</p> <p><b>Intervention 09:</b> Institutional Development and Capacity Development for more effective safety nets.</p> <p><b>Intervention 10:</b> Community based nutrition programmes and services.</p> <p><b>Intervention 11:</b> Orient food and nutrition actions through data.</p> <p><b>Intervention 12:</b> Food safety and quality improvement.</p>
<p>2.3 By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment</p>	<p>2.3 By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment</p>	<p>CIP interventions 01, 02, 03, 04 and 05 will take care of overall productivity and income redistribution.</p> <p><b>Intervention 01:</b> Sustainable and diversified agriculture through integrated research and extension.</p> <p><b>Intervention 02:</b> Improved water management and infrastructure for irrigation purposes.</p> <p><b>Intervention 03:</b> Improved quality of input and soil fertility.</p> <p><b>Intervention 04:</b> Fisheries and aquaculture development.</p> <p><b>Intervention 05:</b> Livestock development, with a focus on poultry and dairy production.</p>
<p>2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality</p>	<p>2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality</p>	<p>CIP interventions 01, 02, 03, 04 and 05 will take care of overall productivity and income redistribution.</p> <p><b>Intervention 01:</b> Sustainable and diversified agriculture through integrated research and extension.</p> <p><b>Intervention 02:</b> Improved water management and infrastructure for irrigation purposes.</p> <p><b>Intervention 03:</b> Improved quality of input and soil fertility.</p> <p><b>Intervention 04:</b> Fisheries and aquaculture development.</p>

Targets in SDG 2	Targets covered in this report	Comments
<p>2.5 By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed</p> <p>2.a Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries</p> <p>2.b Correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round</p> <p>2.c Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility</p>	<p>2.5 By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed</p>	<p><b>Intervention 05:</b> Livestock development, with a focus on poultry and dairy production.</p> <p>CIP interventions 01 and 03 will take care of the generic diversity of seeds and overall improvement of quality of inputs in agricultural production.</p> <p><b>Intervention 01:</b> Sustainable and diversified agriculture through integrated research and extension.</p> <p><b>Intervention 03:</b> Improved quality of input and soil fertility.</p> <p>No data available.</p>
<p>2.c Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility</p>	<p>2.c Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility</p>	<p>No data available.</p> <p>CIP interventions 06, 07, 08 and 09 will take care of market efficiency.</p> <p><b>Intervention 06:</b> Improved access to market, value addition in agriculture and nonfarm incomes.</p> <p><b>Intervention 07:</b> Strengthened capacities for implementation and monitoring of NFP and CIP actions.</p> <p><b>Intervention 08:</b> Enhanced public food management system.</p> <p><b>Intervention 09:</b> Institutional Development and Capacity Development for more effective safety nets.</p>

## Annex 2.2: Methodology of the Calculation of Additional Costing of SDG 2

Targets Covered in this Report	Methodology of the Calculation	Data Source
<p>2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round</p> <p>2.2 By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment</p> <p>2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality</p> <p>2.5 By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed</p> <p>2.c Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility</p>	<p>Costing methodology of SDG 2 has been selected based on consultation<sup>1</sup> with the Food Planning and Monitoring Unit (FPMU), Ministry of Food, Government of the People's Republic of Bangladesh. This calculation is also aligned with the Bangladesh Country Investment Plan (CIP). CIP is a roadmap towards investment in agriculture, food security and nutrition in Bangladesh. CIP consists of twelve nationwide programs<sup>2</sup> targeting food availability, food access and food utilization. These programs cover all relevant targets<sup>3</sup> (for Bangladesh) of SDG2.</p> <p>Cost calculation involves the steps describes below.</p> <p><b>Step 01:</b> Ministry of Food has targeted to invest additional US\$2 billion per year on twelve programs of CIP up to year 2025. Ministry has also targeted to reduce this amount from year 2026 to reach at US\$1.5 billion in 2030. Cost calculation of SDG 2 has proposed this aforementioned additional investment plan (after adjusting for inflation rates) of the Government during the SDG period.</p> <p>Based on the consultation with FPMU, an additional US\$2 billion (yearly) has been proposed to spend on twelve CIP interventions from FY 2017 to FY 2025.</p> <p><b>Step 02:</b> An additional US\$1.5 billion (yearly) has been proposed to spend on twelve CIP interventions from FY 2026 to FY 2030.</p> <p><b>Step 03:</b> Yearly additional costs have been adjusted for inflation.</p>	<p>Bangladesh Country Investment Plan (CIP), Government of the People's Republic of Bangladesh 2011. Bangladesh Delta Plan 2100 (Main Report)</p>

<sup>1</sup> This research team has consulted with Mr. Naser Farid, Director General, Food Planning and Monitoring Unit (FPMU), Ministry of Food, Government of the People's Republic of Bangladesh.

<sup>2</sup> See, pp-34, Bangladesh Country Investment Plan (2011), Government of People's Republic of Bangladesh.

<sup>3</sup> See, annex 2.1 for details.

### Annex 2.3: Breakdown of Total Additional Cost for SDG 2

#### In Current Prices

Total Additional Cost (Billion BDT at current prices)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Total Additional Cost (Billion BDT at current prices)	157.40	166.84	166.37	166.06	165.74	165.58	165.43	165.27	165.27	156.86	148.60	140.21	131.96	123.60
Total Additional Cost (Billion USD)	1.94	1.99	1.93	1.87	1.81	1.76	1.72	1.67	1.63	1.51	1.40	1.29	1.18	1.08

Source: GED estimates

#### In Constant 2015-16 Prices

Total Additional Cost (Billion BDT at constant 2015-16 prices)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Total Additional Cost (Billion BDT at constant 2015-16 prices)	148.63	148.91	140.48	132.91	125.98	119.63	113.73	108.21	103.05	93.24	84.20	75.81	68.08	60.91
Total Additional Cost (Billion USD)	1.83	1.78	1.63	1.49	1.38	1.27	1.18	1.09	1.02	0.90	0.79	0.70	0.61	0.53

Source: GED estimates

### Annex 3.1: Targets Covered in the Calculation of Additional Costing of SDG 3

Targets in SDG 3	Targets covered in this report	Comments
3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births	3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births	The additional cost for achieving target 3.1 has been estimated by using the data of national health programs and average total spending on health by advanced Southeast Asian countries and Bangladesh.
3.2 By 2030, end preventable deaths of new-borns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under 5 mortality to at least as low as 25 per 1,000 live births	3.2 By 2030, end preventable deaths of new-borns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under 5 mortality to at least as low as 25 per 1,000 live births	The additional cost has been calculated by using the same data as target 3.1.
3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases	3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases	The additional cost has been calculated by using the same data as target 3.1.
3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	The additional cost has been calculated by using the same data as target 3.1.
3.5 Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol	3.5 Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol	The additional cost has been calculated by using the same data as target 3.1.
3.6 By 2020, halve the number of global deaths and injuries from road traffic accidents	3.6 By 2020, halve the number of global deaths and injuries from road traffic accidents	It has been synchronized with SDG 11
3.7 By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes	3.7 By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes	The additional cost has been calculated by using the same data as target 3.1.
3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all	3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all	The additional cost has been calculated by using the same data as target 3.1.
3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	It has been synchronized with SDG 14 and SDG 15.

Targets in SDG 3	Targets covered in this report	Comments
<p>3.a Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate</p> <p>3.b Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all</p> <p>3.c Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States</p> <p>3.d Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks</p>	<p>3.a Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate</p> <p>3.b Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all</p> <p>3.c Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States</p> <p>3.d Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks</p>	<p>The additional cost has been calculated by using the same data as target 3.1.</p> <p>The additional cost has been calculated by using the same data as target 3.1.</p> <p>The additional cost has been calculated by using the same data as target 3.1.</p>

### Annex 3.2: Methodology of the Calculation of Additional Costing of SDG 3

Targets covered in this report	Methodology of calculation	Data sources
<p>3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births</p>	<p><b>Step 01:</b> National health programs relevant to target 3.1 have been identified from the ministerial budgets and therefore, the share of those programs out of all programs has been estimated by using the 2015-2016 revised budgets of the relevant ministries. Calculation shows that programs under target 3.1 have an average share of 0.01 percent.</p> <p><b>Step 02:</b> The average total spending on health by the advanced Southeast Asian countries has been considered as the standard spending here since they have achieved great progress as an economy over the last few decades. The data of total health expenditure (as the percentage of GDP) for Bangladesh and advanced Southeast Asian countries have been extracted from the World Development Indicators, World Bank for the period 2010-2014.</p> <p>The average total health expenditure of the advanced Southeast Asian countries for the period 2010-2014 is 5.25 percent of GDP. The data of Bangladesh show that the average total spending on health is 3.00 percent of GDP for the same period. Therefore, Bangladesh needs to increase its total expenditure on health by 2.25 percent of GDP.</p> <p>It will not be realistic to say that Bangladesh should go to 5.25 percent of GDP from 3.00 percent of GDP immediately. Rather, Bangladesh should increase its current level of total health spending gradually, in the context of Bangladesh, SDG will be executed under three FYP: 7<sup>th</sup> FYP (FY2016-FY2020), 8<sup>th</sup> FYP (FY 2021-FY 2025) and 9<sup>th</sup> FYP (FY 2026-FY 2030). Therefore, escalation in total health spending can be materialized under these three FYP periods.</p> <p>Bangladesh should spend an additional 1.00 percent of GDP on health in FY 2020. The additional total spending on health will be 2.00 percent of GDP in FY 2025 and 2.25 percent of GDP in FY 2030.</p>	<p>World Development Indicators, World Bank</p> <p>7<sup>th</sup> Five Year Plan, General Economics Division, Planning Commission, Bangladesh</p> <p>Bangladesh Delta Plan 2100, General Economics Division, Planning Commission, Bangladesh</p> <p>Medium-Term Budgetary Framework (MTBF), Finance Division, Ministry of Finance, Bangladesh</p> <p>Bangladesh Bureau of Statistics</p>



Targets covered in this report	Methodology of calculation	Data sources
<p><b>Step 03:</b> Formula says</p> $C_{t,i} = \alpha_i * \beta_i$ <p>where  <math>t = \text{FY2017, FY2018, ..., FY2030}</math>  <math>C_{t,i}</math> = Additional cost of a particular target for the current fiscal year,  <math>\alpha_i</math> = Share of the programs aligned with a particular target, and  <math>\beta_i</math> = Additional cost of SDG3 for the current fiscal year.</p> <p>For instance, additional cost for SDG3 is 1.00 percent of GDP in FY2020 and share of programs associated with target 3.1 is 0.01 percent. Therefore, additional cost for target 3.1 is</p> $C_{3.1, \text{FY2020}} = \alpha_{3.1} * \beta_{\text{SDG30}} = 0.01 * 1.00 = 0.01$ <p>Therefore, additional cost for target 3.1 is 0.01 percent of GDP. Multiplication of this percentage with the GDP at current prices for FY 2020 gives the additional cost in absolute number which is equivalent to BDT 3.47 billion.</p> <p>Same methodology has been used to calculate the additional cost for target 3.2 as target 3.1.</p>	<p>Same methodology has been used to calculate the additional cost for target 3.3 as target 3.1.</p> <p>Same methodology has been used to calculate the additional cost for target 3.4 as target 3.1.</p>	
<p>3.2 By 2030, end preventable deaths of new-born and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births</p> <p>3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases</p> <p>3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being</p>		

Targets covered in this report	Methodology of calculation	Data sources
3.5 Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol	Same methodology has been used to calculate the additional cost for target 3.5 as target 3.1.	
3.6 By 2020, halve the number of global deaths and injuries from road traffic accidents	The additional cost for target 3.6 has been synchronized with the additional cost for SDG 11.	
3.7 By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes	Same methodology has been used to calculate the additional cost for target 3.7 as target 3.1.	
3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all	Same methodology has been used to calculate the additional cost for target 3.8 as target 3.1.	
3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	The additional cost for target 3.9 has been synchronized with the additional cost for SDG 14 and SDG 15.	
3.a Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate	Same methodology has been used to calculate the additional cost for target 3.a as target 3.1.	
3.b Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights	Same methodology has been used to calculate the additional cost for target 3.b as target 3.1.	

Targets covered in this report	Methodology of calculation	Data sources
<p>regarding flexibilities to protect public health, and, in particular, provide access to medicines for all</p>		
<p>3.c Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States</p>	<p>Same methodology has been used to calculate the additional cost for target 3.c as target 3.1.</p>	
<p>3.d Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks</p>	<p>Same methodology has been used to calculate the additional cost for target 3.d as target 3.1.</p>	

### Annex 3.3: Breakdown of Total Additional Cost for SDG 3

#### In Current Prices

Total Additional Cost/ Fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Additional Cost for Target 3.1 (Billion BDT at current prices)	0.59	1.35	2.29	3.47	4.72	6.24	8.09	10.32	13.02	15.14	17.62	20.49	23.84	27.73
Additional Cost for Target 3.2 (Billion BDT at current prices)	2.08	4.73	8.05	12.18	16.57	21.93	28.42	36.26	45.73	53.20	61.90	72.00	83.77	97.41
Additional Cost for Target 3.3 (Billion BDT at current prices)	1.29	2.93	4.99	7.55	10.27	13.59	17.62	22.48	28.35	32.98	38.38	44.64	51.93	60.39
Additional Cost for Target 3.4 (Billion BDT at current prices)	1.35	3.06	5.21	7.88	10.73	14.19	18.39	23.47	29.59	34.43	40.07	46.60	54.22	63.05
Additional Cost for Target 3.5 (Billion BDT at current prices)	0.33	0.76	1.29	1.95	2.65	3.50	4.54	5.79	7.31	8.50	9.89	11.50	13.38	15.56
Additional Cost for Target 3.7 (Billion BDT at current prices)	6.77	15.37	26.12	39.54	53.81	71.19	92.27	117.72	148.46	172.71	200.99	233.76	271.97	316.26
Additional Cost for Target 3.8 (Billion BDT at current prices)	13.71	31.14	52.93	80.12	109.03	144.26	186.97	238.53	300.82	349.97	407.27	473.67	551.09	640.84
Additional Cost for Target 3.a (Billion BDT at current prices)	0.07	0.16	0.27	0.40	0.55	0.72	0.94	1.20	1.51	1.76	2.04	2.38	2.76	3.21
Additional Cost for Target 3.b (Billion BDT at current prices)	2.45	5.57	9.47	14.34	19.52	25.82	33.47	42.69	53.84	62.64	72.90	84.78	98.64	114.70
Additional Cost for Target 3.c (Billion BDT at current prices)	25.76	58.49	99.43	150.50	204.82	271.00	351.23	448.09	565.11	657.44	765.07	889.82	1,035.26	1,201.84
Additional Cost for Target 3.d (Billion BDT at current prices)	0.93	2.12	3.60	5.44	7.41	9.80	12.71	16.21	20.44	23.78	27.68	32.19	37.45	43.55
<b>Total Additional Cost (Billion BDT at current prices)</b>	<b>55.35</b>	<b>125.67</b>	<b>213.64</b>	<b>323.37</b>	<b>440.07</b>	<b>582.25</b>	<b>754.63</b>	<b>962.76</b>	<b>1,214.18</b>	<b>1,412.55</b>	<b>1,643.81</b>	<b>1,911.83</b>	<b>2,224.32</b>	<b>2,586.54</b>
<b>Total Additional Cost (Billion USD)</b>	<b>0.68</b>	<b>1.50</b>	<b>2.47</b>	<b>3.64</b>	<b>4.81</b>	<b>6.20</b>	<b>7.83</b>	<b>9.74</b>	<b>11.98</b>	<b>13.60</b>	<b>15.45</b>	<b>17.56</b>	<b>19.96</b>	<b>22.70</b>

Source: GED estimates

**In Constant 2015-16 Prices**

Total Additional Cost/Fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Additional Cost for Target 3.1 (Billion BDT at constant 2015-16 prices)	0.56	1.20	1.93	2.78	3.59	4.51	5.56	6.76	8.12	9.00	9.98	11.08	12.30	13.66
Additional Cost for Target 3.2 (Billion BDT at constant 2015-16 prices)	1.96	4.22	6.80	9.75	12.59	15.84	19.54	23.74	28.51	31.62	35.08	38.93	43.22	48.00
Additional Cost for Target 3.3 (Billion BDT at constant 2015-16 prices)	1.22	2.62	4.21	6.04	7.81	9.82	12.11	14.72	17.68	19.60	21.75	24.14	26.79	29.76
Additional Cost for Target 3.4 (Billion BDT at constant 2015-16 prices)	1.27	2.73	4.40	6.31	8.16	10.25	12.64	15.37	18.45	20.87	22.71	25.20	27.97	31.07
Additional Cost for Target 3.5 (Billion BDT at constant 2015-16 prices)	0.31	0.68	1.09	1.56	2.01	2.53	3.12	3.79	4.56	5.05	5.60	6.22	6.90	7.67
Additional Cost for Target 3.7 (Billion BDT at constant 2015-16 prices)	6.39	13.72	22.06	31.65	40.90	51.44	63.43	77.07	92.57	102.66	113.89	126.39	140.32	155.84
Additional Cost for Target 3.8 (Billion BDT at constant 2015-16 prices)	12.95	27.79	44.69	64.13	82.87	104.23	128.53	156.17	187.57	208.03	230.78	256.11	284.32	315.79
Additional Cost for Target 3.a (Billion BDT at constant 2015-16 prices)	0.07	0.14	0.23	0.32	0.42	0.52	0.65	0.79	0.94	1.05	1.16	1.29	1.42	1.58
Additional Cost for Target 3.b (Billion BDT at constant 2015-16 prices)	2.31	4.97	8.00	11.48	14.84	18.66	23.01	27.95	33.57	37.23	41.31	45.84	50.89	56.52
Additional Cost for Target 3.c (Billion BDT at constant 2015-16 prices)	24.32	52.20	83.96	120.46	155.68	195.80	241.45	293.37	352.37	390.79	433.53	481.12	534.12	593.22
Additional Cost for Target 3.d (Billion BDT at constant 2015-16 prices)	0.88	1.89	3.04	4.35	5.63	7.08	8.74	10.61	12.75	14.14	15.68	17.41	19.32	21.46
<b>Total Additional Cost (Billion BDT at constant 2015-16 prices)</b>	<b>52.25</b>	<b>112.17</b>	<b>180.40</b>	<b>258.82</b>	<b>334.50</b>	<b>420.68</b>	<b>518.79</b>	<b>630.34</b>	<b>757.09</b>	<b>839.64</b>	<b>931.46</b>	<b>1033.72</b>	<b>1147.59</b>	<b>1274.57</b>
<b>Total Additional Cost (Billion USD)</b>	<b>0.65</b>	<b>1.34</b>	<b>2.09</b>	<b>2.91</b>	<b>3.66</b>	<b>4.48</b>	<b>5.38</b>	<b>6.38</b>	<b>7.47</b>	<b>8.09</b>	<b>8.76</b>	<b>9.50</b>	<b>10.30</b>	<b>11.19</b>

Source: GED estimates

#### Annex 4.1: Targets Covered in the Calculation of Additional Costing of SDG 4

Targets in SDG 4	Targets covered in this report	Comments
<p>4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes</p>	<p>4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes</p>	<p>The additional cost for achieving target 4.1 has been calculated by using the data of national education programs and average public spending on education by advanced Southeast Asian countries and Bangladesh.</p>
<p>4.2 By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education</p>	<p>4.2 By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education</p>	<p>The additional cost has been calculated by using the same data as target 4.1.</p>
<p>4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university</p>	<p>4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university</p>	<p>The additional cost has been calculated by using the same data as target 4.1.</p>
<p>4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship</p>	<p>4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship</p>	<p>The additional cost has been calculated by using the same data as target 4.1.</p>
<p>4.5 By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations</p>	<p>4.5 By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations</p>	<p>The additional cost has been calculated by using the same data as target 4.1.</p>
<p>4.6 By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy</p>	<p>4.6 By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy</p>	<p>The additional cost has been calculated by using the same data as target 4.1.</p>
<p>4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development</p>	<p>4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development</p>	<p>The additional cost has been calculated by using the same data as target 4.1.</p>

Targets in SDG 4	Targets covered in this report	Comments
<p>4.a Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all</p>	<p>4.a Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all</p>	<p>The additional cost has been calculated by using the same data as target 4.1.</p>
<p>4.b By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries</p>	<p>4.b By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries</p>	<p>The additional cost has been calculated by using the same data as target 4.1.</p>
<p>4.c By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States</p>	<p>4.c By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States</p>	<p>The additional cost has been calculated by using the same data as target 4.1.</p>

#### Annex 4.2: Methodology of the Calculation of Additional Costing of SDG 4

Targets covered in this report	Methodology of calculation	Data sources
<p>4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes</p>	<p><b>Step 01:</b> National education programs relevant to target 4.1 have been identified from the ministerial budgets and therefore, the share of those programs out of all programs has been estimated by using the 2015–2016 revised budgets of the relevant ministries. Calculation shows that programs under target 4.1 have an average share of 0.67 percent.</p> <p><b>Step 02:</b> The average public spending on education by the advanced Southeast Asian countries has been considered as the standard spending here since they have achieved great progress as an economy over the last few decades. The data of public expenditure on education (as the percentage of GDP) for Bangladesh and advanced Southeast Asian countries have been extracted from the World Development Indicators, World Bank for the period 2010–2014.</p> <p>The average public education expenditure of the advanced Southeast Asian countries for the period 2010–2014 is 4.04 percent of GDP. The data of Bangladesh show that the average public spending on education is 1.98 percent of GDP for the same period. Therefore, Bangladesh needs to increase its public expenditure on education by 2.05 percent of GDP.</p> <p>It will not be realistic to say that Bangladesh should go to 4.04 percent of GDP from 1.98 percent of GDP immediately. Rather, Bangladesh should increase its current level of public spending on education gradually, in the context of Bangladesh, SDG will be executed under three FYs: 7<sup>th</sup> FYP (FY 2016–FY 2020), 8<sup>th</sup> FYP (FY 2021–FY 2025) and 9<sup>th</sup> FYP (FY 2026–FY 2030). Therefore, escalation in public education spending can be materialized under these three FYP periods.</p> <p>Bangladesh government should spend an additional 1.00 percent of GDP on education in FY2020. The additional public spending on education will be 2.00 percent of GDP in FY 2025 and 2.05 percent of GDP in FY 2030.</p>	<p>World Development Indicators, World Bank</p> <p>7<sup>th</sup> Five Year Plan, General Economics Division, Planning Commission, Bangladesh</p> <p>Bangladesh Delta Plan 2100, General Economics Division, Planning Commission, Bangladesh</p> <p>Medium-Term Budgetary Framework (MTBF), Finance Division, Ministry of Finance, Bangladesh</p> <p>Bangladesh Bureau of Statistics</p>
<p><b>Step 03:</b> Formula says</p>	$C_{1,2} = \alpha_1 * \beta_0$	



Targets covered in this report	Methodology of calculation	Data sources
<p>where</p> <p><math>t = FY2017, FY2018, \dots, FY2030</math></p> <p><math>C_{it}</math> = Additional cost of a particular target for the current fiscal year,</p> <p><math>\alpha_i</math> = Share of the programs aligned with a particular target, and</p> <p><math>\beta_i</math> = Additional cost of SDG 4 for the current fiscal year.</p> <p>For instance, additional cost for SDG 4 is 1.00 percent of GDP in FY2020 and share of programs associated with target 4.1 is 0.67 percent. Therefore, additional cost for target 4.1 is</p>	<p>Therefore, additional cost for target 4.1 is 0.67 percent of GDP. Multiplication of this percentage with the GDP at current prices for FY 2020 gives the additional cost in absolute number which is equivalent to BDT 216.82 billion.</p> <p>Same methodology has been used to calculate the additional cost for target 4.2 as target 4.1.</p>	
<p>4.2 By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education</p>	$C_{4.1, FY2020} = \alpha_{4.1} * \beta_{SDG4}$ $= 0.67 * 1.00$ $= 0.67$	
<p>4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university</p>	<p>Therefore, additional cost for target 4.1 is 0.67 percent of GDP. Multiplication of this percentage with the GDP at current prices for FY 2020 gives the additional cost in absolute number which is equivalent to BDT 216.82 billion.</p> <p>Same methodology has been used to calculate the additional cost for target 4.2 as target 4.1.</p>	
<p>4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship</p>	<p>Same methodology has been used to calculate the additional cost for target 4.3 as target 4.1.</p>	
<p>4.5 By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations</p>	<p>Same methodology has been used to calculate the additional cost for target 4.4 as target 4.1.</p>	
<p>4.6 By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy</p>	<p>Same methodology has been used to calculate the additional cost for target 4.5 as target 4.1.</p>	
<p>4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote</p>	<p>Same methodology has been used to calculate the additional cost for target 4.6 as target 4.1.</p>	

Targets covered in this report	Methodology of calculation	Data sources
<p>sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development</p> <p>4.a Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all</p> <p>4.b By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries</p> <p>4.c By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States</p>	<p>Same methodology has been used to calculate the additional cost for target 4.a as target 4.1.</p> <p>Same methodology has been used to calculate the additional cost for target 4.b as target 4.1.</p> <p>Same methodology has been used to calculate the additional cost for target 4.c as target 4.1.</p>	

### Annex 4.3: Breakdown of Total Additional Cost for SDG 4

#### In Current Prices

Total Additional Cost/Fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Additional Cost for Target 4.1 (Billion BOT at current prices)	37.17	84.30	143.27	216.82	295.04	390.34	505.89	645.38	811.90	928.40	1,059.91	1,210.01	1,382.56	1,579.68
Additional Cost for Target 4.2 (Billion BOT at current prices)	0.94	2.12	3.61	5.46	7.43	9.83	12.74	16.25	20.50	23.38	26.69	30.47	34.82	39.78
Additional Cost for Target 4.3 (Billion BOT at current prices)	11.97	27.15	46.14	69.82	95.02	125.71	162.92	207.84	262.11	298.99	341.34	389.68	445.25	508.73
Additional Cost for Target 4.4 (Billion BOT at current prices)	0.36	0.82	1.39	2.10	2.86	3.78	4.90	6.25	7.88	8.99	10.76	11.71	13.38	15.29
Additional Cost for Target 4.5 (Billion BOT at current prices)	0.19	0.44	0.75	1.14	1.55	2.05	2.65	3.38	4.27	4.87	5.56	6.35	7.25	8.28
Additional Cost for Target 4.6 (Billion BOT at current prices)	0.44	0.99	1.68	2.54	3.46	4.58	5.93	7.57	9.55	10.89	12.43	14.19	16.22	18.53
Additional Cost for Target 4.7 (Billion BOT at current prices)	3.65	8.27	14.06	21.28	28.95	38.30	49.64	63.33	79.87	91.10	104.01	118.74	135.67	155.01
Additional Cost for Target 4.a (Billion BOT at current prices)	0.28	0.64	1.09	1.65	2.24	2.97	3.85	4.91	6.19	7.06	8.06	9.20	10.52	12.02
Additional Cost for Target 4.b (Billion BOT at current prices)	0.11	0.25	0.42	0.64	0.87	1.16	1.50	1.91	2.41	2.75	3.14	3.59	4.10	4.68
Additional Cost for Target 4.c (Billion BOT at current prices)	0.36	0.81	1.37	2.08	2.83	3.74	4.85	6.19	7.81	8.91	10.17	11.61	13.26	15.15
<b>Total Additional Cost (Billion BOT at current prices)</b>	<b>55.46</b>	<b>125.79</b>	<b>213.79</b>	<b>323.53</b>	<b>440.26</b>	<b>582.46</b>	<b>754.87</b>	<b>963.02</b>	<b>1,214.48</b>	<b>1,385.33</b>	<b>1,581.56</b>	<b>1,805.55</b>	<b>2,063.02</b>	<b>2,357.15</b>
<b>Total Additional Cost (Billion USD)</b>	<b>0.68</b>	<b>1.50</b>	<b>2.47</b>	<b>3.64</b>	<b>4.82</b>	<b>6.20</b>	<b>7.83</b>	<b>9.74</b>	<b>11.98</b>	<b>13.34</b>	<b>14.87</b>	<b>16.59</b>	<b>18.52</b>	<b>20.69</b>

Source: GED estimates

### In Constant 2015-16 Prices

Total Additional Cost/Fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Additional Cost for Target 4.1 (Billion BOT at constant 2015-16 prices)	35.10	75.24	120.98	173.54	224.26	282.03	347.78	422.54	507.50	551.86	600.60	654.25	713.31	776.42
Additional Cost for Target 4.2 (Billion BOT at constant 2015-16 prices)	0.89	1.89	3.05	4.37	5.65	7.10	8.76	10.64	12.78	13.90	15.12	16.48	17.96	19.60
Additional Cost for Target 4.3 (Billion BOT at constant 2015-16 prices)	11.30	24.23	38.96	55.88	72.22	90.83	112.00	136.08	163.44	177.72	193.42	210.70	229.72	250.69
Additional Cost for Target 4.4 (Billion BOT at constant 2015-16 prices)	0.34	0.73	1.17	1.68	2.17	2.73	3.37	4.09	4.91	5.34	5.81	6.33	6.90	7.53
Additional Cost for Target 4.5 (Billion BOT at constant 2015-16 prices)	0.18	0.39	0.63	0.91	1.18	1.48	1.82	2.21	2.66	2.89	3.15	3.43	3.74	4.08
Additional Cost for Target 4.6 (Billion BOT at constant 2015-16 prices)	0.42	0.88	1.42	2.03	2.63	3.33	4.08	4.96	5.95	6.47	7.04	7.67	8.37	9.13
Additional Cost for Target 4.7 (Billion BOT at constant 2015-16 prices)	3.45	7.38	11.87	17.03	22.00	27.67	34.13	41.46	49.80	54.15	58.94	64.20	70.00	76.38
Additional Cost for Target 4.8 (Billion BOT at constant 2015-16 prices)	0.26	0.57	0.92	1.32	1.70	2.15	2.65	3.21	3.86	4.20	4.57	4.97	5.43	5.92
Additional Cost for Target 4.b (Billion BOT at constant 2015-16 prices)	0.10	0.22	0.35	0.51	0.66	0.84	1.03	1.25	1.50	1.63	1.78	1.94	2.12	2.31
Additional Cost for Target 4.c (Billion BOT at constant 2015-16 prices)	0.34	0.72	1.16	1.66	2.15	2.70	3.33	4.05	4.87	5.30	5.76	6.28	6.84	7.47
<b>Total Additional Cost (Billion BOT at constant 2015-16 prices)</b>	<b>52.38</b>	<b>112.27</b>	<b>180.51</b>	<b>258.94</b>	<b>334.63</b>	<b>420.84</b>	<b>518.94</b>	<b>630.50</b>	<b>757.29</b>	<b>823.47</b>	<b>896.20</b>	<b>976.25</b>	<b>1064.38</b>	<b>1161.54</b>
<b>Total Additional Cost (Billion USD)</b>	<b>0.65</b>	<b>1.34</b>	<b>2.09</b>	<b>2.91</b>	<b>3.66</b>	<b>4.48</b>	<b>5.38</b>	<b>6.38</b>	<b>7.47</b>	<b>7.93</b>	<b>8.43</b>	<b>8.97</b>	<b>9.55</b>	<b>10.20</b>

