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| Project/Programme Title: | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Country(ies): | Bangladesh |
| National Designated Authority(ies) (NDA): | Economic Relations Division, Ministry of Finance, Government of the People’s Republic of Bangladesh |
| Accredited Entity(ies) (AE): | United Nations Development Programme |
| Date of first submission/ version number: | *[YYYY-MM-DD] [V.0]*  |
| Date of current submission/ version number | *[YYYY-MM-DD] [V.0]* |
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| **Notes** |
| * The maximum number of pages should **not exceed 12**, excluding annexes. Proposals exceeding the prescribed length will not be assessed within the indicative service standard time of 30 days.
* As per the Information Disclosure Policy, the concept note, and additional documents provided to the Secretariat can be disclosed unless marked by the Accredited Entity(ies) (or NDAs) as confidential.
* The relevant National Designated Authority(ies) will be informed by the Secretariat of the concept note upon receipt.
* NDA can also submit the concept note directly with or without an identified accredited entity at this stage. In this case, they can leave blank the section related to the accredited entity. The Secretariat will inform the accredited entity(ies) nominated by the NDA, if any.
* Accredited Entities and/or NDAs are encouraged to submit a Concept Note before making a request for project preparation support from the Project Preparation Facility (PPF).
* Further information on GCF concept note preparation can be found on GCF website [Funding Projects Fine Print](http://www.greenclimate.fund/how-we-work/funding-projects/fine-print/%22%20%5Cl%20%22p_p_id_56_INSTANCE_4CvAHaIYKHcJ_).
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| 1. **Project/Programme Summary (max. 1 page)**
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| **A.1. Project or programme** | [x]  Project[ ]  Programme | **A.2. Public or private sector** | [x]  Public sector[ ]  Private sector  |
| **A.3. Is the CN submitted in** **response to an RFP?** | Yes [ ]  No [x] If yes, specify the RFP: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ | **A.4. Confidentiality[[1]](#footnote-2)** | [x]  Confidential[ ]  Not confidential  |
| **A.5. Indicate the result areas for the project/programme** | Mitigation: Reduced emissions from:[ ]  Energy access and power generation [ ]  Low emission transport [ ]  Buildings, cities and industries and appliances [ ]  Forestry and land use Adaptation: Increased resilience of:[x]  Most vulnerable people and communities[ ]  Health and well-being, and food and water security[ ]  Infrastructure and built environment[ ]  Ecosystem and ecosystem services |
| **A.6. Estimated mitigation impact (tCO2eq over lifespan)** | N/A | **A.7. Estimated adaptation impact (number of direct beneficiaries and % of population)** | 2.6 million |
| **A.8. Indicative total project cost (GCF + co-finance)** | Amount: USD 225 million  | **A.9. Indicative GCF funding requested** | Amount: USD 100 million  |
| **A.10. Mark the type of financial instrument requested for the GCF funding** | [x]  Grant [x]  Reimbursable grant [x]  Guarantees [ ]  Equity [ ]  Subordinated loan [ ]  Senior Loan [ ]  Other: specify\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  |
| **A.11. Estimated duration of project/ programme:**  | a) disbursement period:b) repayment period, if applicable: | **A.12. Estimated project/ Programme lifespan** |  |
| **A.13. Is funding from the Project Preparation Facility requested?[[2]](#footnote-3)** | Yes [ ]  No [x] Other support received [ ]  If so, by who: | **A.14. ESS category[[3]](#footnote-4)**  | [ ]  A or I-1[x]  B or I-2[ ]  C or I-3 |
| **A.15. Is the CN aligned with your accreditation standard?** | Yes [x]  No [ ]   | **A.16. Has the CN been shared with the NDA?** | Yes [x]  No [ ]   |
| **A.17. AMA signed (if submitted by AE)** | Yes [x]  No [ ]  If no, specify the status of AMA negotiations and expected date of signing:  | **A.18. Is the CN included in the Entity Work Programme?** | Yes [ ]  No [x]   |
| **A.19. Project/Programme rationale, objectives and approach of programme/project (max 100 words)** | 1. In Bangladesh, the lack of a systematic approach to integrating climate change adaptation into government planning and budgeting has meant that mandated measures are not frequently translated into concrete action. Through an approach of locally-led adaptation, this project will increase the resilience of climate-vulnerable communities by strengthening the capacity of local government institutions for inclusive, participatory, and accountable planning and financing of adaptation while giving vulnerable households the tools necessary to implement adaptation measures in the immediate term. By demonstrating the benefits of LLA, the project will promote the increased flow of climate finance to the local level.
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| 1. **Project/Programme Information (max. 8 pages)**
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| **B.1. Context and baseline (max. 2 pages)** |  |
| ***Overview***1. Bangladesh is a South Asian country (see Annex 1: Map), and is regularly among one of the world’s most climate-vulnerable countries, facing increased loss and damage to its people, livelihoods, and infrastructure, because of accelerating climate impacts due to anthropogenic greenhouse gas (GHG) emissions globally. Yet, at just 0.4%, Bangladesh’s contribution to GHG emissions is not significant[[4]](#footnote-5), and its exposure to climate change is disproportionate. In April 2023, for example, Bangladesh experienced hazardous and prolonged heatwave conditions (along with India and Thailand in the neighbouring region)[[5]](#footnote-6), where temperatures in [Dhaka reached 40.5C, highest recorded in 58 years](https://www.undp.org/publications/climate-finance-sustaining-peace-making-climate-finance-work-conflict-affected-and-fragile-contexts), and impacted infrastructure as well as exacerbated heat stress faced by communities (and vulnerable groups, such as the urban poor among them).
2. This disproportionate impact on Bangladeshi peoples, livelihoods and infrastructure has the potential to undo decades of hard-earned developmental progress: over the past three decades, Bangladesh is consistently among the fastest growing economies in the world, with annual per capita growth of 4.0%.[[6]](#footnote-7) The country is also scheduled to graduate from its Least Developed Country (LDC) status by 2026, since economic growth has led to improvements in poverty as well as human development indicator performance.
3. In recognition of climate impacts on current levels of development and hindering enabling factors for future development, the Government of Bangladesh (GoB) has enacted ambitious policies and action plans to address the uneven shocks of climate change: for example, the Bangladesh Climate Change Strategy and Action Plan (BCCSAP)[[7]](#footnote-8) is a pro-poor climate change strategy aiming to eradicate poverty and achieve economic and social well-being for all Bangladeshis. Under the Mujib Climate Prosperity Plan (MCPP)[[8]](#footnote-9), the country will enhance resilience, grow the economy, create jobs and expand opportunities, using action on climate change as the catalyst. Bangladesh also intends to obtain 30% of energy from renewables by 2030. It is currently formulating its National Adaptation Plan, expected to cover the period between 2023 – 2050, with Green Climate Fund support.
4. In this continuum of climate action and progressive policy landscape, increased adaptation investments in infrastructure and livelihoods are necessary to bolster Bangladesh’s developmental pathway towards low-carbon and climate-resilience, and to meet the Sustainable Development Goals, as well as meet GoB’s policy priorities.

***Historical climate information, topographical and geographical determinants in Bangladesh***1. **Historical climate and observed weather:** Historically, Bangladesh has a tropical monsoon climate, characterized by high temperatures, heavy rainfall, and frequent cyclones. The climate of Bangladesh is influenced by its location at the north-eastern edge of the Bay of Bengal, which makes it vulnerable to extreme weather events.
2. Bangladesh has experienced average temperatures around 26°C, with a range between 15°C and 34°C throughout the year. However, the temperatures have been rising significantly in recent decades. The average surface air temperature has risen far more sharply in the past three decades compared to the three decades prior. [[9]](#footnote-10) Pre-monsoon, monsoon and post-monsoon circulations lead to frequent heavy precipitation and tropical cyclones in the country.[[10]](#footnote-11) Bangladesh receives on average about 2,400 millimetres (mm) of rainfall per year, 70% of which falls during the monsoon (July to September).[[11]](#footnote-12)
3. **Topographical and geographical determinants of climate vulnerability:** Bangladesh is a low-lying country with a predominantly flat and riverine topography, which makes it highly vulnerable to the impacts of climate change.
* Coastal geography: Bangladesh has a long and vulnerable coastline along the Bay of Bengal, which is prone to sea-level rise, storm surges, and cyclones.
* Flat topography: The predominantly flat and low-lying topography of Bangladesh means that even minor sea-level rise can result in significant flooding and displacement of people. Except for hilly regions in the northeast and southeast and some highlands in the north and north-western parts (which also experience landslides, the mean elevation is 4 to 5m above sea level, making it particularly vulnerable to sea level rise and increases in storm surges.[[12]](#footnote-13)
* River systems: Bangladesh is crisscrossed by several large river systems. While the country’s landmass constitutes only 7 % of the combined catchment area of the Ganges-Brahmaputra-Meghna (GBM) river basin system, Bangladesh must drain over 92 % of rainfall-runoff generated in the combined GBM catchment within a period of four and a half months (June to mid-October).[[13]](#footnote-14)
* Soil erosion and urbanization: Soil erosion due to topographical specificities, which is exacerbated by anthropogenic deforestation and land use changes, has led to the depletion of soil nutrients and decreased agricultural productivity in many parts of the country. This is coupled with rapid urbanization and high population density, which contribute to climate vulnerability in the country.

