CLIMATE CHANGE ASSESSMENT

I. BASIC PROJECT INFORMATION

Project Title:	Microenterprise Financing and Credit Enhancement Project
Project Cost:	$200 million (concessional OCR); $1,000,000 (TASF; FSDPSF)
Location:	Bangladesh
Sector:	Finance
Theme:	Improving access to microfinance to microenterprises with a strong gender and climate focus.
Brief Description:	The project will expand access to finance for unbanked and underbanked microenterprises, especially women-owned microenterprises, and those from adverse climate regions, through PKSF, a wholesale microfinance and development organization and its partner microfinance institutions partner organizations (MFIs–partner organizations). The attached TA will develop partner organizations' capacity to support women's entrepreneurship skills as well as ensure environmentally responsible microenterprise financing. Bangladesh is highly exposed to climate change impacts because of its location in the monsoon belt and physical geography. In general, MFI clients are mostly women, relatively poor, located in rural areas, and engaged in agriculture or agriculture-related activities for their livelihood. MFI clients are highly vulnerable to the impacts of climate change and weather-related natural hazards as they have limited means to protect themselves from such events. Their income stream, often seasonal and dependent on weather, are insecure and unstable, which may push them further into poverty. Climate impacts and resulting poverty may lead MFI clients to live in remote and ecologically fragile areas prone to natural hazards, such as in the coastal belt, on riverbanks and chars (river islands), and in areas prone to drought. Limited educational and economic status also limits the capacity of most MFI client households to prepare for, cope with, recover from extreme weather events and adapt to future climate, including variability and extremes. The project has three outputs: (i) Output 1: **PKSF's funding to MFIs for microenterprise financing expanded,**[1] (ii) Output 2: **Commercial sources of funding to MFIs for microenterprise financing increased**, and iii) Output 3: **PKSF's and partner MFIs' institutional capacity and viability enhanced.** The project will provide a credit line to PKSF to onlend to partner organizations for their microenterprise financing and targets to increase the number of partner organizations' microenterprise loan borrowers by 100,000, of which are 80% are women, by 2027.Partner organizations finance microenterprises in various business clusters, among which microenterprises in agriculture, livestock, poultry, aquaculture, and manufacturing business cluster receive 84% of partner organizations' total microenterprise financing.

FSDPSF = Financial Sector Development Partnership Special Fund, MFI = microfinance institution, OCR = ordinary capital resource, PKSF = Palli Karma Sahayak Foundation, TA = technical assistance, TASF = Technical Assistance Special Fund.
Source: Asian Development Bank.

[1] Climatically adverse regions are saline affected, flood-prone and drought-prone areas.

II. SUMMARY OF CLIMATE CHANGE FINANCE

Project Financing		Climate Finance	
Source	**Amount ($ million)**	**Adaptation ($ million)**	**Mitigation ($ million)**
Asian Development Bank			
Sovereign Sector Grant: TASF 7	0.80	-	-
Financial Sector Development Partnership Special Fund	0.20	-	-
Sovereign Sector (Concessional Loan): Ordinary capital resources - Credit Line Component	180.00	90.00	-
Sovereign Sector (Concessional Loan): Ordinary capital resources - Credit Guarantee Component	20.00	1.00	-
Totals (including taxes)	**201.00**	**91.00**	**-**

TASF = Technical Assistance Special Fund.
Source: Asian Development Bank estimates.

III. SUMMARY OF CLIMATE RISK SCREENING AND ASSESSMENT

A. Sensitivity of Project Components to Climate or Weather Conditions and the Sea Level

The project will not entail any physical works and outputs will not be directly influenced by climate and disaster risks. Thus, impact of climate change is categorized as low.

However, MFI clients' microenterprise activities are potentially vulnerable to the impacts of climate change and weather-related disasters. Extreme weather events, such as flood, cyclones and droughts would have significant adverse impacts on agriculture and manufacturing business clusters. As microenterprises have limited financial resources to cope with disasters, climate change impacts can potentially have significant adverse effects on their livelihoods.