Source: GED estimates

## Annex 5.1: Targets Covered in the Calculation of Additional Costing of SDG 5

Targets in SDG 5	Targets covered in this report	Comments
5.1 End all forms of discrimination against all women and girls everywhere	5.1 End all forms of discrimination against all women and girls everywhere	Target 5.4 has been addressed in goal 1. Medium-term Budgetary Frameworks
5.2 Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation	5.2 Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation	(MTBFs) of relevant government ministries and divisions have been considered and programs related to targets 5.1, 5.2, 5.3, 5.5, 5.6, 5.a, 5.b, and 5.c have been identified.
5.3 Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation	5.3 Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation	
5.4 Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate	5.4 Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate	
5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life	5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life	
5.6 Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences	5.6 Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences	
5.a Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws	5.a Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws	
5.b Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women	5.b Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women	
5.c Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels	5.c Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels	

## Annex 5.2: Methodology of the Calculation of Additional Costing of SDG 5

Targets covered in this report	Methodology of the calculation	Data sources
<p>5.1 End all forms of discrimination against all women and girls everywhere</p> <p>5.2 Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation</p> <p>5.3 Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation</p> <p>5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life</p>	<p><b>Step 01:</b> The MTBFs (Medium-term Budgetary Frameworks) of the relevant ministries for FY 2015-FY 2016 (revised budget) have been considered for the calculation of additional cost of SDG 5. The programs related to SDG 5 have been identified from the MTBFs of the relevant ministries and divisions.</p> <p>The total amount found from the MTBFs to be allocated for SDG 5 (FY 2015-FY 2016 revised budget), <math>B_{FY2016} =</math> BDT 14.26 billion</p> <p><b>Step 02:</b> The projected inflation rates (CPI base) for FY 2016-FY 2030 have been taken from Bangladesh Delta Plan 2100.</p> <p><b>Step 03:</b> The projected allocation for each year (<math>B_t</math>) in the period FY 2017-FY 2030 have been calculated as follows:</p> $B_t = B_{t-1} * (1 + (i_t / 100))$ <p>Where, <math>i_t</math> = rate of inflation at time t <math>t =</math> FY2017, FY2018,.....,FY2030</p> <p><b>Step 04:</b> It has been assumed that public sector will be responsible for financing 20 percent of the total additional cost of SDG 5 in any particular year, while private sector will be responsible for financing 60 percent and NGOs will be responsible for financing 20 percent of the total additional cost.</p> <p>Under this assumption, the annual allocations at current prices for SDG 5 (<math>B_t</math>) at year t (calculated in step 3) has been considered as 20 percent (to be financed by public sector) of the total additional cost required to achieve SDG 5.</p> <p><b>Step 05:</b> As <math>B_t</math> is considered as 20 percent of the total additional cost, to find the total additional cost, <math>B_t</math> has been multiplied by 5.</p>	<p>Bangladesh Delta Plan 2100</p> <p>Medium-term Budgetary Frameworks (MTBFs), Ministry of Finance, Government of Bangladesh.</p>

### Annex 5.3: Breakdown of Total Additional Cost for SDG 5

#### In Current Prices

Total Additional Cost/Fiscal Year (Billion BDT at current prices)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Total Additional Cost (Billion USD)	0.93	0.96	0.98	1.01	1.03	1.05	1.08	1.11	1.13	1.16	1.19	1.22	1.24	1.27

Source: GED estimates

#### In Constant 2015-16 Prices

Total Additional Cost/Fiscal Year (Billion BDT at constant 2015-16 prices)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Total Additional Cost (Billion USD)	0.88	0.85	0.83	0.80	0.78	0.76	0.74	0.72	0.71	0.69	0.67	0.66	0.64	0.63

Source: GED estimates

Annex 6.1: Targets Covered in the Calculation of Additional Costing of SDG 6

Targets in SDG 6	Targets covered in this report	Comments
6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all	6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all	The cost of arsenic mitigation has been calculated by using the source of UNICEF Bangladesh and considered as the additional cost for target 6.1.
6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations	6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations	The additional cost of providing adequate and equitable sanitation has been calculated by using the source of MDG report and other government documents.
6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally	6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally	Cost of building sufficient water treatment plants has been considered as the additional cost for this target.
6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity	6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity	The actions mapped by GED for achieving this target focus on reduction of environmental pollution and degradation related to water along with the efficient and enough water supply for irrigation. Therefore, the additional cost for this target has been synchronized with SDG 2 and SDG 14.
6.5 By 2030, implement integrated water resources management at all levels, including through trans boundary cooperation as appropriate	6.5 By 2030, implement integrated water resources management at all levels, including through trans boundary cooperation as appropriate	An amount has been allocated as the additional cost for this target.
6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes	6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes	The additional cost for this target has been synchronized with SDG 14.
6.a By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies	6.a By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies	The additional cost for this target has been synchronized with SDG 14.
6.b Support and strengthen the participation of local communities in improving water and sanitation management	6.b Support and strengthen the participation of local communities in improving water and sanitation management	An amount has been allocated as the additional cost for this target.



## Annex 6.2: Methodology of the Calculation of Additional Costing of SDG 6

Targets covered in this report	Methodology of the calculation	Data sources
<p>6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all</p>	<p><b>Step 01:</b> The cost for arsenic mitigation has been taken as the additional cost for target 6.1.</p> <p>A case study conducted by UNICEF Bangladesh at Comilla district in 2011 says that an average BDT 3.94 billion will be needed over 20 years to mitigate the arsenic and provide sufficient pure drinking water in Comilla. Therefore, each year will need an investment of BDT 0.20 billion.</p> <p><b>Step 02:</b> Considering 61 arsenic affected districts, the investment cost is BDT 12.00 billion (0.20*61) for a particular year. This number has been taken as the base and the cost for each of the FY 2017-FY 2030 has been estimated at current prices.</p>	<p>Dhaka Water Supply and Sewerage Authority (WASA)</p> <p>7<sup>th</sup> Five Year Plan, General Economics Division, Planning Commission, Bangladesh</p> <p>Millennium Development Goals Needs Assessment and Costing 2009-2015, Bangladesh</p> <p>Making Economic Sense for Arsenic Mitigation: A Case Study of Comilla District Bangladesh, UNICEF Bangladesh</p>
<p>6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations</p>	<p><b>Step 01:</b> The additional cost for achieving target 6.2 has been estimated by using different government data sources.</p> <p>The MDG report 'Millennium Development Goals Needs Assessment and Costing 2009-2015 Bangladesh' provides an average cost for the access to adequate and equitable sanitation for the period 2009-2015. That is BDT 60.57 billion. This average cost includes both capital cost (BDT 26.42 billion) and operating cost (BDT 34.16 billion).</p> <p><b>Step 02:</b> The additional cost has been calculated at current prices for the FY 2017-FY 2019 by taking the aforesaid average cost as the base.</p> <p>For FY 2020-FY 2030, this study has considered only the operating cost as the additional cost since Bangladesh has a target of achieving 100% access to adequate and equitable sanitation by FY 2020. As mentioned earlier, the average operating cost is BDT 34.16 billion for the period 2009-2015. The additional cost for FY 2020-FY 2030 has been calculated at current prices considering this average operating cost as the base.</p>	<p>Bangladesh Delta Plan 2100, General Economics Division, Planning Commission, Bangladesh</p>

Targets covered in this report	Methodology of the calculation	Data sources
<p>6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally</p>	<p><b>Step 01:</b> Target 6.3 focuses on waste water treatment. Therefore, cost of building sufficient numbers of water treatment plants has been considered as the additional cost for achieving target 6.3 here.</p> <p><b>Step 02:</b> Government has already undertaken three big projects for building water treatment plants in Dhaka division. Apart from Dhaka division, each of other 7 divisions should have at least one water treatment plant. In total, country should have 10 more water treatment plants by FY2030.</p> <p><b>Step 03:</b> Initial years should get more investment. Therefore, 2 more water treatment plants should be built outside Dhaka division along with the three plants in Dhaka division by FY 2021. Each plant in Dhaka will cost, on an average, USD 0.45 billion and the cost for building each plant outside the Dhaka division will be, on an average, USD 0.50 billion. This USD 0.50 billion includes USD 0.05 billion for developing the connectivity (i.e. pipeline). The total additional cost for the period FY 2017-FY 2021 will be USD 2.35 billion. For FY 2022-FY 2025, three (3) water treatment plants should be built in different divisions and they will cost USD 1.50 billion (USD 0.50 billion for each plant). Another two (2) water treatment plants should be built within the period FY 2026-FY 2030 and they will cost USD 1.00 billion (USD 0.50 billion for each plant).</p> <p>The additional cost for target 6.4 has been synchronized with the additional cost for SDG 2 and SDG 14.</p>	
<p>6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity</p>		
<p>6.5 By 2030, implement integrated water resources management at all levels, including through trans boundary cooperation as appropriate</p>	<p>An amount equivalent to 2.5% of total additional cost for targets 6.1, 6.2 and 6.3 has been taken as the additional cost for target 6.5 here.</p>	

Targets covered in this report	Methodology of the calculation	Data sources
<p>6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes.</p>	<p>The additional cost for this target has been synchronized with the additional cost for SDG 14.</p>	
<p>6.a By 2030, expand international cooperation and capacity-building support to developing countries in water-and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies.</p>	<p>The additional cost for this target has been synchronized with the additional cost for SDG 14.</p>	
<p>6.b Support and strengthen the participation of local communities in improving water and sanitation management</p>	<p>The additional cost for target 6.b is equal to 2.5% of total additional cost for targets 6.1, 6.2 and 6.3.</p>	

### Annex 6.3: Breakdown of Total Additional Cost for SDG 6

#### In Current Prices

Total Additional Cost/fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Additional Cost for Target 6.1 (Billion BDT at current prices)	20.01	21.21	22.42	23.65	24.90	26.20	27.54	28.91	30.36	31.85	33.41	35.01	36.69	38.41
Additional Cost for Target 6.2 (Billion BDT at current prices)	68.13	72.21	76.33	80.04	83.95	88.02	92.15	96.45	100.95	105.75	110.80	116.10	121.70	127.50
Additional Cost for Target 6.3 (Billion BDT at current prices)	36.99	36.99	36.99	36.99	36.99	36.99	36.99	36.99	36.99	36.99	36.99	36.99	36.99	36.99
Additional Cost for Target 6.5 (Billion BDT at current prices)	3.13	3.36	3.39	2.42	2.50	2.39	2.48	2.56	2.65	2.40	2.50	2.60	2.71	2.82
Additional Cost for Target 6.6 (Billion BDT at current prices)	3.13	3.26	3.39	2.42	2.50	2.39	2.48	2.56	2.65	2.40	2.50	2.60	2.71	2.82
<b>Total Additional Cost (Billion BDT at current prices)</b>	<b>131.38</b>	<b>136.93</b>	<b>142.52</b>	<b>141.51</b>	<b>144.83</b>	<b>146.41</b>	<b>149.95</b>	<b>154.60</b>	<b>159.43</b>	<b>164.91</b>	<b>170.05</b>	<b>175.90</b>	<b>182.50</b>	<b>189.82</b>
<b>Total Additional Cost (Billion USD)</b>	<b>1.62</b>	<b>1.63</b>	<b>1.65</b>	<b>1.14</b>	<b>1.15</b>	<b>1.07</b>	<b>1.08</b>	<b>1.09</b>	<b>1.10</b>	<b>0.97</b>	<b>0.99</b>	<b>1.00</b>	<b>1.02</b>	<b>1.04</b>

Source: GED estimates.

**In Constant 2015-16 Prices**

Total Additional Cost/Fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Additional Cost for Target 6.1 (Billion BDT at constant 2015-16 prices)	18.90	18.93	18.93	18.93	18.93	18.93	18.93	18.93	18.93	18.93	18.93	18.93	18.93	18.93
Additional Cost for Target 6.2 (Billion BDT at constant 2015-16 prices)	64.33	64.45	64.45	28.85	28.85	28.84	28.84	28.84	28.84	28.84	28.84	28.84	28.84	28.84
Additional Cost for Target 6.3 (Billion BDT at constant 2015-16 prices)	34.93	33.01	31.23	29.61	28.12	21.32	20.29	19.32	18.40	9.36	8.92	8.51	8.12	7.76
Additional Cost for Target 6.4 (Billion BDT at constant 2015-16 prices)	2.96	2.91	2.86	1.94	1.90	1.73	1.70	1.68	1.65	1.43	1.42	1.41	1.40	1.39
Additional Cost for Target 6.5 (Billion BDT at constant 2015-16 prices)	2.96	2.91	2.86	1.94	1.90	1.73	1.70	1.68	1.65	1.43	1.42	1.41	1.40	1.39
<b>Total Additional Cost (Billion BDT at constant 2015-16 prices)</b>	<b>124.07</b>	<b>122.21</b>	<b>120.34</b>	<b>81.25</b>	<b>79.69</b>	<b>72.55</b>	<b>71.47</b>	<b>70.44</b>	<b>69.48</b>	<b>59.98</b>	<b>59.53</b>	<b>59.09</b>	<b>58.69</b>	<b>58.30</b>
<b>Total Additional Cost (Billion USD)</b>	<b>1.53</b>	<b>1.46</b>	<b>1.39</b>	<b>0.91</b>	<b>0.87</b>	<b>0.77</b>	<b>0.74</b>	<b>0.71</b>	<b>0.69</b>	<b>0.58</b>	<b>0.56</b>	<b>0.54</b>	<b>0.53</b>	<b>0.51</b>

Source: GED estimates

### Annex 7.1: Targets Covered in the Calculation of Additional Costing of SDG 7

Targets in SDG 7	Targets covered in this report	Comments
7.1 By 2030, ensure universal access to affordable, reliable and modern energy services	7.1 By 2030, ensure universal access to affordable, reliable and modern energy services	Costs have been calculated from Power sector financing requirements given in the 7 <sup>th</sup> PYP.
7.2 By 2030, increase substantially the share of renewable energy in the global energy mix	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix	
7.3 By 2030, double the global rate of improvement in energy efficiency	7.3 By 2030, double the global rate of improvement in energy efficiency	
7.a By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology	7.a By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology	
7.b By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States and landlocked developing countries, in accordance with their respective programs of support	7.b By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States and landlocked developing countries, in accordance with their respective programs of support	

## Annex 7.2: Methodology of the Calculation of Additional Costing of SDG 7

Targets covered in this report	Methodology of the calculation	Data sources
<p>7.1 By 2030, ensure universal access to affordable, reliable and modern energy services.</p> <p>7.2 By 2030, increase substantially the share of renewable energy in the global energy mix</p> <p>7.3 By 2030, double the global rate of improvement in energy efficiency</p> <p>7.a By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology</p> <p>7.b By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States and landlocked developing countries, in accordance with their respective programs of support</p>	<p><b>Step 01:</b> The investment requirements for the power sector for the period FY 2016-FY 2020 (at FY 2016 prices) have been taken from 7<sup>th</sup> FYP.</p> <p><b>Step 02:</b> It has been observed that, at 2016 prices, investment requirement for the power sector in FY2016, <math>IR_{FY2016}</math> = BDT 294.00 billion Investment requirement for the power sector in FY2017, <math>IR_{FY2017}</math> = BDT 516.00 billion Investment requirement for the power sector in FY2018, <math>IR_{FY2018}</math> = BDT 286.00 billion Investment requirement for the power sector in FY2019, <math>IR_{FY2019}</math> = BDT 697.00 billion Investment requirement for the power sector in FY2020, <math>IR_{FY2020}</math> = BDT 624.00 billion</p> <p>The average annual investment requirement at 2016 prices, <math>AVGIR = (IR_{FY2016} + IR_{FY2017} + IR_{FY2018} + IR_{FY2019} + IR_{FY2020})/5 =</math> BDT 483.40 billion</p> <p><b>Step 03:</b> The projected inflation rates (CPI base) for FY 2017-FY 2030 have been taken from Bangladesh Delta Plan 2100.</p> <p><b>Step 04:</b> Let, <math>r_t</math> = rate of inflation at time t Inflation adjustment factor for year t, <math>r_{t,1} = 1 + (r_t/100)</math> Where t = FY2017, FY2018, ..., FY2030</p> <p><b>Step 05:</b> The average annual investment requirement (at 2016 prices) has been multiplied with the inflation adjustment factor for FY 2017 to find the average annual investment requirement at 2017 prices.</p>	<p>Seventh Five Year plan (7<sup>th</sup> FYP), Bangladesh Delta Plan 2100.</p>

	<p>Average annual investment requirement (at 2017 prices), <math>AC_{FY2017} = \text{AVGIR} * Tr_{FY2017} = \text{BDT } 512.40 \text{ billion}</math></p> <p>It has been assumed that on an average, BDT 512.40 billion (at 2017 prices) will be required annually to achieve SDG7.</p> <p><b>Step 06:</b> The annual requirement to achieve SDG7 for the period FY2018-FY2030 at current prices has been calculated as follows: Annual investment requirement at year <math>t</math> (at current price), <math>AC_t = AC_{t-1} * Tr_{t,z}</math> Where <math>t = \text{FY2018, FY2019, ..., FY2030}</math></p> <p><b>Step 07:</b> The additional cost of SDG 7 for FY 2017-FY 2030 has been calculated by subtracting the projected BAU cost from the annual investment requirement for each year.</p> <p><b>The cost of SDG 7 is included in the cost calculation of SDG 9.</b></p>



### Annex 7.3: Breakdown of Total Additional Cost for SDG 7

#### In Current Prices

Total Additional Cost/Fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Total Additional Cost (Billion BDT at current prices)	413.27	438.07	463.04	488.50	514.39	541.14	568.74	597.18	627.04	657.76	689.99	723.11	757.82	793.44
Total Additional Cost (Billion USD)	5.10	5.23	5.36	5.49	5.63	5.76	5.90	6.04	6.19	6.33	6.49	6.64	6.80	6.96

Source: GED estimates

#### In Constant 2015-16 Prices

Total Additional Cost/Fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Total Additional Cost (Billion BDT at constant 2015-16 prices)	390.25	390.99	390.99	390.98	390.98	390.98	390.98	390.98	390.99	390.98	390.98	390.98	390.98	390.98
Total Additional Cost (Billion USD)	4.82	4.67	4.53	4.40	4.28	4.16	4.06	3.96	3.86	3.77	3.68	3.59	3.51	3.43

Source: GED estimates

### Annex 8.1: Targets Covered in the Calculation of Additional Costing of SDG 8

Targets in SDG 8	Targets covered in this report	Comments
8.1 Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries	8.1 Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries	Calculated using ICOR formula.
8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors	8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors	It has been addressed in SDG 9
8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services		Non-quantifiable
8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10 Year Framework of Programmes on Sustainable Consumption and Production, with developed countries taking the lead	8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10 Year Framework of Programmes on Sustainable Consumption and Production, with developed countries taking the lead	It has been addressed in SDG 12
8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	Cost has been calculated using wage-gap analysis.
8.6 By 2020, substantially reduce the proportion of youth not in employment, education or training	8.6 By 2020, substantially reduce the proportion of youth not in employment, education or training	Cost of providing TVET for NEET youth has been calculated.
8.7 Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms	8.7 Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labor, including recruitment and use of child soldiers, and by 2025 end child labor in all its forms	It has been addressed in SDG 16
8.8 Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment		Non-quantifiable

Targets in SDG 8	Targets covered in this report	Comments
8.9 By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products	8.9 By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products	Additional cost for the development of tourism sector has been calculated.
8.10 Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all	8.10 Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all	Cost of increasing the coverage of financial sector has been calculated.
8.a Increase Aid for Trade support for developing countries, in particular least developed countries, including through the Enhanced Integrated Framework for Trade-related Technical Assistance to Least Developed Countries		Non-quantifiable
8.b By 2020, develop and operationalize a global strategy for youth employment and implement the Global Jobs Pact of the International Labour Organization		Non-quantifiable

## Annex 8.2: Methodology of the Calculation of Additional Costing of SDG 8

Targets covered in this report	Methodology of the calculation	Data sources
<p>8.1 Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries</p>	<p><b>Step 01:</b> Two alternative growth scenarios have been considered in this costing exercise. The BAU growth scenario: Real GDP growth rate per annum (FY 2017-FY 2030) = 7 percent The 7<sup>th</sup> FY extended scenario: Real GDP growth rate = 7.2, 7.4, 7.6 and 8 percent for FY 2017, FY 2018, FY 2019 and FY 2020 respectively. Real GDP growth rate = 8.1, 8.2, 8.3, 8.4 and 8.5 percent for FY 2021, FY 2022, FY 2023, FY 2024 and FY 2025 respectively. And, real GDP growth rate = 8.6, 8.7, 8.8, 8.9 and 9 percent for FY 2026, FY 2027, FY 2028, FY 2029 and FY 2030 respectively.</p> <p><b>Calculating the investment requirement per annum for BAU scenario:</b></p> <p><b>Step 02:</b> The projected inflation rates (CPI base) for FY 2017-FY 2030 have been taken from Bangladesh Delta Plan 2100.</p> <p><b>Step 03:</b> Let, Real GDP growth rate (BAU) at year <math>t = NGDPG_t</math> Inflation rate at year <math>t = \pi_t</math> Nominal GDP growth rate at year <math>t = NGDPG_t + \pi_t</math></p> <p>Then, <math>NGDPG_t</math> has been calculated by the formula: <math>NGDPG_t = RGDPPG_t + \pi_t</math></p> <p><b>Step 04:</b> GDP at current market price at year <math>t</math> (<math>NGDP_t</math>) = <math>NGDP_{t-1} * (1 + (NGDPG_t/100))</math> Where, <math>t =</math> FY2017, FY2018, ..., FY2030</p> <p><b>Step 05:</b> The incremental Capital-output ratio (ICOR<sup>4</sup>) has been assumed to remain constant at 4.25 for FY 2017-FY 2030.</p>	<p>Seventh Five Year Plan (7<sup>th</sup> FYP). Bangladesh Bureau of Statistics (BBS). Bangladesh Delta Plan 2100.</p>

<sup>4</sup> The incremental capital output ratio (ICOR) is calculated as: ICOR=(Annual investment/Annual increase in GDP)

Targets covered in this report	Methodology of the calculation	Data sources
<p>8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labor-intensive sectors</p> <p>8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavor to decouple economic growth from environmental degradation, in accordance with the 10 Year Framework of Programs on Sustainable Consumption and Production, with developed countries taking the lead</p>	<p><b>Step 06:</b> Investment requirement (BAU) at year t, <math>BAUINV_t = NGDP_t * ((COR * RGDPC_t) / 100)</math></p> <p><b>Step 07:</b> Calculating the investment requirement per annum for ZFP extended scenario: Steps similar to step 2, 3, 4, 5 and 6 have been followed where the BAU real GDP growth rates have been replaced by 7<sup>th</sup> FYP extended scenario real GDP growth rates, and investment requirement [ZFP] at year t (<math>ZFPINV_t</math>) has been calculated for FY 2017-FY 2030.</p> <p><b>Step 08:</b> Additional investment requirement for target 8.1 has been calculated by the formula: Additional Investment requirement at year t for target 8.1, <math>AC_{8.1,t} = ZFPINV_t - BAUINV_t</math></p> <p>The cost estimation of target 8.2 is synchronized with the cost calculation of SDG 9.</p> <p>The cost estimation of target 8.2 is synchronized with the cost calculation of SDG 12.</p>	
<p>8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value</p>	<p><b>Step 01:</b> The population under wage employment and self-employment category have been classified into three categories: decent job, good job and good enough job based on the data available in LFS 2010. Category A = Decent job Category B = Good job Category C = Good enough job</p> <p><b>Step 02:</b> Under wage employment category: Weekly mean wage of A, <math>W_{A,W} = 2582.379</math> Weekly mean wage of B, <math>W_{B,W} = 1899.808</math></p>	<p>Labor Force Survey (LFS) 2010. Labor Force Survey (LFS) 2013. Bangladesh Delta Plan 2100. World Population prospects: the 2015 revision, population division (2015), Department of Economic and Social Affairs, United Nations.</p>

Targets covered in this report	Methodology of the calculation	Data sources
	<p>Weekly mean wage of C, <math>W_{C,W} = 1181.866</math></p> <p>Under self-employment category:  Weekly mean wage of A, <math>W_{A,SE} = 1763.287</math>  Weekly mean wage of B, <math>W_{B,SE} = 1840.519</math>  Weekly mean wage of C, <math>W_{C,SE} = 1288.376</math></p> <p>Annual mean wage has been calculated as follows:  For wage employment category,  Annual mean wage of category N (<math>AMW_{N,W}</math>) = <math>(W_{N,W} * 4) * 12</math></p> <p>For self-employment category,  Annual mean wage of category N (<math>AMW_{N,SE}</math>) = <math>(W_{N,SE} * 4) * 12</math></p> <p>Where,  N = A, B, C</p> <p>Average annual mean wage for each category has been calculated as,  Average Annual Mean Wage of category N (<math>AVGW_N</math>) = <math>(AMW_{N,W} * AMW_{N,SE}) / 2</math></p> <p>Where,  N = A, B, C</p> <p><b>Step 03:</b>  With the target of converting good jobs into decent jobs and good enough jobs into good jobs, the average annual wage gap between decent job and good job have been calculated, as well as the average annual wage gap between good job and good enough job.</p> <p>Annual Mean Wage Gap (between decent job and good job categories) to ensure decent job for 'good job' population has been calculated as follows:  Annual Mean Wage Gap, <math>AW_{gapD} = AVGW_A - AVGW_B</math></p> <p>Annual Mean Wage Gap (between good job and good enough job categories) to ensure at least good job for 'good enough job' population has been calculated as follows:  Annual Mean Wage Gap, <math>AW_{gapC} = AVGW_B - AVGW_C</math></p> <p><b>Step 04:</b>  The projected inflation rates (CPI base) for FY 2016-FY 2030 have been taken from Bangladesh Delta Plan 2100, and the actual inflation rates (CPI base) for FY 2011 - FY 2015 have been taken from 7<sup>th</sup> FYP.</p> <p>Let,  Inflation Rate at year <math>t = \pi_t</math></p>	<p>Dr. Selim Raihan and Mahtab Uddin, 2016, "How do education and skill development affect the transition from 'good-enough' job to 'decent' job".  Seventh Five Year Plan.</p>

Targets covered in this report	Methodology of the calculation	Data sources
	<p>Annual mean wage gap at current prices has been calculated as follows:</p> <p>Annual Mean Wage Gap (between decent job and good job categories) at year <math>t</math>, <math>AW\ gap_{B,t} = AW\ gap_{B,t-1} * (1 + (tr_t/100))</math></p> <p>Where,  <math>t =</math> FY2011, FY2012,.....,FY2030</p> <p>Annual Mean Wage Gap (between good job and good enough job categories) at year <math>t</math>, <math>AW\ gap_{C,t} = AW\ gap_{C,t-1} * (1 + (tr_t/100))</math></p> <p>Where,  <math>t =</math> FY2011, FY2012,.....,FY2030</p> <p><b>Step 05:</b>            Total employed population in 2010, <math>E_{2010} = 54084000</math>            Total employed population in 2013, <math>E_{2013} = 58100000</math></p> <p>Average annual employment growth rate for the period 2010-2013 has been calculated and assumed to remain constant in the SOG period.</p> <p>Average annual employment growth rate, <math>E_g = ((E_{2013} - E_{2010}) / E_{2010}) * 100 / 3</math></p> <p>The calculated average annual employment growth rate, <math>E_g = 2.475162094</math></p> <p>Employment growth factor, <math>E_{gf} = 1 + (E_g / 100)</math></p> <p><b>Step 06:</b>            Projected employed population for the years in the period FY 2014-FY 2030 has been calculated using the formula:            Projected employed population at year <math>t</math>, <math>E_t = E_{t-1} * E_{gf}</math></p> <p>Where,  <math>t =</math> FY2014, FY2015,.....,FY2030</p> <p><b>Step 07:</b>            Under wage employment category:            Percentage of population under category B in total employed population, <math>P_{B,W} = 36.39</math>            Percentage of population under category C in total employed population, <math>P_{C,W} = 53.51</math></p>	