***Observed and projected climate change in Bangladesh***1. Bangladesh ranks as the 7th most climate-vulnerable country on the Global Climate Risk Index.[[14]](#footnote-15)
2. Observed climate trends, as well as future projections, show that the country’s climate is changing in several ways, including changes in rainfall patterns, increased temperatures, a high frequency of extreme weather events, i.e., flash, river, and coastal flooding, widespread droughts in the North and tropical cyclones and associated storm surges in coastal areas. The table below summarises the observed and projected climate change in the country (based on IPCC data):

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| --- | --- | --- | --- | --- | --- |
| **Climate** **Variable** | **Observed Change (IPCC AR5)** | **Observed Change (Additional Source 1 – Khan, et al.)** | **Observed Change (Additional Source 2 – ADB)** | **Observed Change (Additional Source 3 – Karmakar, et al. )** | **Projected Change (IPCC AR6)** |
| Average Temperature | Increase of 1.1°C | Increase of 0.5-1.0°C | Increase of 1.0°C | Increase of 0.8-1.4°C | Increase of 1.4-4.3°C |
| Changes in Temperature | 0.15°C per decade | 0.11°C per decade | 0.13°C per decade | 0.14-0.23°C per decade | 0.21-0.46°C per decade |
| Rainfall | Substantial variation year on year (2,000-5,500 mm) | No data available | Substantial variation year on year (2,500-4,500 mm) | Little change in long-term average, more variability | Increased variability, more intense precipitation events |
| Extreme Daily Rainfall | Little change observed | No data available | No data available | Increasing trend observed in recent decades | Increased frequency and intensity |
| Sea Level Rise | 1.5-4.5 mm per year | 3.1 mm per year | 3.14 mm per year | 3.1-4.7 mm per year | 0.26-0.77 meters by 2100 |
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| [Intergovernmental Panel on Climate Change. (2014). Climate Change 2014: Synthesis Report. Retrieved from https://www.ipcc.ch/report/ar5/syr/](https://www.ipcc.ch/report/ar5/syr/) |
| [Intergovernmental Panel on Climate Change. (2021). Climate Change 2021: The Physical Science Basis. Retrieved from https://www.ipcc.ch/report/ar6/wg1/](https://www.ipcc.ch/report/ar6/wg1/) |
| [Khan, R., & Ahmed, F. U. (2009). Climate variability and change: adaptation to drought in Bangladesh. International Journal of Climate Change Strategies and Management, 1(3), 305-323. https://doi.org/10.1108/17568690910978702](https://doi.org/10.1108/17568690910978702) |
| [Asian Development Bank. (2012). Climate Change Scenarios for Bangladesh. Retrieved from https://www.adb.org/sites/default/files/publication/29825/climate-change-scenarios-bangladesh.pdf](https://www.adb.org/sites/default/files/publication/29825/climate-change-scenarios-bangladesh.pdf) |
| [Karmakar, M., Rahman, M., & Khan, M. A. (2017). Observed and projected changes in climate extremes over South Asia from CMIP5 models. Climate Dynamics, 48(9-10), 3295-3317. https://doi.org/10.1007/s00382-016-3273-9](https://doi.org/10.1007/s00382-016-3273-9) |

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1. **Changes in temperature increase:** Recent research shows that Bangladesh is experiencing consistent warming, with variations depending on emissions scenarios. According to the latest data from the Bangladesh National Climate Change Strategy and Action Plan (NC3), the average daily maximum and minimum temperatures rose by 0.16°C and 0.12°C per decade respectively between 1977 and 2008. Additionally, the Berkeley Earth dataset indicates an average temperature rise of 1.03°C in Dhaka between 1900 and 1917 to 2000 and 2017, with the strongest temperature rise occurring during the monsoon season. It is important to note that while monthly and annual average temperatures are commonly used to estimate climate change, daily maximum and minimum temperatures can provide more information on the potential impacts of climate change on daily life in a region. Temperature extremes can affect key variables such as the viability of ecosystems, health impacts, productivity of labor, and crop yields, underscoring the need to consider a range of climate variables and their potential impacts when assessing climate risks and opportunities. Rising temperatures due to climate change are increasing the incidence and severity of heat stress, which can lead to dehydration, respiratory and cardiovascular illnesses, and loss of productivity.[[15]](#footnote-16) The most vulnerable populations, such as the elderly, children, and outdoor workers, are at increased risk of heat-related illnesses, according to IPCC. FAO has also found that heat stress also has implications for agricultural productivity, leading to crop failure and loss of livelihoods). The infrastructure is also affected by high temperatures, with overheating of buildings and strain on energy systems. Further, increase in temperature will have specific impacts on the dry regions of Bangladesh, located along the western border, which are most vulnerable to meteorological **droughts** in the pre-and post-monsoon periods,[[16]](#footnote-17) due to sudden increases in temperature coupled with the non-availability of rainfall, causing a sharp rise in evapotranspiration,[[17]](#footnote-18) as well as the presence of soils with low moisture holding capacity (<200 mm available moisture). Future climate change projections outline an increase in daily temperatures with an increased number of hot days during the pre-monsoon season and fewer rainy days (changes in precipitation is explored below).[[18]](#footnote-19) It is expected that against the backdrop of climate change-induced reductions in rainfall in winter and the already erratic rainfall variability over time and space, evapotranspiration will significantly increase, especially during the post-monsoon and pre-monsoon seasons, leading to more intense droughts.[[19]](#footnote-20) Severe droughts and water scarcity will lead to a loss of aquatic habitat, a decrease in soil moisture and groundwater recharge, creating an irrigation water crisis, and less yield, threatening agricultural production.
2. **Changes in precipitation:** According to the latest climate data, rainfall in Bangladesh varies greatly across different hydrological regions of the country. The dry North-Western Barind Region receives only 791-2241 mm of rainfall, while the North-Eastern Region receives 2586-5944 mm. However, the trend of rainfall is changing, with a decrease of 1.3 mm/year and 0.5 mm/year in winter (December-February) and pre-monsoon (March-May), respectively, and an increase of 0.05 mm/year and 4.5 mm/year in post-monsoon (October-November) and monsoon (June-September), respectively. This means that winters are becoming drier, while monsoon seasons are becoming wetter. Under SSP1-2.6, the mean projected precipitation is expected to increase by 43.6 mm in the near term (2020-2039) and by 88.4 mm in the mid-term (2040-2059). Meanwhile, under SSP5-8.5, a high emissions scenario, precipitation is expected to increase by 30 mm in the near term (2020-2039) and by 96 mm in the long term (2040-2059).[[20]](#footnote-21) However, the frequency of heavy rainfall events is projected to increase, while that of light rainfall events will decrease. This will lead to **flooding**, higher river flows, leading to overtopping and breaching of embankments, widespread flooding in rural and urban areas, riverbank erosion resulting in loss of homes, as well as increased sedimentation in riverbeds leading to drainage congestion and waterlogging.[[21]](#footnote-22) Furthermore, the heavier and more erratic rainfall will cause crop damage and loss of cultivable lands, threatening agricultural production and affecting fisheries and aquaculture. Fisheries and aquaculture, which are importance livelihood sources, are also highly sensitive to climate impacts. Erratic rainfall may also increase the natural mortality of fish due to depletion of pH, as well as breaching of shrimp farms/fishpond dikes and overtopping of cultured fish. Future climate change is expected to increase the monsoon and post-monsoon rainfall in the hilly regions of Bangladesh by 5-10%, potentially aggravating landslides in vulnerable areas.[[22]](#footnote-23)
3. **Floods:** have been a reoccurring feature in Bangladesh’s history, with statistically about a quarter of the country flooded in an average hydrological year.[[23]](#footnote-24) They are caused by the confluence of factors: a huge inflow of water from upstream catchment areas coinciding with heavy monsoon rainfall; a low floodplain gradient; congested drainage channels; tides and storm surges in the coastal region; and polders that increase the intensity of floodwater outside protected areas.[[24]](#footnote-25) Climate change-induced increases in rainfall will lead to increases in river discharge, which, in turn, will increase inundation depth. As discussed above regarding precipitation patterns, the shift towards a lower number of wet days with an increase in the intensity of rainfall on the days with rain creates an increased risk of **flash floods**. Heavier and more erratic rainfall in the GBM (Ganges-Brahmaputra-Meghna) system will also cause higher river flows, leading to overtopping and breaching of embankments, widespread flooding in rural and urban areas, riverbank erosion resulting in loss of homes, as well as increased sedimentation in riverbeds leading to drainage congestion and waterlogging.[[25]](#footnote-26)
4. **Sea level rise**: Due to Bangladesh’s geographic location in a low-lying deltaic area, the country has historically been experiencing the effects of **sea level rise** along its coastal belt. However, the rate of increase has risen sharply in recent times due to climate change triggering rapid deglaciation, ice sheet melt, and the warming of oceans and associated increased volumes of water.[[26]](#footnote-27) Between 1901 and 2018, the global mean sea level has risen 0.2m, with a rate of rise that has accelerated since the 1960s to 3.7 mm/year-1 between 2006 and 2018.[[27]](#footnote-28) Sea levels are expected to rise between 0.11-01.12m in the near term (2030s), 0.23-0.27m in the mid-term (2050s), and 0.54-0.86m in the long-term (2100s) under SSP1-2.6 and SSP5-8.5, respectively.[[28]](#footnote-29) CEGIS estimates that by the mid-term future (2050s) under the SSP5-8.5 scenario, for variable sea-level rise incorporating existing coastal polder setup, around 18 % of Bangladesh’s coastal area might be inundated due to sea level rise.[[29]](#footnote-30) Almost annually, Bangladesh’s coastal belt is hit by **cyclones** in the pre-monsoon (April-May) and late/post-monsoon season (October-November).[[30]](#footnote-31) Between 1877 and 1995, the country experienced 154 cyclones.[[31]](#footnote-32) Increases in ocean surface temperature and rising sea levels associated resulting from climate change are likely to intensify cyclonic storm surges and associated coastal inundation in Bangladesh.[[32]](#footnote-33) Projected sea level rise, combined with cyclonic storm surges, could inundate large parts of Bangladesh’s coastal area, deteriorate water quality, cause **saline water intrusion**, and lead to large-scale loss of human lives and livelihoods.[[33]](#footnote-34)
5. **Salinity:** levels in Bangladesh generally increase almost linearly from October to late May due to the gradual reduction in freshwater flow from upstream.[[34]](#footnote-35) Out of 2.86 million ha of coastal and offshore lands, about 1.056 million ha are affected by varying degrees of soil salinity.[[35]](#footnote-36) From 1973 to 2009, land affected by salinity in Bangladesh grew by about 26.7%, amounting to approximately 0.223 million ha.[[36]](#footnote-37) **Climate change-induced sea level rise**, reduced upstream discharge, and cyclones will contribute to increased salinity intrusion in the coastal areas and beyond by pushing the saline waterfront landwards.[[37]](#footnote-38) The one ppt salinity affected areas will face a rise of 7.5 % in the midterm (2050s), while the five ppt salinity area will increase by 9 %.[[38]](#footnote-39) Besides the loss of cultivable land due to inundation, sea level rise and associated salinity will lead to unfavourable water quality for irrigation and consumption, low yield, and crop damage. Moreover, increases in salinity will create an unfavourable habitat for freshwater fishes. All these factors will, in turn, cause loss of livelihoods, hamper food security, and drive internal displacement and migration. This will substantially affect communities, infrastructures, and their livelihoods in the coastal zone of Bangladesh, which covers about 20% of the country and more than 30% of cultivable land.[[39]](#footnote-40)

