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Report No: PAD5168

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT
ON A
PROPOSED CREDIT

IN THE AMOUNT OF SDR 188.2 MILLION

(US$250 MILLION EQUIVALENT)

TO THE

PEOPLE'S REPUBLIC OF BANGLADESH

FOR A

SUSTAINABLE MICROENTERPRISE AND RESILIENT TRANSFORMATION (SMART)
[P178996]

April 4, 2023

Environment, Natural Resources & The Blue Economy Global Practice
South Asia Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective Feb 28, 2023)

Currency Unit =	BDT
BDT 104.50 =	US$1
US$1.33 =	SDR 1

FISCAL YEAR
July 1 – June 30

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ABBREVIATIONS AND ACRONYMS

Asian Development Bank	Asian Development Bank	MFI	Microfinance institution
Current account deficit	Current account deficit	MIRR	Modified internal rate of return
Cost-benefit analysis	Cost-benefit analysis	MIS	Management Information System
Country Climate and Development Report	Country Climate and Development Report	MRA	Microcredit Regulatory Authority
Cottage, micro, small, and medium enterprises	Cottage, micro, small, and medium enterprises	MSMEs	Micro, small, and medium enterprises
Country Partnership Framework	Country Partnership Framework	NAP	National Adaptation Plan
Environmental and climate-change units	Environmental and climate-change units	NDC	Nationally Determined Contributions
Economic and financial analysis	Economic and financial analysis	NGOs	Nongovernmental organizations
Environmental and Social Framework	Environmental and Social Framework	PDO	Project development objective
Environmental and Social Management System	Environmental and Social Management System	PKSF	Palli Karma-Sahayak Foundation
Financial Institutions Division	Financial Institutions Division	PM	Particulate matter
Financial Intermediary Financing	Financial Intermediary Financing	PMU	Project Management Unit
Financial internal rate of return	Financial internal rate of return	POs	Partner organizations
Financial net present value	Financial net present value	PSC	Project Steering Committee
Fiscal year	Fiscal year	RECP	Resource-Efficient and Cleaner Production
Global Crisis Response Framework	Global Crisis Response Framework	SEP	Sustainable Enterprise Project
Gross Domestic Product	Gross Domestic Product	SMART	Sustainable Microenterprise and Resilient Transformation Project
Greenhouse emissions	Greenhouse emissions	SORT	Systematic Operation Risk Rating Tool
Government of Bangladesh	Government of Bangladesh	SPEC	Subproject Evaluation Committee
Grievance Redressal Mechanism	Grievance Redressal Mechanism	WB	World Bank
Information and communication technologies	Information and communication technologies	WBG	World Bank Group
International Development Association	International Development Association	WOP	Without project
Monitoring and evaluation	Monitoring and evaluation	WP	With project
MEs	Microenterprises	yoy	Year-over-year

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DATASHEET

BASIC INFORMATION

Country(ies)	Project Name	
Bangladesh	Sustainable Microenterprise and Resilient Transformation (SMART)	
Project ID	**Financing Instrument**	**Environmental and Social Risk Classification**
P178996	Investment Project Financing	Moderate

Financing & Implementation Modalities

[ ] Multiphase Programmatic Approach (MPA)	[ ] Contingent Emergency Response Component (CERC)
[ ] Series of Projects (SOP)	[ ] Fragile State(s)
[ ] Performance-Based Conditions (PBCs)	[ ] Small State(s)
[✓] Financial Intermediaries (FI)	[ ] Fragile within a non-fragile Country
[ ] Project-Based Guarantee	[ ] Conflict
[ ] Deferred Drawdown	[ ] Responding to Natural or Man-made Disaster
[ ] Alternate Procurement Arrangements (APA)	[ ] Hands-on Enhanced Implementation Support (HEIS)

Expected Approval Date	Expected Closing Date
27-Apr-2023	31-Dec-2028

Bank/IFC Collaboration

No

Proposed Development Objective(s)

To increase resource-efficient and resilient green growth of microenterprises (MEs).

Components

Component Name	Cost (US$, millions)

Enabling Capacity and Systems for Green Growth of MEs	32.00
Providing Access to Finance for MEs to enable green growth	251.00
Improving PKSF Project Management, Communications, Monitoring and Evaluations, and Knowledge Management	17.00

Organizations

Borrower:	People's Republic of Bangladesh
Implementing Agency:	Palli Karma-Sahayak Foundation (PKSF)

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	300.00
Total Financing	300.00
of which IBRD/IDA	250.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	250.00
IDA Credit	250.00

Non-World Bank Group Financing

Counterpart Funding	50.00
Borrower/Recipient	50.00

IDA Resources (in US$, Millions)

	Credit Amount	Grant Amount	SML Amount	Guarantee Amount	Total Amount
Bangladesh	250.00	0.00	0.00	0.00	250.00
National Performance-Based Allocations (PBA)	250.00	0.00	0.00	0.00	250.00

Total	**250.00**	**0.00**	**0.00**	**0.00**	**250.00**

Expected Disbursements (in US$, Millions)

WB Fiscal Year	2023	2024	2025	2026	2027	2028	2029
Annual	0.00	17.16	10.19	43.72	46.93	76.64	55.36
Cumulative	0.00	17.16	27.35	71.07	118.00	194.64	250.00

INSTITUTIONAL DATA

Practice Area (Lead)

Environment, Natural Resources & the Blue Economy

Contributing Practice Areas

Finance, Competitiveness and Innovation

Climate Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	Moderate
2. Macroeconomic	Moderate
3. Sector Strategies and Policies	Moderate
4. Technical Design of Project or Program	Moderate
5. Institutional Capacity for Implementation and Sustainability	Moderate
6. Fiduciary	Substantial
7. Environment and Social	Moderate
8. Stakeholders	Moderate
9. Other	Moderate
10. Overall	Moderate

COMPLIANCE

Policy

Does the project depart from the CPF in content or in other significant respects?

[ ] Yes [✓] No

Does the project require any waivers of Bank policies?

[ ] Yes [✓] No

Environmental and Social Standards Relevance Given its Context at the Time of Appraisal

E & S Standards	Relevance
Assessment and Management of Environmental and Social Risks and Impacts	Relevant
Stakeholder Engagement and Information Disclosure	Relevant
Labor and Working Conditions	Relevant
Resource Efficiency and Pollution Prevention and Management	Relevant
Community Health and Safety	Relevant
Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Not Currently Relevant
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Not Currently Relevant
Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Relevant
Cultural Heritage	Relevant
Financial Intermediaries	Relevant

NOTE: For further information regarding the World Bank's due diligence assessment of the Project's potential environmental and social risks and impacts, please refer to the Project's Appraisal Environmental and Social Review Summary (ESRS).

Legal Covenants

Sections and Description

Section 1.A of Schedule 2 of the Financing Agreement, Institutional Arrangements:

1) By no later than three (3) month after the Effective Date, the Recipient shall, establish and thereafter maintain throughout the course of Project implementation, a Project steering committee ("Project Steering Committee") with a mandate, functions, composition and resources satisfactory to the Association. Without limitation to the immediately foregoing provision, said Project Steering Committee shall: (a) be chaired by the Secretary of the Financial Institution Division and comprise representatives from the relevant ministries/agencies involved in Project implementation; and (b) meet at least every six (6) months to: (i) provide strategic and policy direction on all Project activities; (ii) review progress in Project implementation; and (iii) address any obstacle during Project implementation.

2) By no later than three (3) months after the Effective Date, the Recipient shall cause the Project Implementing Entity to establish and thereafter maintain throughout the course of Project implementation a Project management unit (PMU), with a mandate, functions and resources satisfactory to the Association, and with staff in adequate numbers and with qualifications, experience and terms of reference satisfactory to the Association. Without limitation on the foregoing, the PMU shall: (a) be headed by a Project coordinator, and (b) be staffed with technical experts and specialists in, inter alia, procurement, financial management, and monitoring and evaluation and reporting; and (c) be responsible for, inter alia, planning, coordination, implementation and monitoring and evaluation of Project activities, preparing annual work plans and budgets, procurement and financial management, social and environmental safeguards, and reporting on Project progress.

Sections and Description

Section 1.B of Schedule 2 of the Financing Agreement – Subsidiary Loan and Grant Agreement:
To facilitate the carrying out of the Recipient shall make the proceeds of the Financing available to the Project Implementing Entity under a subsidiary loan and grant agreement between the Recipient and the Project Implementing Entity ("PKSF Subsidiary Loan and Grant agreement"), under terms and conditions acceptable to the Association.

Sections and Description

Section 1.C of Schedule 2 of the Financing Agreement – Project Operations Manual:
The Recipient shall prepare and promptly furnish to the Association for its review, and adopt, by no later than [three (3) month] after the Effective Date, a Project Operations Manual for the Project, in a manner and substance satisfactory to the Association, setting out detailed arrangements and procedures for implementation of the Project.

Sections and Description

Section 1.D of Schedule 2 of the Financing Agreement: Grants, Sub-loans, Sub-project Grants and Lines of Credit:
1) The Recipient shall cause the Project Implementing Entity to ensure that the Grants and/or Sub-loans are made to selected POs (the "Participating POs") in accordance with the eligibility criteria and procedures set forth in the Project Operations Manual.
2) Upon selection of Participating POs and the award of a Grant or a Sub-loan, the Recipient shall ensure that the Project Implementing Entity shall enter into a written agreement (the "Grant Agreement" or the "Sub-loan Agreement", as the case may be) with the Participating PO, under term and conditions acceptable to the Association, as set forth in the Project Operations Manual, and pursuant to the respective template agreements prescribed in the Project Operations Manual.
3) The Grant Agreement and the Sub-loan Agreement shall provide that Participating PO shall ensure that the the Lines of Credit are made to selected MEs in accordance with the eligibility criteria and procedures set forth in

the Project Operations Manual acceptable to the Association and that, upon selection of the MEs and the award of the the Lines of Credit, the Participating PO shall enter into written Lines of Credit Agreement with the selected MEs under terms and conditions acceptable to the Project Implementing Entity, as set forth in the Project Operations Manual, and pursuant to the respective template agreements prescribed in the Project Operations Manual

Sections and Description

Section 3 of the Financing Agreement : The Recipient shall provide or cause the PIE to provide, as needed, the funds, facilities and services and other resources required for the Project.

Conditions

Type	Financing source	Description
Effectiveness	IBRD/IDA	Section 5.01 of the Financing Agreement: "The PKSF Subsidiary Loan and Grant Agreement has been executed on behalf of the Recipient and PKSF and all conditions precedent to its effectiveness or to the right of PKSF to make withdrawals under it (other than the effectiveness of this Agreement) have been fulfilled".

I. STRATEGIC CONTEXT

A. Country Context

1. **Bangladesh made rapid social and economic progress in recent decades and reached lower middle-income status in 2015.** Stable macroeconomic conditions supported average annual real GDP growth of 6.7 percent between 2010 and 2019. Strong labor market gains contributed to a sharp decline in poverty, with the national poverty rate falling from 48.9 to 24.5 percent between 2000 and 2016. However, the pace of poverty reduction slowed in recent years even as growth accelerated, particularly in urban areas and the country's west.[1] The annual consumption growth of the bottom 40 percent (1.2 percent) trailed that of the overall population (1.6 percent) from 2010 to 2016. Bangladesh faces a high level of vulnerability to the effects of climate change. The Global Climate Risk Index ranks Bangladesh as the world's seventh most-affected country in 2000-2019[2] with high susceptibility to extreme weather events such as cyclones, floods, and storm surges. Extreme heat, sea level rise, strong winds and droughts are also part of the climate and geophysical hazards that the country faces.