Targets covered in this report	Methodology of the calculation	Data sources
	<p><b>Under self-employment category:</b></p> <p>Percentage of population under category B in total employed population, <math>P_{B,SE} = 36.39</math></p> <p>Percentage of population under category C in total employed population, <math>P_{C,SE} = 53.51</math></p> <p>Average percentage of population under category B in total employed population at year <math>t</math>, <math>P_B = (P_{B,W} + P_{B,SE})/2 = 37.8</math></p> <p>Average percentage of population under category C in total employed population at year <math>t</math>, <math>P_C = (P_{C,W} + P_{C,SE})/2 = 52.535</math></p> <p>The Average percentage of population under each category in total employed population is assumed to remain constant in SDG period.</p> <p><b>Step 08:</b></p> <p>Percentage of population under good job category to be brought into decent job category in a year on average, <math>COV_{B,th} = P_B / T_{FY17-FY20} = 2.7</math></p> <p>Where,</p> <p><math>T_{FY17-FY20}</math> = Number of years in the period FY2017-FY2030 = 14</p> <p>Percentage of population under good enough job category to be brought into good job category in a year on average, <math>COV_{C,th} = P_C / T_{FY17-FY20} = 3.7525</math></p> <p>Where,</p> <p><math>T_{FY17-FY20}</math> = Number of years in the period FY2017-FY2030 = 14</p> <p><b>Step 09:</b></p> <p>Projected population under category B at year <math>t</math>, <math>E_{B,t} = E_t * (P_B / 100)</math></p> <p>Projected population under category C at year <math>t</math>, <math>E_{C,t} = E_t * (P_C / 100)</math></p> <p>Where,</p> <p><math>t = FY2017, FY2018, \dots, FY2030</math></p> <p><b>Step 10:</b></p> <p>population under good job category to be brought into decent job category in year <math>t</math>, <math>COV_{B,t} = E_{B,t} * (COV_{B,th} / 100)</math></p> <p>population under good job category to be brought into decent job category in year <math>t</math>, <math>COV_{C,t} = E_{C,t} * (COV_{C,th} / 100)</math></p>	
	<p><b>Step 11:</b></p>	



Targets covered in this report	Methodology of the calculation	Data sources
<p>8.6 By 2020, substantially reduce the proportion of youth not in employment, education or training</p>	<p><b>Cost of transforming 'Good job' into 'Decent job'</b> in year <math>t</math>, <math>C_{P,t} = COV_{B,t} * AW_{gap_{P,t}}</math>  <b>Cost of transforming 'Good enough job' into 'Good job'</b> in year <math>t</math>, <math>C_{L,t} = COV_{L,t} * AW_{gap_{L,t}}</math></p> <p>Total estimated additional cost at year <math>t</math> to achieve target 8.5, <math>AC_{8.5,t} = C_{B,t} + C_{L,t}</math></p> <p><b>Step 01:</b>  According to IFS, 2013, 25.4% of all youth (aged 15-29) are not in education, employment and training (NEET) in Bangladesh. Using this percentage, the number of youth considered NEET has been calculated from the population projection (by UN) for the years FY2017-FY2030.</p> <p>The population in the age groups 15-19, 20-24 and 25-29 for the period FY2013-FY2030 have been taken from the population projection by UN. The youth (aged 15-29) population for each year in this period have been calculated by adding the population under these three age groups.</p> <p><b>Step 02:</b>  Let,  Percentage of NEET population among youth population = <math>NEET_{\%} = 25.4</math>  Youth (aged 15-29) population at year <math>t = Youth_{pop}</math>  NEET population at year <math>t</math>, <math>NEET_{pop} = Youth_{pop} * (NEET_{\%} / 100)</math></p> <p><b>Step 03:</b>  The data concerning public expenditure on TVET have been taken from the paper titled: 'Financing of Technical and Vocational Education and Training (TVET) in Bangladesh', draft report, September 2009.  The average annual expenditure per student in NEET category (FY 2008-FY 2009 revised budget) = BDT 10700</p> <p><b>Step 04:</b>  The projected inflation rates (CPI base) for FY2016-FY2030 have been taken from Bangladesh Delta Plan 2100, and the actual inflation rates (CPI base) for FY 2010 - FY 2015 have been taken from 7<sup>th</sup> FYP.  Let,  Inflation Rate at year <math>t = \pi_t</math></p> <p>The average annual expenditure per student for each of the projected years in the period FY2010-FY2030 at current prices has been calculated as follows:</p>	<p>World Population prospects: the 2015 revision, Division of Economic and Social Welfare, United Nations.</p> <p>IFS, 2013 Financing of Technical and Vocational Education and Training (TVET) in Bangladesh (for the EC/ILO executed TVET Reform Project in Bangladesh) draft report September 2009.</p> <p>Seventh Five Year Plan.</p>

Targets covered in this report	Methodology of the calculation	Data sources
<p>8.7 Take immediate and effective measures to eradicate forced labor, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labor, including recruitment and use of child soldiers, and by 2025 end child labor in all its forms.</p> <p>8.9 By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products</p>	<p>Average annual expenditure per student in NEET category at year <math>t</math>, <math>Exp_t = Exp_{t-1} * (1 + (r_t / 100))</math> Where, <math>t =</math> FY2010, FY2011,.....FY2030</p> <p><b>Step 05:</b> With the target of reaching 100% coverage rate in FY2030, it has been assumed that (100/T) percentage of NEET youth will be brought under TVET coverage every year, where, T= number of years in the period FY2017-FY2030 = 14 Target annual coverage rate (%), <math>COV_{100} = 100/14 = 7.142857143</math></p> <p><b>Step 06:</b> Target NEET youth population to be covered in year <math>t</math>, <math>TCOV_t = NEET_{pop} * (COV_{100} / 100)</math> Where, <math>t =</math> FY2017, FY2018,.....FY2030</p> <p><b>Step 07:</b> Annual additional cost for target 8.6 at year <math>t</math>, <math>AC_{8.6,t} = TCOV_t * Exp_t</math></p> <p><b>The cost of target 8.6 is included in the cost of SDG04.</b></p> <p>The cost estimation of target 8.2 is synchronized with the cost calculation of goal 16.</p>	
<p>8.9 By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products</p>	<p>The cost calculation of target 8.9 considered the '7<sup>th</sup> FYP Background Paper 5: Prospect and Strategy for Tourism Development' as the data source.</p> <p><b>Step 01:</b> The background paper provides the projected tourism investment in 2020 as % of GDP in two different scenarios: Business As Usual scenario (BAU growth rate=4%) and 7<sup>th</sup> FYP scenario (7<sup>th</sup> FYP targeted growth rate=15%).</p> <p>Projected Tourism Investment (billion BDT) in 2020, BAU= 141 Projected Tourism Investment (billion BDT) in 2020, 7FYP= 345</p>	<p>Seventh Five Year Plan (7FYP) Background Paper 5: Prospect and Strategy for Tourism Development</p>

Targets covered in this report	Methodology of the calculation	Data sources
<p>8.10 Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all</p>	<p><b>Tourism Investment in 2020, BALI (as % of GDP)= 0.5</b>  <b>Tourism Investment in 2020, 7FYP (as % of GDP)= 1.3</b></p> <p><b>Step 02:</b>  Additional (7<sup>th</sup> FYP-BALI) tourism investment required (as % of GDP)= 0.8  It has been assumed that this difference will remain constant through the period FY 2017-FY 2030.</p> <p><b>Step 03:</b>  The nominal amount of additional investment at current prices to achieve target 8.9 has been calculated by taking 0.8 percent of the projected (7Fyp extended growth scenario) nominal GDP of each year.</p> <p><b>Step 01:</b>  The sectorial share of GDP at current market prices for Financial Intermediation in FY15 has been found to be 3.86 percent.</p> <p><b>Step 02:</b>  To increase the coverage of the financial sector, an additional 0.5 percent of projected (7<sup>th</sup> FYP extended growth scenario) nominal GDP has been assumed to be required each year in the period FY 2017-FY 2030.</p> <p>The additional cost for target 8.10 has been calculated by taking 0.5 percent of projected (7<sup>th</sup> FYP extended growth scenario) nominal GDP at current prices for FY 2017-FY 2030.</p>	<p>Statistical Yearbook 2015</p>

### Annex 8.3: Breakdown of Total Additional Cost for SDG 8

#### In Current Prices

Total Additional Cost/Fiscal Years	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Additional Cost for Target 8.1 (Billion BDt at current prices)	200.24	467.27	816.38	1,560.50	2,029.36	2,605.32	3,309.57	4,167.09	5,211.72	6,475.82	8,007.44	9,851.42	12,075.71	14,742.28
Additional Cost for Target 8.5 (Billion BDt at current prices)	79.95	86.84	94.06	101.68	109.71	118.26	127.36	137.02	147.42	158.46	170.32	182.90	196.41	210.71
Additional Cost for Target 8.6 (Billion BDt at current prices)	16.10	17.17	18.23	19.29	20.34	21.41	22.49	23.57	24.67	25.80	26.95	28.11	29.29	30.48
Additional Cost for Target 8.9 (Billion BDt at current prices)	177.49	201.27	228.04	258.82	293.50	332.83	377.43	428.01	485.79	551.37	626.36	711.55	809.03	919.86
Additional Cost for Target 8.10 (Billion BDt at current prices)	110.93	125.79	142.52	161.76	183.44	208.02	235.90	267.51	303.62	344.61	391.48	444.72	505.64	574.92
<b>Total Additional Cost<sup>5</sup> (Billion BDt at current prices)</b>	<b>404.50</b>	<b>696.67</b>	<b>1,073.76</b>	<b>1,849.70</b>	<b>2,354.11</b>	<b>2,970.09</b>	<b>3,719.39</b>	<b>4,627.67</b>	<b>5,729.98</b>	<b>7,059.18</b>	<b>8,664.87</b>	<b>10,592.57</b>	<b>12,912.27</b>	<b>15,865.85</b>
<b>Total Additional Cost (Billion USD)</b>	<b>4.99</b>	<b>8.32</b>	<b>12.43</b>	<b>20.80</b>	<b>25.75</b>	<b>31.62</b>	<b>38.58</b>	<b>46.82</b>	<b>56.53</b>	<b>67.98</b>	<b>81.46</b>	<b>97.30</b>	<b>115.89</b>	<b>137.70</b>

Source: GED estimates

<sup>5</sup> In the calculation of the total additional cost of SDG 8, 100 percent of the additional cost for target 8.1, 30 percent of the additional cost for target 8.5, 100 percent of the additional cost for target 8.6, 30 percent of the additional cost for target 8.9, and 100 percent of the additional cost for target 8.10 have been considered, as 70 percent of the additional costs of target 8.5 and target 8.9 are assumed to be contributing to the additional cost of target 8.1.

**In Constant 2015-16 Prices**

Total Additional Cost/Fiscal Years	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Additional Cost for Target 8.1 (billion BOT at constant 2015-16 prices)	189.08	417.05	689.34	1248.98	1542.49	1882.38	2278.18	2728.27	3249.72	3849.33	4537.41	5326.62	6290.24	7264.57
Additional Cost for Target 8.2 (billion BOT at constant 2015-16 prices)	75.50	77.51	79.42	81.38	83.39	85.44	87.55	89.71	91.92	94.19	96.51	98.89	101.33	103.83
Additional Cost for Target 8.6 (billion BOT at constant 2015-16 prices)	15.20	15.32	15.39	15.44	15.46	15.47	15.46	15.43	15.38	15.34	15.27	15.20	15.11	15.02
Additional Cost for Target 8.9 (billion BOT at constant 2015-16 prices)	167.60	179.64	192.55	207.15	222.09	240.47	259.47	280.23	302.91	327.74	354.93	384.73	417.40	453.28
Additional Cost for Target 8.10 (billion BOT at constant 2015-16 prices)	104.75	112.27	120.34	129.47	139.43	150.30	162.17	175.14	189.32	204.84	221.83	240.46	260.88	283.30
<b>Total Additional Cost (billion BOT at constant 2015-16 prices)</b>	<b>381.97</b>	<b>621.79</b>	<b>906.67</b>	<b>1480.44</b>	<b>1780.32</b>	<b>2145.92</b>	<b>2556.92</b>	<b>3029.83</b>	<b>3572.88</b>	<b>4196.08</b>	<b>4909.95</b>	<b>5727.37</b>	<b>6661.85</b>	<b>7730.03</b>
<b>Total Additional Cost (billion USD)</b>	<b>4.72</b>	<b>7.42</b>	<b>10.50</b>	<b>16.65</b>	<b>19.57</b>	<b>22.85</b>	<b>26.52</b>	<b>30.65</b>	<b>35.25</b>	<b>40.41</b>	<b>46.16</b>	<b>52.61</b>	<b>59.79</b>	<b>67.85</b>

Source: GED estimates

## Annex 9.1: Targets Covered in the Calculation of Additional Costing of SDG 9

Targets in SDG 9	Targets covered in this report	Comments
<p>9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all</p> <p>9.2 Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries</p> <p>9.3 Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets</p> <p>9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities</p> <p>9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending</p> <p>9.a Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing States</p> <p>9.b Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities</p> <p>9.c Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020</p>	<p>9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all</p> <p>9.2 Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries</p> <p>9.3 Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets</p> <p>9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities</p> <p>9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending</p>	<p>Increased investment in infrastructure as a percentage of GDP will help achieve this target</p> <p>Cost of implementing 100 SEZs</p> <p>Cost of implementing 100 SEZs</p> <p>Increased investment in infrastructure as a percentage of GDP will help achieve this target</p> <p>Increased investment in innovation will help achieve this target</p> <p>No data available</p> <p>No data available</p> <p>No data available</p>

## Annex 9.2: Methodology of the Calculation of Additional Costing of SDG 9

Targets Covered in this Report	Methodology of the Calculation	Data Source
<p>9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.</p> <p>9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities</p>	<p><b>Step 01:</b> According to the 7<sup>th</sup> FYP, Bangladesh needs more than 5% of GDP as additional investment in major infrastructural projects per year to sustain growth at a higher level. Currently, about 1.67% of GDP goes to communication and power sector, which is about US\$ 3-3.5 billion<sup>6</sup>. This estimation proposes a gradual increase in yearly expenditure on infrastructural development as percentage of GDP during SDG period. According to this estimation, cost on infrastructural development will reach at 5.67% of GDP in fiscal year 2030.</p> <p>Additional cost of infrastructure development has been calculated based on the formula below.</p> $C_{inf,t} = \mu NGDP_{t-1}$ <p>Where,</p> $C_{inf,t} = \text{Cost on infrastructure development}$ $NGDP_t = \text{Nominal Gross Domestic Product}$ $\mu = 0.03 \text{ if } t = 2017-2020$ $= 0.040 \text{ if } t = 2021-2030$	<p>7<sup>th</sup> Five-Year Plan, Government of the People's Republic of Bangladesh.</p> <p>Bangladesh Delta Plan 2100 (main report), Bangladesh Bureau of Statistics (BBS).</p>

<sup>6</sup> See, pp-103, 7thFYP, Government of the People's Republic of Bangladesh.

Targets Covered in this Report	Methodology of the Calculation	Data Source
<p>9.2 Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries</p> <p>9.3 Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets</p>	<p><b>Step 02:</b> Government of Bangladesh has targeted to implement 100 Special Economic Zones (SEZs) by 2030. This calculation has taken cost of implementing all 100 SEZs as the proxy of industrialization during SDG period. Mathematical model looks like-</p> $C_{i,indus,t} = \beta (\text{cost per SEZ})$ <p><math>C_{i,indus,t}</math> = cost of industrialization at time t; t = 2017, 2018,.....,2030  <math>\beta = 5</math> if t = 2017- 2020 (i.e. 20 SEZs between 2017 and 2020)  <math>= 8</math> if t = 2021- 2025 (i.e. 40 SEZs between 2021 and 2025)  <math>= 8</math> if t = 2026- 2030 (i.e. 40 SEZs between 2026 and 2030)</p>	<p>7<sup>th</sup> Five Year Plan, Government of the People's Republic of Bangladesh, BEPZA, Annual Report 2016.</p> <p>Bangladesh Delta Plan 2100 (main report)</p> <p>Bangladesh Bureau of Statistics (BBS).</p>
<p>9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending</p>	<p><b>Step 03:</b> Expenditure on research and development is very low (0.6% of GDP<sup>7</sup>) in Bangladesh and about two percent in East Asia and Pacific (excluding high income countries)<sup>8</sup> region. This calculation proposes a gradual rise in the expenditure on research and development as percentage of GDP to 2 percent by 2030. The proposed investment for year 2017 is 0.7% (additional 0.1% of GDP, which will continue to rise to reach at 1.5% (additional 0.9%) and 2% (additional 1.4%) of GDP in 2025 and 2030 respectively.</p>	<p>7<sup>th</sup> Five Year Plan, Government of the People's Republic of Bangladesh</p> <p>World Bank's, World Development Indicators (WDI)</p> <p>Bangladesh Delta Plan 2100 (main report)</p> <p>Bangladesh Bureau of Statistics (BBS).</p>

<sup>7</sup> 7th FYP, Government of the People's Republic of Bangladesh.

<sup>8</sup> World Bank's World Development Indicators (WDI).



### Annex 9.3: Breakdown of Total Additional Cost for SDG 9

#### In Current Prices

Total Additional Cost/Fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Additional Cost for Infrastructure (Billion BOT at current prices)	665.57	754.76	855.14	970.58	1,467.52	1,664.17	1,887.17	2,140.05	2,438.96	2,756.87	3,131.80	3,557.73	4,045.14	4,599.32
Additional Cost for Industrialization (Billion BOT at current prices)	137.73	145.99	145.58	145.30	222.09	221.88	221.67	221.46	221.46	216.30	216.30	216.09	216.06	215.89
Additional Cost for Innovation (Billion BOT at current prices)	22.19	50.32	85.51	129.41	183.44	249.63	330.26	438.01	546.53	689.32	861.25	1,087.32	1,314.67	1,609.76
<b>Total Additional Cost (Billion BOT at current prices)</b>	<b>825.48</b>	<b>951.06</b>	<b>1,086.23</b>	<b>1,245.30</b>	<b>1,873.06</b>	<b>2,135.68</b>	<b>2,439.10</b>	<b>2,789.53</b>	<b>3,196.94</b>	<b>3,662.38</b>	<b>4,209.35</b>	<b>4,841.14</b>	<b>5,575.90</b>	<b>6,424.97</b>
<b>Total Additional Cost (Billion USD)</b>	<b>10.19</b>	<b>11.35</b>	<b>12.58</b>	<b>14.01</b>	<b>20.49</b>	<b>22.74</b>	<b>25.30</b>	<b>28.22</b>	<b>31.54</b>	<b>35.27</b>	<b>39.57</b>	<b>44.47</b>	<b>50.04</b>	<b>56.40</b>

Source: GED estimates

#### In Constant 2015-16 Prices

Total Additional Cost/Fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Additional Cost for Infrastructure (Billion BOT at constant 2015-16 prices)	628.49	673.64	722.07	776.82	1,115.44	1,202.39	1,297.34	1,401.13	1,514.56	1,638.73	1,774.63	1,923.65	2,087.01	2,266.41
Additional Cost for Industrialization (Billion BOT at constant 2015-16 prices)	130.06	130.30	122.93	116.29	168.81	160.31	152.39	144.99	138.09	128.57	122.57	116.84	111.49	106.38
Additional Cost for Innovation (Billion BOT at constant 2015-16 prices)	20.95	44.91	72.20	103.58	139.43	180.36	237.04	280.23	340.78	409.68	488.03	577.10	678.28	793.24
<b>Total Additional Cost (Billion BOT at constant 2015-16 prices)</b>	<b>779.50</b>	<b>848.85</b>	<b>917.20</b>	<b>996.69</b>	<b>1,423.68</b>	<b>1,543.06</b>	<b>1,676.77</b>	<b>1,826.35</b>	<b>1,993.43</b>	<b>2,176.98</b>	<b>2,385.23</b>	<b>2,617.59</b>	<b>2,876.78</b>	<b>3,166.04</b>
<b>Total Additional Cost (Billion USD)</b>	<b>9.62</b>	<b>10.11</b>	<b>10.62</b>	<b>11.21</b>	<b>15.57</b>	<b>16.43</b>	<b>17.39</b>	<b>18.48</b>	<b>19.67</b>	<b>20.96</b>	<b>22.42</b>	<b>24.05</b>	<b>25.82</b>	<b>27.79</b>

Source: GED estimates

## Annex 10.1: Targets Covered in the Calculation of Additional Costing of SDG 10

Targets in SDG 10	Targets covered in this report	Comments
<p>10.1 By 2030, progressively achieve and sustain income growth of the bottom 40 percent of the population at a rate higher than the national average</p> <p>10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status</p> <p>10.3 Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard</p> <p>10.4 Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality</p> <p>10.5 Improve the regulation and monitoring of global financial markets and institutions and strengthen the implementation of such regulations</p>	<p>10.1 By 2030, progressively achieve and sustain income growth of the bottom 40 percent of the population at a rate higher than the national average</p> <p>10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status</p>	<p>Cost calculation is based on estimated income gap over business as usual scenario for the bottom 40 Percent of population.</p> <p>Scale up the budget of the Ministry of Social welfare</p>
<p>10.5 Ensure enhanced representation and voice for developing countries in decision-making in global international economic and financial institutions in order to deliver more effective, credible, accountable and legitimate institutions</p> <p>10.7 Facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies</p>	<p>10.5 Ensure enhanced representation and voice for developing countries in decision-making in global international economic and financial institutions in order to deliver more effective, credible, accountable and legitimate institutions</p> <p>10.7 Facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies</p>	<p>Non-quantifiable</p> <p>Non-quantifiable</p> <p>Non-quantifiable</p>
<p>10.a Implement the principle of special and differential treatment for developing countries, in particular least developed countries, in accordance with World Trade Organization agreements</p> <p>10.b Encourage official development assistance and financial flows, including foreign direct investment, to States where the need is greatest, in particular least developed countries, African countries, small island developing States and landlocked developing countries, in accordance with their national plans and programmes</p> <p>10.c By 2030, reduce to less than 3 per cent the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5 per cent</p>	<p>10.a Encourage official development assistance and financial flows, including foreign direct investment, to States where the need is greatest, in particular least developed countries, African countries, small island developing States and landlocked developing countries, in accordance with their national plans and programmes</p> <p>10.c By 2030, reduce to less than 3 per cent the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5 per cent</p>	<p>Scale up the budget of the Ministry of Commerce and the Ministry of Foreign Affairs</p> <p>Scale up the budget of the Ministry of Expatriates' Welfare and Overseas Employment</p> <p>Non-quantifiable</p> <p>Synchronized with target 10.6</p> <p>Synchronized with target 10.7</p>

## Annex 10.2: Methodology of the Calculation of Additional Costing of SDG 10

Targets covered in this report	Methodology of the calculation	Data sources
<p><b>10.1</b> By 2030, progressively achieve and sustain income growth of the bottom 40 percent of the population at a rate higher than the national average<sup>9</sup></p>	<p><b>Step 01:</b> Cost estimation of this target to address income inequality is based on total cost to increase income for bottom 40 percent of population. Average income share of these population was 21 percent of Gross National Income (GNI) for the period 2000 to 2010 (WDI).</p> <p><b>Step 02:</b> Income share is considered to be constant at 21 percent in 2015 and total income of bottom 40 percent is calculated from GNI at current price (BBS, 2015) using the following formula: <math display="block">I_{B40,2015} = \sigma_{B40} GNI_{2015}</math> Where, <math>I_{B40,2015}</math> = Total income of bottom 40 percent of population in 2015 <math>GNI_{2015}</math> = Gross National Income in 2015 <math>\sigma_{B40}</math> = Income share of bottom 40 percent of population</p> <p><b>Step 03:</b> It is assumed that growth rate of GNI is equivalent to the growth rate of GDP. Growth rate of GNI at constant price is taken from the 7FYP extended scenario<sup>9</sup>. The projected inflation rates (CPI base) for FY17-30 have been taken from Bangladesh Delta Plan 2100. Growth rate of nominal GNI (<math>\beta_{GNI}</math>) is the sum of the growth rate of GNI at constant price and the rate of inflation.</p> <p><b>Step 04:</b> Targeted income path of bottom 40 percent of population is calculated based on the projection of the growth rate of nominal GNI. <math display="block">I_{B40,t} = \beta_{GNI,t} I_{B40,t-1}</math> Where <math>I_{B40,t}</math> = Total income of bottom 40 percent of population at time t <math>I_{B40,t-1}</math> = Total income of bottom 40 percent of population at time t-1 t = FY2016, FY2017, ..., FY2030</p> <p><b>Step 05:</b> GNI at current price is considered to grow annually by 10 percent as business as usual scenario. The counterfactual income of bottom 40 percent of population is calculated using this constant growth rate.</p>	<p>Bangladesh Delta Plan 2100 Seventh Five Year Plan (7FYP) Bangladesh Bureau of Statistics (BBS) World Development Indicator (WDI), World Bank.</p>

<sup>9</sup> Please see the 7FYP extended scenario in Annex 8.2.

Targets covered in this report	Methodology of the calculation	Data sources
<b>Step 06:</b>	Annual cost to address this target is the difference between the required/targeted income and the counterfactual income.	
<b>Step 01:</b>	Existing Expenditure of the Ministry of Social welfare for FY 2017 and projected budgetary allocation for FY 2018 and FY 2019 are taken from medium term expenditure provided by the Ministry of Finance. Projected expenditure of this ministry is calculated using the trend line of the budget.	
<b>Step 02:</b>	To promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status, projected annual expenditure of the Ministry of Social welfare is considered to increase by 50 percent.	
<b>Step 01:</b>	Projected annual allocation of the Ministry of Commerce and the Ministry of Foreign Affairs has been calculated using the trend line of the medium term expenditure of these ministries.	
<b>Step 02:</b>	Annual allocation of these ministries is considered to increase by 25 percent for capacity building programs to address this target.	
<b>Step 01:</b>	Annual budgetary allocation of the Ministry of Expatriates' Welfare and Overseas Employment is considered in this cost estimation. Projected expenditure of this ministry is calculated using the trend line of this budgetary allocation.	
<b>Step 02:</b>	For the cost estimation, 25 percent of the projected allocation of the Ministry of Expatriates' Welfare and Overseas Employment is considered to increase to facilitate responsible migration and mobility of people.	
	Cost estimation of this target is synchronized with the target 10.6	
	Cost estimation of this target is synchronized with the cost estimation of target 10.7	
10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status		
10.6 Ensure enhanced representation and voice for developing countries in decision-making in global international economic and financial institutions in order to deliver more effective, credible, accountable and legitimate institutions		
10.7 Facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies		
10.b Encourage official development assistance and financial flows, including foreign direct investment, to States where the need is greatest, in particular least developed countries, African countries, small island developing States and landlocked developing countries, in accordance with their national plans and programs		
10.c By 2030, reduce to less than 3 per cent the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5 per cent		

## Annex 10.3: Breakdown of Total Additional Cost for SDG 10

## In Current Prices

Total Additional Cost/Fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Additional Cost for target 10.1 (Billion BOT at current prices)	3.25	5.59	8.36	11.86	15.99	20.92	26.78	33.74	42.11	52.00	63.82	77.73	94.28	113.70
Additional Cost for target 10.2 (Billion BOT at current prices)	21.37	22.70	24.08	25.43	26.79	28.15	29.50	30.86	32.22	33.58	34.93	36.29	37.65	39.01
Additional Cost for target 10.6 (Billion BOT at current prices)	4.10	4.12	4.41	4.86	5.22	5.58	5.94	6.30	6.66	7.02	7.39	7.75	8.11	8.47
Additional Cost for target 10.7 (Billion BOT at current prices)	1.40	1.51	1.63	1.75	1.86	1.98	2.10	2.21	2.33	2.45	2.56	2.68	2.79	2.91
<b>Total Additional Cost (Billion BOT at current prices)</b>	<b>30.12</b>	<b>33.92</b>	<b>38.49</b>	<b>41.90</b>	<b>49.86</b>	<b>56.62</b>	<b>64.33</b>	<b>73.12</b>	<b>83.33</b>	<b>95.05</b>	<b>106.70</b>	<b>124.44</b>	<b>142.84</b>	<b>164.09</b>
Total Additional Cost (Billion USD)	0.37	0.40	0.45	0.49	0.55	0.60	0.67	0.74	0.82	0.92	1.02	1.14	1.28	1.44

Source: GED estimates

## In Constant 2015-16 Prices

Total Additional Cost/Fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Additional Cost for target 10.1 (Billion BOT at constant 2015-16 prices)	3.07	4.99	7.06	9.49	12.15	15.12	18.41	22.09	26.26	30.91	36.16	42.03	48.64	56.03
Additional Cost for target 10.2 (Billion BOT at constant 2015-16 prices)	20.18	20.26	20.33	20.35	20.36	20.34	20.28	20.20	20.09	19.96	19.79	19.62	19.42	19.22
Additional Cost for target 10.6 (Billion BOT at constant 2015-16 prices)	3.87	3.68	3.72	3.89	3.97	4.03	4.08	4.12	4.15	4.17	4.19	4.19	4.18	4.17
Additional Cost for target 10.7 (Billion BOT at constant 2015-16 prices)	1.32	1.35	1.38	1.40	1.41	1.43	1.44	1.45	1.45	1.46	1.45	1.45	1.44	1.43
<b>Total Additional Cost (Billion BOT at constant 2015-16 prices)</b>	<b>26.44</b>	<b>30.27</b>	<b>32.49</b>	<b>35.14</b>	<b>37.90</b>	<b>40.92</b>	<b>44.22</b>	<b>47.87</b>	<b>51.95</b>	<b>56.50</b>	<b>61.59</b>	<b>67.29</b>	<b>73.69</b>	<b>80.86</b>
Total Additional Cost (Billion USD)	0.35	0.36	0.38	0.40	0.41	0.44	0.46	0.48	0.51	0.54	0.58	0.62	0.66	0.71

Source: GED estimates

## Annex 11.1: Targets Covered in the Calculation of Additional Costing of SDG 11

Targets in SDG 11	Targets covered in this report	Comments
11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums	11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums	Costs calculated from ADP allocation for Ministry of Housing and Public works, provided in the 7 <sup>th</sup> Five Year Plan.
11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons	11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons	
11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlements planning and management in all countries	11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlements planning and management in all countries	
11.4 Strengthen efforts to protect and safeguard the world's cultural and natural heritage	11.4 Strengthen efforts to protect and safeguard the world's cultural and natural heritage	
11.5 By 2030, significantly reduce the number of deaths and direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations	11.5 By 2030, significantly reduce the number of deaths and direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations	
11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	
11.7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities	11.7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities	
11.a Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning	11.a Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning	
11.b By 2030, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015–2030, holistic disaster risk management at all levels	11.b By 2030, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015–2030, holistic disaster risk management at all levels	
11.c Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials	11.c Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials	