***Socioeconomic and climate impacts in Bangladesh***1. Bangladesh has a population of Bangladesh of 171 million and one of the highest population densities in the world.[[40]](#footnote-41) According to the World Population Review, Bangladesh's population growth rate was 1.01% in 2021, and the country has an urbanization rate of 39.9%. The following table tracks Bangladesh’s GDP per capita, as well as growth rate:

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| --- | --- | --- |
| **Year** | **GDP per capita (World Bank)** | **GDP growth rate (IMF)** |
| 2019 | 1,906 | 8.2 |
| 2020 | 1,887 | -1.6 |
| 2021 | 1,956 (projected) | 6.5 (projected) |

1. Although Bangladesh has rapidly diversified its economy (particularly exports), it continues to have significant natural resource-dependent sectors, such as agriculture and fisheries, are critical to Bangladesh's economy, accounting for 16% of the country's GDP and employing over 40% of the workforce (World Bank, 2021). These sectors underpin the livelihoods of millions of people, particularly those living in rural areas, where **poverty** rates are high.
2. **Poverty:** According to the Bangladesh Bureau of Statistics (BBS), the poverty rate in Bangladesh was 24.3% in 2018, with an estimated 38.3 million people living in poverty. The poverty rate is significantly higher in rural areas, where the majority of the population lives, with a poverty rate of 26.4% compared to 18.9% in urban areas. There is also significant variation in poverty rates across different regions of the country, with poverty rates ranging from 14.5% in Dhaka to 31.5% in Barisal division. The Multidimensional Poverty Index shows a figure of 23.1% multidimensionally poor in the country, as well.
3. Other human development indicators: Despite the above levels of poverty reflected across the country, Bangladesh has made significant gains overall on different human development indictors, as presented below:

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| --- | --- |
| Human Development Index (HDI) | 0.632 (medium) |
| Life Expectancy at Birth | 72.3 years |
| Mean Years of Schooling | 5.2 years |
| Expected Years of Schooling | 11.2 years |
| Gross Enrollment Ratio, Primary Education | 97.8% |
| Gross Enrollment Ratio, Secondary Education | 66.8% |
| Literacy Rate, Adult | 73.9% |
| Human Capital Index (HCI) | 0.48 (low) |
| Gender Development Index (GDI) | 0.950 (very high) |
| Gender Inequality Index (GII) | 0.456 (medium) |
| Human Development Indices and Indicators: 2021 Statistical Update. United Nations Development Programme. Accessed on April 27, 2023.Bangladesh Education Statistics 2019. Bangladesh Bureau of Educational Information and Statistics. Accessed on April 27, 2023.Human Capital Index 2020 Update. World Bank. Accessed on April 27, 2023.Gender Development Index and Gender Inequality Index. United Nations Development Programme. Accessed on April 27, 2023.Multidimensional Poverty Index 2021. United Nations Development Programme. Accessed on April 27, 2023. |

1. According to the **ND-GAIN Country Index**[[41]](#footnote-42), which assesses a country’s readiness to leverage private and public sector investment for adaptive actions, Bangladesh has a high vulnerability score (29th most vulnerable globally), with a concomitant low readiness score (167th most ready country to adapt to climate change). Climate change impacts, such as flooding, droughts, and salinity and inundation (driven by climate change effects – temperature and precipitation pattern changes as well as sea level rise) combine with existing socioeconomic and sociocultural factors, regional disparities and levels of vulnerability depending on gender and social inclusion. In turn, these affect Bangladesh's climate-vulnerable sectors such as agriculture and fisheries sectors, food and water security levels and the livelihoods of millions of people (IPCC, 2014). These also impact infrastructure and broader economic gains as well as developmental progresses Bangladesh has made over the years. The table below summarises these impacts:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Climate Variable** | **Risk Level** | **Impact on Agriculture and Fisheries** | **Impact on Livelihoods** | **Impact on Water and Food Security** | **Impact on Loss of Ecosystem Goods and Services** | **Impact on Urban and Rural Infrastructure** |
| Temperature | **High** | Increased temperature could lead to decreased crop yields, particularly for wheat and rice, which are major staples in Bangladesh. This could affect food security, and also impact livelihoods of farmers.  | Changes in temperature could affect the productivity of livestock, potentially leading to a decline in livestock populations and impacting the livelihoods of livestock farmers. [1] | Changes in temperature could impact the availability of water for irrigation, potentially leading to decreased crop yields and impacting the livelihoods of farmers. [2] | Changes in temperature could impact the distribution and productivity of marine and freshwater fish, impacting the livelihoods of fishermen. [3] | Increased temperatures could lead to increased demand for energy, particularly for cooling purposes, which could strain energy infrastructure inurban areas. [4]Increased temperatures could lead to increased water stress, and impact (particularly) rural water infrastructure. |
| Precipitation | **High** | Changes in precipitation patterns could lead to flooding, particularly in low-lying areas, which could impact both urban and rural infrastructure. Additionally, changes in precipitation could impact agriculture, particularly if there are prolonged dry periods, leading to decreased crop yields and impacting food security and livelihoods. | Changes in precipitation could impact the availability of water for irrigation, potentially leading to decreased crop yields and impacting the livelihoods of farmers. [2] | Changes in precipitation could impact the functionality of water infrastructure, both in rural urban areas, where drainage systems may not be able to handle increased rainfall.It can severely impact water access and safety, if infrastructure such as wells are flooded/cannot be accessed. [5] | Changes in precipitation could impact soil erosion and nutrient cycling, leading to reduced ecosystem services such as soil fertility and carbon storage. [6] | Changes in precipitation could impact the functionality of infrastructure, particularly in urban areas, where flooding could damage roads and buildings. In rural settings, where such infrastructure is fragile/not well-built, this could imply limited access (particularly to essential services such as hospitals) during monsoon. [5] |
| Floods | High | Floods can lead to crop loss, erosion, and waterlogging. This can affect food security and livelihoods, particularly in low-lying areas where floods are more common.  | Floods can lead to the loss of crops, impact shrimp farming, and livestock health, impacting the livelihoods of farmers. [7] | Floods can impact water quality and availability, potentially leading to waterborne diseases and impacting food and water security. [8] | Floods can impact wetlands and other ecosystems, leading to reduced ecosystem services such as water filtration and flood control. [9] | * *as above*
 |
| Sea Level Rise | **High** | Sea level rise can lead to saltwater intrusion, impacting soil salinity and crop productivity. This could affect food security and livelihoods, particularly for coastal farmers/communities.  | Sea level rise could impact the availability of land for agriculture and settlements, potentially leading to displacement and loss of livelihoods. [10] | Sea level rise can impact freshwater availability, as saltwater intrusion can contaminate freshwater sources, leading to water scarcity. [11] | Sea level rise can impact coastal ecosystems, leading to loss of habitats and ecosystem services such as fisheries and carbon sequestration. [12] | Sea level rise can damage coastal infrastructure, including roads, buildings, and ports. Particularly, impact on water infrastructure is high, with salinity lowering available levels of potable water in rural Bangladesh [11] |
| Drought | **Low** | Droughts can lead to decreased crop yields, impacting food security and livelihoods. Currently, impacts of drought is felt in limmited disctricts of Bangladesh. | Droughts can lead to decreased livestock productivity and agricultural yield, impacting the livelihoods of farming and rural communities. Drought can particularly impact water-intensive crops such as rice[13] | Droughts can impact the availability of water for irrigation and domestic use, potentially leading to decreased crop yields and impacting food security and livelihoods. [14] | Droughts can impact soil moisture and nutrient cycling, leading to reduced ecosystem services such as carbon storage and soil fertility. [15] | Droughts can damage infrastructure, particularly in rural areas where access to water and sanitation may be limited. [16] |
| Salinity | **Medium** | Salinity intrusion can impact crop productivity, particularly for rice. This can affect food security and livelihoods, particularly for coastal farmers. Additionally, salinity can impact freshwater availability, as well as health issues among populations. Salinity is a particular issue in coastal, southern Bangladesh. | Salinity intrusion can impact the productivity of livestock, potentially leading to a decline in livestock populations and impacting the livelihoods of livestock farmers. Saltwater intrusion can also affect freshwater fish populations and livelihoods derived from that.  | Salinity intrusion can impact the availability of freshwater for irrigation and domestic use, potentially leading to decreased crop yields and impacting food security and livelihoods. [18] | Salinity intrusion can impact coastal ecosystems, leading to loss of habitats and ecosystem services such as fisheries, soil fertility and nutrient balance, and carbon sequestration. [19] | Salinity intrusion can damage infrastructure, particularly in coastal areas where saltwater can corrode buildings, roads, and other infrastructure. [20] |