2. **A strong post-pandemic recovery was disrupted by rising global commodity prices and synchronous global policy tightening.** Bangladesh navigated the COVID-19 pandemic with prudent macroeconomic policies, maintaining positive real GDP growth. An effective stimulus program supported a rapid economic recovery in FY21, as movement restrictions ended. However, worsening external conditions led to a surge in imports in mid-FY22. Inflation accelerated, driven by rising commodity prices and an upward adjustment in administered prices of petroleum products. In the first half of FY23, high inflation weighed on private consumption and fiscal consolidation measures slowed government consumption and investment growth. Exports remained resilient, growing by 9.8 percent in the first seven months (July-January) of FY23. On the supply side, strong industrial growth in FY22 slowed in the first half of FY23 due to energy shortages, rising input costs, and limited issuance of Letters of Credit (LCs) for key imports. Services growth also slowed from a FY22 post-pandemic rebound, as consumer purchasing power declined with rising inflation in the first half of FY23. Modest agricultural growth was sustained, although increases in the diesel price impacted production. Monetary policy was tightened through higher policy rates, although transmission was impaired by a cap on lending interest rates. Tight liquidity conditions and narrow net interest margins weighed on private sector credit growth.

3. **The Balance of Payments (BoP) deficit widened in FY22 with rising imports**. The current account deficit (CAD) surged in the second half of FY22 amidst rising commodity and intermediate goods prices. Import price moderation and limited LC issuance narrowed the CAD in the first half of FY23, supported by resilient export growth. However, a sharp contraction in trade credit and lower medium- and long-term lending contributed to a financial account deficit, resulting in a US$7.2 billion BoP deficit in the first half of FY23 and a 7.2 percent depreciation of the interbank exchange rate. Gross FX reserves declined by US$12.6 billion over a one-year period to US$32.6 billion at the end of January 2023 and authorities requested additional external financing from development partners. An IMF program was approved by the Executive Board in January 2023.

4. **The fiscal deficit widened from 3.7 percent in FY21 to 4.3 percent of GDP in FY22 but remained below the target of 5 percent of GDP.** Tax revenue remained among the lowest in the world at 7.6 percent of GDP in FY22. Expenditure growth accelerated with higher subsidy spending as a result of elevated commodity prices. Capital expenditure rose in FY22 led by infrastructure megaprojects, before being rationalized in the first half of FY23 to narrow the budget deficit.

[1] World Bank, 2021. Bangladesh Systematic Country Diagnostic Update.
[2] German watch (2021) Global Climate Risk Index 2021.

5. **Real GDP growth is expected to decelerate to 5.2 percent in FY23 before returning to its long-term trend of positive growth.** Modest export growth is expected in FY23, led by rising readymade garments (RMG) market share. Growth is expected to accelerate in FY24, as inflationary pressure eases and reform implementation accelerates, converging to around 6.5 percent over the medium term depending on the depth of economic reforms implemented. The fiscal deficit is projected to narrow to 3.7 percent of GDP over the medium term as revenues rise with increasing trade and economic activity, higher incomes, and tax administration reform implementation. The CAD will narrow as imports normalize with moderating commodity prices. Remittance inflows are expected to rise with a higher outflow of workers and resilient demand for workers in the Gulf region. The financial account deficit is projected to contribute to external sector pressure in FY23, before returning to surplus in FY24.

6. **Structural reforms are needed to support a faster pace of growth over the medium term.** To achieve the vision of attaining upper middle-income status by 2031, Bangladesh needs to create jobs and employment opportunities by creating a competitive business environment, diversifying exports, increasing human capital, building efficient infrastructure, deepening the financial sector, and establishing a policy environment that attracts private investment. At the same time, Bangladesh will need to implement coordinated policies and investments to address rising climate vulnerabilities.[3] These reforms will support international competitiveness as Bangladesh prepares for graduation from the United Nations Least Developed Country (LDC) status in 2026, which will gradually result in reduced access to concessional financing and preferential external market access for its exports.

7. **Bangladesh faces a high level of vulnerability to the effects of climate change.** Because of its topography and geographic location, the country has been catalogued as one of the most vulnerable to the effects of climate change, with high susceptibility to extreme weather events like cyclones, floods, and storm surges.[4] Extreme heat, sea level rise, strong winds, and droughts are also part of the climate and geophysical hazards that the country faces. Despite making small contributions to global greenhouse gas (GHG) emissions—less than 0.21 percent of the total in 2020.[5] The Notre Dame Global Adaptation Initiative (ND-GAIN) Country Index catalogues Bangladesh as the 18th most prone country to be negatively affected by climate hazards.[6] Recent studies estimate that, by 2050, Bangladesh could have 13.3 million internally displaced climate migrants.[7] Addressing these climate risks will support sustainable and resilient economic development, ensuring that the vulnerable populations are not left behind. Improved resilience to immediate and future climate risks is essential to Bangladesh's development.[8]

B. Sectoral and Institutional Context

8. **Increased economic growth in Bangladesh comes at the cost of inefficient use of resources, increased pollution, and reduced climate resilience.** Rapid economic growth has brought negative externalities resulting in significant degradation of environment and natural resources, substantially affecting human health and the ecosystem.[9]

[3] World Bank, 2022. Country Climate and Development Report.
[4] Ministry of Foreign Affairs of the Netherlands. 2018. "Climate Change Profile, Bangladesh." Ministry of Foreign Affairs of the Netherlands.
[5] Eckstein, D., Kunzel, V., and Shafer, L. 2021. Global Climate Risk Index 2021. Who Suffers Most from Extreme Weather Events? Weather-Loss Events in 2019 and 2000-2019. https://www.germanwatch.org/sites/default/files/Global%20Climate%20Risk%20Index%202021_2.pdf
[6] University of Notre Dame. 2022. Notre Dame Global Adaptation Initiative. *https://gain.nd.edu/our-work/country-index/*
[7] World Bank. 2018. Groundswell: Preparing for Internal Climate Migration. Washington, DC: World Bank.
[8] USAID. 2022. Bangladesh. Climate Change Fact Sheet. https://www.usaid.gov/sites/default/files/2022-05/Climate_Change_Fact_Sheet_-_bangladesh_FINAL2.pdf
[9] World Bank. 2015. Bangladesh Systematic Country Diagnostic. Washington, DC: World Bank.

Annual average PM2.5 in Bangladesh ranges from 48–62 µg/m3 to 81–103 µg/m3. This is 5–10 times higher than WHO Air Quality Guideline (AQG) standards for annual PM2.5. Bangladesh's annual per capita plastic consumption in urban areas rose from 3.0 kilograms in 2005 to 9.0 kilograms in 2020. Major environmental health risks are associated with 275,000 premature deaths, 5.2 billion days lived with illness annually, and impaired intelligence among children amounting to a loss of 20 million IQ points.[10] As a consequence, the annual cost of environmental degradation is equivalent to 17.3 percent of Bangladesh's GDP in 2019, affecting disproportionally the poorest and most vulnerable groups, such as women, children under five years old, and the elders. Pollution and related environmental risks are responsible for 32 percent of all deaths in the country.[11] Unaddressed, these externalities will reduce the rate of return on investments, and the growth rate and jeopardize Bangladesh's vision of becoming a high-income nation by 2041. A green growth approach involves (a) resource efficiency; and (b) employing adaptation and mitigation that are environmentally sustainable and resilient to risks related to climate change. Specifically, a green growth approach comprises: (a) abating environmental damage; (b) securing new growth engines through research and development of green technology; (c) creating new job opportunities; and (d) achieving harmony between the economy and environment.[12] Green growth is achieved through knowledge and innovation allowing Bangladesh to access new markets, generate public goods, and reduce vulnerability to climate shocks. Embarking on a pathway of green growth will provide major benefits for Bangladesh.

9. **Microenterprises (MEs)[13] contribute up to 25 percent of GDP and provide 56 percent of jobs in the country.[14]** According to the Bangladesh's Economic Census, about 89 percent of the 7.8 million economic establishments in Bangladesh are MEs.[15] MEs underpin and provide the base for key economic sectors: livestock, agriculture, fisheries, food processing, garments, trade, services, and light manufacturing. The growth of MEs is a solution to poverty because they provide an alternative for many individuals whose only other options are unemployment or low-wage jobs.[16] The MEs elevate economic growth and generate employment opportunities for communities. However, the rapid growth of MEs drives unsustainable use of resources and degradation of the ecosystem due to multiple forms of emission, resource use, and effluents that lead to pollution. The Sustainable Environmental Project (SEP) (P163250), being implemented by Palli Karma-Sahayak Foundation's (PKSF) supported by World Bank, has already reached more than 40,000 ME beneficiaries in the manufacturing (30 percent) and agricultural sectors (70 percent). Most of the targeted MEs involve animal farming, crops and horticulture, and manufacturing. The successful performance of SEP supporting MEs to adopt environmental practices provided a rationale for expanding the environmental parameters, scale and including additional economic sectors, deepening the environmental impact.

10. **During the two decades before the COVID-19 pandemic, Bangladesh was among the world's fastest-growing economies**. The officially reported annual growth of Bangladesh's GDP had averaged close to 6 percent since 2000. Strong labor-market gains contributed to a sharp decline in poverty, with the national poverty rate falling from 48.9 percent to close to 20 percent between 2000 and 2019, while extreme poverty declined from 34.3

[10] These risks are outdoor and indoor air pollution, inadequate water supply, sanitation and hygiene (WASH), and lead (Pb) contamination.
[11] Country Environmental Analysis (CEA) for Bangladesh 2023. unpublished
[12] OECD definition of green growth.
[13] Cottage businesses are defined as economic establishments with fixed assets, excluding land and buildings, of less than BDT 0.5 million, or with up to nine workers, including household members. MEs are defined as economic establishments with fixed asset value between BDT 0.5 million and BDT 5 million, or with between 10 and 24 workers. We refer to both cottage businesses and microenterprises as MEs.
[14] LightCastle Partners. 2020. CMSME Stimulus and Refinancing.
[15] Government of the People's Republic of Bangladesh. 2013. Economic Census 2013. Dhaka: Bangladesh Bureau of Statistics.
[16] Banerjee, M. M. 1998. "Microenterprise Development: A Response to Poverty." J. Community Pract. 5: 63–83.

percent to 10.5 percent.[17] However, the pace of poverty reduction slowed down in recent years even as economic growth accelerated, particularly in urban areas and in the west of the country. According to the Planning Commission, in 2020 the national poverty rate increased from 20.5 percent to 29.4 percent while the extreme poverty rate rose from 10.5 percent to 20.5 percent. [18] As labor markets and economic activity deteriorated due to COVID-induced disruptions, poorer households experienced a decline in their income, food security, and capacity to sustain essential expenditures.