B. Climate Risk Screening

Bangladesh is highly exposed to climate change impacts. Most of the geomorphology of Bangladesh comprises low lying deltaic landforms. Seasonal flooding is part of the natural processes that generate and maintain deltaic landforms and enrich the soils. Rural communities in Bangladesh have developed their agricultural practices in accordance with this seasonal flooding. However, in recent decades climate change has been associated with changes in the intensity and frequency of floods, cyclones, and droughts as well as changes in rainfall patterns, all of which threaten the main agricultural systems. Climate change is expected to transform large tracts of land from non-flood-prone to flood-prone status as a result of sea level rise and melting of the Himalayan glaciers. Other projected climate change impacts include increased risk of extreme weather events such as tropical cyclones; less predictable and more intense rainfall; higher risk of drought, especially in northern parts of the country; coastal and riverbank erosion; storm damage of mangrove forests resulting in biodiversity loss; intrusion of salt water into soils and aquifers, with serious implications for agriculture; and sedimentation of riverbeds. If, as projected, sea level rises by half a meter by 2050, Bangladesh would lose about 11% of its land, affecting 15 million people.[a]

The poor and vulnerable population are disproportionately impacted by climate change because of their high level of exposure and vulnerability to natural hazards. The effects include loss of household assets, disruption of livelihoods, and loss of income, and may lead to the poor adopting negative coping strategies regarding education, health, and livelihoods, all of which may impact their long-term well-being. The poor, especially women are often involved in microenterprises, which are often small informal enterprises and mostly run by household members. They are in various business clusters, including agriculture, livestock and fisheries sectors, which are highly climate-sensitive and vulnerable to impacts of climate change. As

such, climate risks affect the productivity and income and sustainability of microenterprises. With climate risks expected to increase with future climate change, it becomes critical that microenterprises have access to financial and technical resources to implement climate and disaster adaptation actions and build resilience.

Climate Risk Classification: *low*

C. Climate Risk and Adaptation Assessment

Recognizing that the ultimate beneficiaries (microenterprises) are at risks from climate impacts, the project aims to support the adoption of appropriate climate and disaster resilience-related measures at the subproject level. Output 1 will ensure that the project's microenterprise financing is supporting climate actions by instituting a screening of climate and disaster risks at the subproject level, especially for subprojects in climate-sensitive clusters, and promoting climate actions and disaster risk management measures at the microenterprise level. In addition, partner organizations who will benefit from the loan will need to have a minimum 10% of the microenterprise portfolio from high climate and disaster risk regions of the country. Output 2, focusing on increasing commercial sources of funding to MFIs for microenterprise financing, will need to have a minimum of 10% of the microenterprise portfolio from high climate and disaster risk region of the country. Output 3 aims at institutional strengthening and capacity building and will provide training to partner organizations on environmental and social safeguards, climate and disaster risk assessment, and implementation of climate and disaster resilience measures relevant to microenterprise business clusters.

D. Climate Risk Screening Tool and/or Procedure Used

ADB preliminary climate risk screening checklist for the main financing project.

Microenterprise subprojects applying for support will undergo a preliminary climate and disaster risk screening using ADB's climate and disaster risk screening checklist, or a checklist endorsed by ADB. Information from Microcredit Regulatory Authority, PKSF, MFIs will also be sought in preparing the checklist.

ADB = Asian Development Bank, MFI = microfinance institution, PKSF = Palli Karma Sahayak Foundation.

[a] H. Shceyvens. 2015. IGES Research Report 2014-06. The Role of Microfinance and Microfinance Institutions in Climate Change Adaptation: Learning from Experience in Bangladesh. Japan. https://www.iges.or.jp/en/pub/role-microfinance-and-microfinance-0/en

Source: Asian Development Bank.