## Annex 11.2: Methodology of the Calculation of Additional Costing of SDG 11

Targets covered in this report	Methodology of the calculation	Data source
<p>11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums</p> <p>11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons</p> <p>11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries</p> <p>11.4 Strengthen efforts to protect and safeguard the world's cultural and natural heritage</p> <p>11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations</p> <p>11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management</p> <p>11.7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities</p> <p>11.a Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning</p> <p>11.b By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line</p>	<p><b>Step 01:</b> ADP Allocations for the Housing and Public Works (Taka Billion); current Prices: <math>ADP_{MultiPW.FY16}</math> (in FY2016): BDT 18.9 billion <math>ADP_{MultiPW.FY17}</math> (in FY2017): BDT 17.6 billion <math>ADP_{MultiPW.FY18}</math> (in FY2018): BDT 20.9 billion <math>ADP_{MultiPW.FY19}</math> (in FY2019): BDT 24.5 billion <math>ADP_{MultiPW.FY20}</math> (in FY2020): BDT 28.8 billion</p> <p><b>Step 02:</b> The 75yr extended growth scenario: Real GDP growth rate = 7.2, 7.4, 7.6 and 8 percent for FY 2017, FY 2018, FY 2019 and FY 2020 respectively. Real GDP growth rate = 8.1, 8.2, 8.3, 8.4 and 8.5 percent for FY 2021, FY 2022, FY 2023, FY 2024 and FY 2025 respectively. And, real GDP growth rate = 8.6, 8.7, 8.8, 8.9 and 9 percent for FY 2026, FY 2027, FY 2028, FY 2029 and FY 2030 respectively.</p> <p><b>Step 03:</b> The projected inflation rates (CPI base) for FY 2017-FY 2030 have been taken from Bangladesh Delta Plan 2100.</p> <p><b>Step 04:</b> Let, Real GDP growth rate (7FYp extended) at year <math>t = RGDPP_t</math>; Inflation Rate at year <math>t = \pi_t</math> Nominal GDP growth rate at year <math>t = NGDPP_t</math></p> <p>Then, <math>NGDPP_t</math> has been calculated by the formula: <math>NGDPP_t = RGDPP_t + \pi_t</math></p> <p><b>Step 05:</b> GDP at current market price at year <math>t</math> (<math>NGDP_t</math>) = <math>NGDPP_{t-1} * (1 + (\pi_t/100))</math></p> <p><b>Step 06:</b></p>	<p>Seventh Plan Projections Population Projection of Bangladesh Dynamics and Trends 2011-2064, November 2015, Bangladesh Bureau of Statistics (BBS), Statistics and Informatics Division (SID), Ministry of Planning, Gov.</p>

Targets covered in this report	Methodology of the calculation	Data source
<p>with the Sendai Framework for Disaster Risk Reduction 2015–2030, holistic disaster risk management at all levels</p> <p>11.c Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials</p>	<p>ADP Allocations for the Housing and Public Works at year t, as % of GDP:</p> $ADP_{\text{Housing/GDP},t} = (ADP_{\text{Housing/NGDP},t}) \times 100$ <p>Where, t = FY2017, FY2018, FY2019, FY2020</p> <p>Calculations show that,</p> $ADP_{\text{Housing/GDP},FY2017} = 0.079330325$ $ADP_{\text{Housing/GDP},FY2018} = 0.083072981$ $ADP_{\text{Housing/GDP},FY2019} = 0.085950753$ $ADP_{\text{Housing/GDP},FY2020} = 0.089018491$ <p>It is observed that the ADP allocations for housing and public works for FY 2017-FY 2020 have been projected to be around 0.08 percent of the GDP at current market prices.</p> <p><b>Step 07:</b></p> <p>It has been assumed that an additional 0.08 percent of the GDP (over the projected ADP allocation of around 0.08 percent of the nominal GDP observed in step 6) at current market prices will be required to achieve SDG11. The total additional cost for SDG 11 has been calculated as follows:</p> <p>Total additional cost for SDG 11 at year t, <math>AC_t = NGDP_t \times (0.08/100)</math></p>	



### Annex 11.3: Breakdown of Total Additional Cost for SDG 11

#### In Current Prices

Total Additional Cost/Fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Total Additional Cost (Billion BDT at current prices)	17.75	20.13	22.80	25.88	29.35	33.28	37.74	42.80	48.58	55.14	62.64	71.15	80.90	91.99
Total Additional Cost (Billion USD)	0.22	0.24	0.26	0.29	0.32	0.35	0.39	0.43	0.48	0.53	0.59	0.65	0.73	0.81

Source: GED estimates

#### In Constant 2015-16 Prices

Total Additional Cost/Fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Total Additional Cost (Billion BDT at constant 2015-16 prices)	16.76	17.97	19.25	20.71	22.31	24.05	25.94	28.02	30.29	32.78	35.49	38.47	41.74	45.33
Total Additional Cost (Billion USD)	0.21	0.21	0.22	0.23	0.24	0.26	0.27	0.28	0.30	0.32	0.33	0.35	0.37	0.40

Source: GED estimates

## Annex 12.1: Targets Covered in the Calculation of Additional Costing of SDG 12

Targets in SDG 12	Targets covered in this report	Comments
<p>12.1 Implement the 10 Year Framework of Programmes on Sustainable Consumption and Production Patterns, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries.</p> <p>12.2 By 2030, achieve the sustainable management and efficient use of natural resources</p> <p>12.3 By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses</p> <p>12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment</p> <p>12.5 By 2030, substantially reduce waste generation through prevention, recycling and reuse</p> <p>12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle</p> <p>12.7 Promote public procurement practices that are sustainable, in accordance with national policies and priorities</p> <p>12.8 By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature</p> <p>12.a Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production</p>	<p>12.1 Implement the 10 Year Framework of Programmes on Sustainable Consumption and Production Patterns, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries.</p> <p>12.2 By 2030, achieve the sustainable management and efficient use of natural resources</p> <p>12.3 By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses</p> <p>12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment</p> <p>12.5 By 2030, substantially reduce waste generation through prevention, recycling and reuse</p> <p>12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle</p> <p>12.7 Promote public procurement practices that are sustainable, in accordance with national policies and priorities</p> <p>12.8 By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature</p> <p>12.a Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production</p>	<p>Block allocation (i.e. certain percentage of additional investment from SDG 8)</p> <p>Block allocation (i.e. certain percentage of additional investment from SDG 8)</p> <p>Block allocation (i.e. certain percentage of additional investment from SDG 8)</p> <p>Cost of Central Effluent Treatment Plant (CETP)</p> <p>Cost of Central Effluent Treatment Plant (CETP)</p> <p>Block allocation (i.e. certain percentage of additional investment from SDG 8)</p> <p>Block allocation (i.e. certain percentage of additional investment from SDG 8)</p> <p>Block allocation (i.e. certain percentage of additional investment from SDG 8)</p> <p>Block allocation (i.e. certain percentage of additional investment from SDG 8)</p>

Targets in SDG 12	Targets covered in this report	Comments
<p>12.b Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products</p>		<p>Block allocation (i.e. certain percentage of additional investment from SDG 8)</p>
<p>12.c Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities</p>	<p>12.c Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities</p>	<p>Block allocation (i.e. certain percentage of additional investment from SDG 8)</p>

## Annex 12.2: Methodology of the Calculation of Additional Costing of SDG 12

Targets covered in this report	Methodology of the Calculation	Data source
<p>12.1 Implement the 10 Year Framework of Programmes on Sustainable Consumption and Production Patterns, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries.</p> <p>12.2 By 2030, achieve the sustainable management and efficient use of natural resources</p> <p>12.3 By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses</p> <p>12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle</p> <p>12.7 Promote public procurement practices that are sustainable, in accordance with national policies and priorities</p> <p>12.8 By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature</p> <p>12.a Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production</p> <p>12.b Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products</p> <p>12.c Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those</p>	<p><b>Step 01:</b> Bangladesh will need to invest a huge amount by 2030, in order to achieve the most of the targets of SDG 12 (responsible consumption and production). A certain percentage (5%) of additional investment required in SDG8.1 is proposed to allocate to achieve the targets 12.1, 12.2, 12.3, 12.6, 12.7, 12.8, 12.a, 12.b and 12.c of SDG 12. The formula becomes,</p> $C_t = \mu \Delta INV_t$ <p>Where,</p> <p><math>C_t</math> = Cost of implementing targets 12.1, 12.2, 12.3, 12.6, 12.7, 12.8, 12.a, 12.b and 12.c of SDG 12 at time t</p> <p><math>\mu</math> = 5% ; <math>\forall t</math></p> <p><math>\Delta INV_t</math> = Additional investment requirement in SDG 8.1 at time t</p>	<p>7<sup>th</sup> Five Year Plan, Government of the People's Republic of Bangladesh</p> <p>Bangladesh Delta Plan 2100 (main report)</p> <p>Bangladesh Bureau of Statistics (BBS)</p>

Targets covered in this report	Methodology of the Calculation	Data source
<p>harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities</p> <p>12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment</p> <p>12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse</p>	<p><b>Step 02:</b> Government of Bangladesh has planned to implement 100 SEZs by 2030. This exercise proposes an estimated cost to build one Central Effluent Treatment Plant (CETP) for each SEZ. Average cost of one CETP is around USD 0.01 billion. Hence, it will require additional USD 0.50 billion in next 14 years to build 100 CETPs within the SEZs.</p>	<p>BEPZA annual report 2010-11</p> <p>BEPZA annual report 2012-13</p>

### Annex 12.3: Breakdown of Total Additional Cost for SDG 12

#### In Current Prices

Total Additional Cost/Fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Additional Cost for targets other than 12.4 and 12.5 (Billion BOT at current prices)	10.01	21.36	40.82	78.02	101.47	130.27	165.48	208.35	260.59	323.79	400.37	492.57	603.79	737.11
Additional Cost for targets 12.4 and 12.5 (Billion BOT at current prices)	1.97	2.09	2.08	2.08	3.31	3.31	3.31	3.31	3.31	3.30	3.30	3.30	3.30	3.30
<b>Total Additional Cost (Billion BOT at current prices)</b>	<b>11.98</b>	<b>25.45</b>	<b>42.90</b>	<b>80.10</b>	<b>104.78</b>	<b>133.58</b>	<b>168.79</b>	<b>211.66</b>	<b>263.89</b>	<b>327.09</b>	<b>403.67</b>	<b>495.87</b>	<b>607.08</b>	<b>740.41</b>
<b>Total Cost (Billion USD)</b>	<b>0.15</b>	<b>0.30</b>	<b>0.50</b>	<b>0.90</b>	<b>1.15</b>	<b>1.42</b>	<b>1.75</b>	<b>2.14</b>	<b>2.60</b>	<b>3.15</b>	<b>3.79</b>	<b>4.56</b>	<b>5.45</b>	<b>6.50</b>

Source: GED estimates

#### In Constant 2015-16 Prices

Total Additional Cost/Fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Additional Cost for targets other than 12.4 and 12.5 (Billion BOT at constant 2015-16 prices)	9.45	20.85	34.47	62.44	77.13	94.12	111.76	136.41	162.49	192.47	226.87	266.33	311.51	361.23
Additional Cost for targets 12.4 and 12.5 (Billion BOT at constant 2015-16 prices)	1.86	1.87	1.76	1.66	2.52	2.39	2.28	2.17	2.06	1.96	1.87	1.78	1.70	1.63
<b>Total Additional Cost (Billion BOT at constant 2015-16 prices)</b>	<b>11.31</b>	<b>22.71</b>	<b>36.22</b>	<b>64.11</b>	<b>79.64</b>	<b>96.51</b>	<b>116.04</b>	<b>138.58</b>	<b>164.55</b>	<b>194.43</b>	<b>228.74</b>	<b>268.11</b>	<b>313.22</b>	<b>364.85</b>
<b>Total Cost (Billion USD)</b>	<b>0.14</b>	<b>0.27</b>	<b>0.42</b>	<b>0.72</b>	<b>0.87</b>	<b>1.03</b>	<b>1.20</b>	<b>1.40</b>	<b>1.62</b>	<b>1.87</b>	<b>2.15</b>	<b>2.46</b>	<b>2.81</b>	<b>3.20</b>

Source: GED estimates

## Annex 13.1: Targets Covered in the Calculation of Additional Costing of SDG 13

Targets in SDG 13	Targets covered in this report	Comments
13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries	13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries	The additional cost for achieving SDG 13 has been estimated by using the reference of Bangladesh Delta Plan 2100.
13.2 Integrate climate change measures into national policies, strategies and planning	13.2 Integrate climate change measures into national policies, strategies and planning	
13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	
13.a Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible	13.a Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible	
13.b Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities	13.b Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities	

## Annex 13.2: Methodology of the Calculation of Additional Costing of SDG 13

Targets covered in this report	Methodology of calculation	Data sources
<p><b>13.1</b> Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries</p> <p><b>13.2</b> Integrate climate change measures into national policies, strategies and planning</p> <p><b>13.3</b> Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning</p> <p><b>13.a</b> Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible</p> <p><b>13.b</b> Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities</p>	<p><b>SDG 13</b> is about the necessary measures to avert the negative impacts of climate change. Issues related to climate change fall into one or another of the two major categories. They are mitigation and adaptation. Therefore, the additional cost (as % of GDP) required for achieving SDG 13 should be calculated considering both categories.</p> <p><b>Step 01:</b> A similar kind of exercise has been done in Bangladesh Delta Plan 2100. It says that total additional investment (as % of GDP) for mitigation and adaptation will be 2.3% of GDP for each of the FY 2017-FY 2019, 2.4% of GDP for each of the FY 2020-FY 2025 and 2.5% of GDP for each of the FY 2026-FY 2030. These numbers have been taken as the additional costs for SDG 13.</p> <p><b>Step 02:</b> For calculating the additional cost of respective fiscal year, the GDP at current prices has been multiplied by the aforementioned percentage of GDP. The formula is</p> $C_i = \text{NGDP}_i * (X_i/100),$ <p>where</p> <p><math>i</math> = FY2017, FY2018, ..., FY2030.  <math>C_i</math> = Additional cost for current fiscal year,            NGDP<sub>i</sub> = Nominal GDP for current fiscal year, and  <math>X_i</math> = Additional investment (as percentage of GDP) for current fiscal year.</p>	<p>Bangladesh Delta Plan 2100, General Economics Division, Planning Commission, Bangladesh</p> <p>7<sup>th</sup> Five Year Plan, General Economics Division, Planning Commission, Bangladesh</p> <p>Bangladesh Bureau of Statistics</p>



### Annex 13.3: Breakdown of Total Additional Cost for SDG 13

#### In Current Prices

Total Additional Cost/Fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Total Additional Cost (Billion BDT at current prices)	510.27	578.65	655.61	776.47	880.51	998.50	1,132.30	1,284.03	1,457.38	1,723.04	1,957.38	2,223.58	2,528.21	2,874.58
Total Additional Cost (Billion USD)	6.30	6.91	7.59	8.73	9.63	10.63	11.75	12.99	14.38	16.59	18.40	20.43	22.69	25.23

Source: GED estimates

#### In Constant 2015-16 Prices

Total Additional Cost/Fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Total Additional Cost (Billion BDT at constant 2015-16 prices)	481.84	516.46	553.59	621.46	669.26	721.43	778.40	840.68	908.74	1024.20	1109.15	1202.28	1304.38	1416.51
Total Additional Cost (Billion USD)	5.95	6.17	6.41	6.99	7.32	7.68	8.07	8.50	8.97	9.86	10.43	11.04	11.71	12.43

Source: GED estimates

**Annex 14.1: Targets Covered in the Calculation of Additional Costing of SDG 14**

Targets in SDG 14	Targets covered in this report	Comments
<p>14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution</p> <p>14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans</p> <p>14.3 Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels</p> <p>14.4 By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics</p> <p>14.5 By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information</p>	<p>14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution</p> <p>14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans</p> <p>14.3 Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels</p> <p>14.4 By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics</p> <p>14.5 By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information</p>	<p>Suggested interventions, capacity building programmes for relevant public and private bodies, awareness program for mass people and investment in coastal area will cover these targets</p>
<p>14.6 By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the World Trade Organization fisheries subsidies negotiation (Taking into account on going World Trade Organization negotiations, the Doha Development Agenda and the Hong Kong ministerial mandate)</p> <p>14.7 By 2030, increase the economic benefits to small island developing States, and least developed countries</p>		<p>Non-quantifiable</p>
		<p>Non-quantifiable</p>

Targets in SDG 14	Targets covered in this report	Comments
<p>from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism</p> <p>14.a Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries.</p> <p>14.b Provide access for small-scale artisanal fishers to marine resources and markets</p>	<p>14.a Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries.</p> <p>14.b Provide access for small-scale artisanal fishers to marine resources and markets</p>	<p>Synchronized with suggested programs</p>
<p>14.c Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in the United Nations Convention on the Law of the Sea, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of “The future we want”</p>	<p>14.c Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in the United Nations Convention on the Law of the Sea, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of “The future we want”</p>	

## Annex 14.2: Methodology of the Calculation of Additional Costing of SDG 14

Targets covered in this report	Methodology of the calculation	Data sources
<p>14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution</p> <p>14.2 By 2030, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans</p> <p>14.3 Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels</p> <p>14.4 By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics</p> <p>14.5 By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information</p> <p>14.a Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries</p> <p>14.b Provide access for small-scale artisanal fishers to marine resources and markets</p> <p>14.c Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in the United Nations Convention on the Law of the Sea, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of "The future we want"</p>	<p><b>Step 01:</b> To conserve and protect coastal areas, coastal belt afforestation programs have been designed. Community based schemes for poor fishers have also been designed to provide access for small scale artisan fishers to marine resources. Annually, 500 hectares of coastal belt are projected to be taken under forestation program and one community based scheme is to be taken for poor fishers. Unit cost of each intervention is calculated using the inflation adjustment factor.</p> $C_{i,t} = \alpha_i C_{i,t-1}$ <p>Where, <math>C_{i,t}</math> = Unit cost of intervention i at year t <math>C_{i,t-1}</math> = Unit cost of intervention i at year t-1 <math>\alpha_i = 1 + (\pi_i / 100)</math> is the inflation adjustment factor at time t and <math>\pi_i</math> is the rate of inflation at year t t=FY2010, FY2011,....., FY2030</p> <p>Unit cost is taken from MDG Needs Assessment and Costing 2009-2015 report. Actual inflation rates for FY 2010-FY 2015 are taken from Seventh Five Year Plan of Bangladesh and projected inflation rates for FY 2016-FY 2030 are taken from Bangladesh Delta Plan 2100.</p> <p><b>Step 02:</b> Total cost of these interventions are calculated by multiplying the inflation adjusted unit cost with the targets per year. Total cost is calculated using the following formula</p> $TC_{i,t} = C_{i,t} T_{i,t}$ <p>Where, <math>TC_{i,t}</math> = Cost of intervention i at time t <math>T_{i,t}</math> = Target of intervention i at time t t=FY2017, FY2018,....., FY2030</p> <p><b>Step 03:</b></p>	<p>Bangladesh Delta Plan 2100</p> <p>MDG Needs Assessment and Costing 2009-2015</p> <p>Medium-term Budgetary Frameworks (MTBFs), Ministry of Finance, Government of Bangladesh</p>

	<p>In addition to aforementioned interventions, annual projected allocations of lead ministries<sup>20</sup> under this goal (Ministry of Water Resources, Ministry of Fisheries and Livestock, Ministry of Foreign Affairs and Ministry of Science and Technology) have been increased by 10 percent for capacity building and awareness program to conserve sea, ocean and coastal area and sustainable use of their resources. Increase in the annual allocation of the Ministry of Environment and Forest has been considered and covered in the costing of SDG 15. Moreover, additional investment is required for the development and protection of the coastal and marine areas. The data on the required investment in the coastal areas are taken from Bangladesh Delta Plan 2100. For the protection of these areas and to regulate overfishing, annual allocation of Bangladesh Coast Guard has been increased; which has been synchronized with SDG 16.</p>	
	<p><b>Step 04:</b> Adding the cost of interventions, cost of capacity building and awareness programs and additional investment requirement, total additional cost of SDG 14 over business as usual cost has been determined.</p>	

<sup>20</sup> Mapping of Ministries/Divisions by Targets in the Implementation of Sustainable Development Goals (SDGs) keeping infirmity with the Seventh Five Year Plan (2016-20)

### Annex 14.3: Breakdown of Total Additional Cost for SDG 14

#### In Current Prices

Total Additional Cost/Fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Additional Cost for Community Based Schemes for Pore Fishes (Billion BOT at current prices)	3.58	3.79	4.01	4.23	4.45	4.68	4.92	5.17	5.43	5.69	5.97	6.26	6.56	6.87
Additional Cost for Coastal Protection Schemes (Billion BOT at current prices)	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03
Additional Cost for Ministry of Water Resources (Annual allocation increases by 10% for capacity building) (Billion BOT at current prices)	4.71	5.18	5.70	6.40	7.02	7.64	8.26	8.88	9.50	10.12	10.74	11.36	11.98	12.60
Additional Cost for Ministry of Fisheries and Livestock (Annual allocation increases by 10% for capacity building) (Billion BOT at current prices)	1.80	1.98	2.18	2.40	2.61	2.81	3.02	3.23	3.44	3.65	3.85	4.06	4.27	4.48
Additional Cost for Ministry of Foreign Affairs (Annual allocations increases by 10% for capacity building) (Billion BOT at current prices)	1.08	1.06	1.11	1.22	1.29	1.36	1.44	1.51	1.58	1.66	1.73	1.80	1.87	1.95
Additional Cost for Ministry of Science and Technology (Annual allocation increases by 10% for capacity building) (Billion BOT at current prices)	2.07	2.28	2.50	3.07	3.49	3.92	4.35	4.77	5.20	5.63	6.05	6.48	3.07	7.34
Additional Cost for Investment Requirement in the Coastal Region (Billion BOT at current prices)	50.30	54.40	58.90	64.00	69.50	75.50	82.10	89.30	97.11	105.60	114.80	124.00	136.00	148.00
<b>Total Additional Cost (Billion BOT at current prices)</b>	<b>63.57</b>	<b>68.71</b>	<b>74.44</b>	<b>81.33</b>	<b>88.38</b>	<b>95.95</b>	<b>104.11</b>	<b>112.89</b>	<b>122.29</b>	<b>132.37</b>	<b>143.18</b>	<b>154.89</b>	<b>163.78</b>	<b>181.26</b>
<b>Total Additional Cost (Billion USD)</b>	<b>0.78</b>	<b>0.82</b>	<b>0.86</b>	<b>0.91</b>	<b>0.97</b>	<b>1.02</b>	<b>1.08</b>	<b>1.14</b>	<b>1.21</b>	<b>1.27</b>	<b>1.35</b>	<b>1.42</b>	<b>1.47</b>	<b>1.59</b>

Source: GED estimates

In Constant 2015-16 Prices

Total Cost/Fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Additional Cost for Community Based Schemes for Poor (fishes, 2015-16 prices)	3.38	3.38	3.39	3.39	3.38	3.38	3.38	3.38	3.39	3.38	3.38	3.38	3.38	3.39
Additional Cost for Coastal Fisheries (fishes, 2015-16 prices)	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.01
Additional Cost for Ministry of Water Resources (Annual allocation increases by 10% for capacity building, 2015-16 prices)	4.45	4.62	4.81	5.12	5.34	5.52	5.68	5.83	5.92	6.02	6.09	6.14	6.18	6.21
Additional Cost for Ministry of Fisheries (Annual allocation increases by 10% for capacity building, 2015-16 prices)	1.70	1.77	1.84	1.92	1.98	2.03	2.06	2.11	2.14	2.17	2.18	2.20	2.20	2.21
Additional Cost for Ministry of Foreign Affairs (Annual allocation increases by 10% for capacity building, 2015-16 prices)	1.03	0.95	0.95	0.98	0.98	0.98	0.99	0.99	0.99	0.99	0.98	0.97	0.96	0.96
Additional Cost for Ministry of Science and Technology (Annual allocation increases by 10% for capacity building, 2015-16 prices)	1.95	2.03	2.13	2.46	2.65	2.83	2.99	3.12	3.24	3.35	3.43	3.50	3.58	3.62
Additional Cost for Ministry of Education (Annual allocation increases by 10% for capacity building, 2015-16 prices)	87.50	48.55	49.73	51.22	52.83	54.55	56.44	58.47	60.55	62.77	65.05	67.53	70.17	72.93
<b>Total Additional Cost (Billion USD)</b>	<b>60.03</b>	<b>61.33</b>	<b>62.86</b>	<b>65.10</b>	<b>67.18</b>	<b>69.31</b>	<b>71.57</b>	<b>73.90</b>	<b>76.25</b>	<b>78.68</b>	<b>81.13</b>	<b>83.75</b>	<b>84.50</b>	<b>89.32</b>
<b>Total Additional Cost (Billion USD)</b>	<b>0.74</b>	<b>0.73</b>	<b>0.73</b>	<b>0.73</b>	<b>0.73</b>	<b>0.74</b>	<b>0.74</b>	<b>0.75</b>	<b>0.75</b>	<b>0.76</b>	<b>0.76</b>	<b>0.77</b>	<b>0.76</b>	<b>0.78</b>

Source: GED estimates

### Annex 15.1: Targets Covered in the Calculation of Additional Costing of SDG 15

Targets in SDG 15	Targets covered in this report	Comments
<p>15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements</p>	<p>15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements</p>	<p>These targets will be covered by the interventions suggested in the cost estimation.</p>
<p>15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally</p>	<p>15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally</p>	
<p>15.3 By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world</p>	<p>15.3 By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world</p>	
<p>15.4 By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development</p>	<p>15.4 By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development</p>	
<p>15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species</p>	<p>15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species</p>	
<p>15.6 Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed</p>	<p>15.6 Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed</p>	
<p>15.7 Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products</p>	<p>15.7 Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products</p>	
<p>15.8 By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species</p>	<p>15.8 By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species</p>	



Targets in SDG 15	Targets covered in this report	Comments
<p>15.9 By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts</p>	<p>15.9 By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts</p>	<p>Non-quantifiable</p>
<p>15.a Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems</p> <p>15.b Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation</p> <p>15.c Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities</p>		<p>Non-quantifiable</p>

## Annex 15.2: Methodology of the Calculation of Additional Costing of SDG 15

Targets covered in this report	Methodology of the calculation	Data sources
<p>15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements</p> <p>15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally</p> <p>15.3 By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world</p> <p>15.4 By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development</p> <p>15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species</p> <p>15.6 Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed</p> <p>15.7 Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products</p> <p>15.8 By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species</p> <p>15.9 By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts</p>	<p>Several interventions are considered for the cost estimation of this goal. Additional targets for each intervention are designed in a nonlinear way for FY 2017-FY 2020, FY 2021-FY 2025 and FY 2026-FY 2030.</p> <p><b>Step 01:</b> Unit cost of each intervention is calculated using the inflation adjustment factor.</p> $C_{i,t} = \alpha_i C_{i,t-1}$ <p>Where,  <math>C_{i,t}</math> = Unit cost of intervention <math>i</math> at time <math>t</math>  <math>C_{i,t-1}</math> = Unit cost of intervention <math>i</math> at time <math>t-1</math>  <math>\alpha_i = 1 + \pi_t/100</math> is the inflation adjustment factor at time <math>t</math> and <math>\pi_t</math> is the rate of inflation at time <math>t</math>  <math>t</math> = FY2010, FY2011,....., FY2030</p> <p>Unit cost is taken from MDG Needs Assessment and Costing 2009-20015. Actual inflation rates for FY 2010-FY 2015 are taken from 7th Five Year Plan of Bangladesh and projected inflation rates for FY 2016-FY 2030 are taken from Bangladesh Delta Plan 2100.</p> <p>The interventions, targets and unit cost in billion BDT are presented in the following Table.</p> <p><b>Step 02:</b> Total cost per annum for these interventions has been calculated by multiplying targets per year with inflation adjusted unit costs. Total cost is calculated using the following formula</p> $TC_{i,t} = C_{i,t} \times B_{i,t}$ <p>Where,  <math>TC_{i,t}</math> = Cost of intervention <math>i</math> at time <math>t</math>  <math>B_{i,t}</math> = Target of intervention <math>i</math> at time <math>t</math>  <math>t</math> = FY2017, FY2018,....., FY2030</p> <p>These interventions are considered to address most of the targets of this goal.</p>	<p>7<sup>th</sup> Five Year Plan of Bangladesh</p> <p>MDG Needs Assessment and Costing 2009-2015</p> <p>Bangladesh Delta Plan 2100</p> <p>Medium-term Budgetary Frameworks (MTBFs), Ministry of Finance, Government of Bangladesh</p>

Targets covered in this report	Methodology of the calculation	Data sources
	<p><b>Step 03:</b> In addition of these interventions, annual budget allocation of the Ministry of Environment and Forest and the Economic Relations Division (ERD) which are two lead Ministries/Divisions<sup>11</sup> are considered to increase by 50 percent and 25 percent respectively to employ additional manpower and for capacity building and awareness program.</p> <p><b>Step 04:</b> Summing all these cost, total additional cost to address SDG 15 is achieved.</p>	