11. **Bangladesh is known for its success in pioneering approaches that support MEs to alleviate poverty and address existing market and government failures; however, a lack of targeted policies and institutions constrain MEs' capacity to grow in an environmentally sustainable way.** SEP provided access to finance while successfully introducing environmental practices to more than 40,000 MEs (5 percent of the total MEs in Bangladesh). SEP's success highlighted the need for a larger-scale investment to reduce the negative environmental externalities of MEs growth to continue reducing poverty and inequality. Despite this clear commitment to green and resilient growth, only a few initiatives including SEP aimed to promote climate-resilient resource efficient and cleaner production (RECP) approaches and technologies in the ME sector. PKSF, an apex microcredit funding and capacity-building organization, is the only governmental institution in Bangladesh that has a successful record of working with MEs. However, PKSF alone cannot help the ME sector to overcome the following barriers that hinder their growth:

    a) **MEs' owners are often unaware of resource inefficiencies, cleaner production practices, and access to finance to adopt climate-resilient RECP and green practices for growth.** The experience in Bangladesh and other countries shows that MEs' investments in climate-resilient RECP can generate both economic gains for firms and environmental benefits for society. However, MEs often fail to make such investments due to capacity, technical, and financial constraints. This is because MEs have very limited access to technical knowledge and advisory services for climate response.

    b) **MEs employ approximately 50 percent of the population, yet MEs often follow unsafe practices that expose workers to occupational health risks and are more at risk to produce contaminated products.** For example, puffed rice from a kitchen market was found to have lead concentrations of 3.39 mg/kg.[19] The chronic effect of such exposure— including cancer, kidney disorders, and birth defects—is unlikely to be observed in the short term because such diseases only manifest after long-term, low-level exposure. Therefore, there is a need for knowledge and capacity building programs for MEs to explain the long-term impacts of environmental pollution and operational health and safety issues.

    c) **MEs have limited access to finance for climate-resilient RECP adoption**. Due to institutional gaps in the Government of Bangladesh (GoB) and the low-risk appetite of private financial institutions, MEs' access to finance for climate-resilient RECP is limited.[20] Access to finance remains a major constraint for MEs and limits their ability to invest in climate-resilient RECP technologies. Most ME investments are financed from informal sources such as individual savings and informal loans from friends and relatives. Informal moneylenders, however, charge exorbitant interest rates that range from 180 to 240 percent a year. According to SEP Mid-

[17] BBS (Bangladesh Bureau of Statistics). 2020. https://thefinancialexpress.com.bd/national/virus-fuels-poverty-rate-to-294pc-shows-planning-commission-estimate-1601694926
[18] BBS and Planning Commission 2020
[19] Bangladesh Agricultural University. 2015. "Consumption of Unsafe Foods: Heavy Metal, Mineral and Trace Element Contamination." Mymensingh: Bangladesh Agricultural University Department of Soil Science.
[20] UKaid. 2017. "Financing Green Growth in Bangladesh. Challenges and Opportunities." UK Aid.

term Review (MTR), 50 percent of MEs that did not adopt environmental practices reported the cost burden as the main obstacle to adoption. Microfinance institutions (MFIs) or Partner Organizations (POs) of PKSF have the potential to alleviate MEs' credit constraints.

d) **MEs have poor uptake and restricted access to high-value green and organic markets.** Globally, markets for green goods and services are growing, and an increasing proportion of consumers take sustainability into account in their purchase decisions.[21] Most MEs operate in small, domestic markets, with 87.4 percent of manufacturers selling all their products to local markets often using green and organic processes but not always verified. In Bangladesh the awareness and demand for organic agricultural products is increasing. Bangladesh Organic Product Manufacturers Association (BOPMA) has set a target to gradually increase the areas under organic production system from 8097 ha to 2,18,663 ha by 2032. However, MEs have limited access to such consumers and require support and knowledge for green and or ecolabeling.

12. **Climate change amplifies market and government failures that constrain MEs' capacity**. MEs, especially those operating in the tourism industries and service sectors, are extremely vulnerable to prolonged floods and waterlogging, heat stress, devastating cyclones, tidal surges, and salinity in coastal regions and urban areas.[22] The MEs in agriculture and manufacturing can be affected by industry damage through strong winds and surges and flooding of access roads. In addition, climate change amplifies the negative environmental impact on ecosystems caused by the business activities of MEs. Strengthening MEs' resilience to climate change and related environmental stress is key to avoiding the risk of pushing numerous people back into poverty. MEs have to adapt to the negative effects of climate change through adjusting their existing business practices. MEs face more obstacles adapting to climate change than larger enterprises. Such obstacles include the lack of information about climate risks for medium-term and long-term business viability, low capacity to identify cost-effective adaptation measures, limited technical capacity to implement such measures, and a lack of access to financial products adapted to their risk-reward profile. Climate-induced impacts and issues are highly context specific—based on geographic location and shaped by existing coping strategies (often driven strongly by local socioeconomic situations and cultural norms)—and appropriate solutions need to be tailored to local context.

13. **Microfinance is widely used to provide financial and technical assistance to the poor, particularly rural women**. The microfinance sector (4.8 percent of financial sector assets) is represented by 746 microfinance institutions that cover more than 33.3 million members, mostly in rural areas. The Microcredit Regulatory Authority (MRA) is the central body that is responsible for licensing, monitoring and supervising the operations of non-governmental microfinance institutions (NG-MFIs) holding over 80 percent of total outstanding microcredit loans. PKSF started its dedicated microenterprise development program, in 2001.

14. **The demand for ME loans by PKSF's POs is much higher than PKSF disburses**. Over the past three years, PKSF has disbursed, through its various programs, over BDT 49.5 billion or equivalent to US$495 million microenterprise loans which was around 25 percent of demand from POs. In general, PKSF provides a maximum of 20-25 percent fund against the demand of the POs. In FY22, PKSF's disbursement grew by 7 percent year-over-year (yoy) while estimated loan demand grew by 7.5 percent yoy. This suggests that the overall demand for ME loans is robust. In SEP, where several selected and easy-to-implement green business practices were promoted, POs placed a demand for BDT 30 billion against which SEP allocated only BDT 7.54 billion for MEs which was around one-fourth of the demand. However, demand for loans for robust green business practices with advanced technical

[21] Nielson, C. 2015. "The Sustainability Imperative: New Insights on Consumer Expectations." New York: Nielsen Company. *https://nielseniq.com/global/en/insights/analysis/2015/the-sustainability-imperative-2/*
[22] MOEFCC. National Adaptation Plan of Bangladesh. 2022

knowledge and implementation by MEs is still at a nascent stage. Therefore, awareness and capacity building on climate-resilient RECP practices among the POs will open the opportunity to boost the demand and uptake for such loans. Additionally, keeping the loans unencumbered and flexibly available for financing commercial business growth as well as climate-resilient RECP practices will be a more effective approach. Overall, the allocation of the credit lines under the current project considers the high demand for ME loans and aims to narrow the financing gap.

15. **Despite the disproportionate impacts of climate change on women, there is a stark under-representation of women-owned MEs adopting climate-resilient RECP practices in the country.** Although, 84 percent of the MEs who take loans from PKSF are women, country-wide women-led MEs have to face the following key barriers (a) limited access to capital to start or grow enterprises; (b) lack of entrepreneurial skills (technical, management, marketing, financial); and (c) lack of information, access to business support, difficulty finding the right contacts for a business venture. Women continue to face barriers to credit access just 36 percent of women have access to a bank account, compared to 65 percent of males. Women can have low levels of financial literacy; little experience using formal financial systems. These obstacles can, along with lower levels of confidence vis a vis the formal financial sphere, can make the process of applying for business loans complicated. Other barriers exist. Lending institutions can be reluctant to offer women the amounts they need to start MEs because their financing requirements are too small or large enough requiring collaterals. For female entrepreneurs, some loan categories require one of the guarantors to be their husband who often can refuse. Women-owned enterprises received just above seven percent of the Cottage, Micro, Small, and Medium Enterprise (CMSME) loan funds disbursed by Bangladesh Bank (BB) in the first quarter of 2019, and the credit received by new women entrepreneurs was only 4 percent of total loan disbursement. Therefore, ensuring financial inclusion and reducing credit gap for women-owned MEs is critical for gender-equitable green growth addition to building their capacity in climate-resilient RECP. While women are already falling behind in their attempts to meet the challenges of entrepreneurship, adopting climate-resilient RECP technology becomes even more difficult.

16. **Access to technology and the use of digital devices has grown rapidly in Bangladesh.** Retail e-commerce has been growing at 72 percent per month. In 2020 over 35,000 individuals and 25,000 MEs were involved in e-commerce.[23] E-commerce has grown partly due to the electronic-payment platform—National Payment Switch Bangladesh—which has been operating since the end of 2012. Emerging e-wallets for online payments and money transfers, such as bKash are helping to develop the industry. The SME Policy 2019 cites the increased use of information and communication technology (ICT) for ME development. It also aims to expand e-commerce for MEs, offers ICT-based support services, promotes new technologies for production, and develops incubators.[24] Therefore, there is a need to pilot digital loan transaction modalities and e-commerce for MEs to boost their growth.

17. **SMART uses a green growth approach to address continued market failures by drawing on lessons from SEP.** SEP's results suggested that environmental knowledge together with microfinance support were critical for MEs to take up climate-resilient RECP at the ME level and lead to long-term behavioral change. Furthermore, at the cluster level, common services enabled public goods that improved the competitiveness of clusters and in other cases allowed for the creation of new MEs. SEP proved that MEs can grow sustainably. Therefore, in SMART the

[23] United States International Trade Administration. Bangladesh – Country Commercial Guide. eCommerce. Updated September 17, 2022. https://www.trade.gov/country-commercial-guides/bangladesh-ecommerce. The Financial Express. 2020. "E-commerce in Bangladesh: Where Are We Headed?" January 10, 2020. https://thefinancialexpress.com.bd/views/views/e-commerce-in-bangladesh-where-are-weheaded-1578666791

[24] Ministry of Industries. 2019. SME Policy.

concept is to (a) focus on the most climate-vulnerable zones and key subsectors where most environmental benefits can be achieved, and (b) enhance the institutionalization of green growth approaches by monitoring key environmental performance indicators for MEs, and support standards and certifications using digital solutions and partnerships.

C. Relevance to Higher Level Objectives

18. **SMART is aligned with the World Bank Group (WBG) Country Partnership Framework (CPF) FY23–FY27 (No. 181003-BD) to be discussed by the Board of Executive Directors on April 27, 2023. Specifically, it contributes to Objective 8 (Enhanced sustainability and productivity in the use of natural capital for climate-smart green growth) under the CPF's High Level Outcome (HLO) C (Enhanced Climate and Environmental Resilience)** through adoption/promotion of climate resilient resource efficient cleaner production (RECP) business practices and greener technologies. SMART will allow MEs to gain RECP knowledge, use methods, make investments that decrease negative environmental externalities. MEs using RECP will enhance their productivity and develop new green businesses especially as the project targets potentially higher polluting subsectors across manufacturing, agriculture, and service industries. In addition, SMART is aligned with CPF Objective 1 (Improved business environment for broad-based private sector) under the HLO A (Increased private sector jobs) as it promotes green, energy-efficient, cleaner businesses at the ME level that are socially inclusive and enhance competitiveness through green/eco-labelling of products. Such labeling will increase green enterprises' access to markets and support common service facilities for better management of environmental and social risks. SMART will also contribute to Objective 5 (Enhanced economic opportunities for women and vulnerable groups) under HLO B (Improved socioeconomic inclusion) by strengthening and expanding livelihood opportunities for the MEs by supporting investment in activities that are environmentally sustainable.

19. **SMART is aligned with the Global Crisis Response Framework (GCRF) to address multiple, compounding crises**. This framework builds on the pillars of the COVID-19 crisis response, and incorporates lessons learned from responding to the pandemic as well as to past food crises. SMART directly addresses three GCRF pillars: Pillar 1 (Responding to Food Insecurity) through immediate crisis response to provide urgent support and avoid long-term derailment of development prospects; Pillar 3(Strengthening Resilience) by helping Bangladesh to be better prepared for future crises and challenges; and Pillar 4 (Strengthening Policies, Institutions and Investments for Rebuilding Better) by utilizing the opportunities the crises provide to improve long-term development outcomes. Component 1 (IDA US$32 million) will provide technical assistance to MEs to acquire knowledge and capacity on climate-resilient RECP and is hence aligned with the GCFR Pillar 3 Component 2 (IDA US$203 million, PKSF US$48 million) will provide lines of credit to targeted MEs and is aligned with Pillar 1. Component 3 (IDA US$15 million, PKSF US$2 million) is aligned with Pillar 4, as it supports project implementation, monitoring, fiduciary, and Environmental Social Framework (ESF) compliance.

20. **The project follows the recommendations of World Bank Country Climate and Development Report (CCDR) for Bangladesh.** The CCDR highlights the importance of transitioning to a green, resilient, inclusive growth model focusing on greener infrastructure planning and development as drivers of productivity and growth. SMART is designed to decouple economic growth from a generation of GHG emissions. The project contributes to Priority Area 1: People, Climate-Smart Spatial Development, which leverages financing mechanisms for locally led climate action, increases awareness for local-level climate actions and strengthens systems for adaptation in a transparent and accountable manner. There is a need to further strengthen current capacity levels of local government and communities to address climate vulnerabilities and work together. The project also supports Priority Area 2: Delivering development benefits with decarbonization, which focuses on energy efficiency and circular economy solutions in ready-made garments and textile factories.