1. Overall, Bangladesh’s crucial food production, fisheries agricultural sector, occupying 38 % of the country’s labour force (2019), will suffer from reduced yields caused by climate change-induced droughts, floods, salinity and related impacts.[[42]](#footnote-43) Ecosystems are rapidly altering in response to climate change drivers, including changes in rainfall, atmospheric carbon dioxide concentration, water balance, ocean chemistry, the frequency and amplitude of extreme events, and other variables.[[43]](#footnote-44) Moreover, climate change impacts fisheries and aquaculture through increases in temperature, salinity, and erratic rainfall. Fisheries play a vital role in the economy of Bangladesh, making up 3.52 % of GDP (26.37 % of agricultural GDP), 1.39 % of export earnings, and more than 60 % of the animal protein supply in people’s diets.[[44]](#footnote-45)
2. The impacts discussed above will significantly increase the vulnerabilities of communities and their livelihoods, reduce water and food security; cause malnutrition and public health concerns; lead to loss of livelihoods and increases in poverty; economic losses; ecosystem and biodiversity degradation; increases in gender-based violence and social inequality; internal displacements; and overall hampered sustainable development.[[45]](#footnote-46) Cumulatively, climate change induced-disasters have caused loss and damages worth US$ 1.9 billion in the proposed intervention areas (33 districts across Bangladesh) between 2016 and 2021.[[46]](#footnote-47)
3. Over the past 40 years, economic losses due to climate change in Bangladesh were estimated at US$12 billion.[[47]](#footnote-48) In future, the Asian Development Bank (ADB) estimates that due to climate change and under a ‘business-as-usual’ scenario, Bangladesh will face an annual GDP loss of 2 % by 2050 and more than 9 % by 2100.[[48]](#footnote-49) The National Adaptation Plan has estimated that investments totaling US$ 230 billion will be required to meet the adaptation needs of the country.

***Adaptation barriers in Bangladesh***1. **Overview:** While Bangladesh recognises the importance of adaptation as fundamental to its sustainable development, the lack of a systematic approach to integrating climate change adaptation into local government planning and budgeting, compounded by limited institutional capacity, has meant that mandated measures are not frequently translated into concrete action. Furthermore, climate-vulnerable communities lack the awareness, financial resources, and decision-making power to influence local adaptation planning and financing and implement adaptation measures. Together, these factors limit the capabilities of climate-vulnerable communities to build long-term resilience to a changing climate. While vulnerable communities have developed their home-grown adaptation measures to deal with natural disasters, the sheer magnitude of multiple impacts of disasters often overwhelms the traditional coping mechanisms at the local level. Rural households in Bangladesh are spending a staggering 158 billion *taka* (almost US$ 2billion) annually to prepare for and respond to the impacts of frequent climate disasters.[[49]](#footnote-50) Families have to divert money away from basic necessities such as food, health, and education to repair damaged houses, and replace livestock and destroyed crops. Affected households are often left with no choice but to borrow money from informal sources with high interest rates, pushing them into a perpetual cycle of financial insecurity and deep poverty. Furthermore, vulnerable communities have limited access to knowledge, skills, technology, and funds for climate change adaptation and limited capacity to influence local development plans to ensure their needs are adequately captured.
2. **Gender:** Hotspots of climate vulnerability can be found across the country, with poor, marginalised groups and women likely disproportionately affected by the negative impacts of climate change, causing inequalities to widen even further.[[50]](#footnote-51) The effects of climate change are largely gendered, exacerbating the pre-existing inequalities and vulnerabilities women in Bangladesh face, including entrenched gender norms and reproductive responsibilities.