**Table: Interventions, targets and Unit Costs to Achieve the Goal**

Interventions	Target as 2020 (additional)	Target as 2025 (additional)	Target as 2030 (additional)	Unit cost (Billion BDT as per 2015)
Co-managed forest initiatives for benefiting poor people (number)	15	15	10	0.0716
Pro-poor forest and wildlife management plans (number)	25	25	20	0.0086
Pro-poor timber and NTFP value addition schemes (number)	5	5	5	0.0057
Timber & non timber forest plantation established (hectar)	40,000	40,000	30000	0.0001
Strip plantation established (km)	20,000	20,000	15000	0.0001
Medicinal, food & fodder and indigenous plants for biodiversity protection (hectar)	4000	4000	4000	0.0001
Automation of meteorological observation station (number)	10	10	5	0.0161
Composting Plants (number)	200	200	150	0.0002

<sup>11</sup> Mapping of Ministries/Divisions by Targets in the Implementation of Sustainable Development Goals (SDGs) keeping infirmity with the Seventh Five Year Plan (2016-20)

### Annex 15.3: Breakdown of Total Additional Cost for SDG 15

#### In Current Prices

Total Additional Cost/ fiscal year	FY2013	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Additional Cost for Co-managed Forest Initiatives for Benefiting Poor People (Billion BDT at current prices)	0.30	0.32	0.34	0.36	0.30	0.32	0.33	0.35	0.37	0.26	0.27	0.28	0.30	0.31
Additional Cost for Pro-poor forest and Wildlife Management Plans (Billion BDT at current prices)	0.06	0.06	0.07	0.07	0.06	0.06	0.07	0.07	0.07	0.06	0.06	0.07	0.07	0.07
Additional Cost for Pro-poor Timber and NTFP Value Addition Schemes (Billion BDT at current prices)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Additional Cost for Timber & Non-timber Forest Plantation Established (Billion BDT at current prices)	1.59	1.48	1.78	1.87	1.58	1.46	1.75	1.83	1.92	1.53	1.59	1.66	1.74	1.83
Additional Cost for Strip Protection (Billion BDT at current prices)	0.66	0.70	0.74	0.78	0.66	0.69	0.72	0.76	0.80	0.63	0.66	0.69	0.72	0.76
Additional Cost for Medicinal Food & Fodder and Indigenous Plants for Biodiversity Protection (Billion BDT at current prices)	0.11	0.12	0.13	0.13	0.11	0.12	0.12	0.13	0.14	0.14	0.15	0.16	0.16	0.17
Additional Cost for Automation of Meteorological Observation Station (Billion BDT at current prices)	0.05	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.05	0.03	0.03	0.03	0.03	0.03
Additional Cost for Composting Plant (Billion BDT at current prices)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Additional Cost for Land Zoning (Billion BDT at current prices)	3.36	3.56	3.76	3.97	3.35	3.52	3.70	3.88	4.08	2.57	2.69	2.82	2.96	3.10
Additional Cost for Ministry of Environment and Forest (Annual allocation increases by 50%) (Billion BDT at current prices)	5.17	5.57	6.13	6.45	6.86	7.26	7.66	8.07	8.47	8.87	9.28	9.68	10.08	10.49
Additional Cost for Economic Zones Division (Annual allocation increases by 20%) (Billion BDT at current prices)	25.05	27.47	30.02	32.71	35.33	37.96	40.58	43.20	45.82	48.44	51.06	53.68	56.30	58.93
<b>Total Additional Cost (Billion BDT at current prices)</b>	<b>36.36</b>	<b>39.55</b>	<b>43.04</b>	<b>46.43</b>	<b>48.31</b>	<b>51.65</b>	<b>55.00</b>	<b>58.37</b>	<b>61.75</b>	<b>62.53</b>	<b>65.82</b>	<b>69.10</b>	<b>72.40</b>	<b>75.71</b>
<b>Total Additional Cost (Billion USD)</b>	<b>0.45</b>	<b>0.47</b>	<b>0.50</b>	<b>0.52</b>	<b>0.53</b>	<b>0.55</b>	<b>0.57</b>	<b>0.59</b>	<b>0.61</b>	<b>0.60</b>	<b>0.62</b>	<b>0.63</b>	<b>0.65</b>	<b>0.66</b>

Source: GED estimates

## In Constant 2015-16 Prices

	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Total Additional Cost for Co-managed Forest Initiatives for Benefiting Poor People (Billion BDT at constant 2015-16 prices)	0.28	0.29	0.29	0.29	0.23	0.23	0.23	0.23	0.23	0.15	0.15	0.15	0.15	0.15
Additional Cost for Forest Management (Billion BDT at constant 2015-16 prices)	0.06	0.05	0.06	0.06	0.05	0.04	0.05	0.05	0.04	0.04	0.03	0.04	0.04	0.03
Additional Cost for Pro-poor Timber and NTFP Value Addition Schemes (Billion BDT at constant 2015-16 prices)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Additional Cost for Timber & Non-Timber Forest Plantation Establishment (Billion BDT at constant 2015-16 prices)	1.50	1.50	1.50	1.50	1.20	1.20	1.20	1.20	1.20	0.90	0.90	0.90	0.90	0.90
Additional Cost for Non-Timber Forest Plantation Establishment (Billion BDT at constant 2015-16 prices)	0.62	0.62	0.62	0.62	0.50	0.50	0.49	0.50	0.50	0.37	0.37	0.37	0.37	0.37
Additional Cost for Medicinal, Food & Fuel and Indigenous Plants for Biodiversity Protection (Billion BDT at constant 2015-16 prices)	0.10	0.11	0.11	0.10	0.08	0.09	0.08	0.09	0.09	0.08	0.08	0.09	0.08	0.08
Additional Cost for Automation of Forest Management Information System (Billion BDT at constant 2015-16 prices)	0.05	0.04	0.04	0.04	0.03	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01
Additional Cost for Composting (Billion BDT at constant 2015-16 prices)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Additional Cost for Land Zoning (Billion BDT at constant 2015-16 prices)	3.17	3.18	3.17	3.18	2.55	2.54	2.54	2.54	2.54	1.53	1.52	1.52	1.53	1.53
Additional Cost for Ministry of Environment and Forest (Annual Recurrence Increases by 20% (Billion BDT at constant 2015-16 prices)	4.88	4.97	5.18	5.18	5.21	5.25	5.27	5.28	5.28	5.27	5.26	5.23	5.20	5.17
Additional Cost for Economic Incentives Division (Annual Recurrence Increases by 25%) (Billion BDT at constant 2015-16 prices)	23.65	24.52	25.35	26.18	26.85	27.63	27.90	28.28	28.57	28.79	28.93	29.02	29.05	29.04
Total Additional Cost (Billion BDT at constant 2015-16 prices)	34.34	35.30	36.34	37.15	36.72	37.33	37.83	38.21	38.50	37.17	37.29	37.36	37.34	37.31
Total Additional Cost (Billion USD)	0.42	0.42	0.42	0.42	0.40	0.40	0.39	0.39	0.38	0.36	0.35	0.34	0.34	0.33

Source: GED estimates

## Annex 16.1: Targets Covered in the Calculation of Additional Costing of SDG 16

Targets in SDG 16	Targets covered in this report	Comments
16.1 Significantly reduce all forms of violence and related death rates everywhere	16.1 Significantly reduce all forms of violence and related death rates everywhere	Increasing strength of Bangladesh Police, Department of Ansars and Village Defence, Border Guard Bangladesh, Bangladesh Coast Guard, Department of Prisons, Narcotics Control Department, Law and Justice Division and Supreme Court will cover most of the targets under this goal. Besides, there is a block allocation for institutional reform. Targets 16.7 and 16.10 are non-quantifiable. Therefore, we have not covered these targets in the cost estimation.
16.2 End abuse, exploitation, trafficking and all forms of violence against and torture of children	16.2 End abuse, exploitation, trafficking and all forms of violence against and torture of children	
16.3 Promote the rule of law at the national and international levels and ensure equal access to justice for all	16.3 Promote the rule of law at the national and international levels and ensure equal access to justice for all	
16.4 By 2030, significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime	16.4 By 2030, significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime	
16.5 Substantially reduce corruption and bribery in all their forms	16.5 Substantially reduce corruption and bribery in all their forms	
16.6 Develop effective, accountable and transparent institutions at all levels	16.6 Develop effective, accountable and transparent institutions at all levels	
16.7 Ensure responsive, inclusive, participatory and representative decision-making at all levels	16.7 Ensure responsive, inclusive, participatory and representative decision-making at all levels	
16.8 Broaden and strengthen the participation of developing countries in the institutions of global governance	16.8 Broaden and strengthen the participation of developing countries in the institutions of global governance	
16.9 By 2030, provide legal identity for all, including birth registration	16.9 By 2030, provide legal identity for all, including birth registration	
16.10 Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreement	16.10 Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreement	
16.a Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime	16.a Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime	
16.b Promote and enforce non-discriminatory laws and policies for sustainable development	16.b Promote and enforce non-discriminatory laws and policies for sustainable development	

## Annex 16.2: Methodology of the Calculation of Additional Costing of SDG 16

Targets covered in this report	Methodology of the calculation	Data sources
<p>16.1 Significantly reduce all forms of violence and related death rates everywhere</p> <p>16.2 End abuse, exploitation, trafficking and all forms of violence against and torture of children</p> <p>16.3 Promote the rule of law at the national and international levels and ensure equal access to justice for all</p> <p>16.4 By 2030, significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime</p> <p>16.5 Substantially reduce corruption and bribery in all their forms</p> <p>16.6 Develop effective, accountable and transparent institutions at all levels</p> <p>16.8 Broaden and strengthen the participation of developing countries in the institutions of global governance</p>	<p>Different operational units of Ministry of Home Affairs, Law and Justice Division of Ministry of Law, Justice and Parliamentary Affairs and Supreme Court are considered in the cost estimation.</p> <p><b>Step 01:</b> Existing Expenditure of each department for FY 2017 and projected budget for FY 2018 and FY 2019 are taken from medium term expenditure of Ministry of Home Affairs, Law and Justice Division of Ministry of Law, Justice and Parliamentary Affairs and Supreme Court. Projected allocation of these departments are calculated using the trend line of medium term expenditure provided by the Ministry of Finance.</p> <p><b>Step 02:</b> At present, 96 police are serving about 1000000 population in Bangladesh (Wikipedia). The number of police officers should be increased to serve the population and to reduce human trafficking, intentional homicides and violence and to promote law and order or in a word to prevail peace in the country. It is considered that the number of police, Ansars and Village Defense, Border Guards Bangladesh, Bangladesh Coast Guard will be gradually increased by 100 percent by 2030. To prevail justice in the country, judiciary system should be strong and number of judges should be increased. The judge to population ratio in Bangladesh stands 11 judges per 10 lakh population. There are a large number of cases pending in our country. To address this issues, the number of judges should be increased. Indian Law Commission recommended a standard of 50 judges per 10 lakh population. If it is considered as standard, projected expenditure of Law and Justice Division must be gradually increased by the factor (50/11) by 2030. To improve the judiciary system and to employ sufficient number of judges, Department of Prisons, Narcotics Control Department and Supreme Court are also related to peace and justice in the country. Projected expenditure of these departments are gradually increased by 100 percent to make them more efficient and effective.</p> <p>In step 2, it is considered that one-third of the targets will be covered by 2020, two-third by 2025 and remaining one-third by the end of 2030. Annual projected allocation of the aforementioned departments/divisions have been increased proportionately according to the targets.</p>	<p>Ministry of Home Affairs, Government of Bangladesh</p> <p>Ministry of Law, Justice and Parliamentary Affairs, Government of Bangladesh</p> <p>Bangladesh Delta Plan 2100</p>

Targets covered in this report	Methodology of the calculation	Data sources
<p>16.9 By 2030, provide legal identity for all, including birth registration</p> <p>16.a Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime</p> <p>16.b Promote and enforce non-discriminatory laws and policies for sustainable development</p>	<p><b>Step 03:</b> Adding these targeted allocation, total cost for these targets are achieved. Annually 0.1 percent of GDP is allocated for institutional reform to make institutions effective, accountable, transparent and efficient and to eliminate red tape barrier in public institutions. Total cost of SGD 16 is achieved by adding all these allocations.</p> <p><b>Step 04:</b> Trend line of existing expenditure of all department are considered as the business as usual scenario. The difference of total cost of SDG 16 and total cost under business as usual scenario is the additional cost to address SDG 16.</p> <p>Cost estimation of this target is synchronized with total additional cost of this goal.</p> <p>Cost estimation of this target is covered by the block allocation for institutional reform.</p> <p>Cost estimation of this target is synchronized with total additional cost of this goal.</p>	



### Annex 16.3: Breakdown of Total Additional Cost for SDG 16

#### In Current Prices

Total Additional Cost/financial year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Additional Cost for Reproductive Health BOT at current prices	8.83	19.30	30.96	44.38	56.64	70.50	85.35	101.41	118.05	137.10	156.73	177.57	199.60	222.83
Additional Cost for Border Guards Bangladesh (billion BOT at current prices)	-1.14	4.85	7.82	11.42	14.82	18.59	22.79	27.24	32.12	37.38	43.00	49.00	55.37	62.11
Additional Cost for Department of Awars and Village Defence (billion BOT at current prices)	1.02	2.25	3.61	5.20	6.68	8.31	10.08	12.01	14.08	16.30	18.66	21.17	23.83	26.64
Additional Cost for Department of Prisons (billion BOT at current prices)	0.72	1.65	2.54	3.69	4.72	5.86	7.09	8.43	9.86	11.39	13.03	14.76	16.59	18.52
Additional Cost for Narcotics Control Department (billion BOT at current prices)	0.08	0.23	0.37	0.59	0.81	1.06	1.34	1.65	2.00	2.38	2.80	3.24	3.72	4.24
Additional Cost for Coast Guard (billion BOT at current prices)	0.92	1.01	1.74	2.62	3.51	4.51	5.63	6.88	8.24	9.72	11.33	13.05	14.89	16.85
Additional Cost for Judiciary (billion BOT at current prices)	4.49	8.83	14.17	19.09	23.45	28.00	32.78	37.65	42.74	48.02	53.49	59.13	64.96	70.97
Additional Cost for Supreme Court (Billion BOT at current prices)	0.13	0.27	0.43	0.60	0.75	0.91	1.08	1.27	1.46	1.66	1.88	2.10	2.34	2.59
Additional Cost for Institutional reforms (0.1% of GDP) (billion BOT at current prices)	22.19	25.16	28.50	32.35	36.69	41.60	47.18	53.50	60.72	68.92	78.30	88.94	101.13	114.88
<b>Total Additional Cost (billion BOT at current prices)</b>	<b>40.52</b>	<b>61.55</b>	<b>90.14</b>	<b>119.98</b>	<b>148.26</b>	<b>179.33</b>	<b>213.22</b>	<b>250.02</b>	<b>289.88</b>	<b>332.88</b>	<b>379.21</b>	<b>428.97</b>	<b>482.43</b>	<b>539.72</b>
<b>Total Additional Cost (Billion USD)</b>	<b>0.50</b>	<b>0.76</b>	<b>1.04</b>	<b>1.35</b>	<b>1.62</b>	<b>1.91</b>	<b>2.21</b>	<b>2.53</b>	<b>2.86</b>	<b>3.21</b>	<b>3.56</b>	<b>3.94</b>	<b>4.33</b>	<b>4.74</b>

Source: GED estimates

### In Constant 2015-16 Prices

Total Additional Cost/Fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Additional Cost for Bangladesh Police (Billion BOT at constant 2015-16 prices)	8.34	17.23	26.14	35.52	43.20	50.94	58.07	66.40	73.98	81.49	88.81	96.01	103.98	109.80
Additional Cost for Border Guard with Bangladesh (Billion BOT at constant 2015-16 prices)	2.02	4.33	6.60	9.14	11.26	13.43	15.63	17.83	20.03	22.22	24.37	26.49	28.57	30.61
Additional Cost for Department of Amars and Village Defense (Billion BOT at constant 2015-16 prices)	0.96	2.01	3.05	4.16	5.08	6.00	6.93	7.86	8.78	9.69	10.57	11.45	12.29	13.13
Additional Cost for Department of Prisons (Billion BOT at constant 2015-16 prices)	0.68	1.47	2.14	2.95	3.59	4.23	4.87	5.52	6.15	6.77	7.38	7.98	8.56	9.13
Additional Cost for Narcotics Control Department (Billion BOT at constant 2015-16 prices)	0.08	0.21	0.33	0.49	0.62	0.77	0.92	1.08	1.25	1.41	1.58	1.75	1.92	2.09
Additional Cost for Coast Guard (Billion BOT at constant 2015-16 prices)	0.87	0.90	1.47	2.10	2.67	3.26	3.87	4.50	5.14	5.78	6.42	7.06	7.68	8.30
Additional Cost for Judiciary (Billion BOT at constant 2015-16 prices)	4.24	7.88	11.97	15.28	17.82	20.23	22.50	24.65	26.65	28.54	30.31	31.97	33.51	34.97
Additional Cost for Supreme Court (Billion BOT at constant 2015-16 prices)	0.12	0.24	0.36	0.48	0.57	0.66	0.74	0.83	0.91	0.99	1.07	1.14	1.21	1.28
Additional Cost for Investment (5.1% of GDP) (Billion BOT at constant 2015-16 prices)	20.95	22.46	24.07	25.89	27.89	30.06	32.43	35.03	37.86	40.97	44.37	48.09	52.18	56.66
<b>Total Additional Cost (Billion BOT at constant 2015-16 prices)</b>	<b>38.26</b>	<b>56.72</b>	<b>76.11</b>	<b>96.00</b>	<b>112.70</b>	<b>129.58</b>	<b>146.57</b>	<b>163.71</b>	<b>180.75</b>	<b>197.86</b>	<b>214.88</b>	<b>231.94</b>	<b>248.90</b>	<b>265.96</b>
<b>Total Additional Cost (Billion USD)</b>	<b>0.47</b>	<b>0.68</b>	<b>0.88</b>	<b>1.08</b>	<b>1.23</b>	<b>1.38</b>	<b>1.52</b>	<b>1.66</b>	<b>1.78</b>	<b>1.91</b>	<b>2.02</b>	<b>2.13</b>	<b>2.23</b>	<b>2.33</b>

Source: GED estimates

## Annex 17.1: Targets Covered in the Calculation of Additional Costing of SDG 17

Targets in SDG 17	Targets covered in this report	Comments
<p>17.1 Strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection</p> <p>17.2 Developed countries to implement fully their official development assistance commitments, including the commitment by many developed countries to achieve the target of 0.7 per cent of gross national income for official development assistance (ODA/GNI) to developing countries and 0.15 to 0.20 per cent of ODA/GNI to least developed countries; ODA providers are encouraged to consider setting a target to provide at least 0.20 per cent of ODA/GNI to least developed countries</p> <p>17.3 Mobilize additional financial resources for developing countries from multiple sources</p> <p>17.4 Assist developing countries in attaining long-term debt sustainability through coordinated policies aimed at fostering debt financing, debt relief and debt restructuring, as appropriate, and address the external debt of highly indebted poor countries to reduce debt distress</p> <p>17.5 Adopt and implement investment promotion regimes for least developed countries</p>	<p>17.1 Strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection</p>	<p>It has been synchronized with SDG 16.</p> <p>Non-quantifiable</p>
<p>17.3 Mobilize additional financial resources for developing countries from multiple sources</p> <p>17.4 Assist developing countries in attaining long-term debt sustainability through coordinated policies aimed at fostering debt financing, debt relief and debt restructuring, as appropriate, and address the external debt of highly indebted poor countries to reduce debt distress</p> <p>17.5 Adopt and implement investment promotion regimes for least developed countries</p>		<p>Non-quantifiable</p> <p>Non-quantifiable</p>
<p>17.6 Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism</p>	<p>17.5 Adopt and implement investment promotion regimes for least developed countries</p> <p>17.6 Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism</p>	<p>The additional cost for this target has been calculated by using the data sources of Export Promotion Bureau (EPB) and Board of Investment (BoI).</p> <p>It has been synchronized with SDG 10 and SDG 14.</p>

Targets in SDG 17	Targets covered in this report	Comments
<p>17.7 Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed</p>	<p>17.7 Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed</p>	<p>It has been synchronized with SDG 12.</p>
<p>17.8 Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology</p>	<p>17.8 Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology</p>	<p>It has been synchronized with SDG 16.</p>
<p>17.9 Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the Sustainable Development Goals, including through North-South, South-South and triangular cooperation</p>		<p>Non-quantifiable</p>
<p>17.10 Promote a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the World Trade Organization, including through the conclusion of negotiations under its Doha Development Agenda</p>	<p>17.10 Promote a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the World Trade Organization, including through the conclusion of negotiations under its Doha Development Agenda</p>	<p>The additional cost has been estimated by using the data of budget for Ministry of Commerce.</p>
<p>17.11 Significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries' share of global exports by 2020</p>	<p>17.11 Significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries' share of global exports by 2020</p>	<p>This has been synchronized with SDG 9.</p>
<p>17.12 Realize timely implementation of duty-free and quota-free market access on a lasting basis for all least developed countries, consistent with World Trade Organization decisions, including by ensuring that preferential rules of origin applicable to imports from least developed countries are transparent and simple, and contribute to facilitating market access</p>		<p>Non-quantifiable</p>
<p>17.13 Enhance global macroeconomic stability, including through policy coordination and policy coherence</p>		<p>Non-quantifiable</p>
<p>17.14 Enhance policy coherence for sustainable development</p>		<p>Non-quantifiable</p>

Targets in SDG 17	Targets covered in this report	Comments
<p>17.15 Respect each country's policy space and leadership to establish and implement policies for poverty eradication and sustainable development</p> <p>17.16 Enhance the Global Partnership for Sustainable Development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the Sustainable Development Goals in all countries, in particular developing countries</p>	<p>17.16 Enhance the Global Partnership for Sustainable Development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the Sustainable Development Goals in all countries, in particular developing countries</p>	<p>Non-quantifiable</p> <p>It has been synchronized with SDG 10.</p>
<p>17.17 Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships</p> <p>17.18 By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts</p>	<p>17.17 Encourage and promote effective public, private and civil society partnerships, building on the experience and resourcing strategies of partnerships</p> <p>17.18 By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts</p>	<p>The additional cost has been calculated by using the data source of budget for Public Private Partnership.</p> <p>The additional cost has been calculated by using the data source of Bangladesh Bureau of Statistics named 'Setting Priorities for Data Support to 7th FYP and SDGs: An Overview'.</p>
<p>17.19 By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries</p>	<p>17.19 By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries</p>	

## Annex 17.2: Methodology of the Calculation of Additional Costing of SDG 17

Targets Covered in this Report	Methodology of Calculation	Data Sources
<p>17.1 Strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection</p>	<p>The additional cost for target 17.1 has been synchronized with the additional cost for SDG 16.</p>	<p>Medium-Term Budgetary Framework (MTBF), Finance Division, Ministry of Finance, Bangladesh</p> <p>Setting Priorities for Data Support to the 7<sup>th</sup> FYP and SDGs: An Overview, Bangladesh Bureau of Statistics</p> <p>Bangladesh Delta Plan 2100, General Economics Division, Planning Commission, Bangladesh</p>
<p>17.6 Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism</p>	<p>The additional cost for target 17.6 has been synchronized with the additional cost for SDG 10 and SDG 14.</p>	
<p>17.7 Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed</p>	<p>The additional cost for target 17.7 has been synchronized with the additional cost for SDG 12.</p>	
<p>17.8 Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology</p>	<p>The additional cost for target 17.8 has been synchronized with the additional cost for SDG 16.</p>	
<p>17.5 Adopt and implement investment promotion regimes for least developed countries</p>	<p><b>Step 01:</b> To calculate the cost of target 17.5, 25% of the actual budget of Export Promotion Bureau (EPB) and Bangladesh Board of Investment (BOI) for the year 2014-15 has been considered as the additional resource requirement.</p> <p><b>Step 02:</b> The cost calculated for FY 2015 has then been multiplied by the inflation adjustment factor (1+ projected inflation rate for the respective fiscal year/100) to find the additional resources required for FY2016 at current prices. This</p>	

Targets Covered in this Report	Methodology of Calculation	Data Sources
<p>17.10 Promote a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the World Trade Organization, including through the conclusion of negotiations under its Doha Development Agenda</p>	<p>process has been continued till FY 2030. Therefore, the formula is</p> $C_t = C_{t-1} \cdot (1 + \pi_t / 100)$ <p>where</p> <p><math>C_t</math> = Additional cost for current fiscal year,  <math>C_{t-1}</math> = Additional cost for immediate previous fiscal year, and  <math>\pi_t</math> = Inflation rate for current fiscal year.</p> <p><b>Step 01:</b>  The budget for the activity 'Strengthen and Expand Initiatives for Improved Market Access under WTO' under the medium term expenditure of the Ministry of Commerce has been considered to estimate the additional cost of target 17.10.</p> <p><b>Step 02:</b>  The growth rate of the budget has been calculated by using the data of the budgets for the years 2012-13 to 2016-17 and the budget for each of the fiscal years 2017-2030 has been estimated by using this growth rate.  Since more investment will be required to meet the upcoming challenges, 25% increase in the BAU level of budget has been recommended. The gap between required budget and BAU budget is the additional cost for achieving this target.</p> <p>The additional cost for target 17.11 has been synchronized with the additional cost for SDG 9.</p> <p>The additional cost for target 17.16 has been synchronized with the additional cost for SDG 10.</p>	
<p>17.11 Significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries' share of global exports by 2020</p> <p>17.16 Enhance the Global Partnership for Sustainable Development complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the Sustainable Development Goals in all countries, in particular developing countries.</p>	<p><b>Step 01:</b>  17.17 Encourage and promote effective public, public-private and civil society partnerships, building</p>	

Targets Covered in this Report	Methodology of Calculation	Data Sources
<p>on the experience and resourcing strategies of partnerships</p>	<p>The budget for the Public Private Partnership under the medium term expenditure of the Prime Minister's Office has been considered for calculating the additional cost.</p> <p><b>Step 02:</b> The growth of the budget has been calculated by using the data of the budget for the years 2013-14 to 2016-17 and the budget for the period 2017-2030 has been projected by using this growth rate. The budget should be increased from its current level in order to meet the upcoming challenges. 50% increase has been recommended. The gap between required budget and BAU budget is the additional cost for achieving this target.</p> <p><b>Step 01:</b> The cost of data collection has been considered as the additional cost for these two targets. The cost of data collection for the FY2017-FY2030 has been estimated by using the document 'Setting Priorities for Data Support to the 7<sup>th</sup> PYP and SDGs: An Overview'.</p> <p><b>Step 02:</b> The document describes important projects that will be needed to undertake in order to extract the essential data and projects the total cost for implementing them. The total cost for the period 2016-2025 is 9.73 billion BDT. The average cost for each year of the aforesaid period is 0.97 billion BDT. This number has been taken as the base and the cost for each of the FY 2017-FY 2030 has been calculated at current prices by multiplying with the inflation adjustment factor.</p>	
<p>17.18 By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts</p> <p>17.19 By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries</p>		



### Annex 17.3: Breakdown of Total Additional Cost for SDG 17

#### In Current Prices

Total Additional Cost/Fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Additional Cost for Target 17.5 (Billion BDT at current)	0.12	0.12	0.13	0.14	0.15	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.12
Additional Cost for Target 17.10 (Billion BDT at current)	0.11	0.12	0.13	0.14	0.14	0.15	0.17	0.18	0.19	0.20	0.22	0.23	0.25	0.11
Additional Cost for Target 17.17 (Billion BDT at current prices)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.01
Additional Cost for Targets 17.18 & 17.19 (Billion BDT at current prices)	1.03	1.09	1.16	1.22	1.28	1.35	1.42	1.49	1.56	1.64	1.72	1.80	1.89	1.03
<b>Total Additional Cost (Billion BDT at current prices)</b>	<b>1.27</b>	<b>1.35</b>	<b>1.42</b>	<b>1.50</b>	<b>1.59</b>	<b>1.67</b>	<b>1.76</b>	<b>1.85</b>	<b>1.95</b>	<b>2.05</b>	<b>2.15</b>	<b>2.26</b>	<b>2.37</b>	<b>1.27</b>
<b>Total Additional Cost (Billion USD)</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.01</b>

Source: GED estimates

**In Constant 2015-16 Prices**

Total Additional Cost/Fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Additional Cost for Target 17.5 (Billion BDT at constant 2015-16 prices)	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.06
Additional Cost for Target 17.10 (Billion BDT at constant 2015-16 prices)	0.10	0.11	0.11	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.13	0.06
Additional Cost for Target 17.17 (Billion BDT at constant 2015-16 prices)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Additional Cost for Targets 17.18 & 17.19 (Billion BDT at constant 2015-16 prices)	0.97	0.97	0.98	0.98	0.97	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.98	0.51
Total Additional Cost (Billion BDT at constant 2015-16 prices)	1.20	1.20	1.21	1.21	1.20	1.20	1.21	1.21	1.21	1.22	1.22	1.22	1.23	0.63
Total Additional Cost (Billion USD)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

Source: GED estimates

### Annex 18.1: Additional Unsynchronized and Synchronized SDGs Costs in FY 2017 (in Billion BDT)

SDG	SDG 1	SDG 2	SDG 3	SDG 4	SDG 5	SDG 6	SDG 7	SDG 8	SDG 9	SDG 10	SDG 11	SDG 12	SDG 13	SDG 14	SDG 15	SDG 16	SDG 17	Unsynchronized Total Additional Cost (Billion BDT in current prices)
SDG 1	110.93				Target 3.4 has been addressed in SDG 1													110.93
SDG 2		157.40				Target 6.4 (partially) has been covered by SDG 2												157.40
SDG 3			55.35															55.35
SDG 4				39.36														56.46
SDG 5					75.60													75.60
SDG 6						131.38												131.38
SDG 7							121.98											413.27
SDG 8							401.50											404.50
SDG 9							Target 7.8 has been covered by SDG 9	171.47	404.00								Target 17.11 has been covered by SDG 9	825.48
SDG 10										30.12							Target 17.6 (partially) & Target 17.16 has been covered by SDG 10	30.12
SDG 11												17.75						37.75
SDG 12													1.97				Target 12.7 has been covered by SDG 12	11.96
SDG 13																		510.27
SDG 14														63.57			Target 13.6 has been partially covered by SDG 14	63.57

SDG	SDG 1	SDG 2	SDG 3	SDG 4	SDG 5	SDG 6	SDG 7	SDG 8	SDG 9	SDG 10	SDG 11	SDG 12	SDG 13	SDG 14	SDG 15	SDG 16	SDG 17	Unsynchronized Total Additional Cost (Billion BDT in current prices)
SDG 15			Target 3.9 has been partially met in SDG 15.												36.36			36.36
SDG 16							Target 8.7 has been addressed in SDG 16.							40.52			Targets 12.1 & 17.8 has been covered by SDG 16.	40.52
SDG 17																	1.27	1.27
Synchronized Total Additional Cost (Billion BDT in current prices)	110.93	157.40	95.35	99.36	75.60	331.38	121.98	404.50	454.02	30.12	17.75	1.97	510.27	63.57	36.36	40.52	1.27	

Total Unsynchronized cost at current prices = Billion BDT 2,941.22  
 Total Synchronized cost at current prices = Billion BDT 2,254.35  
 Total Unsynchronized cost at 2015-16 constant prices = Billion BDT 2,777.35  
 Total Synchronized cost at 2015-16 constant prices = Billion BDT 2,128.75  
 The ratio of Synchronized cost to Unsynchronized cost = 0.77

Source: GED estimates.