21. **Green growth and climate resilience are strategic priorities for the GoB.** The project's higher-level objective is to promote sustainable development in Bangladesh by mainstreaming climate-resilient RECP practices in MEs. The Government's 2010–2021 National Sustainable Development Strategy (updated in 2013) laid out its vision to combine economic, social, and environmental goals through five strategic priority areas (a) sustained economic growth; (b) development of priority sectors (agriculture, industry, energy, transport, and human resource development); (c) sustainable urbanization; (d) social security and protection; and (e) environmental, natural resources, and disaster management. These five priority areas align with the Bank's CCDR and are foundational for climate-resilient growth in Bangladesh.

22. **The 8th Five Year Plan, Nationally Determined Contribution (NDC), and the National Adaptation Plan (NAP), 2022, comprising Bangladesh's roadmap to promote economic growth and poverty reduction, pay special attention to MEs and environmental sustainability**. The plan states that the government will foster access to finance and other supportive measures and remove institutional or regulatory barriers that affect MEs' economic development. In addition, Bangladesh's roadmap lists specific commitments to promote green growth through a wide array of activities that include MEs, such as the promotion of improved waste management systems, the promotion of climate-resilient RECP technologies and sustainable production, and support of agriculture, manufacturing, and eco-tourism.[25] The national long-term development framework, the Perspective Plan of Bangladesh 2021–2041, aims to help small urban and rural enterprises in manufacturing and services by (a) establishing a Small Business Development Authority (SBDA) as a one-stop shop for promoting small business enterprises; (b) internationalization of small and medium enterprises (SMEs) and individual entrepreneurs (microenterprises) through digitalization and well-connected global networks that allow them to compete in the global marketplace; and (c) integrating SMEs with a national innovation system.

23. **Bangladesh's NAP 2022 recommends engaging the private sector for climate adaptation.** NAP also gives high priority to promoting and accelerating community (includes MEs) and private sector-led adaptation. NAP, the Standing Order on Disaster, Bangladesh Climate Change Strategy and Action Plan (BCCSAP), and the Disaster Management Act (DMA) identify the importance of communities and their livelihoods in planning and implementation of interventions to manage and adapt to climate risks.

24. **The project will generate climate co-benefits.** In its revised NDC in 2021, Bangladesh committed to increase its conditional emissions reduction to 89.47 MtCO2e by 2030 compared to business as usual. The project will provide support all six adaptation and resilience focus areas of Bangladesh: food, agriculture, forestry, water, infrastructure, and disaster risk management via supporting RECP practices. The project will promote climate-resilient RECP practices in agriculture production, services and manufacturing sectors by investing in climate-resilient RECP technologies to help to adapt and mitigate climate risks. All infrastructure developed within SMART will include full consideration of adaptation to climate change in both design and operation.

25. **The project is consistent with the World Bank's Maximizing Finance for Development strategy**. The project provides a liquidity injection that will benefit MEs and has the potential to support further business creation in the future. The project expects private capital financing from POs, providing additional finance to improve environmental sustainability of MEs. It is also expected to facilitate private investments into the MEs sector as MEs grow their operations, introduce environmental monitoring, and control processes, and receive budget for climate-resilient RECP practices.

[25] Government of Bangladesh. 2020. 8th Five Years Plan July 2020 – June 2025. Promoting Prosperity and Fostering Inclusiveness.

II. PROJECT DESCRIPTION

26. **Building on the success and learnings from SEP, SMART will support MEs in the agribusiness, manufacturing, and service sectors.** SMART will maximize the impact on MEs in environmentally stressed areas vulnerable to climate change and natural disasters. The project aims to support MEs through climate-resilient RECP investments in the agribusiness, manufacturing, and service sectors to promote climate-resilient RECP practices and technologies among MEs. The project will induce changes in the microcredit ecosystem to enable environmentally friendly businesses through adoption of operational safety norms and creating decent working environment in project supported MEs. Climate-resilient RECP aims to increase the ability of MEs to anticipate, prepare for, and respond to hazardous events, trends, or disturbances related to climate in ways that will ensure the overall sustainability of the project activities.

27. **SMART will support green growth solutions through capacity building.** New technology and skills, knowledge, and education can help create enduring solutions to reduce pollution, increase resource efficiency and climate resilience and overall reduce their negative impact on environment. SMART will target behavior change and have transformational institutional approach with the use of efficient digital technologies. PKSF will drive the green growth solutions among POs. POs will share the knowledge with MEs, and MEs will initiate behavior change in their communities.

28. **To maximize its positive environmental impacts and climate co-benefits, the project will select interventions based on the following priority principles and criteria:** (a) business clusters having relevant growth potentials both in horizontal and vertical expansion of MEs, product demand, marketability, employment opportunity, and so forth; (b) potential for reducing pollution and increasing energy and resource efficiency; (c) potential for reducing environmental and health damage; (d) potential for lowering ecosystem damage; (e) economic and climatic vulnerability; (f) potential for demonstration, replication, and scaling up of outcomes of the interventions and ultimately behavior change; and (g) the expansion of innovative activities that contribute to environmentally friendly clean and green business[26] and climate resilience[27].

29. **SMART consists of three Components**: (a) Enabling Capacity and Systems for Green Growth of MEs; (b) Providing Access to Finance for MEs to Enable Green Growth; and (c) Improving PKSF Project Management, Communications, Monitoring and Evaluations, and Knowledge Management.

A. Project Development Objective

PDO Statement

30. To increase resource-efficient and resilient green growth of microenterprises (MEs).

PDO Level Indicators

31. The long-term objective of the project is to promote a transformation of the ME sector into a more dynamic, lower polluting, resource-efficient, and a climate-resilient ME sector. It comprises three key concepts in promoting

[26] Green business is defined as an enterprise whose environmental impact is lower that business as usual.
[27] Climate resilience is the ability to anticipate, prepare for, and respond to hazardous events, trends, or disturbances related to climate to ensure the overall sustainability of project activities. Climate-resilient measures can also have adaptation and mitigation benefits.

transformation of the MEs towards more sustainable business models:

a) **Resource-efficiency** - MEs will only adopt resource efficient and cleaner production measures if their businesses are still making profit and improves livelihoods. A project baseline study will be done at the start the project in order to conduct an impact assessment. Climate-resilient RECP indicators are key environmental performance indicators and include the following: for resource use (energy use, materials use and water use) and for pollution (air emissions, wastewater, and waste).[28]

b) **Green growth**– Green growth allows businesses to contribute to clean air, clean water and healthy eco-systems. MEs are a significant part of the national economy and national landscape. If MEs grow and continue to pollute the air and the water and deplete natural resources, they will erode the not only the natural capital but also the health of their families and communities.

c) **Climate Resilience** – Bangladesh is among the ten most affected countries by climate change in the world. This requires projects in Bangladesh to take climate change adaptation into account in their design and implementation. SMART will contribute to climate resilience in three specific areas: (i) strengthen the economic basis and social cohesion of MEs to become more resilient to external shocks; (ii) assist construction of common facilities which can serve as shelters in situations of emergencies (e.g., natural disasters and climate change related events); and (iii) undertake a climate-resilient assessment as part of the RECP assessment to inform the design interventions of SMART targeted at the most vulnerable MEs.

32. The project will support measures which enhance climate resilience through adoption of RECP knowledge, technology, and business processes. Additionally, the project will use digital monitoring, tools and solutions to enhance businesses practices; and collect key environmental performance indicators of clean air and water, waste and GHG emissions.

33. Adopting resource-efficient and resilient green business practices are captured by the following PDO indicators:

- Supported MEs adopting at least two climate-resilient RECP practices (disaggregated by female- and male-ownership of MEs) (Number)
- Supported MEs with improved knowledge on climate vulnerability (Number)
- Supported MEs with increased revenues by 10 percent or more compared to non-supported MEs (disaggregated by female- and male-ownership of MEs) (Number)

B. Project Components

Component 1: Enabling capacity and systems for green growth of MEs (IDA US$32 million, PKSF US$0) (GCRF Pillar 3)

34. Based on the lessons learned from SEP, this Component expands technical assistance to 80,000 MEs to acquire knowledge and capacity on climate-resilient RECP. This Component will use a more institutionalized approach through conducting technical resource-efficiency, environmental and climate adaptation technology, and environmental assessments. This will select and prioritize climate-resilient RECP practices and develop environmental and financial digital tools to support business plan development that considers economic benefits

[28] These indicators are used to calculate resource-productivity indicators such as product output per unit of resource consumption and pollution-intensity indicators calculated by emissions or waste generation per unit of product output.

in a climate hazard situation. The Component will support two types of MEs: those starting new green businesses and those willing to convert existing businesses to more climate-resilient ones and introduce digital tools and climate-resilient RECP. This Component will enable MEs to adopt changes in their existing business practices and build awareness of critical environmental issues.

35. **Subcomponent 1.1: Enhancing MEs' environmental-knowledge capacity.** This sub-component provides grants to POs to increase MEs' technical knowledge and capacity, identify improvement areas and promote skills among MEs to increase their climate resilience. This subcomponent will support two RECP assessments, on at the beginning called Rapid RECP climate-resilient assessment, and a second one called Detailed RECP climate-resilient assessment after the selection of participating POs and MEs. The Rapid climate-resilient RECP assessment of MEs business practices will provide guidelines for the POs and MEs selection by PKSF. This assessment will identify general environmental issues, assess climate-change vulnerability, and develop technical recommendations for MEs and ME clusters. After the selection of POs and MEs, a Detailed RECP climate-resilient assessment will be conducted with the selected MEs by a firm who will support PKSF and POs. The assessments will identify opportunities for MEs and MEs clusters to re-engineer their business model for climate-resilient RECP through improving individual climate-resilient RECP practices, implement climate-change adaptation measures without hampering the ongoing business operation of MEs. The recommendations will be appropriate and cost effective. The firm will also provide capacity building to increase MEs' technical knowledge and promote adoption of RECP practices among MEs. The activities will include awareness-raising campaigns to enable the project's sustainability and galvanize behavioral change. Through the assessment a simplified customized environmental assessment tools for MEs will be developed.

36. **This subcomponent aims to ensure that MEs receive the necessary support (demonstration of climate-resilient RECP, technical capacity, skills development) to adopt climate-resilient RECP in their operations**. This subcomponent includes awareness-raising campaigns among the MEs community to guarantee the project's sustainability and behavioral change. To ensure that women-owned entrepreneurs benefit equally, gender assessments will be conducted by experts with experience in working with women entrepreneurs. The assessment recommendations will inform trainings tailored for women entrepreneurs and dedicated sessions for women-owned MEs will be organized, to inform about procedures such as registering with government and loan applications. Awareness-raising campaigns will also include messages on women's entrepreneurship and share success stories to motivate other women.

37. **This subcomponent will support the digitalization of the environmental and financial management system of PKSF, POs and MEs to digitally monitor project progress using the analysis of the data generated.** Greater use of big-data analytics will also help PKSF, POs, and MEs in terms of environmental performance and other information to drive the improvement and growth of Bangladesh's ME sector. Additional efforts will be made to reach MEs owned by women. One is targeted outreach and tailored training packages that will respond to areas where women face additional challenges and provide helpdesk services for applying. In addition, financial literacy and training/education will be provided to increase understanding/acceptance by MEs.

38. **Subcomponent 1.2: Enhancing common facilities and enabling environmental systems for MEs clusters.** This subcomponent will provide support for non–revenue-generating common facilities (NRG)[29] to promote inclusive,

[29] Non–revenue-generating common services facilitated under SMART for the MEs are marketplace; hygiene latrine; drainage system; safe drinking water; waste management (dumping station/collection point); waste-recycling unit; design, display, sell and servicing center; common service production; processing unit; ecological farming; sea-salt production (without polythene); poultry service center;

green growth outcomes to enhance MEs' growth, competitiveness, and productivity. NRG will include structures that are public in nature and reduce pollution and increase resource efficiency and climate resilience. However, these types of activities require a non-commercial approach. As such, support will be provided as grants and is expected to result in improved climate resilience and resource savings at the cluster level. While the project will fund the establishment of the common facilities, the project participating MEs will continue to maintain and improve if required. This subcomponent aims to support common facilities that have a critical influence on the productivity of MEs and ME clusters. These common facilities will be owned and maintained by the local community.