Various micro-level studies also indicate that women are more vulnerable than men, both to short-term recurring climatic events (major natural disasters) as well as long-term climate-induced changes (sea level rise, salinity intrusion in water and soil, land erosion, drought), because these are threat multipliers. Women’s lack of control over capital, limited economic opportunities, and lack of voice in decision-making further impede their ability to adapt to and overcome challenges posed by climate change. As their average income is much lower, female-headed households spend three times more of their income on addressing the effects of climate change than households headed by men, further entrenching gender inequalities. Social norms and family responsibility reduce women’s survival chances in rapid-onset climate events. Women respondents, in surveys conducted in southern, cyclone-prone Bangladesh, indicated that they are reluctant to use shelters because it is difficult to leave their homes and/or stay in a shelter without a male relative. Women and adolescent girls also face specific difficulties due to climate variability such as lack of sanitation facilities, because of their fuel and water collection responsibilities for their families, and from increased external and domestic violence. This should not imply that Bangladeshi women and girls are victims. According to IUCN data, women also play a crucially important role in food production in Bangladesh – by 2008, 66% of all women participated in agricultural activities and women constituted 45.6% of the total farming population overall, making them a key stakeholder for adaptation investments and project design.1. **Barriers:** are discussed below:
2. **Limited institutional capacity for locally-led adaptation at the local government level:** At the local government level, there is limited understanding of climate change, as well as varying degrees of skills to incorporate climate change into the regular planning processes of local governments. Lessons from UNDP and UNCDF experience suggest that integration of climate change in the actions of LGIs, CSOs and the local institutions working at the local level can help deliver adaptation benefits at scale. However, both these actors lack the capacity and incentives to integrate climate change into their development planning. Such incentives in the form of technical support, access to finance and leadership can unleash the potential for the country to deliver climate finance at scale in all vulnerable areas and all climate-vulnerable populations.
3. **Limited awareness, knowledge, interest, and decision-making power of climate-vulnerable communities, especially women, to influence local adaptation planning and budgeting:** While vulnerable people living in climate hotspots have developed their own strategies and practices to cope with the impacts of climate change, they have not been sufficiently empowered to lead adaptation planning in their communities. This is fuelled by a lack of easily accessible climate information and understanding to explain the circumstances of climate change impacts as well as their causes and how to adopt long-term remedies. The effectiveness of climate actions remains contingent upon how the priorities and concerns of the most vulnerable sections, which include men, women, children, ethnic minorities, and persons with disability, are addressed.
4. **Limited knowledge and financial resources at the household and community level to implement adaptive livelihoods**: The most vulnerable households have only limited access to innovative technology and funds for adaptation. Moreover, there is a lack of large-scale diversification of rural employment, increasing communities’ vulnerabilities to the impacts of climate change.
5. **Lack of market linkages and incentives for private sector engagement to scale up adaptive livelihoods:** The overall interest of the private sector in Bangladesh to promote climate change adaptation is extremely low, partly fuelled by a lack of business models to promote market-led climate adaptation, as well as, more generally, limited examples of pro-poor private sector development in the country. Moreover, project beneficiaries have limited knowledge and experience to work with the private sector.
6. **Lack of institutional financing system for adaptive community schemes at the local government level:** There is currently no systematic approach to transfer climate finance from the national to the local level, where the need and impact of such finance would be highest. Coupled with inadequate accountability in the planning and budgeting processes of the local governments, the GoB does not have the adequate capacities and resources in place for a strong system of locally-led adaptation.
7. **Insufficient budget allocation for adaptation to the local government level:** The GoB does not have sufficient access to international climate finance for local-level adaptation of the most vulnerable communities.The GoB expenditure pattern of climate change activities is overwhelmingly shaped by sectoral policies and their implementation rather than climate change policy. On the other hand, the highest spending organ of the government in terms of implementation of projects at the local level (the Local Government Division-LGD) does not make reference to climate change indicators in the budget at the ministry level. A recent analysis of the expenditure pattern on climate change indicates that Local Government Institutions (LGIs) receive regular development finance and other safety net resources (e.g., food) from different sources. They also generate their own revenue. The LGIs have been drawn into the implementation of several regular development programmes and provide a platform for long-term interventions.
8. **Competitive national policy environment and institutional slow-down demonstrated by a lack of a systematic approach to decentralised CCA management through LGIs:** The Government already recognises the severity of climate change, and therefore, the related concerns are being gradually mainstreamed in the national development policy planning and financing. However, this sector is served by a number of sectoral policies which also shape the expenditure pattern in the national budget. While the LGIs are mandated to implement many actions related to climate change, these actions need to be included in the local plans as climate-proofing initiatives. The absence of a systematic approach to integrating climate change into planning and budgeting, both at the national and local levels, has meant that mandated measures are not frequently translated into concrete action.The development of climate change policy in Bangladesh has been influenced by the international context, where the country played a leading role in highlighting the position of the LDCs in the climate finance debate. At the national level, the climate change agenda operates in a competitive policy environment, where sectoral policies take a lead in shaping public expenditure, although there is scope to reflect climate change as an item of expenditure. There is a lack of a systematic approach to integrating climate change into planning and budgeting both at the national and local levels as well as a lack of decentralised CCA management through LGIs. A good example of this is the Local Government Division (LGD), which is the highest spending ministry in respect of climate-sensitive activities (22% over three years); however, there is a need to include climate change activities in the budget framework at the ministry level.Moreover, despite a proactive commitment of the government on climate change issues at the international level, the national level work is characterised by actions at various ministry and department levels with slow cascading down. While the country has several plans supported by a broad policy landscape, it does not have a legislative and institutional framework specific to CCA implementation to bring any obligatory mandate. Moreover, amidst multiple policies and actors, there is inadequate opportunity for marginalised groups and vulnerable communities to effectively contribute to shaping climate actions at the local level.
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| **B.2. Project/Programme description (max. 3 pages)** |
| 1. In 2016, the Government of Bangladesh, the European Union, Government of Sweden, together with the United Nations Development Programme (UNDP) and United Nations Capital Development Fund (UNCDF), jointly designed the ‘Local Government Initiative on Climate Change’ (LoGIC) project to develop a mechanism to deliver climate finance to the most vulnerable households and local government institutions for building resilience and promoting local action on climate change adaptation at scale. Initially designed as a four-year project, the project was extended for another 30 months based on the success of its initial results. The proposed project will build on the lessons learned from the LoGIC project with the aim of institutionalising an innovative climate finance model across the country’s most climate-vulnerable districts. LoGIC is being implemented in 72 Unions of 19 Upazilas across the seven most climate-vulnerable districts in Bangladesh, targeting a total of 400,000 households. LoGIC is centered around three key pillars:
* Strengthening the capacity of vulnerable people and local stakeholders for accountable planning and financing of CCA/Disaster Risk Reduction (DRR) actions for building resilience.
* Enhancing access of LGIs and vulnerable households to climate funds for climate-resilient infrastructures and adaptive livelihoods.
* Establishing evidence-based advocacy for a mechanism for financing local resilience.
1. **Theory of Change:** People living in climate hotspots in Bangladesh are particularly vulnerable to climate change impacts but lack the resources and capacities to adapt to a changing climate. The proposed project is based on the assumption that ***if*** *climate-vulnerable communities in Bangladesh have enhanced capacity to lead local-level adaptation and financing, supported by a robust national and local governance and policy framework, and vulnerable households have the resources to implement adaptive livelihoods;* ***then*** *they will be more resilient to the increasing impacts of climate change;* ***because*** *their vulnerability to climate-induced shocks will be reduced and adaptive capacity increased.*
2. The **project goal/immediate outcome** is to support the GoB in *institutionalising a streamlined, effective, and inclusive local-level planning and financing mechanism for locally-led climate change adaptation solutions through LGIs.* This will be achieved by addressing the above-mentioned barriers through three pathways of change:
* Enhancing the capacity of local governments and vulnerable communities for facilitating locally-led adaptation planning and financing (Output), which will enable local governments, civil society, and vulnerable communities to build long-term local resilience to climate change impacts (Outcome).
* Establishing a financing mechanism to fund local governments and households for implementing adaptation measures (Outcome), which will enable vulnerable communities, especially women, to build immediate-term resilience to climate change impacts (Outcome).
* Strengthening national and local level governance and policy frameworks for local-level adaptation planning and financing (Output), which will enhance institutional adaptive capacity and local-to-national linkages (Outcome).
1. In terms of **GCF impacts**, the proposed intervention will contribute to increased health, food, and water security; resilient livelihoods of people and livelihoods; as well as maintenance of ecosystems and ecosystem-based services. The envisaged **paradigm shift** is a move away from a decentralised system of adaptation planning and financing, predominantly concentrated at the national level, towards locally-led, community-centric adaptation solutions embedded within a robust institutional system that builds ownership and capacities at all levels to design, implement, manage, and evolve adaptive responses in order to safeguard livelihoods, increase climate resilience of communities, and overall accelerate sustainable development in Bangladesh.