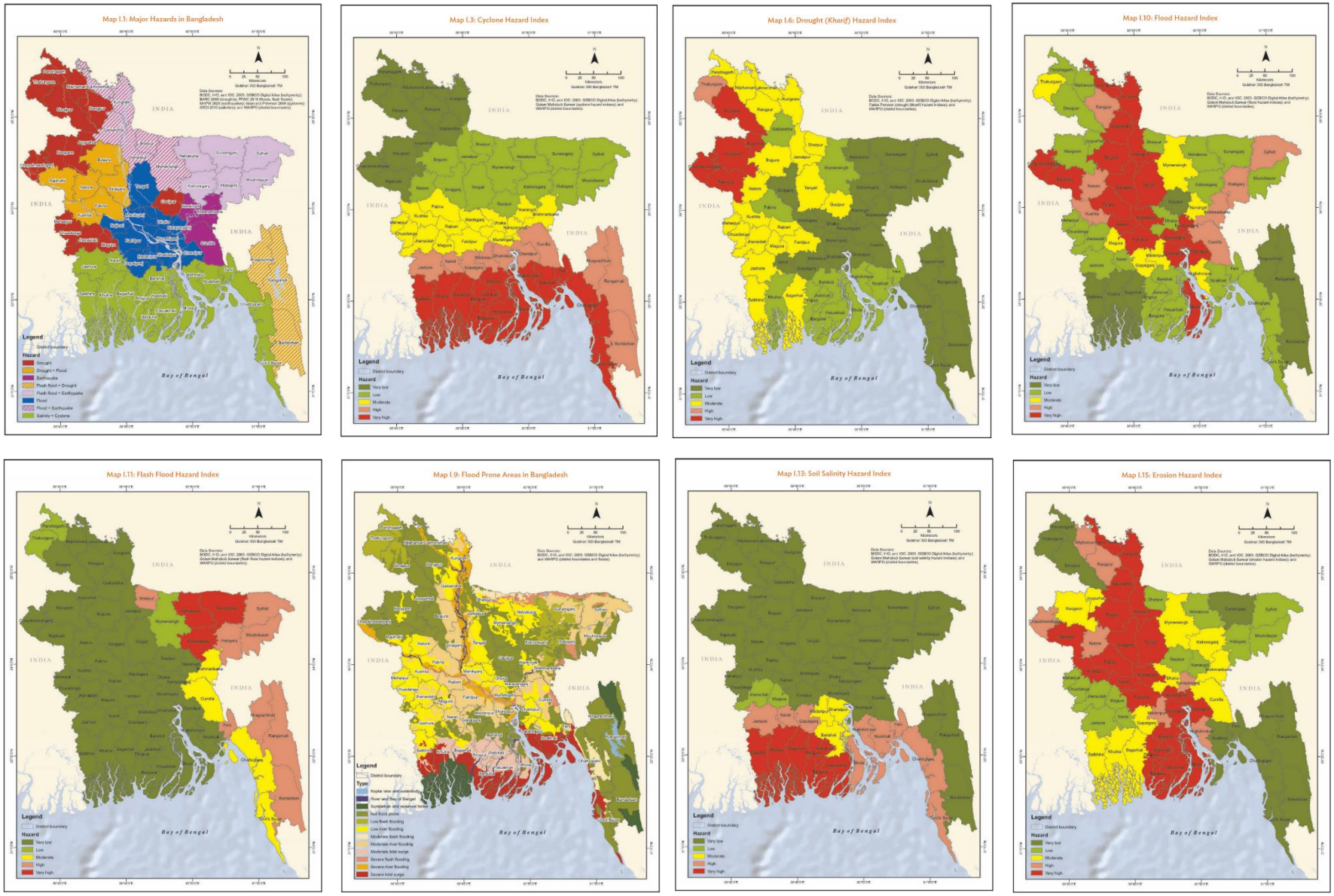
IV. CLIMATE ADAPTATION PLANS WITHIN THE PROJECT

Adaptation Activity	Target Climate Risk	Estimated Adaptation Costs	Adaptation Finance Justification
Under Output 1: Support for implementation of climate and disaster resilience measures for microenterprises that are found to be at risk after applying the subproject screening for climate change and disaster risks.	Extreme weather events such as flood, cyclone, and drought that would affect MFI clients' microenterprise activities	$90,000,000	Adaptation finance cost is estimated at 45% of the output cost i.e., $90,000,000. This estimation is based on a proportional approach. Since microenterprises in climate sensitive sectors, such as agriculture, livestock, poultry, aquaculture, and manufacturing business cluster constitute over 84% of partner organizations' total microenterprise financing, it can be expected that many of these enterprises will implement, with technical and financial support, climate and disaster resilience measures to reduce impacts posed

Adaptation Activity	Target Climate Risk	Estimated Adaptation Costs	Adaptation Finance Justification
			by climate change. Further, since at least 10% of the partner organization's microfinance portfolio has to be in high climate risk areas, such portfolio can be expected to support measures to build climate and disaster resilience.
Under Output 3: MFI capacity development training to increase awareness on climate and disaster risks and promote climate risk adaptation and mitigation measures in microenterprises	Extreme weather events such as flood, cyclone, and drought that would affect MFI clients' microenterprise activities		PKSF partner organizations need updated knowledge and skills to promote awareness on climate and disaster risks and promote climate risk adaptation and disaster resilience measures to their clients. The conduct of capacity development activities are estimated to cost $1,000,000.[a]

MFI = microfinance institution, PKSF = Palli Karma Sahayak Foundation.
[a] The estimated climate adaptation cost from Output 3 is $1.0 million, which will be financed through the attached TA and reported under the project's climate financing.
Source: Asian Development Bank estimates.

Appendix 1. Multi-Hazard Maps - Bangladesh.



Source: Asian Development Bank, 2021.