39. **Subcomponent 1.3: Enabling MEs to develop a green value chain and expand markets for green products.** This subcomponent will support MEs access to domestic, regional, and international markets including eco-labelling of their products or services as "safe, organic, green, agroecological," For instance. Eco-labeling will be prepared after assessing certain criteria for various products/services manufactured with the use of climate-resilience RECP. This assessment will serve as an important validation tool, both for manufacturers/producers to provide transparent data about the environmental sustainability of their products and for specifiers to make informed purchasing decisions. There is a growing demand for green products in the premium domestic market. Developing and strengthening safe, organic, green, and environmental labeling will further promote consumers' demand for such products and services, motivating the MEs to adopt new climate-resilient RECP technologies and business practices. Due to the financial limitations and lack of awareness and knowledge on eco-labeling among the MEs coupled with limited guidelines, MEs have limited access to premium markets. The project will adopt a simple approach that will be easier to follow MEs. The project will build on global best practices but be customized based on the various limitations at the ME level. Criteria for eco-labeling of various products will be undertaken by experts who closely work with Bangladesh Standards and Testing Institution (BSTI) and/or other private certification companies and other relevant stakeholders. This subcomponent will help MEs to access and learn the relevant national and local level associations working on "safe, organic, green, agroecological" products and existing guidelines. PKSF will build and institutionalize the capacity of selected POs. It will enable MEs to use these platforms to promote eco-labels. This initiative will be implemented in selected subsectors based on a market demand study.

40. **This subcomponent will support MEs to obtain certification for their products**. The collaboration with relevant Government and private agencies will add value to MEs' product branding and certification. POs and MEs will be supported by the project in product diversification, packaging, transportation, organizing events to showcase MEs' products to buyers and markets, and organizing linkages to markets. Special outreach and support will be provided to women-owned MEs. Additionally, this subcomponent will support the use of e-commerce platforms to improve ME sales and outreach. The e-commerce platform will disseminate information regarding eco-labelling and Environmental Product Declaration (EPD) to facilitate informed consumer decision-making. This will also provide the possibility of expanding outreach to regional and even international markets as quality and capacities increase.

Component 2: Providing Access to Finance for MEs to enable Green Growth (IDA US$203 million, PKSF US$48 million) (GCRF Pillar 1)

41. **This component aims to expand income-generating opportunities for MEs by supporting investments in climate-resilient RECP practices, and thus enhance MEs' productivity and competitiveness.** Under this line of credit

training; information hub; and so forth. These services have a critical impact on MEs' productivity but are not commercially viable; for example, raising a cluster's plinths in frequently flood-affected areas, treating effluents, or providing a common space to dispose of or collect waste for recycling.

component, PKSF through its POs will provide loans to MEs to implement commercially viable investments in climate-resilient RECP. Importantly, PKSF will use its standard approaches for appraising the commercial viability and repayment capacity of MEs. The financing is largely expected to benefit MEs inclusive of the value chain operating in the selected 21 subsectors across agriculture, manufacturing, and services. However, based on exceptional climate-resilient RECP, pollution abatement cases and growth potential additional subsectors may be included. These subsectors and clusters have been identified based on learnings from SEP on potential demand and environmental impact. This component uses the success of microfinance in Bangladesh to better target environmentally friendly and climate beneficial activities informed by component 1.

42. **Subcomponent 2.1: Provision of Line of Credit ($241M) for sustainable climate-resilient RECP practices and technologies** to provide sub-loans to MEs that adopt sector-appropriate climate-resilient RECP business improvement measures. The climate-resilient RECP business practices assessed and identified through subcomponent 1.1 will guide the selection of business-improvement measures to be financed. The improvements by recipient MEs will be monitored using technological devices and digital tools that are expected to feed into introductory use of big-data analytics at PKSF end. Additionally, this subcomponent will support borrowers who are interested in updating their existing business or launching a new business or activities featuring climate-resilient RECP. To close gender-gaps in access to credit, PKSF will continue their practice with a dedicated window for women-owned MEs that prioritize selection of women-owned businesses for collateral free loan (applies to all MEs). Additionally, sensitization activities will be carried out for POs to raise awareness of relevant policies on extending credit to women owned MEs under Component 1.

43. **Subcomponent 2.2: Provision of Line of Credit ($10M) for revenue-generating common facilities** to establish and upgrade the common facilities that promote RECP and pollution reduction, and overall productivity of MEs. The selection of solutions and projects to be financed from this subcomponent will be identified and will benefit from the technical assistance provided through subcomponent 1.1. The common services may be owned and managed by an ME or community of MEs (but not the PO) and can include fee-based commercially viable business like vermicompost, recycling center, common service center providing training and job works, milk-chilling facility, storage facilities, and so forth. The difference between the revenue-generating common facilities and non-revenue-generating facilities is in the commercial viability.

44. **Project activities will be implemented under the current regulatory framework and will not add to any market distortions.** The financing for line of credit will not interfere with the commercial aspects of microfinance schemes. Lending terms are defined based on microcredit regulations of the MRA and PKSF guidelines. Based on current regulations, the ME loans will range from BDT 30,000 to BDT 1,000,000 for both working capital and investments, with a loan maturity of up to two years. The interest rate[30] charged on the loan will be based on current market and regulatory practices. The line of credit may engage 50–60 POs depending on their eligibility as POs across all districts in Bangladesh to reach around 80,000 MEs in targeted subsectors, covering both formal (MEs with trade license) and informal businesses.

45. **The project envisions piloting a digital tool for loan processing, disbursement, and monitoring** in at least 10 POs based on their interest. It is expected that digital finance will provide a cost-effective transaction process for

[30] Interest rate from PKSF to PO: 5 percent for small PO (loan outstanding up to 500 ml); 6 percent for medium PO (loan outstanding 510 ml to 1 bl); 7.5 percent for large PO (loan outstanding above 1 bl): PKSF's latest operating cost over operating income ratio is 0.53. Interest rate for PO to ME: Maximum 24 percent (per MRA rule). The task team did not find interest rate decomposition data, but background research and interviews indicate the profit margin at PO level is around 4-5 percent. This is based on the cost of funds at 5-7.5 percent from PKSF less operating and other costs. The operating costs are high in the MFI model since the whole operation is in-person door to door.

microfinance while reducing the extremely high costs of human interaction and loan administration due to large, geographically distributed microenterprises.

46. **PKSF selects MFIs to become their POs and the participating POs will be chosen by PKSF based on the selection criteria agreed upon between the WB and PKSF.** Similarly, there will be a set of criteria for selecting the MEs. These selection criteria will be part of the Project Operation Manual (POM). During implementation, POs' compliance with the eligibility criteria will be closely monitored by PKSF and tracked on an ongoing basis. Any failure to maintain the eligibility criteria will result in the closure of future financing with that PO under the project. POs will be required to report to PKSF on their sub-loan portfolio and key financial and performance indicators on a quarterly and annual basis, as relevant and in line with the results framework.

Component 3: Improving PKSF Project Management, Communications, Monitoring and Evaluations, and Knowledge Management (IDA US$15 million, PKSF US$2 million) (GCRF Pillar 4)

47. This component will ensure timely and effective project implementation by building PKSF's institutional and organizational capacity to expand the use of digital tools, data analysis, effective business practices, communications, M&E, and knowledge management. Activities under this component will help institutionalize and strengthen environmental and climate-change units (ECCUs) with additional RECP knowledge and activities at the PO level. Specifically, this component will provide support to subproject design and monitoring, climate-change adaption mitigation and environment screening checklists, guidelines, and identify capacity building needs. These activities will provide the essential green, resilient (where applicable) and RECP knowledge will ensure the successful implementation of components 1 and 2. This is because enhanced institutional and individual capabilities will ultimately ensure the broader transformation and future sustainability of the ME sector.

48. **Subcomponent 3.1: PKSF's Project management and enhanced capacity.** The project will support PKSF in establishing a Project Management Unit (PMU) to implement the project effectively. The PMU will be staffed with a project coordinator, deputy project coordinators, assistant project coordinators, and other PMU staff members with responsibility for day-to-day supportive supervision, monitoring, and reporting. It will have full-time experts in key technical aspects of the project. The PMU will be responsible for executing overall monitoring of the project. It will also include trainings toto enhance awareness and knowledge of new technologies an best practices (e.g., workshops, local and international exposure visits) for effective project implementation. The implementation arrangement of components 1 and 2 is presented in Annex 1 (Implementation Arrangements and Support Plan).

49. **Subcomponent 3.2: Communications, Monitoring, and Evaluations (M&E).** This will include enhancing the capacity of the PMU to carry out communications, monitoring and evaluation activities. This will require implementing a digital system-based project management tool, enhancing PKSF's capacity to adopt a more systematic data management approach, and enhancing the technical environmental and climate-change capacity of PKSF's ECCU, especially in knowledge management and climate-resilient RECP practices. Data and evidence are essential for a systematic transformation toward sustainable financing. PKSF has a great scope to capitalize on the existing database to find various behavior patterns in the ME sector. Technology can assist PMU in organizing data and becoming the first governmental knowledge-driven organization in Bangladesh focusing on sustainable financing for MEs. Under this subcomponent, the technology and capacity-building support will be provided for the application and use of nudging, psychometric analysis, introducing new digital solutions as part of the digital transformation. The M&E will include: (a) audit of PO operations by PKSF; (b) continuous onsite and offsite monitoring by PKSF; (c) a project baseline study (conducted at the beginning of the project based), midterm

review, and final evaluation; (d) management information system (MIS) development and adoption of digital modalities; and (e) citizen-engagement mechanisms including survey of satisfaction with project interventions and feedback loop and capacity support to PKSF and their networks.

50. **Subcomponent 3.3: Knowledge management.** This will include supporting the generation and sharing of knowledge of all Project participants (the PMU staff, PO staff and MEs). Knowledge management will aim to maximize the learning of all actors and capture achievements and lessons learned in different forms, from communications to analytical studies, radio interviews and instruction videos for almost any product. This subcomponent will contribute to the design of new learning through events and trainings based on the demands generated through implementation. PKSF will conduct cluster and/or product-specific studies, as needed, that will help POs undertake the activities in components 1 and 2.

51. **The technical RECP assessment will provide a list of potential experts to enhance communities of practice at the regional level.** POs will seek the necessary support from PKSF during subproject design and implementation. Through the climate-resilient RECP assessment, PKSF will enhance POs and MEs institutionalization, technical knowledge, and promote the knowledge exchange across the country. This will enhance the uptake of climate-resilient RECP recommendations with the PO and MEs. The capacity building will target representatives from the private sector, young entrepreneurs, researchers, academia, social, environmental, and sectoral experts, and practitioners from GOB and Nongovernmental organizations (NGOs). The capacity building and knowledge engagement with the identified experts will allow POs to access local and up-to-date knowledge on climate-resilient RECP and develop knowledge products that raise MEs' awareness of climate-resilient RECP and climate change. PKSF will update the expert list as required. Communities of practice will be formed on a voluntary basis.