Annex 18.2: Additional Unsynchronized and Synchronized SDGs Costs in FY 2018 (in Billion BDT)

SDG#	SDG 1	SDG 2	SDG 3	SDG 4	SDG 5	SDG 6	SDG 7	SDG 8	SDG 9	SDG 10	SDG 11	SDG 12	SDG 13	SDG 14	SDG 15	SDG 16	SDG 17	Unsynchronized Cost (in Billion BDT in current prices)
SDG 1	125.79			Target 5.4 has been addressed in SDG1														125.79
SDG 2		166.84				Target 6.4 (partially) has been addressed in SDG2												166.84
SDG 3			125.67					12.17										125.67
SDG 4				108.63														125.79
SDG 5				80.14														80.14
SDG 6						138.93			306.65									136.93
SDG 7	Target 1.2 has been taken care of by target 8.1						131.42											438.67
SDG 8								696.67										696.67
SDG 9							Target 7.6 has been covered by SDG9	644.42	308.65								Target 17.11 has been covered by SDG 9	951.06
SDG 10										33.92							Target 17.6 (partially) has been covered by SDG 10	33.92
SDG 11											20.13							20.13
SDG 12								23.36				2.09					Target 17.7 has been covered by SDG 12	25.45
SDG 13													578.65					578.65

SDGs	SDG 1	SDG 2	SDG 3	SDG 4	SDG 5	SDG 6	SDG 7	SDG 8	SDG 9	SDG 10	SDG 11	SDG 12	SDG 13	SDG 14	SDG 15	SDG 16	SDG 17	Unsynchronized Total Estimated Cost (Billion BDT in current prices)
SDG 14			Target 3.9: No harm from marine litter covered in SDG 14			Targets 6.4 (Japan), 6.6 & 6.a have been covered by SDG 14								68.71	89.55		Target 17.6 has been partially covered by SDG 14	68.71
SDG 15			Target 3.9: No harm from marine litter covered in SDG 14												89.55			89.55
SDG 16								Target 8.7 has been addressed in SDG 16								63.55	Targets 17.1 & 17.6 has been covered by SDG 16	63.55
SDG 17																	1.35	1.35
Synchronized Additional Cost (Billion BDT in current prices)	125.79	165.84	125.67	80.34		136.93	131.42	606.67	306.65	33.92	20.13	2.09	578.65	68.71	89.55	63.55	1.35	

Total Unsynchronized cost at current prices = Billion BDT 3,678.27  
 Total Synchronized cost at current prices = Billion BDT 2,686.67  
 Total Unsynchronized cost at 2015-16 constant prices = Billion BDT 3,282.93  
 Total Synchronized cost at 2015-16 constant prices = Billion BDT 2,397.91  
 The ratio of Synchronized cost to Unsynchronized cost = 0.73  
 Source: GED estimates

Annex 18.3: Additional Unsynchronized and Synchronized SDGs Costs in FY 2019 (in Billion BDT)

SDGs	SDG 1	SDG 2	SDG 3	SDG 4	SDG 5	SDG 6	SDG 7	SDG 8	SDG 9	SDG 10	SDG 11	SDG 12	SDG 13	SDG 14	SDG 15	SDG 17	Unsynchronized Total (Additional or Current period)
SDG 1	142.52				Target 5.4 has been addressed in SDG 5												142.52
SDG 2		166.37				Target 6.4 (partially) has been covered by SDG 2											166.37
SDG 3			213.64					18.21									213.64
SDG 4				195.56													195.56
SDG 5					84.71												84.71
SDG 6						142.52											142.52
SDG 7							118.91	325.87									463.04
SDG 8								1,071.76									1,071.76
SDG 9								780.36	325.87							Target 17.11 has been covered by SDG 9	1,086.23
SDG 10										38.49						Target 17.8 (partially) has been covered by SDG 10	38.49
SDG 11											22.80						22.80
SDG 12								40.82				2.08				Target 17.7 has been covered by SDG 12	42.90
SDG 13													655.61				655.61

SDGs	SDG 1	SDG 2	SDG 3	SDG 4	SDG 5	SDG 6	SDG 7	SDG 8	SDG 9	SDG 10	SDG 11	SDG 12	SDG 13	SDG 14	SDG 15	SDG 16	SDG 17	Unsynchronized Total (Billion BDT in current prices)
SDG 14			Target 3.9 has been partially covered in SDG 14			Targets 6.4 (partially), 6.6 & 6.4 have been covered by SDG 14								74.44			Target 17.6 has been partially covered by SDG 14	74.44
SDG 15			Target 3.9 has been partially covered in SDG 15												43.04			43.04
SDG 16							Target 8.7 has been addressed in SDG 16										90.14 has been covered by SDG 16	90.14
SDG 17																	1.42 has been covered by SDG 16	1.42
Synchronized Additional Cost (Billion BDT in current prices)	142.32	166.37	213.84	195.56	84.71	140.32	138.91	1,072.76	325.87	36.49	22.80	2.08	635.83	74.44	43.04		1.42	

Total Unsynchronized cost at current prices = Billion BDT 4,555.42  
 Total Synchronized cost at current prices = Billion BDT 3,411.89  
 Total Unsynchronized cost at 2015-16 constant prices = Billion BDT 3,846.55  
 Total Synchronized cost at 2015-16 constant prices = Billion BDT 2,880.97  
 The ratio of Synchronized cost to Unsynchronized cost = 0.75  
 Source: GED estimates



Annex 18.4: Additional Unsynchronized and Synchronized SDGs Costs in FY 2020 (in Billion BDT)

SDGs	SDG 1	SDG 2	SDG 3	SDG 4	SDG 5	SDG 6	SDG 7	SDG 8	SDG 9	SDG 10	SDG 11	SDG 12	SDG 13	SDG 14	SDG 15	SDG 16	SDG 17	Unsynchronized Total Additional Cost (in Billion BDT)
SDG 1	161.76				Target 5.4 has been addressed in SDG 3													161.76
SDG 2		166.06				Target 6.4 (partially) has been covered by SDG 2												166.06
SDG 3			323.37															323.37
SDG 4				304.24				35.29										323.53
SDG 5					89.37													89.37
SDG 6								841.96										101.51
SDG 7							146.55											488.50
SDG 8	Target 1.2 has been taken care of by target 8.1							1,849.70										1,849.70
SDG 9								871.71	371.59									Target 17.11 has been covered by SDG 9
SDG 10										41.90								Target 17.6 (partially) & Target 17.16 has been covered by SDG 10
SDG 11											25.88							25.88
SDG 12												2.08						Target 17.7 has been covered by SDG 12
SDG 13													776.47					776.47

	5001	5002	5003	5004	5005	5006	5007	5008	5009	50010	50011	50012	50013	50014	50015	50016	50017	Un-synchronized Total Cost (Billion BDT in current prices)		
5004																				
50014			Target 3.9 has been partially covered in 50014			Targets 6.4 (partially), 6.5 & 6.4 have been covered by 50014								81.33				Target 17.6 has been partially covered by 50014	81.33	
50015			Target 3.3 has been partially covered in 50015												46.43				46.43	
50016							Target 6.7 has been addressed in 50016											Targets 17.1 & 17.6 has been covered by 50016	17.1 & 17.6 has been covered by 50016	119.93
50017	Additional Synchronized Total Cost (Billion BDT in current prices)	161.76	146.06	323.37	304.24	101.51	146.55	1,849.70	373.59	43.90	25.88	2.08	776.47	81.33	46.43	119.93	1.30	1.30	1.30	

Total Un-synchronized cost at current prices = Billion BDT 5,924.64  
 Total Synchronized cost at current prices = Billion BDT 4,613.67  
 Total Un-synchronized cost at 2015-16 constant prices = Billion BDT 4,741.91  
 Total Synchronized cost at 2015-16 constant prices = Billion BDT 3,692.64  
 The ratio of Synchronized cost to Un-synchronized cost = 0.78

Source: GED estimates

Annex 18.5: Additional Unsynchronized and Synchronized SDGs Costs in FY 2021 (in Billion BDT)

SDG	SDG 1	SDG 2	SDG 3	SDG 4	SDG 5	SDG 6	SDG 7	SDG 8	SDG 9	SDG 10	SDG 11	SDG 12	SDG 13	SDG 14	SDG 15	SDG 16	SDG 17	Unsynchronized Total (in Billion BDT in current prices)
SDG 1	183.44	165.74			Target 5.4 has been addressed in SDG 1	Target 6.4 (partially) has been covered by SDG 2												183.44
SDG 2								29.34										165.74
SDG 3			440.07															440.07
SDG 4																		440.26
SDG 5				94.10														94.10
SDG 6						104.83												104.83
SDG 7							154.82		165.08									154.89
SDG 8	Target 1.2 has been addressed in SDG 1 Target 8.1							2,354.11										2,354.11
SDG 9							Target 7.b has been covered by SDG 9	3,311.24	561.92								Target 17.3 has been covered by SDG 9	3,873.06
SDG 10										49.86							Target 10.1 (partially) & Target 17.20 has been covered by SDG 10	49.86
SDG 11			Target 3.6 has been addressed in SDG 11								29.35						Target 11.7 has been covered by SDG 11	29.35
SDG 12												3.31						104.78
SDG 13	Target 1.3 has been addressed in SDG 13							101.47										880.51
																		880.51

SDG	SDG 1	SDG 2	SDG 3	SDG 4	SDG 5	SDG 6	SDG 7	SDG 8	SDG 9	SDG 10	SDG 11	SDG 12	SDG 13	SDG 14	SDG 15	SDG 16	SDG 17	Un-synchronized Total (Billion USD in current prices)
SDG 14			Target 13.3 has been partially covered in SDG 14		Targets 6.4 (partially), 6.6 & 6.a have been covered by SDG 14									88.38			88.38	88.38
SDG 15			Target 13.3 has been partially covered in SDG 15															48.31
SDG 18							Target 8.7 has been addressed in SDG 18											148.26
SDG 17																		1.59
<b>Additional Synchronized Cost (Billion BDT in current prices)</b>	<b>183.44</b>	<b>165.74</b>	<b>440.07</b>	<b>419.91</b>	<b>94.10</b>	<b>104.83</b>	<b>154.32</b>	<b>2,354.11</b>	<b>561.92</b>	<b>49.86</b>	<b>29.15</b>	<b>3.31</b>	<b>860.51</b>	<b>88.38</b>	<b>48.31</b>	<b>148.26</b>	<b>1.59</b>	<b>1,59</b>

Total Un-synchronized cost at current prices = Billion BDT 7,521.06  
 Total Synchronized cost at current prices = Billion BDT 5,728.03  
 Total Un-synchronized cost at 2015-16 constant prices = Billion BDT 5,716.63  
 Total Synchronized cost at 2015-16 constant prices = Billion BDT 4,353.79  
 The ratio of Synchronized cost to Un-synchronized cost = 0.76

Source: GED estimates

Annex 18.6: Additional Unsynchronized and Synchronized SDGs Costs in FY 2022 (in Billion BDT)

SDGs	SDG 1	SDG 2	SDG 3	SDG 4	SDG 5	SDG 6	SDG 7	SDG 8	SDG 9	SDG 10	SDG 11	SDG 12	SDG 13	SDG 14	SDG 15	SDG 16	SDG 17	Unsynchronized SDG Costs (Billion BDT in current prices)
SDG 1	208.02				Target 5.4 has been addressed in SDG 1													208.02
SDG 2		102.58				Target 6.4 (partially) has been covered by SDG 2												102.58
SDG 3			582.25					71.41										582.25
SDG 4				561.05														562.46
SDG 5					93.00													99.00
SDG 6						100.41												100.41
SDG 7							152.34	179.90										150.41
SDG 8	Target 1.2 has been taken care of in target 8.1							2,970.09										2,970.09
SDG 9							Target 7.5 has been covered by SDG 3	3,494.98	640.70								Target 17.11 has been covered by SDG 9	2,135.68
SDG 10										56.62							Target 17.3 (partially) & Target 17.16 has been covered by SDG 10	56.62
SDG 11			Target 3.6 has been covered in SDG 11							33.28								33.28
SDG 12											3.31						Target 17.7 has been covered by SDG 12	133.58
SDG 13	Target 1.3 has been covered in SDG 13							130.27										998.50

SDGs	SDG 1	SDG 2	SDG 3	SDG 4	SDG 5	SDG 6	SDG 7	SDG 8	SDG 9	SDG 10	SDG 11	SDG 12	SDG 13	SDG 14	SDG 15	SDG 16	SDG 17	Unsynchronized Total Additional Cost (Billion BDT in current prices)	
SDG 14		Target 3.9 has been achieved in SDG 14	Target 6.4 (partially), 6.6 & 6.a have been covered by SDG 14											95.95		Target 17.6 has been partially covered by SDG 14		95.95	
SDG 15		Target 3.9 has been achieved in SDG 15													51.65				51.65
SDG 16							Target 8.7 has been addressed in SDG 16						179.33			Target 17.3 & 17.8 has been covered by SDG 16		179.33	
SDG 17 Synchronized Additional Cost (Billion BDT in current prices)	208.82	165.58	382.25	941.05	99.00	100.41	182.34	2,970.09	640.70	56.62	33.28	3.31	998.50	95.95	51.65	179.33	1.87		1.87

Total Unsynchronized cost at current prices = Billion BDT 8,935.23  
 Total Synchronized cost at current prices = Billion BDT 6,909.77  
 Total Unsynchronized cost at 2015-16 constant prices = Billion BDT 6,455.82  
 Total Synchronized cost at 2015-16 constant prices = Billion BDT 4,992.41  
 The ratio of Synchronized cost to Unsynchronized cost = 0.77  
 Source: GED estimates

### Annex 18.7: Additional Unsynchronized and Synchronized SDGs Costs in FY 2023 (in Billion BDT)

SDG	SDG 1	SDG 2	SDG 3	SDG 4	SDG 5	SDG 6	SDG 7	SDG 8	SDG 9	SDG 10	SDG 11	SDG 12	SDG 13	SDG 14	SDG 15	SDG 16	SDG 17	Unsynchronized Total (Additional Cost) (BDT in constant prices)
SDG 1	235.90				Target 5.4 has been addressed in SDG 1													235.90
SDG 2		165.43			Target 6.4 (partially) has been covered by SDG 2													165.43
SDG 3			734.63															734.63
SDG 4				732.38				22.48										754.87
SDG 5					104.05													104.05
SDG 6						103.95												103.95
SDG 7							120.62		298.33									548.74
SDG 8	Target 2.2 has been addressed in SDG 8									3,719.39								3,719.39
SDG 9	Target 9.1									1,707.37								2,439.10
SDG 10							Target 7.9 has been covered by SDG 9											Target 17.11 has been covered by SDG 9
SDG 10																		Target 17.16 (partially) & Target 17.16 has been covered by SDG 10
SDG 11																		64.33
SDG 11										64.33								64.33
SDG 12																		Target 17.7 has been covered by SDG 12
SDG 12																		37.74
SDG 12																		37.74
SDG 13																		3.31
SDG 13																		3.31
SDG 15	Target 1.5 has been addressed in SDG 15																	1,132.30
SDG 15																		1,132.30

SDG	SDG 1	SDG 2	SDG 3	SDG 4	SDG 5	SDG 6	SDG 7	SDG 8	SDG 9	SDG 10	SDG 11	SDG 12	SDG 13	SDG 14	SDG 15	SDG 16	SDG 17	Un-synchronized Total (Million of Constant BDT in constant prices)	
SDG 14			Target 1.3 has been covered in SDG 14			Targets 6.4 (partially), 6.5 & 6.6 have been covered by SDG 14								104.11				Target 17.6 has been partially covered by SDG 14	104.11
SDG 15			Target 1.3 has been partially covered in SDG 15													55.00			55.00
SDG 16							Target 8.7 has been addressed in SDG 16											Targets 17.1 & 17.8 has been covered by SDG 16	213.22
SDG 17																			1.76
<b>Synchronized Total</b>																			
<b>Additional Cost (Billion BDT in current prices)</b>	235.90	165.43	754.63	731.38	104.05	103.95	176.62	3,718.38	731.73	64.33	37.74	3.31	1,132.20	104.11	55.00			1.76	1.76

Total Un-synchronized cost at current prices = Billion BDT 10,623.31

Total Synchronized cost at current prices = Billion BDT 8,329.86

Total Un-synchronized cost at 2015-16 constant prices = Billion BDT 7,303.04

Total Synchronized cost at 2015-16 constant prices = Billion BDT 5,726.40

The ratio of Synchronized cost to Un-synchronized cost = 0.78

Source: GED estimates



Annex 18.8: Additional Unsynchronized and Synchronized SDGs Costs in FY 2024 (in Billion BDT)

SDG	SDG 1	SDG 2	SDG 3	SDG 4	SDG 5	SDG 6	SDG 7	SDG 8	SDG 9	SDG 10	SDG 11	SDG 12	SDG 13	SDG 14	SDG 15	SDG 16	SDG 17	Unsynchronized Total (in Billion BDT in current prices)
SDG 1	207.51				Target 5.A has been addressed in SDG 1													207.51
SDG 2		165.27																165.27
SDG 3			962.76															962.76
SDG 4				939.45			33.57											963.02
SDG 5					109.75													109.75
SDG 6						107.60												107.60
SDG 7							179.15		418.00									597.18
SDG 8	Target 1.2 has been addressed in SDG 8							4,627.67										4,627.67
SDG 9							Target 7.B has been covered by SDG 9	1,952.67	886.46								Target 17.11 has been covered by SDG 9	2,789.53
SDG 10										73.12								73.12
SDG 11			Target 1.6 has been addressed in SDG 11								42.80							42.80
SDG 12								708.35				3.31					Target 17.7 has been covered by SDG 12	211.46
SDG 13													1,284.03					1,284.03

SDGs	SDG 1	SDG 2	SDG 3	SDG 4	SDG 5	SDG 6	SDG 7	SDG 8	SDG 9	SDG 10	SDG 11	SDG 12	SDG 13	SDG 14	SDG 15	SDG 17	Un-synchronized Total Additional Cost (Billion BDT in current prices)
SDG 14		Target 14.1 has been partially covered in SDG 14				Targets 6.4 (partially), 6.6 & 6.1a have been partially covered in SDG 14							112.89			Target 17.6 has been partially covered in SDG 14	112.89
SDG 15		Target 15.9 has been partially covered in SDG 15													58.37		58.37
SDG 16								Target 8.7 has been partially covered in SDG 16								Targets 17.1 & 17.8 has been covered in SDG 16	250.02
SDG 17																	1.85
<b>Total Synchronized Additional Cost (Billion BDT in current prices)</b>	<b>267.51</b>	<b>165.27</b>	<b>962.76</b>	<b>939.46</b>	<b>109.25</b>	<b>107.60</b>	<b>179.15</b>	<b>4,627.67</b>	<b>836.46</b>	<b>73.12</b>	<b>42.80</b>	<b>3.31</b>	<b>1,284.03</b>	<b>112.89</b>	<b>58.37</b>	<b>250.02</b>	<b>1.85</b>

Total Un-synchronized cost at current prices = Billion BDT 12,624.52  
 Total Synchronized cost at current prices = Billion BDT 10,021.91  
 Total Un-synchronized cost at 2015-16 constant prices = Billion BDT 8,265.52  
 Total Synchronized cost at 2015-16 constant prices = Billion BDT 6,561.53  
 The ratio of Synchronized cost to Un-synchronized cost = 0.79  
 Source: GED estimates

Annex 18.9: Additional Unsynchronized and Synchronized SDGs Costs in FY 2025 (in Billion BDT)

SDGs	SDG 1	SDG 2	SDG 3	SDG 4	SDG 5	SDG 6	SDG 7	SDG 8	SDG 9	SDG 10	SDG 11	SDG 12	SDG 13	SDG 14	SDG 15	SDG 16	SDG 17	Unsynchronized Additional Cost (Billion BDT in current prices)
SDG 1	303.62				Target 5.4 has been addressed in SDG 1													303.62
SDG 2	165.27				Target 6.4 (partially) has been addressed in SDG 2													165.27
SDG 3		1,214.18						24.67										1,214.18
SDG 4			1,109.21															1,109.21
SDG 5				114.71														114.71
SDG 6						111.43												111.43
SDG 7							188.11	438.92										627.04
SDG 8	Target 2.2 has been addressed in SDG 8 Target 8.1							5,729.98										5,729.98
SDG 9							Target 7.b has been covered by SDG 9	2,237.86	959.08								Target 37.15 has been covered by SDG 9	3,196.94
SDG 10										83.33							Target 17.6 (partially) has been covered by SDG 10 & Target 17.16 has been covered by SDG 10	83.33
SDG 11			Target 3.6 has been addressed in SDG 11								48.58							48.58
SDG 12								265.59				3.31					Target 12.7 has been covered by SDG 12	263.89
SDG 13	Target 1.5 has been addressed in SDG 13												1,457.38					1,457.38

SDGs	SDG 1	SDG 2	SDG 3	SDG 4	SDG 5	SDG 6	SDG 7	SDG 8	SDG 9	SDG 10	SDG 11	SDG 12	SDG 13	SDG 14	SDG 15	SDG 16	SDG 17	Un-synchronized cost (Billion BDT in current prices)
SDG 14		Target 3.9 has been partially covered in SDG 14				Targets 6.4 (quarterly), 6.6 & 6.4 have been covered by SDG 14							122.29				Target 17.6 has been partially covered by SDG 14	222.29
SDG 15		Target 3.9 has been partially covered in SDG 15													61.75			61.75
SDG 16							Target 8.7 has been addressed in SDG 16										Targets 17.1 & 17.8 has been covered by SDG 16	289.88
SDG 17																		1.95
<b>Synchronized Additional Cost (Billion BDT in current prices)</b>	<b>803.82</b>	<b>165.27</b>	<b>1,214.18</b>	<b>1,189.81</b>	<b>114.71</b>	<b>111.43</b>	<b>188.11</b>	<b>5,728.98</b>	<b>919.68</b>	<b>83.33</b>	<b>48.58</b>	<b>3.31</b>	<b>1,457.38</b>	<b>122.29</b>	<b>61.75</b>	<b>289.88</b>	<b>1.95</b>	<b>3,457.38</b>

Total Un-synchronized cost at current prices = Billion BDT 15,006.67  
 Total Synchronized cost at current prices = Billion BDT 12,044.63  
 Total Un-synchronized cost at 2015-16 constant prices = Billion BDT 9,357.30  
 Total Synchronized cost at 2015-16 constant prices = Billion BDT 7,510.33  
 The ratio of Synchronized cost to Un-synchronized cost = 0.80  
 Source: GED estimates

Annex 18.10: Additional Unsynchronized and Synchronized SDGs Costs in FY 2026 (in Billion BDT)

SDG	SDG1	SDG2	SDG3	SDG4	SDG5	SDG6	SDG7	SDG8	SDG9	SDG10	SDG11	SDG12	SDG13	SDG14	SDG15	SDG16	SDG17	Unsynchronized Total Additional Cost (Billion BDT in current prices)
SDG1	344.61																	344.61
SDG2		154.86				Target 6.4 (partially) has been covered by SDG 2												154.86
SDG3			1,412.53															1,412.53
SDG4				1,339.53				23.89										1,339.53
SDG5					120.11													120.11
SDG6						120.93												120.93
SDG7							197.33											197.33
SDG8	Target 1.2 has been taken care of by target 8.1							7,059.18										7,059.18
SDG9								2,563.87	1,098.72								Target 17.11 has been covered by SDG 9	3,662.59
SDG10										95.05							Target (partially) 17.6 Target 17.11 has been covered by SDG 10	95.05
SDG11			Target 3.6 has been addressed if in SDG 11								55.14							55.14

	SDG 6	SDG 7	SDG 8	SDG 9	SDG 10	SDG 11	SDG 12	SDG 13	SDG 14	SDG 15	SDG 16	SDG 17	Unsynchro- nized Total Additional Cost (billion BDT in current prices)
SDG 6													506.17
SDG 7			321.79				3.30						Target 37.2 has been covered by SDG 17
SDG 8								1,723.04					1,723.04
SDG 9									132.37				Target 37.6 has been partially covered by SDG 14
SDG 10										62.53			62.53
SDG 11													Target 17.1 & 17.8 has been covered by SDG 16
SDG 12													Target 2.05
SDG 13	Target 1.5 has been addressed in SDG 13												327.09
SDG 14		Target 3.9 has been partially covered in SDG 14	Target 6.4 (quarterly), 6.6 & 6.4 have been covered by SDG 14										112.37
SDG 15		Target 3.9 has been partially covered in SDG 15											62.53
SDG 16			Target 8.7 has been addressed in SDG 16										332.88
SDG 17													2.05
Additional Cost (billion BDT in current prices)	344.81	156.86	1,412.55	1,359.53	120.33	100.91	197.33	7,059.18	1,088.72	95.05	55.14	3.30	1,723.04
Total													332.88
Total Synchronized cost at current prices													42.53
Total Synchronized cost at 2015-16 constant prices													332.88
Total Unsynchronized cost at current prices													2.05
Total Unsynchronized cost at 2015-16 constant prices													2.05

Total Unsynchronized cost at current prices = Billion BDT 17,630.05  
 Total Synchronized cost at current prices = Billion BDT 14,256.36  
 Total Unsynchronized cost at 2015-16 constant prices = Billion BDT 10,479.58  
 Total Synchronized cost at 2015-16 constant prices = Billion BDT 8,474.20  
 The ratio of Synchronized cost to Unsynchronized cost = 0.81

Source: GED estimates

## Annex 18.11: Additional Unsynchronized and Synchronized SDGs Costs in FY 2027 (in Billion BDT)

SDGs	SDG 1	SDG 2	SDG 3	SDG 4	SDG 5	SDG 6	SDG 7	SDG 8	SDG 9	SDG 10	SDG 11	SDG 12	SDG 13	SDG 14	SDG 15	SDG 16	SDG 17	Unsynchronized Total Additional Costs in Billion BDT in current prices)
SDG 1	391.48				Target 5.4 has been addressed in SDG 1													391.48
SDG 2		148.60				Target 6.4 (partially) has been covered by SDG 2												148.60
SDG 3			1,643.81					74.95										1,643.81
SDG 4				1,554.41														1,554.41
SDG 5					136.23													136.23
SDG 6						105.05												105.05
SDG 7							207.00		483.99									689.99
SDG 8								8,664.87										8,664.87
SDG 9									1,262.80								Target 17.11 has been covered by SDG 9	4,209.35
SDG 10										108.70							Target 17.16 (partially) & Target 17.16 has been covered by SDG 10	108.70
SDG 11											62.64						Target 17.7 has been covered by SDG 11	62.64
SDG 12								499.37			3.30						Target 17.7 has been covered by SDG 12	499.37
SDG 13												1,957.38						1,957.38

	SDG 1	SDG 2	SDG 3	SDG 4	SDG 5	SDG 6	SDG 7	SDG 8	SDG 9	SDG 10	SDG 11	SDG 12	SDG 13	SDG 14	SDG 15	SDG 16	SDG 17	Unsynchronized Total Additional Cost (Billion BDT in current prices)
SDG 14			Target 3.9 has been partially covered in SDG 14			Targets 6.4 (partially), 6.6 & 6.8 have been partially covered by SDG 14								143.18			Target 17.6 has been partially covered by SDG 14	143.18
SDG 15			Target 3.9 has been partially covered in SDG 15												65.82			65.82
SDG 16							Target 8.7 has been addressed in SDG 16										Targets 17.1 & 17.2 have been covered by SDG 16	379.21
SDG 17																	2.15	2.15
<b>Synchronized Total Additional Cost (Billion BDT in current prices)</b>	<b>391.48</b>	<b>148.60</b>	<b>1,443.81</b>	<b>1,554.81</b>	<b>126.23</b>	<b>105.05</b>	<b>207.00</b>	<b>8,664.87</b>	<b>1,262.80</b>	<b>108.70</b>	<b>62.64</b>	<b>3.30</b>	<b>1,907.38</b>	<b>143.18</b>	<b>65.82</b>	<b>379.21</b>	<b>2.15</b>	<b>143.18</b>

Total Unsynchronized cost at current prices = Billion BDT 20,683.67

Total Synchronized cost at current prices = Billion BDT 16,826.80

Total Unsynchronized cost at 2015-16 constant prices = Billion BDT 11,720.40

Total Synchronized cost at 2015-16 constant prices = Billion BDT 9,534.90

The ratio of Synchronized cost to Unsynchronized cost = 0.81

Source: GED estimates



Annex 18.12: Additional Unsyncronized and Synchronized SDGs Costs in FY 2028 (in Billion BDT)