**Output 1: Performance-based grants are deployed and investments for climate resilience are implemented by local governments**Under this Output, the project will mainstream climate change adaptation into local government planning and financing and will deploy performance-based grants for community-based adaptation interventions. The output will provide communities and LGIs with the necessary capacity and tools to ensure that the interventions and investments implemented through Component 2 promote local resilience. The Output will ensure that interventions implemented by LGIs are addressing key adaption needs, are meaningfully prioritized, properly budgeted and managed in terms of finance and implementation. Building on this improved capacity, the communities, together with the LGIs, will undertake a participatory Community Climate Vulnerability Assessment (CCVA), which will, in turn, inform the local interventions through the development of the Local Resilience Plans (LRP). To complement this locally-led, bottom-up approach, the project will combine a top-down approach (risk assessments based on downscaled climate models). Part of the LRP development process will be identifying need-based community adaptation schemes in consultation with the project, focusing on ecosystem-based adaptation initiatives. These plans will then be mainstreamed into the local development planning (LDP) process and regularly screened and updated against current and emerging environmental and climate risk priorities to improve the climate-inclusive LDPs on an ongoing basis. A Performance-Based Climate Resilience Grant (PBCRG) system will supplement the existing LGI development budget, targeting specific adaptation interventions and providing an additional resource to climate-proof their investment in community-based adaptation. By integrating a dedicated CCA-linked scheme into the five-year and annual development plans of LGIs, the project ensures that climate finance for adaptation can be delivered at scale. This system will demonstrate the benefit of investing in CCA and is expected to make a case for increased and accountable budget allocations. The PBCRGs will be aligned with the current system of fiscal transfers to LGIs, and finance adaptation schemes identified in the LRPs will be financed through grants. Activity 1.1: Strengthen capacities of local government institutions for inclusive locally-led adaptation planning, financing, implementation and monitoring This activity involves training all Government staff on climate change and local-level adaptation planning and budgeting through the MoEFCC. Additionally, a training course will be designed for bankers, Government officials, private sector actors, and other stakeholders on climate financing tools, including adaptation bonds, green bonds, and risk financing. Upazila- and district-level officials will be developed to become lead trainers responsible for the training of community mobilizers, as well as overseeing the implementation of the PBCRG and CRF-supported schemes to ensure proper implementation and finance management. To ensure monitoring and accountability for the mechanisms, training sessions on social audit and fiduciary risk management of climate will be conducted, which will enable Union Parishad representatives to report on CCA efforts to the MoEFCC through an automated data updating protocol established and institutionalized by the project. Activity 1.2: Mainstream climate adaptation in LGI planning through Community Climate Vulnerability Assessments (CCVA) and Local Resilience Plans (LRP)For this activity, Climate Resilience Coordination Committees (CRCC) will be established to facilitate participatory CCVAs in climate-vulnerable communities, which will produce information relevant to each UP's specific LDP planning process and context. Using the CCVA findings, LGIs will prioritize interventions and investments to be financed in a participatory and gender-sensitive manner, using multiple criteria and in consultation with relevant technical research institutions and ministries. The plans will be updated annually to take into account new climate risk-related information to ensure the relevance of the priorities identified.Activity 1.3: Implement Performance-Based Climate Resilience Grants (PBCRG) and Operational Expenditure Block Grants (OEBG) system through LGIsIn this activity, CRCCs will be trained to prepare and submit project proposals for community-based schemes based on their prioritized activities in the LRP. Interventions and investments will be costed, selected, and prioritized in a participatory and gender-sensitive manner. Additional funding, in the form of PBCRGs, will be provided to the LGIs through existing intergovernmental fiscal transfer channels to support the implementation of adaptation interventions within existing annual planning and budgeting cycles. The performance of LGIs will be assessed annually for compliance with mandatory requirements and appraisal against the performance measures. Finally, CRCs will be responsible for monitoring the effectiveness of the schemes and recording any grievances from the communities.**Output 2: Resilient livelihoods are implemented for climate-vulnerable households and communities**This Output will focus on establishing a financing mechanism to complement the PBCRGs from Output 1 in order to fund communities to implement adaptation measures. The Climate Resilience Fund (CRF) will channel grants directly to climate-vulnerable households to kickstart the implementation of climate-adaptive livelihood options (CALOs) and is a medium-term measure to meet the livelihood and food security needs of vulnerable households that are currently not effectively reached to increase their overall resilience. In the longer term, the project aims to institutionalise the CRF as a social protection scheme in the LGIs to channel climate finance to the most climate-vulnerable households effectively. Throughout, the Project will focus on strengthening the quality and accountability of the activities funded through the CRF grant mechanism. Moreover, the project will build the capacity of vulnerable communities to implement adaptive livelihood options, ensuring that Climate Resilience Funds do not lead to maladaptation practices.Activity 2.1: Improve capacities of climate-vulnerable households on local-level adaptation This activity involves conducting awareness-raising and capacity-building sessions for communities to impart knowledge on climate change and its impacts, adaptation solutions, and nature-based solutions. The project team will also identify community mobilizers who will receive training on the CCVA and LRP system and on how to support vulnerable households to implement CALOs. These mobilizers will receive special training on community mobilization. Additionally, the project will establish a national youth network to build the capacities and awareness of local youth on climate change and adaptive measures, develop their leadership and innovation, and enable them to advocate for sustainable solutions to climate change through local and national platforms. Activity 2.2: Support vulnerable households to implement climate adaptive livelihoods through Climate Resilience Funds (CRF)This activity involves identifying suitable CALOs through the LGD and relevant line departments together with research institutions and summarizing them in a menu focusing on nature-based solutions and prevention of maladaptation. Next, the project will identify eligible beneficiaries, mainly women, and support them to develop household-level resilience plans through the CRCCs, which will be treated as proposals to the LGIs for the CRF. The project will facilitate the formation of local-level committees at the LGI level to screen proposals against the LRPs for relevance and support the LGIs to develop the necessary support mechanisms to assist households in developing the micro-grant proposals based on the LRPs. Once identified, the beneficiaries will be trained on CALOs of their choice by the CRCCs with technical support from the project. The project will disburse CRF micro-grants (USD 350) after completion of the training directly to selected households to implement CALOs using an electronic cash transfer mechanism. Finally, the project will conduct result and compliance monitoring of resilience grants for adaptive livelihoods of vulnerable households.**Output 3: Developed value chains, market linkages, and information systems for improved engagement with the private sector**This Output will engage the private sector in order to make businesses, markets, and livelihoods of community members more climate resilient. Climate Smart Cooperatives will be formed and given technical and financial assistance to scale up their climate adaptive initiatives. Activity 3.1: Develop Climate Smart Cooperatives (CSC), value chains, and market linkagesThe activity includes facilitating the formation of 700 CSCs with legal and organizational structures, skill-building for beneficiaries on industrial management to run large-scale green businesses, and establishing market linkages for cooperatives to increase income opportunities. The project will also develop gender-responsive value chains to help communities adapt and secure resilient livelihoods.Activity 3.2: Enhance local-level adaptation financing by promoting the active participation and scrutiny of communities, CSOs and local institutionsThis activity involves supporting LGIs to develop a performance measurement framework and set up a system for participatory annual performance assessments of the PBCRG and CRF operations and results. The project will also support LGIs to conduct social and environmental safeguard screenings of PBCRG and CRF-supported schemes. Additionally, the project will facilitate the structured participation of community members, particularly those identified under the LRPs as most vulnerable to climate change, in the LGI-oriented performance assessment process to improve the social accountability of the LGIs.Activity 3.3: Provide CSCs with concessional loan financing to upscale adaptive livelihood initiativesUnder this activity, both newly formed and existing CSCs (950 total) will be provided with concessional loans to upscale their adaptive green businesses. The activity will involve preparing a financing strategy, mapping out and developing a strong project pipeline, and selecting end borrowers. Loans will be disbursed to CSCs that apply climate adaptive techniques in their businesses. Particular attention will be paid to supporting and funding women’s CSCs.**Output 4: Strengthened national and local level governance and policy frameworks for local-level adaptation planning and financing** Under this Output, the project will institutionalise the locally-led adaptation planning and financing model established at the community and local government level by informing wider policy and practice and strengthening governance and reforming the planning and financing system of the Government for CCA at the local and community level. The Output is designed to promote the increased fund flows from the central to local government for implementing locally-led adaptation initiatives. Activity 4.1: Promote increased climate finance allocation for locally-led adaptation to the local government level This activity includes collecting and consolidating evidence from the project to develop a solid evidence-based business case for the GoB to channel increased domestic resources to the local government for financing local-level adaptation. The use of a nationwide Climate Vulnerability Index (CVI), which maps the climate vulnerability of regions in Bangladesh up to the Union Parishad level, will also be institutionalized. A household-level vulnerability index will be created based on the project's beneficiary selection criteria, which identifies the most climate-vulnerable households within each Union for allocation of climate adaptation social protection schemes and integrate it into the CVI. Other viable climate financing models, including insurance and other risk financing instruments, green bonds, blended finance through PPP, or green microcredits, will also be researched.. Activity 4.2: Advocate for transparent and sustainable use of climate finance at the national and local level The activities under this include advocating for the inclusion of the Local Climate Financing Framework (LCFF), developed by the project, in the revised National Climate Financing Framework (CFF) through policy discussions with the Finance Division of the Government. Transparency and accountability of climate finance at the national and local level will be enhanced by promoting data collection, monitoring and evaluation, and reporting on adaptation programming and expenditure. A social audit protocol within the Government audit system will be introduced to enhance transparency and accountability. The project will also promote the adoption and implementation of the enhanced transparency framework (ETF) established by UNFCCC.*Describe in what way the Accredited Entity(ies) is well placed to undertake the planned activities and what will be the implementation arrangements with the executing entity(ies) and implementing partners.*1. UNDP, the Accredited Entity, has been a long-standing trusted development partner of the Government of Bangladesh and as such is able to deliver qualitative technical guidance, oversight, and quality assurance of project implementation. As such, UNDP has successfully helped to make government institutions more effective, transparent, and accountable.