C. Project Beneficiaries

52. **The project will target the MEs in specific sectors with high environmental improvement potential.** The project will include SEP MEs beneficiaries that fit the RECP criteria under SMART. Project beneficiaries will include informal (enterprises that do not have licenses) MEs. There is no structured registration practice for MEs in Bangladesh and using registration as an eligibility criterion could limit the demand for support from the project, notably from female entrepreneurs who are more likely to be informal. Therefore, as part of the project, the following will apply:

    a) To be eligible for the environmental credit under component 2, all MEs will need to have some form of recognition from the government (at all levels, mainly the Union Parishad level) or an agency of the government (such as market committees set up by the Union Parishad).[31]

    b) To be eligible for the line of credit under component 2, MEs should work in the specific subsectors as listed in the POM.

    c) Women entrepreneurs will be given extra attention to facilitate their registration in the government system.

    d) The project will promote MEs to obtain business license registration from local government.

    e) The project will support progressive MEs who are willing to adopt the climate -resilient RECP practices in

[31] According to PKSF's Microenterprise (ME) Policy (2010): To be termed a microenterprise, an enterprise must be visible; legal (that is, it needs to have or procure papers including a trade license and registration certificate); environment-friendly (clearance from Department of Environment if needed); and engaged in ongoing economic activities. "MEs" means microenterprises being economic entities involving investment amounts from BDT 0.1 million to BDT 20.0 million, excluding the value of land and building, and partial or full-time employment of less than 100 persons

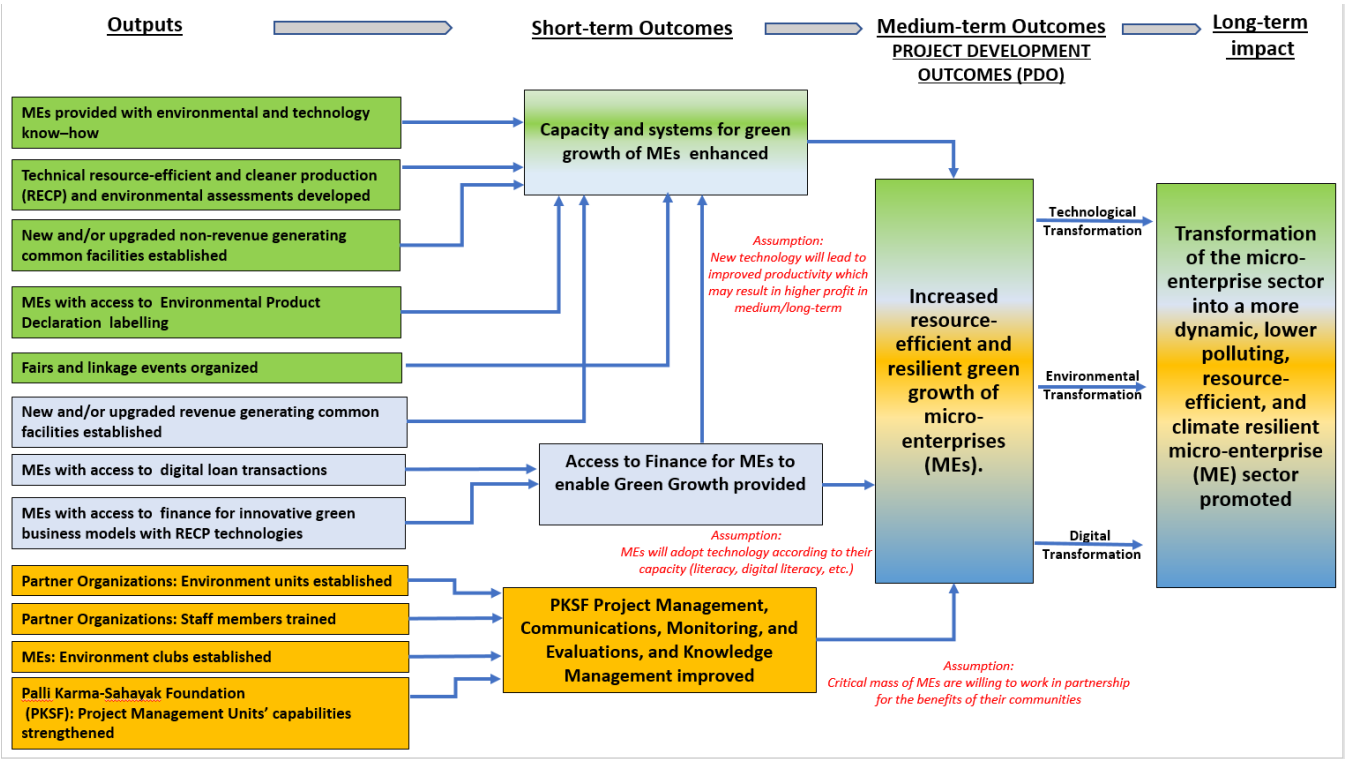
their operations and intend to aim for operational financial and environmental sustainability.

f) The project will promote MEs who have the potential to adopt eco-labeling in order to access premium markets inside/outside of the country.

53. **Special attention will be paid to ensure that female entrepreneurs benefit from the project**. Learnings from SEP implementation showed that the share of female entrepreneurs in the manufacturing and agribusiness sectors is 29 percent and 36 percent, respectively. Capacity building focusing on female entrepreneurs at the PO level will help maximize the project's benefit, since more women are likely to be found in agribusinesses such as beef fattening, homemade-food production, goat rearing, vermicomposting, and cultivating medicinal plants. While women are already falling behind in their attempts to meet the challenges of entrepreneurship, adopting climate-resilient RECP technology becomes even more difficult.

54. **PKSF and implementing POs will also be beneficiaries of the project**. PKSF is currently supporting approximately 1.7 million MEs that have a presence in the agribusiness, manufacturing, and service sectors. PKSF supports the MEs through POs dispersed throughout the country. These POs are implementing PKSF's programs and projects in the country. The project will provide capacity building to PKSF to improve its ability to support operational financial and environmental sustainability for MEs. First, PKSF will receive extensive technical capacity building in environmental management for MEs. Second, the project will support the digital operationalization of collection and management of environmental and financial data within PKSF. Third, the digital operationalization will allow PKSF to ensure a broader number of MEs access to lending opportunities.

D. Results Chain



Source: World Bank.
Note: ME = microenterprise; PKSF = Palli Karma-Sahayak Foundation; PMU = Project Management Unit; PO = Partner Organization; RECP = Resource-Efficient and Cleaner Production.

E. Rationale for Bank Involvement and Role of Partners

55. **Public-sector interventions are needed because of the following market failures**: (a) externalities related to MEs' contribution to environmental degradation and pollution, and MEs' lack of climate resilience; (b) asymmetries of information, since MEs lack knowledge of green, climate-resilient technologies and practices, and markets to sell their products and services, and consumers' lack knowledge of product quality and associated environmental impacts; (c) coordination failures since MEs, communities, and MFIs lack the capacity, resources, and incentives to work together in projects that provide them with competitive advantages and that promote the efficient use of resources, the reduction of pollution, and climate resilience; (d) missing markets that occur when MEs cannot transform green, climate-resilient investments into increased productivity and higher revenue/profitability, thus reducing their incentive to go green; (e) low price elasticity, since the ability of prices to trigger changes in consumer's behavior can be limited by consumers' lack of more sustainable alternatives; (f) a poor regulatory environment that lacks certification and safety standards; and (g) the high cost of regulating MEs through enforcement. The public sector plays a catalytic role in mainstreaming environmental and climate resilience into MEs' financing, as this does not come from the private financing available to MEs. Their primary motivation is the cost-efficient technology/process that increases profit and allows recovery of loans. This project will support catalytic public sector interventions aimed to infuse environmental dimensions into financial intermediation while utilizing access to finance for MEs as means to reach and influence them. The need for public sector support is further justified by this project's innovative concept to promote commercially viable MEs that are geared towards climate-resilient RECP practices. Public sector support is critical for building the right regulatory environment (such as ensuring worker safety) and institutional capacity to provide packages of technical assistance and financing schemes that incentivize MEs to address the externalities or public good aspects that stem from the ME sector. Government interventions—such as investing in market infrastructure, raising awareness, building capacity, or offering financial support—are necessary to uncover opportunities for MEs and drive the potential to invest in green businesses or reduce environmental footprints.

56. **The project will provide access to finance to credit constrained MEs**. In Bangladesh banks are reluctant to lend to MEs for several reasons: (a) current regulations mandate a lending interest rate cap of nine percent, which makes it financially unviable for banks to channel funds through MFIs to MEs; (b) structurally, government securities offer a higher yield (over 7–8 percent), which disincentivizes banking sector liquidity to reach MEs on account of the higher risk perception and operating costs associated with ME lending; (c) behaviorally and culturally, bank finance has historically been wary of lending to women entrepreneurs who are the largest clients of MEs; and (d) while green lending guidelines are available, climate change risks are not integrated in financial policies, and this major gap that affects access to "green" finance for not just MEs but all private sector firms. As a result of these constraints, the banking sector's share in MFI's source of funds, which had risen from BDT 23 billion in 2010 to BDT 210 billion in 2019, fell to BDT 167.79 billion (15 percent of total) as of June 2021 when both the COVID-19 pandemic and interest rate cap hit the economy. While efforts are underway to resolve broader market failures related to ME's access to bank finance in general, and "green" finance in particular, the project will provide financing through PKSF to MFIs to facilitate ME's uptake of commercially viable climate-resilient RECP activities and their transition to green business models.

57. **The project will benefit from PKSF's role in the microfinance and enterprise sector and the capacity it has built promoting environmental sustainability and resilience under SEP.** As of mid-September 2022, SEP introduced Environmentally Sustainable Practices in 30 priority subsectors/clusters, 19 of which were also provided with common services that target MEs' productivity. Beyond the cumulative target of 30,000 MEs to reach up to fourth year, 54,472 MEs (among which 84 percent are female) had signed loan agreements under SEP. SMART will allow

scaling up the success of SEP.

F. Lessons Learned and Reflected in the Project Design

58. **During the implementation of SEP, environmentally sustainable practices[32] were widely adopted by MEs with a substantial level of satisfaction.** Prior to joining SEP as project participant, only 1.76 percent of MEs had been practicing environmentally sustainable practices.[33] The SEP mid-term review (MTR) showed that approximately 70 percent of MEs (71 percent of them owned by women) adopted environmentally sustainable practices for over 12 months. Of the total, 23 percent of MEs adopted energy savings lighting, 16 percent of MEs improved drainages and pits, 13 percent of MEs used natural or organic fertilizers and dyes for safe production or packaging, and 10 percent of MEs implemented waste management activities. Moreover, almost 79 percent of MEs were willing to continue the adoption of environmentally sustainable practices in future. While 86 percent of respondents indicated that they required additional financing to keep implementing the environmentally sustainable practices, and 97 percent of respondents indicated that they required another loan to expand their business.

59. **SMART project's design builds on experiences and lessons learned from relevant projects funded by the World Bank and implemented in different low- and middle-income countries, including Bangladesh**. Successful projects target market failures and provide evidence-based solutions that minimize risks from capture and rent-seeking behaviors and avoid government failures while spurring green growth. These experiences have shaped SMART's rationale, and their lessons are reflected in its Theory of Change (TOC), PDO, components, and activities. Most importantly, SMART project design reflects six lessons learned from SEP in Bangladesh, as described below.

    a) In Mexico, the Expanding Rural Finance Project (P153338) teaches the importance of (a) nudging clients and partner organizations to **embrace online banking** to better serve Micro, small, and medium enterprises (MSMEs), and (b) advancing the technological capabilities of participating financial institutions that target businesses. In Guatemala, the Promoting Clean Technology with Value Chains Project (P127536) shows that **providing MSMEs with knowledge about the importance of applying climate-resilient RECP practices** increases their interest in receiving technical assistance to learn how to adopt and benefit from them. The Nicaragua Micro, Small, and Medium Enterprise Development Project (P109691) states that success in implementation of grant programs for MEs calls for significant **handholding at the application stage and close monitoring of the implementation**, including on-site visits to beneficiary firms.

    b) The Clean Air & Sustainable Environment Project (P098151) highlights the importance of **addressing environmentally related market failures by providing credit lines to businesses to cover different climate-resilient RECP technologies** and **treating finance access as a complement to technical assistance to increase environmental sustainability**.

    c) **SEP had less emphasis on what environmental outcomes were driven by climate-resilient RECP practices in each subsector**. SMART's project design will ensure that the theory of change of subprojects will be in line with the whole project and that the notion of climate-resilient RECP and climate change and adaptation will be mainstreamed in design and implementation of subprojects. Requiring climate-resilient

[32] In the PAD of SEP, an environmentally sustainable practice is defined as a business methodology or technology that provides (1) resource efficiency; (2) low pollution; (3) and/or climate resilience.
[33] PKSF. 2021. Interim Survey Results of SEP.