SDG	SDG 1	SDG 2	SDG 3	SDG 4	SDG 5	SDG 6	SDG 7	SDG 8	SDG 9	SDG 10	SDG 11	SDG 12	SDG 13	SDG 14	SDG 15	SDG 16	SDG 17	Unsyncronized Total Additional Cost (Billion BDT in current prices)
SDG 1	444.72				Target 5.4 has been addressed in SDG 1													444.72
SDG 2	140.21					Target 6.4 (partially) has been covered by SDG 2												140.21
SDG 3		1,931.83																1,931.83
SDG 4		1,777.44						28.11										1,805.55
SDG 5					332.29													332.29
SDG 6						109.30												109.30
SDG 7							215.93		506.18									723.11
SDG 8	Target 1.2 has been addressed in SDG 8 Target 8.1							10,393.37										10,393.37
SDG 9								1,388.80	1,452.34								Target 17.11 has been covered by SDG 9	4,841.14
SDG 10										124.44							Target 17.10 has been covered by SDG 10	124.44
SDG 11											71.15							71.15
SDG 12								492.57				3.30					Target 12.7 has been covered by SDG 12	495.87
SDG 13	Target 1.3 has been addressed in SDG 13												2,233.58					2,233.58

SDGs	SDG 1	SDG 2	SDG 3	SDG 4	SDG 5	SDG 6	SDG 7	SDG 8	SDG 9	SDG 10	SDG 11	SDG 12	SDG 13	SDG 14	SDG 15	SDG 16	SDG 17	Unsynchronized Total Additional Cost (Billion BDT in current prices)
SDG 14			Target 3.9 has been partially covered in SDG 14			Targets 6.4 (partially), 6.6 & 6.a have been covered by SDG 14							134.89				Target 17.6 has been partially covered by SDG 14	154.89
SDG 15			Target 3.9 has been partially covered in SDG 15												69.10			69.10
SDG 16							Target 8.7 has been addressed in SDG 16									428.97	Targets 17.1 & 17.6 has been covered by SDG 16	428.97
SDG 17																		2.26
Unsynchronized Total Additional Cost (Billion BDT in current prices)	444.72	146.21	1,911.83	1,777.44	132.29	109.30	216.93	10,597.57	1,452.34	194.44	71.15	3.30	2,223.58	154.89	69.10	428.97	2.26	2.26

Total Unsynchronized cost at current prices = Billion BDT 24,270.99  
 Total Synchronized cost at current prices = Billion BDT 19,855.34  
 Total Unsynchronized cost at 2015-16 constant prices = Billion BDT 13,123.22  
 Total Synchronized cost at 2015-16 constant prices = Billion BDT 10,735.71  
 The ratio of Synchronized cost to Unsynchronized cost = 0.82

Source: GED estimates

Annex 18.13: Additional Unsynchronized and Synchronized SDGs Costs in FY 2029 (in Billion BDT)

	5001	5002	5003	5004	5005	5006	5007	5008	5009	5010	5011	5012	5013	5014	5015	5016	50017	Unsynchronized Cost (Billion BDT in current prices)
5001	505.64				Target 5.4 has been addressed in 500 1													505.64
5002		131.96				Target 6.4 has been addressed in 500 2												131.96
5003			2,224.32															2,224.32
5004			2,033.73					29.28										2,063.02
5005					138.63													138.64
5006						313.75												313.75
5007							227.35		330.87									757.82
5008	Target 1.2 has been addressed in 500 8 of by Target 5.1							12,912.27										12,912.27
5009								3,803.13	1,622.27									5,575.90
5010										142.84								142.84
5011											80.90							80.90
5012												3.30						607.08
5013	Target 1.5 has been addressed in 500 13							603.79					2,538.21					2,538.21

SDG	SDG 1	SDG 2	SDG 3	SDG 4	SDG 5	SDG 6	SDG 7	SDG 8	SDG 9	SDG 10	SDG 11	SDG 12	SDG 13	SDG 14	SDG 15	SDG 16	SDG 17	Unsynchronized Total Additional Cost (Billion BDT in current prices)
SDG 14			Target 13.9 has been partially covered in SDG 14			Targets 6.4 (partially), 6.6 & 6.a have been covered by SDG 14								163.78			Target 17.6 has been partially covered by SDG 14	163.78
SDG 15			Target 13.9 has been partially covered in SDG 15												72.40			72.40
SDG 16							Target 8.7 has been addressed in SDG 16										Target 17.1 & 17.6 has been covered by SDG 16	482.43
SDG 17																		2.37
<b>Total Additional Cost (Billion BDT in current prices)</b>	<b>505.64</b>	<b>131.96</b>	<b>2,224.32</b>	<b>2,033.73</b>	<b>136.64</b>	<b>113.75</b>	<b>277.35</b>	<b>12,912.27</b>	<b>1,672.77</b>	<b>162.84</b>	<b>60.90</b>	<b>3.30</b>	<b>2,528.21</b>	<b>163.78</b>	<b>71.40</b>	<b>482.43</b>	<b>2.37</b>	

Total Unsynchronized cost at current prices = Billion BDT 28,503.34  
 Total Synchronized cost at current prices = Billion BDT 23,436.67  
 Total Unsynchronized cost at 2015-16 constant prices = Billion BDT 14,705.76  
 Total Synchronized cost at 2015-16 constant prices = Billion BDT 12,091.71  
 The ratio of Synchronized cost to Unsynchronized cost = 0.82

Source: GED estimates

Annex 18.14: Additional Unsynchronized and Synchronized SDGs Costs in FY2030 (in Billion BDT)

SDG	SDG 1	SDG 2	SDG 3	SDG 4	SDG 5	SDG 6	SDG 7	SDG 8	SDG 9	SDG 10	SDG 11	SDG 12	SDG 13	SDG 14	SDG 15	SDG 16	SDG 17	Unsynchronized by FY2030 Cost (Billion BDT in current prices)
SDG 1	574.92				Target 5.4 has been addressed in SDG 1													574.92
SDG 2		173.60				Target 6.4 has been addressed in SDG 2												173.60
SDG 3			2,536.54															2,536.54
SDG 4			2,320.67					30.48										2,357.15
SDG 5					145.15													145.15
SDG 6						118.32												118.32
SDG 7							218.03		555.41									793.44
SDG 8	Target 1.2 has been addressed in SDG 8 by Target 8.1							15,686.85										15,686.85
SDG 9							Target 7.8 has been covered by SDG 9	4,497.48	3,927.49								Target 17.11 has been covered by SDG 9	6,424.97
SDG 10										144.09								144.09
SDG 11			Target 3.6 has been addressed in SDG 11								91.99							91.99
SDG 12								737.11				3.30					Target 17.7 has been covered by SDG 12	740.41
SDG 13	Target 1.3 has been addressed in SDG 13												2,874.58					2,874.58

SOGs	SOG 1	SOG 2	SOG 3	SOG 4	SOG 5	SOG 6	SOG 7	SOG 8	SOG 9	SOG 10	SOG 11	SOG 12	SOG 13	SOG 14	SOG 15	SOG 16	SOG 17	Unsynchronized Total Additional Cost (Billion BDT in current prices)
SOG 14			Target 1.9 has been partially covered in SOG 14			Targets 6.4 (partially), 6.8 & 6.9 have been covered in SOG 14							181.26				Target 17.6 has been partially covered by SOG 16	181.26
SOG 15			Target 1.9 has been partially covered in SOG 15												75.71			75.71
SOG 16								Target 8.7 has been approved in SOG 16									Targets 17.1 & 17.8 has been covered by SOG 16	519.72
SOG 17																		2.49
Synchronized Total Additional Cost (Billion BDT in current prices)	574.92	123.60	2,386.54	2,326.67	145.15	118.32	218.03	15,686.85	1,977.49	164.09	91.99	3.30	2,874.58	181.26	75.71	539.72	2.49	

Total Unsynchronized cost at current prices = Billion BDT 33,481.18  
 Total Synchronized cost at current prices = Billion BDT 27,660.70  
 Total Unsynchronized cost at 2015-16 constant prices = Billion BDT 16,498.56  
 Total Synchronized cost at 2015-16 constant prices = Billion BDT 13,630.40  
 The ratio of Synchronized cost to Unsynchronized cost = 0.83

Source: GED estimates

## Annex 19.1: Summary of Total Additional Unsynchronized SDGs Cost

SDG/Financial Year	In Current Prices (Billion BDT)															
	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total	
5001	110.93	125.79	142.52	161.76	185.44	208.02	235.90	267.51	303.62	344.61	391.48	444.72	505.64	574.92	6,000.85	
5002	337.40	366.84	416.67	466.06	515.74	565.58	615.43	665.27	715.12	765.06	814.90	864.74	914.58	964.42	11,885.20	
5003	55.35	325.67	213.64	323.33	440.07	545.25	754.63	962.76	1,214.18	1,472.55	1,668.81	1,911.83	2,224.32	2,586.54	18,450.98	
5004	55.46	40.14	75.60	81.73	89.37	94.10	99.00	104.26	109.75	114.73	120.33	125.23	131.29	138.64	1,451.15	
5005	131.38	136.91	142.53	101.51	104.83	107.60	101.95	107.60	111.43	100.91	105.05	109.30	113.75	118.34	1,533.55	
5006	413.27	438.07	461.04	488.50	512.89	541.14	569.74	597.18	624.04	650.76	680.99	713.11	752.82	791.44	8,707.89	
5008	404.50	498.67	1,071.76	1,249.70	1,354.11	1,370.09	1,370.09	1,370.09	1,370.09	1,370.09	1,370.09	1,370.09	1,370.09	1,370.09	13,608.35	
5009	825.48	951.38	1,089.23	1,245.50	1,417.50	1,603.50	1,809.51	2,035.51	2,281.51	2,537.51	2,803.51	3,079.51	3,365.51	3,661.51	41,246.11	
5010	171.78	171.78	171.78	171.78	171.78	171.78	171.78	171.78	171.78	171.78	171.78	171.78	171.78	171.78	1,717.80	
5011	31.98	31.98	31.98	31.98	31.98	31.98	31.98	31.98	31.98	31.98	31.98	31.98	31.98	31.98	319.80	
5012	11.98	25.45	41.90	60.10	100.78	131.58	164.79	211.86	263.89	321.69	386.47	458.24	537.00	622.74	4,807.79	
5013	31.98	31.98	31.98	31.98	31.98	31.98	31.98	31.98	31.98	31.98	31.98	31.98	31.98	31.98	319.80	
5014	63.57	68.71	74.65	81.33	88.88	96.95	104.13	112.89	122.28	132.07	143.18	154.49	163.78	171.58	2,874.58	
50013	63.57	68.71	74.65	81.33	88.88	96.95	104.13	112.89	122.28	132.07	143.18	154.49	163.78	171.58	19,500.51	
50014	63.57	68.71	74.65	81.33	88.88	96.95	104.13	112.89	122.28	132.07	143.18	154.49	163.78	171.58	19,500.51	
50015	63.57	68.71	74.65	81.33	88.88	96.95	104.13	112.89	122.28	132.07	143.18	154.49	163.78	171.58	19,500.51	
50016	40.52	63.55	90.14	119.93	148.26	179.33	211.22	250.02	289.88	332.88	379.21	426.97	482.43	539.72	6,558.97	
50017	1.77	1.35	1.47	1.50	1.59	1.67	1.76	1.85	1.95	2.05	2.15	2.26	2.37	2.49	25.67	
Total	2,941.22	3,678.27	4,555.42	5,924.64	7,521.06	8,935.23	10,623.33	12,624.52	15,006.67	17,630.05	20,683.67	24,270.99	28,503.34	33,481.18	196,375.58	

Source: GED estimates

SDG/Financial Year	In Constant 2015-16 Prices (Billion BDT)															
	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total	
5001	104.75	112.27	120.34	129.47	139.41	150.1	162.17	175.14	189.32	204.84	223.83	240.46	260.88	283.3	2,884.5	
5002	448.63	448.63	448.63	448.63	448.63	448.63	448.63	448.63	448.63	448.63	448.63	448.63	448.63	448.63	4,486.30	
5003	52.27	112.17	180.52	258.82	334.69	420.68	518.77	620.34	757.69	879.64	973.46	1031.72	1147.6	1274.57	8,692.01	
5004	52.37	112.17	180.52	258.82	334.69	420.68	518.77	620.34	757.69	879.64	973.46	1031.72	1147.6	1274.57	8,692.01	
5005	71.39	71.53	71.53	71.53	71.53	71.53	71.53	71.53	71.53	71.53	71.53	71.53	71.53	71.53	818.12	
5006	124.06	122.21	120.34	81.25	79.68	72.55	71.46	70.45	69.48	59.98	59.53	58.69	58.3	57.08	1,107.08	
5007	180.25	300.99	300.99	300.99	300.99	300.99	300.99	300.99	300.99	300.99	300.99	300.99	300.99	300.99	3,009.90	
5008	361.96	621.79	906.67	1,480.44	1,789.33	2,145.93	2,526.91	3,029.82	3,572.88	4,196.08	4,909.94	5,727.36	6,661.87	7,720.03	45,711.01	
5009	779.49	848.84	917.2	996.7	1,073.69	1,154.06	1,245.36	1,346.36	1,452.36	1,564.36	1,682.36	1,806.36	1,936.36	2,072.36	17,608.36	
5010	26.44	30.27	32.5	35.14	37.9	40.92	44.22	47.87	51.96	56.5	61.59	67.28	73.7	80.86	809.15	
50011	16.76	17.97	19.25	20.71	22.31	24.05	25.94	28.02	30.29	32.78	35.47	38.47	41.74	45.31	469.12	
50012	41.81	41.81	41.81	41.81	41.81	41.81	41.81	41.81	41.81	41.81	41.81	41.81	41.81	41.81	418.10	
50013	481.84	516.46	553.59	621.46	778.4	969.26	1,214.53	1,504.23	1,844.53	2,234.53	2,674.53	3,164.53	3,704.53	4,294.53	29,999.02	
50014	60.03	61.33	62.86	65.09	68.13	71.87	76.31	81.53	87.45	94.06	101.46	109.74	118.93	129.03	1,214.93	
50015	34.33	35.3	36.34	37.18	38.22	39.5	41.02	42.72	44.6	46.67	48.93	51.37	53.97	56.72	518.19	
50016	38.26	56.72	76.11	95.99	112.69	129.57	146.58	163.69	180.75	197.87	214.88	231.94	248.9	265.96	2,159.92	
50017	1.2	1.2	1.2	1.21	1.21	1.21	1.21	1.21	1.22	1.22	1.22	1.22	1.22	1.22	12.20	
Total	2,777.15	3,282.93	3,846.55	4,741.91	5,716.63	6,855.82	8,201.04	9,856.52	11,720.58	13,809.58	16,172.64	18,925.76	22,112.27	25,840.56	182,748.56	

Source: GED estimates

In Constant 2015-16 Prices (Billion USD)

SDG/Head Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total
SDG1	1.29	1.18	1.39	1.46	1.51	1.60	1.68	1.77	1.87	1.97	2.09	2.21	2.34	2.49	25.02
SDG2	1.83	1.78	1.83	1.49	1.58	1.27	1.18	1.09	1.02	0.90	0.79	0.70	0.61	0.53	15.23
SDG3	0.65	1.14	2.09	2.71	1.66	4.68	3.18	4.18	4.97	6.09	8.78	9.90	10.90	11.19	82.17
SDG4	0.69	0.84	0.99	0.71	0.58	0.76	0.74	0.72	0.77	0.93	0.67	0.64	0.45	0.29	14.13
SDG5	1.53	1.46	1.39	0.51	0.87	0.77	0.74	0.71	0.69	0.58	0.56	0.54	0.53	0.51	11.89
SDG7	4.82	4.67	4.53	4.40	4.28	4.16	4.06	3.96	3.86	3.77	3.68	3.59	3.51	3.43	54.68
SDG8	4.72	7.82	10.50	16.05	19.37	22.85	26.52	30.65	35.25	40.41	46.16	52.61	59.79	67.85	460.95
SDG9	9.62	10.13	10.62	11.21	11.57	16.43	17.10	18.48	19.67	20.96	22.42	24.05	25.82	27.79	250.17
SDG10	0.35	0.36	0.38	0.40	0.41	0.44	0.46	0.48	0.51	0.54	0.58	0.62	0.66	0.71	6.90
SDG11	0.21	0.21	0.22	0.23	0.24	0.26	0.27	0.29	0.30	0.32	0.33	0.35	0.37	0.40	4.00
SDG12	0.14	0.27	0.42	0.72	0.87	1.03	1.20	1.40	1.62	1.87	2.15	2.46	2.81	3.20	29.18
SDG13	5.95	6.17	6.41	6.99	7.32	7.68	8.07	8.50	8.97	9.86	10.43	11.04	11.71	12.43	121.53
SDG14	0.74	0.73	0.73	0.73	0.73	0.74	0.74	0.75	0.76	0.76	0.76	0.77	0.76	0.78	10.48
SDG15	0.42	0.42	0.42	0.40	0.40	0.40	0.39	0.39	0.38	0.36	0.35	0.34	0.34	0.33	5.36
SDG16	0.47	0.48	0.88	1.08	1.23	1.38	1.52	1.66	1.78	1.91	2.02	2.13	2.23	2.33	21.81
SDG17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.18
<b>Total</b>	<b>34.29</b>	<b>39.19</b>	<b>44.53</b>	<b>51.33</b>	<b>62.52</b>	<b>68.73</b>	<b>75.76</b>	<b>83.62</b>	<b>92.32</b>	<b>100.92</b>	<b>110.19</b>	<b>120.55</b>	<b>131.98</b>	<b>144.83</b>	<b>1162.76</b>

Source: GED estimates



### Annex 19.2: Summary of Total Additional Synchronized SDGs Cost

In Current Prices (Billion BDT)

SDG/Fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	Total
SDG1	113.93	125.79	141.52	161.78	183.84	208.03	235.90	267.51	301.62	344.61	391.48	444.72	2,900.85
SDG2	107.57	117.57	129.57	143.57	159.57	177.57	197.57	219.57	243.57	269.57	298.57	329.57	2,000.85
SDG3	54.15	57.57	61.57	66.57	71.57	77.57	84.57	92.57	101.57	111.57	122.57	134.57	844.57
SDG4	59.15	62.57	66.57	71.57	77.57	84.57	92.57	101.57	111.57	122.57	134.57	147.57	944.57
SDG5	38.15	40.57	43.57	47.57	51.57	56.57	62.57	69.57	77.57	86.57	96.57	107.57	644.57
SDG6	80.14	84.71	89.37	94.10	98.93	104.05	109.35	114.73	120.33	126.23	132.39	138.64	845.15
SDG7	131.38	136.13	141.02	146.15	151.51	157.11	162.94	168.91	175.03	181.31	187.74	194.31	1,187.89
SDG8	982.50	1,148.79	1,538.54	2,369.84	3,070.35	3,773.13	4,621.74	5,643.68	6,877.17	8,395.22	10,134.67	12,201.85	14,812.39
SDG9	30.12	31.92	38.49	43.80	49.86	56.62	64.33	73.12	83.33	95.05	108.70	124.64	744.84
SDG10	37.75	20.13	22.80	25.48	29.35	33.38	37.74	42.40	48.58	55.14	62.64	71.15	402.90
SDG11	1.97	2.09	2.08	2.08	3.31	3.31	3.31	3.31	3.31	3.31	3.30	3.30	31.25
SDG13	3,102.27	3,786.65	4,556.61	5,476.47	6,602.51	7,968.50	9,572.03	11,407.38	13,571.04	15,977.38	18,723.58	22,024.21	2,874.58
SDG14	63.57	68.71	74.44	81.33	88.38	95.95	104.11	112.89	122.29	132.37	143.18	154.89	983.76
SDG15	36.36	39.55	43.04	46.43	48.31	51.65	55.00	58.37	61.75	65.13	68.52	71.90	481.26
SDG16	40.52	63.55	90.14	119.91	148.26	179.33	213.22	250.02	289.88	332.48	379.21	428.97	2,824.97
SDG17	1.27	1.35	1.42	1.50	1.59	1.67	1.85	1.95	2.05	2.15	2.26	2.37	24.97
Total	2,254.35	2,686.47	3,411.89	4,413.67	5,728.09	7,409.77	9,429.86	12,004.61	15,256.16	19,626.90	25,055.34	31,436.67	27,660.70
Cont-GDP Ratio (Projected GDP Growth)	10.2	10.7	12.0	14.3	15.6	16.6	17.7	18.7	19.8	20.7	21.3	22.1	24.1
Cont-GDP Ratio (Real GDP Growth)	18.2	10.7	12.1	14.5	16.1	17.3	18.6	20.0	21.6	22.7	23.9	25.2	28.1

Source: GED estimates

In Constant 2015-16 Prices (Billion BDT)

SDG/Fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	Total
SDG1	104.25	112.27	120.34	129.63	139.41	150.10	162.17	175.14	189.33	204.84	221.63	240.46	2,084.50
SDG2	148.63	168.51	180.48	195.91	215.98	239.63	266.93	297.00	329.93	365.74	405.41	448.84	2,824.27
SDG3	52.37	55.16	58.40	62.82	67.44	72.24	77.30	82.71	88.46	94.54	100.96	107.72	649.61
SDG4	57.17	60.95	65.13	69.50	74.07	78.84	83.90	89.26	94.91	100.84	107.04	113.57	717.63
SDG5	71.59	75.53	79.53	83.52	87.52	91.53	95.53	99.53	103.53	107.53	111.53	115.53	797.63
SDG6	124.06	122.23	120.34	118.25	116.08	113.78	111.46	109.05	106.48	103.88	101.23	98.50	649.61
SDG7	134.06	152.77	179.91	238.75	313.71	409.05	528.24	674.20	860.67	1,084.20	1,350.93	1,671.33	1,913.27
SDG8	28.44	30.27	32.50	35.14	37.90	40.91	44.22	47.87	51.96	56.50	61.59	67.28	402.86
SDG9	16.76	17.97	19.25	20.71	22.31	24.05	25.94	28.02	30.29	32.78	35.40	38.17	244.88
SDG10	1.86	1.87	1.76	1.66	2.52	2.39	2.28	2.17	2.06	1.96	1.87	1.78	17.51
SDG11	481.84	516.46	553.59	621.46	669.26	721.43	778.80	840.68	908.74	1,024.20	1,109.15	1,202.28	1,348.51
SDG13	60.03	61.33	62.66	65.09	67.18	69.33	71.57	73.91	76.35	78.68	81.13	83.76	545.92
SDG15	34.13	35.30	36.58	37.16	38.72	37.32	37.81	38.22	38.50	37.17	37.30	37.36	37.31
SDG16	38.26	56.72	76.13	95.99	112.69	129.57	146.58	163.69	180.75	207.87	234.88	263.84	2,050.96
SDG17	1.50	1.50	1.50	1.50	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	14.16
Total	2,128.75	2,397.91	2,880.97	3,612.84	4,533.78	5,692.41	7,126.06	8,851.53	10,719.31	12,749.20	15,045.72	17,601.11	18,600.60
Cont-GDP Ratio (Projected GDP Growth)	10.2	10.7	12	14.3	15.6	16.6	17.7	18.8	20.7	21.3	22.1	23.1	24.1
Cont-GDP Ratio (Real GDP Growth)	10.2	10.7	12.1	14.5	16.1	17.3	18.6	20.0	21.6	22.7	23.9	25.2	28.1

Source: GED estimates

In Constant 2015-16 Prices (Billion USD)

SDGs/Fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total
SDG1	1.79	1.34	1.39	1.40	1.52	1.60	1.68	1.77	1.87	1.97	2.09	2.21	2.34	2.49	26.02
SDG2	1.83	1.78	1.63	1.49	1.38	1.27	1.18	1.09	1.02	0.90	0.79	0.70	0.61	0.53	16.21
SDG3	0.65	1.34	2.09	2.91	3.66	4.48	5.38	6.38	7.47	8.09	8.76	9.50	10.30	11.19	82.17
SDG4	0.46	1.16	1.91	2.74	3.49	4.32	5.22	6.22	7.32	7.78	8.28	8.83	9.42	10.06	77.21
SDG5	0.88	0.85	0.83	0.80	0.78	0.76	0.74	0.72	0.71	0.69	0.67	0.66	0.64	0.63	10.37
SDG6	1.53	1.46	1.39	0.91	0.87	0.77	0.74	0.72	0.69	0.58	0.56	0.54	0.53	0.51	11.80
SDG7+8+9	11.45	12.09	15.04	21.31	25.52	29.02	37.98	37.18	42.31	47.81	53.99	60.90	68.59	77.22	535.64
SDG10	0.15	0.36	0.38	0.40	0.41	0.44	0.48	0.48	0.51	0.54	0.58	0.62	0.66	0.71	6.90
SDG11	0.21	0.21	0.22	0.23	0.24	0.26	0.27	0.28	0.30	0.32	0.33	0.35	0.37	0.40	4.00
SDG12	0.02	0.02	0.02	0.02	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.29
SDG13	5.95	8.17	8.41	8.99	7.32	7.68	8.07	8.50	8.97	8.88	10.43	11.04	11.71	12.43	131.53
SDG14	0.18	0.13	0.13	0.13	0.13	0.14	0.14	0.15	0.16	0.16	0.17	0.18	0.18	0.18	10.88
SDG15	0.47	0.62	0.88	1.26	1.32	1.38	1.52	1.66	1.78	1.81	2.02	2.13	2.23	2.31	21.31
SDG16	0.21	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.18
SDG17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.18
<b>Total</b>	<b>26.28</b>	<b>28.62</b>	<b>31.85</b>	<b>41.53</b>	<b>47.62</b>	<b>53.15</b>	<b>59.60</b>	<b>66.38</b>	<b>74.10</b>	<b>81.63</b>	<b>89.64</b>	<b>98.62</b>	<b>108.52</b>	<b>119.65</b>	<b>928.68</b>
Cost-GDP Ratio (Projected GDP Growth)	10.2	10.7	12	14.3	15.6	16.6	17.7	18.7	19.8	20.7	21.5	22.3	23.2	24.1	
Cost-GDP Ratio (BAU GDP Growth)	10.2	10.7	12.1	14.5	16.1	17.3	18.6	20	21.4	22.7	23.9	25.2	26.6	28.1	

Source: GED estimates

Annex 19.3: Projection of Key Macroeconomic Indicators for 2015-2030 Consistent with 7<sup>th</sup> FYP Extended Scenario

Table 1: Key Macroeconomic Indicators, 2015-2030

	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30
	[As Percentage of GDP]															
<b>Real Sector:</b>																
Real GDP growth	6.6	7.0	7.2	7.4	7.6	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	9.0
Inflation (CPI Base)	6.4	6.1	6.0	5.8	5.7	5.5	5.3	5.2	5.1	5.0	5.0	4.9	4.9	4.8	4.8	4.7
Inflation (Deflator Base)	5.9	6.1	5.9	5.8	5.7	5.5	5.3	5.2	5.1	5.0	5.0	4.9	4.9	4.8	4.8	4.7
GDP deflator (Base year=2015=16)	100.0	105.9	112.0	118.4	124.9	131.6	138.4	145.5	152.7	160.4	168.2	176.5	184.9	193.8	202.9	
ICOR	4.4	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
Gross National Savings	29.0	30.3	30.9	31.5	32.3	34.0	34.5	35.0	35.4	35.8	36.4	36.8	37.2	37.6	38.1	38.5
Gross Domestic Savings	27.2	23.9	25.0	25.1	25.6	27.2	27.0	27.6	28.1	28.6	29.2	29.6	30.0	30.4	30.9	31.3
Gross Investment	28.9	30.1	31.0	31.8	32.7	34.4	34.8	35.3	35.7	36.1	36.6	37.0	37.4	37.8	38.3	38.7
Public Investment	6.9	6.4	7.1	7.4	7.6	7.8	7.8	7.8	7.8	7.9	7.9	7.9	7.9	8.0	8.0	8.0
Private Investment	22.0	23.7	23.9	24.4	25.1	26.6	27.0	27.5	27.9	28.2	28.7	29.1	29.5	29.8	30.3	30.7
Foreign Domestic Investment(FDI)	0.9	1.2	1.8	2.2	2.5	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0
Domestic Investment	21.1	22.5	22.1	22.2	22.6	23.6	23.9	24.3	24.6	24.8	25.2	25.5	25.8	26.0	26.4	26.7
Consumption	77.5	75.6	75.0	74.9	74.4	72.8	73.0	72.4	71.9	71.4	70.9	70.4	70.0	69.6	69.1	68.7
Gross national income	105.5	105.9	106.5	106.5	106.7	106.8	107.5	107.4	107.3	107.2	107.2	107.2	107.2	107.2	107.2	107.2
GNI Per Capita (USD)	1289	1366	1516	1659	1813	1988	2191	2401	2634	2894	3186	3513	3876	4264	4740	5253
Population in million	161	163	165	167	169	170	172	174	176	177	179	181	182	184	185	186
Population growth	1.21	1.19	1.18	1.16	1.13	1.10	1.06	1.02	0.99	0.95	0.92	0.88	0.85	0.81	0.78	0.74
<b>Fiscal Indicators:</b>																
Revenue and Grants	9.0	10.5	11.8	12.6	13.6	14.8	15.5	16.0	16.4	16.9	17.2	17.7	18.1	18.5	18.9	19.3
Total Revenue	9.6	10.3	11.4	12.2	13.2	14.4	15.1	15.6	16.1	16.6	17.0	17.4	17.8	18.2	18.6	19.0
Tax Revenue	8.5	9.0	9.4	10.2	11.2	12.4	13.0	13.5	14.0	14.5	14.9	15.3	15.7	16.1	16.5	16.9
NBR Tax Revenue	8.2	8.7	9.0	9.8	10.8	12.0	12.6	13.1	13.6	14.1	14.5	14.9	15.3	15.7	16.1	16.5
Non-NBR Tax Revenue	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Non-Tax Revenue	1.1	1.3	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Grants	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Total Expenditure	14.8	15.3	16.4	17.2	18.2	19.4	20.1	20.6	21.1	21.6	22.0	22.4	22.8	23.2	23.6	24.0
Revenue Expenditure	8.4	9.4	9.9	10.4	11.2	12.4	12.8	13.1	13.5	13.8	14.1	14.4	14.7	14.9	15.2	
Development Expenditure	6.4	5.9	6.5	6.8	7.0	7.2	7.7	7.8	7.9	8.1	8.2	8.3	8.4	8.5	8.7	8.8
Overall Balance (Incl. grants)	-4.9	-4.7	-4.6	-4.6	-4.6	-4.6	-4.6	-4.6	-4.7	-4.7	-4.8	-4.8	-4.8	-4.8	-4.8	-4.8
Financing	4.9	4.7	4.6	4.6	4.6	4.6	4.6	4.6	4.7	4.7	4.8	4.8	4.8	4.8	4.8	4.8
Net External Financing	0.8	1.1	1.0	0.9	0.9	1.1	1.1	1.2	1.3	1.4	1.4	1.4	1.4	1.5	1.5	1.5
Domestic Financing	4.1	3.6	3.6	3.7	3.7	3.5	3.5	3.5	3.5	3.4	3.4	3.4	3.4	3.3	3.3	3.3
<b>Debt Indicators:</b>																
Total Debt outstanding	36.3	36.5	36.8	37.0	37.1	37.2	37.3	37.3	37.5	37.6	37.8	37.9	38.0	38.1	38.1	38.2
External Debt	14.4	13.7	13.1	12.4	11.8	11.1	11.0	10.8	10.7	10.7	10.7	10.8	10.8	10.9	11.0	11.1
Domestic Debt	22.0	22.9	23.7	24.5	25.3	26.2	26.5	26.8	27.0	27.1	27.2	27.2	27.2	27.2	27.1	27.1
Total Debt Services	2.7	3.0	3.2	3.3	3.4	3.5	3.4	3.4	3.4	3.5	3.5	3.4	3.4	3.4	3.4	3.4
External	0.7	0.9	1.0	1.0	1.0	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Domestic	2.0	2.1	2.2	2.3	2.3	2.4	2.2	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2
External debt as% exports, remittance	60.9	60.5	57.6	54.2	50.8	47.5	45.4	43.4	41.9	40.9	40.1	39.3	38.3	37.7	37.0	36.3
External debt services as% exports, remittance	2.8	3.0	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Total debt to revenue	377	356	323	303	281	258	248	240	234	227	223	218	214	209	205	201
<b>External Sector:</b>																
	[As Percentage of GDP]															