**Key Financial and Operational Risks and Mitigation Measures:**

|  |  |  |
| --- | --- | --- |
| **Risk category** | **Potential risks**  | **Mitigation measures**  |
| Political | Political instability may prevent/delay project implementation | * This external risk cannot be fully contained at the project level. However, impact on local level activities will be mitigated through a comprehensive contingency plan.
* The work plan will consider eventual political unrest associated with planned political processes such as elections.
* Risk assessments will be conducted, and risk logs maintained and regularly updated by the project.
 |
| Organizational | Changes in LGI political leadership may require additional capacity building and cause delays  | * The project will maintain flexibility in providing extra support to newly appointed government and LGI officials.
* The project will maintain flexibility in the budget for catering to additional capacity building support in case of changes in LGI leadership.
* The project will institutionalize capacity building modules on climate change adaptation through the NILG, with support from the MoEFCC.
 |
| Political | Political influence on geographical targeting of the implementation | * The project has used its Climate Vulnerability Index to identify its working Unions based on exposure and sensitivity information, as well as adaptive capacity. The identification of beneficiary communities within these Unions will be based on agreed selection criteria to ensure fair, transparent, and effective targeting of the most climate vulnerable households and communities.
* The project will ensure the endorsement of targeted communities by all key parties.
 |
| Financial | Reduction in allocations of development funds at the LGI level | * At the government level, the project will continuously advocate for as well as closely monitor the allocation of resources to the local government and advocate for increased flow of funds from the national to the local level.
 |
| Regulatory | Improvements in Government Public Financial Management (PFM) processes do not take place to the extent expected, affecting the availability of climate finance at the local level | * Existing PFM cycles will be assessed in relation to performance-based grants to the local systems, with an emphasis on transparency and accountability mechanisms.
* Capacity building will ensure that government officials have the capacity to correctly use government systems to avoid inadvertent misuse of funds.
 |
| Operational | Fiduciary risks of repurposing of CRF by beneficiaries to meet emergency needs due to cyclones, floods, pandemic, etc. | * Safeguarding climate adaptive livelihood options and ensuring close monitoring.
 |
| Operational | Risk of non-transformative resilience of CRF beneficiaries due to not having a year-round calendar for seasonal and continuous adaptation of their livelihoods. | * Develop yearlong district wise climate adaptive livelihood seasonal calendar and ensure skill transfer to the CRF beneficiaries
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| **B.3. Expected project results aligned with the GCF investment criteria (max. 3 pages)** |
| *The GCF is directed to make a significant and ambitious contribution to the global efforts towards attaining the goals set by the international community to combat climate change and promoting the paradigm shift towards low-emission and climate-resilient development pathways by limiting or reducing greenhouse gas emissions and adapting to the impacts of climate change.**Provide an estimate of the expected impacts aligned with the GCF investment criteria: impact potential, paradigm shift, sustainable development, needs of recipients, country ownership, and efficiency and effectiveness.* **Impact potential:**The Project is directly targeting the 2.6 million most climate-vulnerable households across Bangladesh’s climate hotspots, enhancing their adaptive capacities and increasing their resilience toward the impacts of climate change through a community-based approach to climate adaptation. The Project locations were selected based on a Climate Vulnerability Index (CVI) developed by the Project, taking into account three types of data: (a) exposure information, e.g., climatic data with atmospheric hazards, land-sea hazards, and surface elevation; (b) sensitivity information, e.g., demography, households, infrastructure, livelihoods, and hydrology; and (c) adaptive capacity, e.g., education, employment, road networks, disaster response, etc. The Project will directly strengthen the institutional and regulatory systems of the local governments for climate-responsive and accountable planning and development, as well as climate-informed decision-making. This will be achieved by strengthening the capacity of the local governments, enhancing their access to climate funds, and institutionalising a mechanism for financing local resilience. **Paradigm shift potential:**The previous phase of the Project has already successfully established itself as an effective climate finance mechanism for climate-vulnerable communities and LGIs, with lower transaction costs and higher adaptation benefits. The aim of the proposed Project is to now systematically mainstream climate-informed planning and budgeting into the regular operations of the Government through a community-based approach of locally-led adaptation. As such, the Project’s financing mechanisms have demonstrable large potential for national scale-up and replication in similar contexts. Similarly, the Project’s strategy of accountable climate-informed planning and budgeting can be easily integrated into the local development planning processes across the country. The Project itself will demonstrate the benefit of and business case for investing in CCA not only for increased climate resilience but also for advancing the overall desired sustainable development trajectory Bangladesh envisions for itself. By reforming the planning and financing system of the Government for CCA at the local and community level, the Project will ensure sustainability beyond its duration.Throughout the implementation of its activities, as part of regular Monitoring & Evaluation (M&E), the Project will assess the effectiveness of its PBCRG[[51]](#footnote-54) and CRF schemes in increasing adaptive capacities of the targeted communities to ensure best practices are scaled up and less effective solutions are discontinued. Findings and lessons learned will be captured and openly shared to ensure advancement in the field of adaptation innovation. The Project will actively seek out dialogues and exchanges with institutions or projects implementing similar projects to enable mutual learning. The proposed Project will continuously strive towards implementing new innovative adaptation solutions, which will be identified by a dedicated Adaptation Innovation Expert. The Cooperative model utilised by the Project will enable climate-vulnerable women to meet their economic needs through a jointly owned and democratically controlled green enterprise, which will, in turn, increase their and their communities’ climate resilience. The Government, in turn, can employ this cooperative model to advance its efforts on climate change, offering a systemic solution to global challenges in agriculture, retail, employment, and the economy. By grouping its beneficiaries into cooperatives, the Project also provides them with a safety net in the form of a resilient form of enterprise that enables the Project to gradually cease its support while ensuring the sustainable continuation of its impacts. **Sustainable development potential:** Women commonly face higher risks and greater burdens from the impacts of climate change in situations of poverty. Women’s unequal participation in decision-making processes and labour markets compounds existing inequalities and often prevent women from fully contributing to climate-related planning, policymaking, and implementation. The project is therefore taking a gender-transformative approach to adaptation and will almost exclusively target climate-vulnerable women as recipients of its CRF. Investing in women-focused climate adaptation measures that build women’s resilience to climate change and create spaces for women’s leadership and decision-making in climate chance policy and programming, is imperative for improving communities’ overall climate resilience and advancing the sustainable development of the country. Creating sustainable, equitable and resilient livelihoods for climate vulnerable women will be a key component of the proposed project to bring about adaptive and long-term transformation within the targeted communities. This in turn, will ensure women’s financial inclusion and enhance their income. Moreover, the Project will increase women’s access to public institutions that can help increase adaptive capacity, ensure gender concerns are considered in policies and adaptation strategies, and promote the transformation of women as change agents. These measures combined will help women empower themselves socially and economically.Moreover, to ensure intergenerational change toward a climate resilient future, the Project will build the capacity of youths (ages 16-29) on climate change adaptation and integrate them into Project supported local adaptation planning, climate risk assessments, adaptation tracking and monitoring processes. By involving them in youth networks across the country, the Project will raise awareness on climate change and environmental issues among Bangladesh’s youth and create a space and platform for them to advocate and widen their networks, both nationally and globally. Building their resilience and adaptive capacities will transform these young people into agents of change and enhance their readiness to transform their country into a low-carbon climate resilient economy and society. The Project will also take an equitable and inclusive approach to climate finance and adaptation by reaching out to the most vulnerable and hardest to reach communities, in line with the UN’s principle to ‘Leave No One Behind’ (LNOB). The Project’s beneficiary selection process will prioritize women, girls, ethnic minorities, marginalized communities, and persons with disabilities (PWDs). By adopting a human rights-based approach, the Project will ensure that vulnerable and marginalized people get the choice, entitlement, and participation in the entire process of building local resilience. Climate change provides an additional threat that adds to, interacts with, and can reinforce existing risks, placing additional strains on the livelihoods and coping strategies of the poor. The manyfold challenges posed by climate change exacerbate vulnerable communities’ poverty, threatening the significant gains achieved by Bangladesh in terms of economic growth, poverty reduction, and improvements in health and education. Climate adaptation and poverty reduction therefore are invariably interlinked. By giving vulnerable communities the tools to adapt to climate challenges, the Project will thus also contribute to the reduction of poverty among these communities more generally, for example by introducing climate resilient crops that increase agricultural productivity. Adaption to climate change is an imperative for Bangladesh’s path of sustainable development and should be part of its overall poverty reduction strategy. **Needs of the recipient:** Bangladesh is often cited as one of the most climate vulnerable countries in the world, struggling with a combination of a high population (approximately 166 million[[52]](#footnote-55)) and density, low-lying typography, high poverty, and weak infrastructure. While Bangladesh has experienced significant economic growth in recent decades, it is still a least developed country (LDC) set to graduate to middle income status by 2026 and ranks low in many measures of economic development. Continued progress is being hampered by the exacerbating impacts of climate change.According to a 2018 U.S. government report, 90 million Bangladeshis (56 percent of the population) live in “high climate exposure areas,” with 53 million subject to “very high” exposure[[53]](#footnote-56). This greatly exceeds global averages for population exposure: only 14 percent of the world’s population live in areas facing *high* climate exposure (compared to 56 percent in Bangladesh) and globally only 6 percent of the population live in areas with *very high* climate exposure (compared to 33 percent in Bangladesh)[[54]](#footnote-57). The country’s potential to sustain its development faces significant challenges posed by a changing climate with risks to life, infrastructure, and the economy. While the Government recognizes the importance of addressing climate change and has made significant progress in increasing disaster resilience, a lack of financial resources and institutional capacity has left most communities in climate hotspots to remain climate vulnerable. The proposed Project will increase the Government’s institutional capacity for climate change adaptation through a community-based approach that will give local governments and communities the tools and resources necessary to increase their resilience. Through a Climate Vulnerability Index (CVI), the Project is targeting the most climate vulnerable, poorest, and hardest to reach communities in Bangladesh. Beneficiaries will be selected based on their individual vulnerability measured by their level of poverty, climate fragility and adaptive capacity (income, health, housing, education, early warning, social capital). All CRF beneficiaries will be women, with special priority given to ethnic minorities and PWDs. **Country ownership:** The proposed Project directly contributes to and is aligned with Bangladesh’s priorities for climate resilient development as identified in its NAP and INDCs. It reflects the Government’s main overarching climate change strategy, the Bangladesh Climate Change Strategy Action Plan (BCCSAP) [[55]](#footnote-58) and aligns very well with the first NDC of Bangladesh, which highlights adaptation as a priority, including several specific priorities that strongly overlap with the Project, including climate resilient livelihoods, capacity building at the individual and institutional level to plan and implement adaptation programmes and projects in the country. More generally, the proposed Project is also closely aligned with the country’s national development strategy, as expressed in its Vision 2041[[56]](#footnote-59), as well as its 8th Five Year Plan.[[57]](#footnote-60) The previous phase of the Project has demonstrated the consistent track record and relevant experience and expertise of the AE and executing entity in designing and implementing climate finance mechanisms and building the capacity of local governments for locally led adaptation. Government ownership in the previous phase was exceptionally high, reflected by its acknowledgment and presentation of the Project as a government intervention, demonstrating a full buy-in. The Project’s exemplary contributions to climate change adaptation in Bangladesh were recognized in the Government’s Mujib Climate Prosperity Report 2030 presented at COP26. The LGD expressed keen interest in the scale-up of the Project with GCF support, is ready to make financial commitments, and aims to make it a flagship project for delivering climate finance to the most vulnerable communities, further highlighting the Government’s ownership of the proposed Project. Removed from B1: **Alignment with national priorities:** Bangladesh has made climate change adaptation an integral part of its national development strategy, as expressed in its Vision 2041[[58]](#footnote-61), as well as its 8th Five-Year Plan.[[59]](#footnote-62) It has expressively sought support from the international community to implement its climate resilience strategy and provide additional resources for climate adaptation. The GoB introduced its first adaptation initiative with the development of its National Adaptation Program of Action (NAPA) in 2005 (subsequently revised in 2009), which identifies necessary adaptation measures, including those addressed by the proposed project, e.g., rainwater harvesting, climate-resilient cropping systems, livelihood diversification, community-level adaptation, social protection, and policy and institutional capacity building.[[60]](#footnote-63) The Bangladesh Climate Change Strategy and Action Plan (BCCSAP), published in 2009, streamlined and reinforced climate adaptation actions in the country. It provides core programme direction, aiming to increase the country’s resilience against the impacts of climate change; reduce/eliminate the risks climate change poses to the country's development; and continue the country's rapid development, following a ‘low-carbon growth path’.[[61]](#footnote-64) ‘Climate proofing’ the country, i.e., adapting to climate change, is one of the key priorities of the Government’s strategy. The proposed project will specifically target Pillar 1 - *Food security, social protection, and health*, as well as Pillar 7 – *Capacity building and institutional strengthening* of the Strategy. The Government also created a Climate Change Trust Fund (CCTF) from its own resources to finance projects within the scope of the BCCSAP, as well as the Bangladesh Climate Change Resilience Fund (BCCRF), which consists of funds pledged and provided by developed countries. The latter, however, is no longer operational. In 2018, the GoB published the Delta Plan 2100, which addresses the long-term priorities for sustainable water resources management. The Mujib Climate Prosperity Plan, presented at COP26, provides a guide for a sustainable development path through a low-carbon strategy. Please review Annex 6 for details on the Policy Landscape in Bangladesh.**Efficiency and effectiveness:** The proposed Project is aligned with all the international best practices for CCA projects and will utilize a community-based adaptation (CBA) approach which has been found to be a vital strategy for supporting the adaptation needs of the most climate vulnerable which aspires to be inclusive, empowering and context-specific. It will build on the lessons learned of the LoGIC project, the concept for which arose out of existing EU and Government of Sweden supported experience in inclusive local governance and performance grants schemes, as well as the learning of UNDP and UNCDF covering the aspects of reducing vulnerability of the community, enhancing their participation in local level planning and budgeting for climate actions, increasing capacity of the stakeholders and improving the governance of LGIs with regard to climate financing.  |
| **B.4. Engagement among the NDA, AE, and/or other relevant stakeholders in the country (max ½ page)** |
| *Please describe how engagement among the NDA, AE and/or other relevant stakeholders in the country has taken place and what further engagement will be undertaken as the concept is developed into a funding proposal.*  |
| 1. **Indicative Financing/Cost Information (max. 3 pages)**
 |
| **C.1. Financing by components (max ½ page)** |
| *Please provide an estimate of the total cost per component/output and disaggregate by source of financing.*