RECP profiles for most MEs under the succeeding project will ensure a stronger emphasis on climate-resilient RECP.

d) Enhancing climate-resilient RECP technologies and processes can contribute to MEs' green growth. **Limited understanding of the MEs and the POs on "environmental" issues resulted in the MEs' being unaware of their operations' environmental impact and pollution.** Such knowledge gaps negatively affect the MEs' willingness to take collective actions or borrow loans to address environmental and climate challenges. Under SEP POs and MEs were given limited RECP capacity building and knowledge. SMART will strengthen awareness of environmental and climate challenges and promote behavioral changes to increase climate-resilience of MEs. SMART will coordinate closely with the environmental clubs and units to close the knowledge gap and lessons to enhance uptake. Furthermore, the POs' role needs to shift from that of an intermediary between MEs and PKSF to a business partner for the MEs, which will provide technical advice to strengthen the MEs' business plans to mainstream climate-resilient RECP.

e) **SEP effectively targeted the MEs owned by women by setting the MEs in the agribusiness sector as one of the target beneficiaries**. However, assessing SEP's contribution on women's empowerment will require further evidence. Agribusiness MEs in the country were largely owned by women. For this project, 42 percent of agriculture MEs in the treatment group was owned by women, which was much higher than 10 percent of female owned MEs in the manufacturing sector in the treatment group. On the other hand, more evidence is required to assess to what extent the project contributed to women's empowerment. SMART will specify what gender-related challenges faced by the target MEs will be addressed within the project's scope and how to measure the achievement.

f) **Subsector-disaggregated data on MEs that obtained business certification, environmental clearance, and product certification are important for value-chain development for environmentally sustainable goods but difficult to monitor**. Monitoring such data was not part of SEP design. As proxy data, the project collected data on beneficiaries' perception regarding environment/green/organic certification, including the data on MEs associated cost of certification. Based on this lesson, SMART will monitor the status of certification and establish the eco-labeling system under the project to monitor certification status by subsectors.

g) **Active dissemination of information on climate-resilient RECP practices and products through online platforms under the project can be a good step toward digitalizing the value chain and learning to achieve further resource efficiency**. The MEs and POs regularly posted and shared information on climate-resilient RECP practices and products online (for example, social networking services). There is a potential to connect the MEs with customers and banking systems through developing e-commerce ecosystems and digital payment modalities in the next projects. In addition, digitalization of the business processes in the MEs will be important to improve their access to formal banking in the future. Building on the experience, SMART will connect the MEs with customers and banking systems through developing e-commerce ecosystems and piloting digital loan transaction modalities.

h) **Awareness-building on environmental and climate-change consequences among MEs through demonstrations is critical, since such awareness can foster beneficiaries' participation and promote green behavior change.** This lesson on the demonstration effects was emerged from the Bangladesh Community Climate Change Project (P125447) and addressed during implementation of SEP to a certain extent. Building on the lesson, SMART will support innovative pilots for green businesses and formulate a

Community of Practice for climate-resilient RECP under component 3, as well as implement pilots on digital loan transactions with selected MEs under component 2.

III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

60. **PKSF, affiliated with the Financial Institutions Division (FID) of the Ministry of Finance, has been identified as the project's implementing agency.** PKSF is a semi-autonomous government institution with a mandate of sustainable poverty reduction through employment generation, with a focus on the ultra and moderate poor and microentrepreneurs. The proposed credit line under component 2 will be provided to MEs through PKSF's POs. Therefore, it was designed in line with WBG policy OP 10.0 Financial Intermediary Financing (FIF) and the accompanying guidance note on financial intermediary lending.

61. **For the purposes of this credit line, the IDA loan funds will be channeled through the Economic Relations Division of the Ministry of Finance as the borrower's representative and passed on to PKSF in local currency** (Bangladeshi taka). PKSF will sign a Subsidiary Loan and Grant Agreement (SLGA) with the FID of GOB and it will, in turn, sign agreements with each qualified PO for the purposes of implementing the subproject's credit line. Separate operational procedures for the credit line will be outlined in detail in the POM which will determine the eligible institutional criteria, eligible activities, detailed withdrawal procedures, and responsibilities of all parties implementing the credit line. All IDA funds, including sub-loans, will be made available to PKSF under a SLGA with the FID with the Ministry of Finance.

62. **PKSF will establish a PMU.** A project coordinator will lead the PMU and oversee overall implementation. The coordinator will report directly to a PKSF Additional Managing Director and will be the day-to-day point of contact for the World Bank. Like all other project implemented by PKSF, the project is not included in the Annual Development Programme (ADP) and does not require any development project proposal (DPP). A project steering committee (PSC) will be formed to supervise the project activities. The PSC will be chaired by the Secretary, FID.

B. Results Monitoring and Evaluation Arrangements

63. **The project makes a significant contribution to the environmental sustainability and profitability of MEs.** Monitoring the project's effectiveness and sustainability is integral to achieving its objective. An effective results-based M&E system will strengthen learning, accountability, and transparency, and support a culture of evidenced-based decision-making and policy formulation. Main users of M&E data will be the PMU, PKSF, and the POs, and, more broadly, NGOs and Civil society organizations (CSOs) that support microenterprise development, as well as the staff of the ministries and agencies concerned with finance, environment, and business development.

64. **PKSF has its own monitoring system for subprojects that has proven to be a useful tool for keeping SEP implementation on track.** Likewise**,** the PMU will have an M&E section under SMART that will develop a more detailed, results-based monitoring framework based on the project's results framework and the needs of economic and financial analyses, including capturing environmental outcomes. These two systems will complement each other by integrating field implementation status and result outcome. A Geospatial Information System (GIS) approach will be used to show results along the lines of the mapping of results approach. The results-based monitoring will also include a project management information system called Activity to Output Monitoring, which allows continuous monitoring of budget utilization at all levels of the project. This will provide an integrated platform for project monitoring using information and communication technologies to simplify bookkeeping and data entry modules. The implementing POs will share real-time monitoring data and pictures. Based on these

monitoring data, quarterly reports from the POs to PKSF and quarterly reports from PKSF to the World Bank will be prepared.

65. **The project will target a significant number of MEs**. It is expected that this will result in significant data volume which needs to be shared among the POs and PKSF. This will require that PKSF and the POs develop a robust MIS with a database which can handle that large data volume. All data inputs will be digitally captured from the very beginning of the project to ensure full integration of the systems of existing POs and potentially new POs into the MIS. The RECP approach requires very good baseline data and data collection capacity. Therefore, SMART will be undertaking an impact assessment study to monitor progress in the MEs transformation towards sustainable business models.

66. **To ensure that monitoring is verified at the field level, the POs will conduct their own monitoring.** Each quarter, the selected POs will visit the site for cross-monitoring and share the reports with PKSF. This will include supervising data collection, updating and maintaining the project database, coordinating all M&E activities, and regularly analyzing monitoring data to improve project management and identify POs' implementation issues. From year 1 of the project, a biennial comprehensive impact survey will be conducted by a third party. The impact survey will examine the adoption of environmentally sustainable practices and their environmental effects, along with the economic aspects of reducing pollution and using resources more efficiently. The findings of the survey can validate the project's concept of establishing a win-win situation for improving access to finance and creating environmental benefits. The baseline data will be established as MEs enter the program, and impacts will be measured against it after the subproject is implemented.

67. **At mid-term of the project implementation, PKSF will conduct a beneficiary assessment.** The beneficiary assessment will provide a basis for assessing progress in project implementation and may recommend steps to alter or improve interventions. Ideally, the beneficiary assessment is conducted by a third party to receive an independent assessment of the work of the partners in the field.

C. Sustainability

68. **The project aims to build environmental norms in ME lending and gradually mainstream these through PKSF's intervention**. In doing so, the project will move the ME sector toward a greener tomorrow. Though the project uses a financial intermediary route, it is design to help change the nature of financial intermediation and through it, ME operations, rather than being focused on boosting access to finance for MEs; this also provides the rationale for public funding. A critical aspect of the project lies in the fact that it uses a holistic approach that goes beyond environment-focused finance to move the sector toward an environmentally friendly future. It accomplishes this by (a) creating common service facilities, which cannot be done by individual entrepreneurs; (b) supporting the adoption of eco labeling; (c) raising individual and institutional capabilities in green lending; and (d) establishing collection, monitoring, and analysis of environmental and financial data. At present, both at the individual project level and institutional level, the primary motivation is to adopt cost-efficient technologies and processes and recover loans, respectively. The sole reliance on financial dynamics—which severely erodes future sustainability—and absence of any prioritization of environmental norms is a flawed short-term approach that has the potential to seriously affect the national economy in the medium to short term. The project adopts a catalytic and holistic green growth approach to nudge the microfinance sector and MEs toward sustainability by mainstreaming environmentally friendly parameters in their operations. The capacity-building of PMU and strengthening of already existing ECCU of PKSF are geared toward making a sustainable impact.

69. **Project objectives appear sustainable beyond the project's duration.** Adding to the sustainability matrix out of

project design is PKSF's role as the apex organization to the POs and their role. Established in 1990, PKSF started its ME loan program—distinct from its microcredit program—in 2001. 182 POs were implementing ME loan programs, and to date the number of ME borrowers under the program stood at approximately 2.06 million. The number of POs and MEs reached by these POs makes PKSF an ideal choice for inducing sector-wide changes. PKSF's leadership role is well acknowledged in the sector, and POs depend on PKSF for initiating sector-wide changes. Both PKSF and POs involved in ME lending have good financial sustainability—PKSF's Capital Adequacy stands at 76.63 percent, with its Return on Assets at 3.13 percent—and PKSF evaluates all POs selected to participate in the ME loan program with a diversified rating tool that focuses on credit quality and profitability. Having an impressive geographical and ME coverage, the adoption of environmental norms by the POs of PKSF covered by the project will have a significant demonstration impact on other NGOs and other lenders to the sector.

70. **SMART has a strong focus on sustainability, which is reinforced by three interrelated aspects**: (a) holistic project design; (b) PKSF's experience and focus on the environment; and (c) wide coverage of MEs, because the POs have significant demonstration impact. Around 80,000 MEs are expected to be covered under the project, which will provide a strong demonstration impact to other lenders, as well as the MEs, on account of tangible benefits (that is, a cleaner environment and better health and worker safety).

IV. PROJECT APPRAISAL SUMMARY

A. Economic and Financial Analysis

71. **Economic and financial analysis (EFA) of SMART**. The ME funding envisioned in component 2 is used for quantitative EFA. The provision of credit lines to MEs that constitutes the core of the project's funding (US$203 million) can be assessed quantitatively. The EFA was conducted by modeling the provision of credit-line funding to MEs (US$2,537.50 per ME) in selected subsectors (Table 1) and outlining enterprise-level cash and resource flows. The net financial revenues and net economic benefits accruing to modeled MEs can be used as estimates of the potential project's impacts. The potential qualitative benefits of components 1 and 3 are expected to add to the overall positive effects of SMART and success of MEs which is assessed quantitatively in component 2.

72. **EFA was conducted using a classic cost-benefit analysis (CBA) framework.**[34] The CBA uses in individual MEs categorized into five types of and in aggregate terms assuming an aggregate number of each sector. The incremental measures of the financial viability of the proposed interventions indicate whether the interventions are likely to be viable after the project ends. The financial analysis suggests that viability is expected, as financial profitability measures (FNPV, FIRR, and MIRR) are positive for all five proposed MEs and higher when compared to WOP scenarios. The obtained FIRRs are also higher than the discount rate of 13.5 percent. This suggests the likely financial profitability to intended beneficiaries of the proposed credit-line funding under component 2. Incremental economic measures are essential from the perspective of the entire economy since they suggest if the proposed interventions can improve the status quo of the national economy.