Table-1: Key Macroeconomic Indicators, 2015-2030

	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30
Export growth	3.3	9.0	11.0	12.0	13.0	14.0	14.5	15.0	15.0	15.5	15.5	15.5	16.0	16.0	16.0	16.0
Import growth	11.2	7.0	11.2	12.3	12.8	13.8	14.0	14.0	13.8	13.8	13.8	13.8	13.5	13.5	13.5	13.5
Service growth	12.9	11.0	11.5	12.0	13.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
Income receipt growth	13.7	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Remittance growth	7.5	-0.5	8.0	10.0	10.0	10.0	9.5	9.5	9.5	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Current Account Balance as (% of GDP)	-0.8	-1.5	-1.9	-2.3	-2.6	-3.0	-3.4	-3.6	-3.9	-4.0	-4.1	-4.2	-4.1	-3.9	-3.7	-3.5
FDI as (% of GDP)	0.9	1.2	1.8	2.2	2.5	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0
Net M&T as % of GDP	0.8	1.1	1.0	1.0	0.9	0.9	1.1	1.1	1.2	1.3	1.4	1.4	1.4	1.5	1.5	1.5
Exchange Rate(TK/USD)	77.8	80.5	81.00	83.77	86.38	88.91	91.43	93.93	96.40	98.85	101.36	103.84	106.37	108.86	111.42	113.92
Reserves in months of imports	6.4	6.6	6.7	6.6	6.6	6.5	6.4	6.2	5.9	5.8	5.6	5.4	5.4	5.5	5.7	6.0
<b>Monetary Sector:</b>																
Broad Money	16.1	12.4	16.0	16.2	16.5	16.5	16.5	16.3	16.3	16.3	16.3	16.2	16.2	16.2	16.0	16.0
Net Foreign Assets	43.2	38.2	10.4	11.4	11.9	11.6	13.5	12.8	11.0	10.9	11.7	12.2	12.4	14.8	18.5	20.8
Net Domestic Assets	10.3	10.7	17.8	18.0	18.0	18.1	18.1	19.1	20.1	21.1	22.1	23.1	24.1	25.1	26.1	27.1
Private sector	12.3	13.2	14.5	15.5	15.7	16.0	16.5	17.0	17.0	17.0	17.0	17.0	17.1	17.2	17.2	17.2
Velocity (Nominal GDP /M2)	1.9	1.9	1.9	1.8	1.8	1.8	1.7	1.7	1.6	1.6	1.6	1.5	1.5	1.5	1.5	1.4

Source: GED estimates using the Macroeconomic framework of Bangladesh economy

Note: Nominal exchange rate formula:  $E(t) = E(t-1) * [\text{Inflation}_{\text{AOD}}(t) / \text{Inflation}_{\text{Trading Partners}}(t)]$ 

\* Average inflation of trading partners ranged between 2.4 to 2.5 while inflation in Bangladesh has been assumed to drop from 6% in FY2017 to 4.7% in 2030.

## Annex 19.4: Estimates of the Business As Usual (BAU) Cost

	In Current Prices (Billion BDT)														
SOG/Fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Comments
SOG 1	442.93	505.51	46.26	46.13	712.04	799.58	856.13	1,003.89	1,124.36	1,258.16	1,407.88	1,578.01	2,139.74	1,965.61	2% of GDP
SOG 2	46.26	46.26	46.04	46.13	45.96	45.91	45.87	45.83	45.83	45.78	45.78	45.74	45.78	45.70	Estimate for financing 12 GP programs was USD 2,72.8 billion for years 2011-2015. This number has been distributed equally taken as the BAU cost for SOG02
SOG 3	664.40	750.77	846.11	846.11	1,068.96	1,199.17	1,344.50	1,505.84	1,686.54	1,887.23	2,111.82	2,361.01	2,619.61	2,948.44	3% of GDP
SOG 4	438.50	490.53	558.44	628.24	705.53	791.59	887.17	991.85	1,111.11	1,245.37	1,393.80	1,558.27	1,742.14	1,945.97	1.08% of GDP
SOG 5	15.12	16.03	17.87	16.94	18.82	19.80	20.81	21.85	22.94	24.07	25.25	26.46	27.73	29.03	Revised budget 2015-16-relevant programs of ministries/autonomous institutions adjusted.
SOG 6	21.90	24.28	27.07	25.68	28.51	29.99	31.52	33.10	34.75	36.45	38.24	40.07	42.00	44.97	Allocated budget for Water and Sanitation related programs Revised budget for WASA and DWSA LGD.
SOG 7	99.13	105.08	117.18	111.07	123.39	128.81	136.43	143.25	150.41	157.78	165.51	173.46	181.78	190.33	Average of actual development expenditure (Power division and Energy and mineral resources division)
SOG 8	15,583.08	17,256.42	21,034.40	19,065.72	23,175.97	25,515.67	28,080.56	30,887.17	33,987.79	37,380.09	41,127.18	45,226.05	49,752.84	54,703.66	Target 8.1, 10-13-17-18 Expenditure requirement for BAU growth scenario. Target 8.5, Annual mean wage for 3 categories (decent job, good job, poor job). Annual inflation adjusted, multiplied by projected number of population in each category. Target 8.9, BAU requirement for tourism sector (40.5 percent of nominal GDP) (As mentioned in the 7th 9th background paper for tourism)

SDG/ fiscal year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Comments
SDG 9	503.82	571.10	647.06	734.41	832.82	944.42	1,070.97	1,214.48	1,378.43	1,564.52	1,777.30	2,019.01	2,295.62	2,610.32	<p>sector). Target 9.10: BAU cost for financial sector= 3.8% percent of GDP at current prices (from 2015 financial year 2015).</p> <p>infrastructure development. According to 7th FYP, about 1.62% of Bangladesh's GDP goes to power sector each year, which is about US\$ 3-3.5 billion. This number has been taken as the BAU cost for investment of SSCOR development. According to 7th FYP, Bangladesh's R &amp; D expenditure is 0.6 percent of GDP. This number has been taken as BAU cost of innovation. As the implementation of 100 SEZs are initiated very recently and they are all yet to be implemented within next 14 years, this number is not counted BAU cost for industrialization.</p> <p>Business as usual cost of this goal is synchronized in the cost of social infrastructure SDG.</p> <p>0.08 percent of nominal GDP is considered as the BAU cost of SDG 11, because, in the 7th FYP the projected GDP ministry of housing and public works is given which amounts to around 0.08 percent of nominal GDP</p>
SDG 10															
SDG 11	17.60	20.90	24.50	28.80	28.51	31.98	35.85	40.16	44.97	50.33	56.32	62.96	70.39	78.63	
SDG 12															
SDG 13	908.01	1,076.05	1,156.36	1,300.90	1,465.91	1,639.14	1,837.48	2,057.98	2,304.93	2,579.22	2,886.15	3,226.71	3,607.47	4,029.54	
															4.1% of GDP

SDG/Fiscal Year	FY2017	FY2018	FY2018	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Comments
SDG 14+SDG 15	10.34	11.14	12.26	12.91	13.72	14.52	15.33	16.13	16.94	17.75	18.55	19.36	20.17	20.97	21.78	22.59	Projected allocation of the ministry of environment and forestry
SDG 16	181.13	192.34	205.85	221.64	236.86	252.08	267.30	282.51	297.73	312.95	328.17	343.39	358.61	373.82	389.04	404.26	Projected allocation based on Budget
SDG 17	1.54	1.64	1.74	1.84	1.95	2.06	2.18	2.30	2.43	2.56	2.70	2.85	3.01	3.17	3.33	3.50	Share of Budget of different ministries and institutions and ministries
<b>Total Unsynchronized BAU cost</b>	<b>18,933.76</b>	<b>21,018.60</b>	<b>23,281.91</b>	<b>25,757.78</b>	<b>28,451.52</b>	<b>31,415.93</b>	<b>34,672.40</b>	<b>38,248.33</b>	<b>42,215.17</b>	<b>46,582.47</b>	<b>51,384.64</b>	<b>56,679.35</b>	<b>62,546.83</b>	<b>68,984.98</b>	<b>76,024.11</b>	<b>83,781.11</b>	
<b>Total Synchronized BAU cost</b>	<b>14,512.11</b>	<b>15,351.95</b>	<b>17,437.53</b>	<b>20,008.25</b>	<b>21,668.65</b>	<b>24,394.50</b>	<b>27,187.10</b>	<b>30,361.24</b>	<b>33,876.47</b>	<b>37,652.26</b>	<b>41,803.00</b>	<b>46,340.61</b>	<b>51,428.68</b>	<b>57,195.71</b>	<b>63,781.11</b>	<b>71,250.00</b>	

Source: GED estimates

In Constant 2015-16 Prices (Billion BDT)

SDGs/Fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Comments
SDG 1	418.25	446.72	476.3	507.91	541.67	577.71	616.19	657.27	701.09	747.87	797.77	851.06	907.91	968.61	Existing resource for financing 12 CIP programs was USD 2,772.8 billion for years 2011-2015.
SDG 2	43.68	41.29	38.95	36.85	34.93	33.17	31.53	30.01	28.58	27.21	25.94	24.73	23.6	22.52	This number has been distributed yearly and taken as the BAU cost for SDG02.
SDG 3	627.38	670.08	714.45	761.86	812.5	866.56	924.28	985.9	1051.63	1121.8	1196.66	1276.59	1361.86	1452.91	3% of GDP
SDG 4	414.07	442.25	471.54	502.82	536.25	571.94	610.03	650.69	694.07	740.39	789.8	842.55	898.82	958.92	1.98% of GDP
SDG 5	14.28	14.31	14.3	14.3	14.3	14.31	14.31	14.31	14.3	14.31	14.31	14.31	14.31	14.31	Revised budget 2015-16- relevant programs of different ministries- inflation adjusted.
SDG 6	21.62	21.67	21.67	21.67	21.67	21.67	21.67	21.67	21.67	21.67	21.67	21.67	21.67	21.67	Allocated budget for Water and Sanitation related programs and budget for WASA from LGD
SDG 7	93.61	93.79	93.79	93.79	93.79	93.79	93.79	93.79	93.79	93.79	93.79	93.79	93.79	93.79	average of actual



SDGs/Fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Comments
SDG 8:	14713.96	15401.71	16098.91	16835.31	17613.44	18435.45	19304.11	20222.41	21192.8	22229.3	23304.7	24453.55	25669.05	26956.39	Target 8.1: investment requirement for BAU growth scenario, Target 8.5: Annual mean wage for 3 categories (decent job, good job, good enough job) – inflation adjusted, multiplied by projected number of population in each category. Target 8.9: BAU investment for tourism sector (=0.5 percent of nominal GDP) [as mentioned in

SDGs/Fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Comments
SDG 9	475.56	509.72	546.37	587.8	633.01	682.36	736.24	795.14	859.51	929.97	1007.11	1091.67	1184.38	1286.19	the 7FYP background paper for tourism sector). Target 8.10: BAU cost for financial sectors: 3.86 percent of GDP at current prices (from Statistical yearbook, 2015) Infrastructural development: According to 7th FYP, about 1.67% of Bangladesh's GDP goes to communication and power sector each year, which is about US\$ 3-3.5 billion. This number has been taken as the BAU cost for Infrastructural development of SDG09. Innovation: According to 7th FYP, Bangladesh's R & D

SDGs/Fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Comments
															expenditure is 0.6 percent of GDP. This number has been taken as BAU cost of innovation. Industrialization: As the implementation of 100 SEZs are initiated very recently and they are all yet to be implemented within next 14 years, this calculation hasn't count BAU cost for industrialization.
SDG 10															Business as usual cost of this goal is synchronized in the cost of social protection in SDG1
SDG 11	16.62	18.65	20.69	23.05	21.67	23.11	24.65	26.29	28.04	29.92	31.91	34.04	36.32	38.75	0.08 percent of nominal GDP is

SDGs/Fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Comments
															considered as the BAU cost of SDG11, because, in the 7fyp the projected ADP allocation for ministry of housing and public works is given which amounts to around 0.08 percent of nominal GDP.
SDG 12															Synchronized with SDG 8.1
SDG 13	857.42	915.77	976.42	1041.2	1110.42	1184.3	1263.18	1347.4	1437.22	1533.13	1635.44	1744.67	1861.21	1985.64	4.1% of GDP
SDG 14+SDG15	9.76	9.94	10.35	10.33	10.43	10.49	10.54	10.56	10.56	10.55	10.51	10.47	10.41	10.33	Projected allocation of the ministry of environment and forestry
SDG 16	171.23	171.67	173.82	177.39	180.03	182.13	183.76	184.96	185.65	186.02	185.96	185.67	185.02	184.21	Projected allocation based on Budget
SDG 17	1.45	1.46	1.47	1.47	1.48	1.49	1.5	1.51	1.52	1.52	1.53	1.54	1.55	1.56	allocated budget of different public

SDGs/Fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Comments
Total Unsynchronized BAU cost	17878.9	18759.03	19659.03	20615.76	21625.59	22698.48	23835.77	25051.9	26320.42	27677.45	29117.08	30646.3	32269.87	33995.78	
Total Synchronized BAU cost	13703.6	13701.94	14724.09	16054.03	16470.03	17553.14	18689.9	19879.38	21125.26	22381.08	23687.65	25070.79	26533.67	28085.84	

Source: GED estimates

In Constant 2015-16 Prices (Billion USD)

SDGs/Fiscal Year	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total
SDG 1	5.16	5.33	5.51	5.71	5.92	6.15	6.39	6.65	6.92	7.2	7.5	7.82	8.15	8.5	92.93
SDG 2	0.94	0.89	0.45	0.41	0.38	0.35	0.33	0.3	0.28	0.26	0.24	0.23	0.21	0.2	4.69
SDG 3	7.75	8	8.27	8.57	8.89	9.23	9.59	9.97	10.38	10.8	11.25	11.73	12.22	12.75	139.39
SDG 4	5.11	5.28	5.46	5.66	5.87	6.09	6.33	6.58	6.85	7.13	7.42	7.74	8.07	8.42	92
SDG 5	0.18	0.17	0.17	0.16	0.16	0.15	0.15	0.14	0.14	0.14	0.13	0.13	0.13	0.13	2.07
SDG 6	0.27	0.26	0.25	0.24	0.24	0.23	0.22	0.22	0.21	0.21	0.2	0.2	0.19	0.19	3.14
SDG 7	3.16	3.12	3.09	3.05	3.03	3	2.97	2.95	2.93	2.9	2.88	2.86	2.84	2.82	33.6
SDG 8	381.65	383.86	386.37	389.35	392.64	396.27	400.25	404.58	409.08	413.98	419.09	424.63	430.38	436.63	2868.77
SDG 9	5.87	6.08	6.33	6.61	6.92	7.26	7.64	8.04	8.48	8.96	9.47	10.03	10.63	11.29	113.61
SDG 11	0.21	0.22	0.24	0.26	0.28	0.29	0.29	0.29	0.28	0.29	0.3	0.31	0.33	0.34	3.77
SDG 13	10.59	10.93	11.3	11.71	12.14	12.61	13.1	13.63	14.18	14.76	15.37	16.01	16.7	17.43	190.5
SDG14+SDG15	0.12	0.12	0.12	0.12	0.11	0.11	0.11	0.11	0.1	0.1	0.1	0.1	0.09	0.09	1.5
SDG 16	2.11	2.05	2.01	2	1.97	1.94	1.91	1.87	1.83	1.79	1.75	1.71	1.66	1.62	26.21
SDG 17	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.32
<b>Total Unynchronized BAU cost</b>	<b>220.73</b>	<b>223.93</b>	<b>227.59</b>	<b>231.87</b>	<b>236.53</b>	<b>241.65</b>	<b>247.26</b>	<b>253.33</b>	<b>259.67</b>	<b>266.54</b>	<b>273.73</b>	<b>281.52</b>	<b>289.62</b>	<b>298.42</b>	<b>3552.4</b>
<b>Total Synchronized BAU cost</b>	<b>169.18</b>	<b>163.57</b>	<b>170.46</b>	<b>180.56</b>	<b>180.14</b>	<b>186.87</b>	<b>193.88</b>	<b>201.11</b>	<b>208.42</b>	<b>215.53</b>	<b>222.69</b>	<b>230.3</b>	<b>238.14</b>	<b>246.54</b>	<b>2807.39</b>

Source: GED estimates

Annex 20.1: Matrix of Sources of Financing for Goal-wise Total Additional Costs

Sources of Financing/Years	SDG1	SDG2	SDG3	SDG4	SDG5	SDG6	SDG7, 8 and 9	SDG10	SDG11	SDG12	SDG13	SDG14	SDG15	SDG16	SDG17
Public	80%	80%	60%	70%	20%	50%	20%	50%	20%	20%	20%	60%	60%	80%	70%
Private			30%	20%	60%	30%	60%	40%	60%	60%	20%	10%	10%		
Public Private Partnership (PPP)							10%		20%	20%					
External Sources			10%			20%	10%				50%	20%	20%	20%	30%
NGOs	20%	20%		10%	20%			10%			10%	10%	10%		
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Source: GED estimates

**Annex 20.2: Percent Share of Public Sector, Private Sector, Public-Private Partnership (PPP), External Sources and NGOs in Financing the Total Additional Synchronized Costs of SDGs for the Projected Years during FY 17-FY 30**

Sources of Financing/ Fiscal Years	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Average
Public (%)	34.03	35.39	35.38	33.99	33.73	33.78	33.83	33.85	33.86	33.21	32.69	32.20	31.74	31.31	33.50
Private (%)	37.03	36.58	37.90	40.45	41.47	41.96	42.40	42.82	43.22	43.83	44.50	45.13	45.72	46.27	42.09
PPP (%)	4.53	4.39	4.66	5.26	5.47	5.57	5.65	5.72	5.80	5.94	6.10	6.25	6.39	6.52	5.59
External Sources (FDI + Foreign Aid & Grants) (%)	18.35	17.77	16.81	15.78	15.18	14.77	14.40	14.06	13.74	13.78	13.64	13.51	13.38	13.25	14.89
FDI (%)	3.94	7.49	9.19	11.22	10.89	10.84	10.76	10.68	10.59	10.64	10.70	10.75	10.79	10.81	9.95
Foreign Aid & Grants (%)	14.41	10.28	7.62	4.56	4.30	3.93	3.64	3.38	3.16	3.15	2.94	2.76	2.59	2.44	4.94
NGOs (%)	6.07	5.86	5.26	4.52	4.14	3.92	3.72	3.54	3.39	3.24	3.07	2.91	2.77	2.64	3.93
Total (%)	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: GED estimates.



**Annex 20.3: Percent Share of Public Sector, Private Sector, Public-Private Partnership (PPP), External Sources and NGOs in Financing the Total Additional Costs of SDGs for the Projected Years during FY17-FY30 as % of Projected (7<sup>th</sup> FYP extended scenario) GDP at constant 2015-16 prices**

Percent Share/Fiscal Years	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Public	3.46	3.78	4.23	4.85	5.27	5.61	5.97	6.34	6.72	6.87	7.03	7.19	7.36	7.53
Private	3.76	3.91	4.54	5.77	6.47	6.97	7.49	8.02	8.57	9.07	9.56	10.07	10.60	11.13
PPP	0.46	0.47	0.56	0.75	0.85	0.92	1.00	1.07	1.15	1.23	1.31	1.40	1.48	1.57
External Sources (FDI + Foreign Aid and Grants)	1.86	1.90	2.01	2.25	2.37	2.45	2.54	2.63	2.73	2.85	2.93	3.02	3.10	3.19
FDI	0.40	0.80	1.10	1.60	1.70	1.80	1.90	2.00	2.10	2.20	2.30	2.40	2.50	2.60
Foreign Aid and Grants	1.46	1.10	0.91	0.65	0.67	0.65	0.64	0.63	0.63	0.65	0.63	0.62	0.60	0.59
NGOs	0.62	0.63	0.63	0.64	0.65	0.65	0.66	0.66	0.67	0.67	0.66	0.65	0.64	0.64
Total Additional Cost	10.16	10.68	11.97	14.26	15.61	16.61	17.66	18.73	19.84	20.68	21.49	22.32	23.18	24.06

Source: GED estimates

## Annex 21: Abbreviation of Ministries

Ministry of Labour and Employment	MoLE
Ministry of Primary and Mass Education	MoPME
Ministry of Civil Aviation and Tourism	MoCAT
Ministry of Disaster Management and Relief	MoDMR
Ministry of Education	MoE
Ministry of Posts, Telecommunications and Information Technology	MoPTIT
Ministry of Power, Energy & Mineral Resources	MoPEMR
Ministry of Food	MoFD
Ministry of Home Affairs	MoHA
Ministry of Science and Technology	MoST
Ministry of Water Resources	MoWR
Ministry of Information	MoI
Ministry of Planning	MoP
Ministry of Housing and Public Works	MoHPW
Ministry of Health and Family Welfare	MoHFW
Ministry of Agriculture	MoA
Ministry of Women and Children Affairs	MoWCA
Ministry of Law, Justice and Parliamentary Affairs	MoLJPA
Ministry of Finance	MoF
Ministry of Commerce	MoC
Ministry of Fisheries and Livestock	MoFL
Ministry of Foreign Affairs	MoFA
Ministry of Youth and Sports	MoYS
Cabinet Division	CD
Prime Minister's Office	PMO
Ministry of Industries	MoInd
Ministry of Railways	MoR
Ministry of Environment and Forests	MoEF
Ministry of Shipping	MoS
Ministry of Road Transport and Bridges	MoRTB
Ministry of Expatriates' Welfare and Overseas Employment	MoEWOE
Ministry of Public Administration	MoPA
Ministry of Cultural Affairs	MoCA
Ministry of Social Welfare	MoSW
Ministry of Land	MoL
Ministry of Defence	MoD

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1. Policy Study on Financing Growth and Poverty Reduction: Policy Challenges and Options in Bangladesh (May 2009)
2. Policy Study on Responding to the Millennium Development Challenge Through Private Sectors Involvement in Bangladesh (May 2009)
3. Policy Study on The Probable Impacts of Climate Change on Poverty and Economic Growth and the Options of Coping with Adverse Effect of Climate Change in Bangladesh (May 2009)
4. Steps Towards Change: National Strategy for Accelerated Poverty Reduction II (Revised) FY 2009-11 (December 2009)
5. Millennium Development Goals: Bangladesh Progress Report-2009 (2009)
6. Millennium Development Goals: Needs Assessment and Costing 2009-2015 Bangladesh (July 2009)
7. এমডিএস কর্ম-পরিকল্পনা (৫১ টি উপজেলা) (আনুগাতি-জুন ২০১০)
8. MDG Action Plan (51 Upazillas) (January 2011)
9. MDG Financing Strategy for Bangladesh (April 2011)
10. SAARC Development Goals: Bangladesh Progress Report-2011 (August 2011)
11. Background Papers of the Sixth Five Year Plan (Volume 1-4) (September 2011)
12. 6<sup>th</sup> Five Year Plan (FY 2011-FY 2015) (December 2011)
13. Millennium Development Goals: Bangladesh Progress Report-2011 (February 2012)
14. Perspective Plan of Bangladesh 2010-2021: Making Vision 2021 a Reality (April 2012)
15. Public Expenditure for Climate Change: Bangladesh Climate Public Expenditure and Institutional Review (October 2012)
16. Development of Results Framework for Private Sectors Development in Bangladesh (2012)
17. ষষ্ঠ পঞ্চবার্ষিক পরিকল্পনা (২০১১-১৫) বাংলা অনুবাদ (অক্টোবর ২০১২)
18. Climate Fiscal Framework (October 2012)
19. First Implementation Review of the Sixth Five year Plan -2012 (January 2013)
20. বাংলাদেশের প্রথম শ্রেণিত পরিকল্পনা ২০১০-২০১১ রূপকল্প ২০১২ বছরে রূপায়ণ (সেপ্টেম্বর ২০১৩)
21. National Sustainable Development Strategy (2010-2021) (May 2013)
22. জাতীয় টেকসই উন্নয়ন বৈশিষ্ট্যপত্র (২০১০-২০২১) (মূল ইংরেজি থেকে বাংলায় অনুবিত) (মে ২০১৩)
23. Millennium Development Goals: Bangladesh Progress Report-2012 (June 2013)
24. Post 2015 Development Agenda: Bangladesh Proposal to UN (June 2013)
25. National Policy Dialogue on Population Dynamics, Demographic Dividend, Ageing Population & Capacity Building of GED (UNFPA Supported GED Project Output1) (December 2013)
26. Capacity Building Strategy for Climate Mainstreaming: A Strategy for Public Sector Planning Professionals (2013)
27. Revealing Changes: An Impact Assessment of Training on Poverty-Environment Climate-Disaster Nexus (January 2014)
28. Towards Resilient Development: Scope for Mainstreaming Poverty, Environment, Climate Change and Disaster in Development Projects (January 2014)

29. An Indicator Framework for Inclusive and Resilient Development (January 2014)
30. Manual of Instructions for Preparation of Development Project Proposal/Prforma Part-1 & Part 2 (March 2014)
31. SAARC Development Goals: Bangladesh Progress Report-2013 (June 2014)
32. The Mid Term-Implementation Review of the Sixth Five Year Plan 2014 (July 2014)
33. Millennium Development Goals: Bangladesh Progress Report 2013 (August 2014)
34. Population Management Issues: Monograph-2 (March 2015)
35. GED Policy Papers and Manuals (Volume 1-4) (June 2015)
36. National Social Security Strategy (NSSS) of Bangladesh (July 2015)
37. MDGs to Sustainable Development Transforming our World: SDG Agenda for Global Action (2015-2030)- A Brief for Bangladesh Delegation UNGA 70<sup>th</sup> Session, 2015) (September 2015)
38. 7<sup>th</sup> Five Year Plan (2015/16-2019/20) (December 2015)
39. সপ্তম পঞ্চবার্ষিক পরিকল্পনা ২০১৫/১৬-২০১৯/২০ (যুগ ইভেলি থেকে বাংলায় অনুদিত) (অক্টোবর ২০১৬)
40. জাতীয় সামাজিক নিরাপত্তা কৌশলসমূহ (অক্টোবর ২০১৬)
41. Population Management Issues: Monograph-3 (March 2016)
42. Bangladesh ICPD 1994-2014 Country Report (March 2016)
43. Policy Coherence: Mainstreaming SDGs into National Plan and Implementation (Prepared for Bangladesh Delegation to 71<sup>st</sup> UNGA session, 2016) (September 2016)
44. Millennium Development Goals: End- period Stocktaking and Final Evaluation Report (2000-2015) (September 2016)
45. A Handbook on Mapping of Ministries by Targets in the implementation of SDGs aligning with 7<sup>th</sup> Five Year Plan (2016-20) (September 2016)
46. Data Gap Analysis for Sustainable Development Goals (SDGs): Bangladesh Perspective (January 2017)
47. Environment and Climate Change Policy Gap Analysis in Haor Areas (February 2017)
48. Integration of Sustainable Development Goals into the 7<sup>th</sup> Five Year Plan (February 2017)
49. Banking ATLAS (February 2017)
50. টেকসই উন্নয়ন অর্থাৎ, লক্ষ্যমাত্রা ও সূচকসমূহ (যুগ ইভেলি থেকে বাংলায় অনুদিত) (এপ্রিল ২০১৭)
51. A Handbook on Implementation of 7<sup>th</sup> FYP, (June 2017)
52. Bangladesh Voluntary National Review (VNR) 2017 : Eradicating poverty and promoting prosperity in a changing world. (June 2017)
53. SDGs Financing Strategy: Bangladesh Perspective (June 2017)





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