|  |  |  |  |
| --- | --- | --- | --- |
| **Component/****Output** | **Indicative cost****(USD)**  | **GCF financing** | **Co-financing** |
| **Amount****(USD)** | **Financial** **Instrument** | **Amount****(USD)** | **Financial Instrument** | **Name of** **Institutions** |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| **Indicative total cost** **(USD)** |  |  |  |

 |
| **C.2. Justification of GCF funding request (max. 1 page)** |
| *Explain why the Project/ Programme requires GCF funding, i.e., explaining why this is not financed by the public* *and/ or private sector(s) of the country.**Describe alternative funding options for the same activities being proposed in the Concept Note, including an analysis* *of the barriers for the potential beneficiaries to access to finance and the constraints of public and private sources of* *funding.* While Bangladesh has made remarkable progress in reducing poverty, supported by sustained economic growth, these gains are under threat from the impacts of climate change. While climate adaptation and development are inextricably linked, the problem the proposed project is targeting is purely a climate change problem, stemming from the low adaptive capacities of the country’s climate vulnerable population. As an LDC, however, the country cannot afford to divert much needed development funds to climate priorities. The Government currently spends US$1 billion annually, i.e., 6 to 7 percent of its annual budget, on CCA, showing a high commitment to financing adaptation.[[62]](#footnote-65) Nonetheless, this will not be sufficient; Bangladesh’s NDC estimated that overall adaptation measures will cost the country US$42 billion between 2015 and 2030.[[63]](#footnote-66) Moreover, with dwindling ODA resources amidst a looming global recession, as well as limited interest from the private sector to invest in adaptation, Bangladesh is struggling to finance adaptation measures at the scale required to increase resilience among large sections of its population. The expected graduation of Bangladesh from its current LDC status in 2026 will present many new opportunities for the country, but also entails the loss of various international support measures, including those targeted for climate change concerns such as GEF’s LDC Fund. When money is invested into adaptation it typically does not trickle down to the local level and the targeted beneficiaries face great difficulties in securing direct access to financing mechanisms for CCA.The relatively low levels of fund flows to the local level and the limited availability of public and private funds highlight the need for additional external finance. Simultaneously, Bangladesh has demonstrated a high level of success in terms of its institutional capacity to absorb and manage climate finance, with significant progress made in fiduciary management standards, commitment to service delivery, and effective and efficient budget execution. In this context, GCF funding is critical to enable investments in locally led adaptation and would be transformational in influencing local governments to make climate informed budget allocations, overall supporting, and stimulating Bangladesh’s climate resilient development pathway. *Justify the rationale and level of concessionality of the GCF financial instrument(s) as well as how this will be passed on**to the end-users and beneficiaries. Justify why this is the minimum required to make the investment viable and most efficient considering the incremental cost or risk premium of the Project/ Programme (refer to Decisions B.12/17; B.10/03; and B.09/04 for more details). The justification for grants and reimbursable grants is mandatory.*  |
| **C.3. Sustainability and replicability of the project (exit strategy) (max. 1 page)** |
| *Please explain how the project/programme sustainability will be ensured in the long run and how this will be monitored, after the project/programme is implemented with support from the GCF and other sources.*Effective and meaningful adaptation measures are expected to reduce the consequences of climate change in the short as well as the long term. All of the proposed interventions have therefore been strategically designed to live beyond the lifetime of the project to ensure that the adaptation capacities of the targeted communities are strengthened for the long-term. The project envisages a two-fold sustainability of efforts beyond its stipulated life. Firstly, through the capacity-building component, primary stakeholders will continue to utilise the knowledge, skills, and market linkages gained for higher adaptive capacity at their respective levels. The vulnerable households and the community at large will continue to derive benefits by using the knowledge transferred. The cooperative model of the Project will ensure the sustainability of the climate-adaptive livelihoods taken up by the beneficiaries beyond the project’s duration, as well as promote the adoption of climate-resilient livelihood practices targeting sustainable intensification by providing a legal organisational structure that benefits from strong fiduciary risk management. Furthermore, civil society engagement would amplify the demand for more investment for adaptation in an accountable, transparent, participatory, and inclusive manner. Similarly, local governments will have the awareness, tools, and skills necessary to include climate concerns in their planning and budgeting beyond the project’s scope. The proposed intervention will also use the pilot experience gained at the community and local level to inform the wider policy framework and ultimately aim at improving and reforming the planning and financing system of the Government for CCA at the local and community level, enabling a qualitative change at the supply side. The Project will develop a clear exit plan to come into force at the end of the project period, including documentations on lessons learned and framing of a participatory phphase-outlan. The project will plan a gradual handover with backup support over a period of time. The ultimate objective of this phase-out is to transform the project into a mainstreamed mechanism implemented nationwide at the local level.The ability of the project to increase vulnerable communities’ adaptive capacities, as well as to influence the planning process of the local governments was demonstrated by the success of the LoGIC project. With GCF funding, these impacts can be scaled up with the ultimate aim of mainstreaming climate informed locally led planning and budgeting nationally. *For non-grant instruments, explain how the capital invested will be repaid and over what duration of time.* |
| 1. **Supporting documents submitted (OPTIONAL)**
 |
| [x]  Map indicating the location of the project/programme – **attached as Annex 1**[x]  Diagram of the theory of change – **attached as Annex 2**[x]  Economic and financial model with key assumptions and potential stressed scenarios – **attached as Annex 3**[ ]  Pre-feasibility study[ ]  Evaluation report of previous project[x]  Results of environmental and social risk screening – **attached as Annex 4**  |

**Recommended Annexes:**

**Investment Menu (and the climate drivers they address)** – **attached as Annex 5**

**Policy Landscape (and how the proposed programme design aligns with them)** – **attached as Annex 6**

**Any review of ongoing/recently closed work of both UNDP & UNCDF (particularly a synthesis report of the Climate Vulnerability Index) + IDCOL (if they are onboarded) in Bangladesh -** – **attached as Annex 7/8/9.**

**UNDP Risk Screening/relevant document** – **attached as Annex 10**

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| --- |
| **Self-awareness check boxes** |
| Are you aware that the full Funding Proposal and Annexes will require these documents? Yes [x]  No [ ] * Feasibility Study
* Environmental and social impact assessment or environmental and social management framework
* Stakeholder consultations at national and project level implementation including with indigenous people if relevant
* Gender assessment and action plan
* Operations and maintenance plan if relevant
* Loan or grant operation manual as appropriate
* Co-financing commitment letters
 |
| Are you aware that a funding proposal from an accredited entity without a signed AMA will be reviewed but not sent to the Board for consideration? Yes [x]  No [ ]  |

1. Concept notes (or sections of) not marked as confidential may be published in accordance with the Information Disclosure Policy ([Decision B.12/35](http://www.greenclimate.fund/documents/20182/184476/GCF_B.12_32_-_Decisions_of_the_Board___Twelfth_Meeting_of_the_Board__8_10_March_2016.pdf/020edfa1-53b2-4abf-af78-fccf5628db2a)) and the Review of the Initial Proposal Approval Process ([Decision B.17/18](http://www.greenclimate.fund/documents/20182/751020/GCF_B.17_18_-_Review_of_the_initial_proposal_approval_process.pdf/559e7b1c-7f34-44dd-9eff-8fa235714312)). [↑](#footnote-ref-2)
2. See [here](http://www.greenclimate.fund/gcf101/funding-projects/project-preparation/#step-2-submit-a-ppf-application) for access to project preparation support request template and guidelines [↑](#footnote-ref-3)
3. Refer to the Fund’s environmental and social safeguards ([Decision B.07/02](http://www.greenclimate.fund/documents/20182/24943/GCF_B.07_11_-_Decisions_of_the_Board_-_Seventh_Meeting_of_the_Board__18-21_May_2014.pdf/73c63432-2cb1-4210-9bdd-454b52b2846b)) [↑](#footnote-ref-4)
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51. It is anticipated that the PBCRG component of the project can be assessed through the global data tracker ‘Assessing Climate Change Adaptation Framework (ACCAF)’ which is used to monitor adaptation rationale and outcome. ACCAF was developed as part of UNCDF’s Local Climate Adaptive Living (LoCAL) Facility. [↑](#footnote-ref-54)
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