Table 1 Appraised MEs and Scenarios

Model	Without project (WOP) scenario	With project (WP) scenario	Target audience of proposed interventions

[34] G.P. Jenkins, C-Y. Kuo, and A. Harberger. 2011. "Cost-Benefit Analysis for Investment Decisions." Accessed in French translation at https://ideas.repec.org/s/qed/dpaper.html

Model 1: Eco-brick ME	Production of fired clay bricks in improved zigzag kiln is assumed. Fired-bricks production causes serious GHG emissions from production, which negatively influence the environment.	Assumed provision of individual ME line of credit in BDT equivalent to US$2,537.50 for ME development activities. Production of cement hollow blocks (semi-automatic production). Emissions are significantly reduced due to improved/modern technology.	MEs of this type that are qualified for line of credit.
Model 2: Shoemaking ME	Production of shoes with no utilization of production waste and scraps.	Assumed provision of individual ME line of credit in BDT equivalent to US$2,537.50 for ME development activities. Utilization of production waste is envisioned and expected to provide some environmental benefits.	MEs of this type that are qualified for line of credit.
Model 3: Poultry-rearing (with manure management) ME	Rearing of 200 chickens with no management of chicken manure.	Assumed provision of individual ME line of credit in BDT equivalent to US$2,537.50 for ME development activities. Rearing of 1,000 desi chickens with management of chicken manure (manure used as fertilizer).	MEs of this type that are qualified for line of credit.
Model 4: Cattle-fattening (with manure management) ME	Fattening of three cattle with no manure management (manure left in pile)	Assumed provision of individual ME line of credit in BDT equivalent to US$2,537.50 for ME development activities. Fattening of four cattle with management of manure (covering for reduced methane emissions).	MEs of this type that are qualified for line of credit.
Model 5: Loom-production ME	Loom production without reduction of energy usage.	Assumed provision of individual ME line of credit in BDT equivalent to US$2,537.50 for ME development activities.	MEs of this type that are qualified for line of credit.

73. **Carbon volume, pricing, and estimation of climate co-benefits.** The estimation of carbon Co-Benefits is an integral part of the analysis. In addition, proper pricing of carbon emissions or reductions was included in the economic part of this analysis to account for the potential environmental benefits or costs that might accrue through the proposed interventions. The estimated volumes of carbon were priced using the World Bank Guidance Note from November 12, 2017 (with carbon prices adjusted to 2022 shadow prices). Details regarding the assumed levels of carbon that were priced in the analysis are presented in table 2 below. In the case of modeled MEs, some additional environmental Co-Benefits (besides carbon Co-Benefits) and other potential benefits and costs associated with each ME type are also expected but were not quantified in this CBA.

Table 2 Assumed emissions and emissions reductions

WP scenario	Assumed environmental intervention	Tons of CO_2 emissions or savings in tons/year per individual ME	References	Emissions or reductions when compared to WOP
Model 1: Eco-bricks	Switch to modernized technology – concrete hollow-blocks production is assumed	224.40	Asian Development Bank (ADB), Financing Brick Kiln Efficiency Improvement Project, *https://www.adb.org/sites/default/files/project-document/73188/45273-001-ban-rrp.pdf*; Koshy M, Varghese J. Estimation of Embedded Energy and CO2 Emission of an Institutional Building – IJSER, 2014	reductions
Model 2: Shoemaking	Waste is sent as RDF for cement production to replace fossil fuels in case of WP	7.44	IFC, Mapping and Analysis of Opportunities to Produce Refuse Derived Fuel (RDF) from Municipal Solid Waste in Asia, 2022, unpublished	reductions
Model 3: Poultry	Manure is used as fertilizer	0.91	IPCC, 2006 https://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/4_Volume4/V4_10_Ch10_Livestock.pdf	reductions
Model 4: Cattle fattening	Covering of manure for lower methane emissions	-3.35[35]	Climate Change Connection. https://climatechangeconnection.org/emissions/co2-equivalents/	emissions
Model 5: Looming	Energy-saving activities	0.06	Calculated, based on Hossain I, et al. 2017. Demand-Side Energy Efficiency Opportunities in Bangladesh https://documents1.worldbank.org/curated/en/845631543398730054/pdf/132544-Bangladesh-Demand-Side-Energy-Efficiency-FINAL.pdf	reductions

74. **In conclusion, the CBA quantitative results and qualitative analysis of project's interventions suggest that SMART will bring measurable benefits to Bangladesh.** The analysis results (Table 3) confirm that the project is expected to deliver economic benefits that will positively influence society and the country's economy. The main

[35] In the case of model 4: cattle fattening, even with carbon emissions priced and included in the economic part of the analysis, the ME remains economically viable. The carbon emissions are present because, in the WOP scenario, three cattle were assumed for fattening, whereas in the WP scenario, four cattle were assumed. In the WOP scenario, manure is left untreated. In the WP scenario, manure is covered for lower methane emissions with a potential 15 percent decrease in methane emissions (per https://www.dairyresearch.ca/userfiles/files/Fact%20Sheet_Manure%20Management%20Practices%20to%20Mitigate%20GHG_May%202020-1.pdf). However, because one more animal is modeled, the emissions are higher than in the WOP scenario.

gains will manifest through improving MEs' financing and viability. The aggregate environmental benefits of lower emissions and improved waste management will add to the project's achievements. The Bank's value-added through the SMART comprises loan financing and experienced staff. The Bank's contributions will also help minimize capacity constraints within the GoB, allowing a more comprehensive approach to enable future green-growth projects in the country.

Table 3 EFA Aggregate Incremental Financial and Economic Results (over 20 years @ 13.5% financial discount rate and 10% economic discount rate)

	Model 1: Eco-brick ME	Model 2: Shoemaking ME	Model 3: Poultry-rearing (with manure management) ME	Model 4: Cattle-fattening (with manure management) ME	Model 5: Loom-production ME
Incremental Aggregate Financial results (000 USD or %)					
FIRR	20%	48%	19%	54%	53%
FNPV	330,922	262,681	22,443	56,228	79,832
Incremental Aggregate Economic results lower carbon pricing (000 USD or %)					
EIRR	31%	52%	24%	44%	41%
ENPV	1,661,806	357,305	71,486	55,258	72,957
Incremental Aggregate Economic results upper carbon pricing (000 USD or %)					
EIRR	49%	57%	25%	29%	41%
ENPV	3,343,180	413,051	78,281	28,493	73,387

B. Fiduciary

(i) Financial Management

75. An FM capacity assessment of PKSF has been conducted following the Bank's operational policies and procedures. The assessment reviewed PKSF's current financial management systems and practices in implementing development projects, aiming to evaluate the associated risks, and designing the mitigation measures. The project's overall financial management risk is assessed to be "moderate" considering the huge experience gathered by PKSF in implementing various activities using POs. SMART is also designed following the same implementation path of using POs to achieve project objectives. The audit reports of PKSF have always received "unqualified opinion" reflecting the true and fair view in the preparation of the financial statements. PKSF is currently implementing four other Bank-financed projects—namely, RAISE, LICHSP, BD Rural WASH and SEP. In each of these projects, PKSF's performance has been highly satisfactory. At present, there is no pending audit report under PKSF for any Bank-financed projects.

(ii) Procurement

76. Procurement under the project will be carried out in accordance with the World Bank's Procurement Regulations

for IPF Borrowers for Goods, Works, Non-Consulting and Consulting Services, dated July 1, 2016 (revised in November 2017, August 2018, and November 2020). A variety of goods, non-consultant service and consultant services are expected to be procured under the Project. The Project will be subject to the World Bank's Anticorruption Guidelines, dated October 15, 2006, revised in January 2011, and as of July 1, 2016. The project will use the Systematic Tracking of Exchanges in Procurement (STEP) to plan, record, and track procurement transactions. Details of the procurement arrangements are provided in Annex 1 (Implementation Arrangements and Support Plan).

C. Legal Operational Policies

	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

D. Environmental and Social

77. **Environmental and Social Risks**: The Project does not envisage any significant or irreversible environmental/social risks. Overall, the project is expected to have positive environmental benefits as environmental management practices of MEs will be enhanced. From the nature of proposed MEs and likely activities, it is expected that there will be minor construction-related impacts causing noise and dust and generating waste and community health and safety and labor and workplace related risks. There is also risk of exclusion of vulnerable and marginalized groups/women owned MEs. The project may also support the construction and operations of small-scale effluent treatment plants, drainage facilities and material recovery facilities. There may be legacy environmental and social issues due to inappropriate pollution control. The E&S risk of the project is rated Moderate considering these risks. The risk assessment carried out using the Social Protection and Jobs (SPJ) and civil work SEA/SH risk assessment tool for Social Protection projects gives the project a risk rating of 'Moderate.'

78. **The potential environmental and social risks will be managed through updated PKSF Environmental Social Management System (ESMS) and Environmental Social Commitment Plan (ESCP), including development of operational manual, Environmental and Social (E&S) screening procedures, management plans and monitoring systems.** Activities with significant environmental or social impacts will not be supported through screening of sub-projects against an exclusion list which will be part of PKSF ESCP. The roles and responsibilities of PKSF Environment and Climate Change Unit (ECCU), PMU, POs and MEs will be included in the updated PKSF ESMS. The treatment efficiency and disposal of the wastes and effluents will need to meet the WBG and national standards. COVID-19 related Occupational Health and Safety (OHS) measures and waste management issues will also need to be addressed at enterprise level. PKSF with the support of POs will conduct a stakeholder mapping and analysis exercise to ensure that all vulnerable groups, including differently able and LGBT+ individuals are well consulted and well informed about the project benefits. The POs will also take required measures to ensure that the IPs/tribal/ethnic minority groups are aware of the project and can benefit from it. SMART ESF documents are disclosed here: *https://pksf.org.bd/policy-documents/* on February 25, 2023.

79. **Gender.** SMART will primarily support women entrepreneurs to access credit and expand knowledge on climate-resilient RECP practices and adopt improvements. The project will address gaps through a package of interventions aimed at providing technical support to women-owned MEs and ensuring access to credit in component 1 and 2. They are: i) ME assessments conducted by experts with specialized skills; ii) tailored trainings for women-owned

MEs based on assessment (including financial literacy, climate-resilient mitigation measures, green technologies and procedures, and measures to tap into the demand for environmentally-friendly products); iii) window under the line of credit for women-owned MEs; iv) additional steps to be taken to support women entrepreneurs register with government, open mobile banking accounts, and apply for loans; and v) awareness raising campaigns to inform women about the project's services as well as raise community awareness on giving opportunities to women-owned MEs. The main area of focus will be access to credit because it is a key challenge for women who are faced with wide credit gap. PO staff will also be informed on relevant policies on important of extending credit to women-led MEs.

80. **Climate change mitigation**. Project activities and outcomes will support Bangladesh's efforts to achieve its climate commitments. SMART supports addressing system weaknesses in energy efficiency and waste and wastewater management, which if not addressed will increase the vulnerability of the target areas to climate risks and lead to negative climate externalities. Under component 1, the project enables GHG emission reduction because of it raising ME's awareness of climate change and its advice on climate actions, technical assistance to promote competitiveness and productivity of sectors through adoption of climate-resilient RECP that directly reduce GHG emissions, and development of GHG emissions monitoring systems for MEs. Interventions under component 2 that directly result in GHG emission savings is lending to MEs to allow investments in climate-resilient RECP technologies in polluting subsectors. Component 3 interventions facilitating institutional strengthening include an increase in the technical skills of PKSF and POs to develop and implement frameworks to directly support climate-change mitigation investment activities of MEs. Table 2 provides an overview of GHG qualitative assessments for five sectors-eco-bricks, shoe manufacturing, loom production, poultry, and beef fattening. The SMART interventions in these sectors may generate 229.46 tons of CO2 emission savings per year per ME, most of the savings coming from eco-bricks sector.[36]

81. **Climate change adaptation.** The project targets districts prone to risks related to climate. Risk-reduction measures have been incorporated to reduce climate risks and limit exposure and vulnerability to the impacts of climate change. Project locations have been/will be screened for potential threats to site integrity from natural hazards such as erosion. Specifically, activities under component 1 will raise awareness around climate change and promote skills among MEs necessary to help enterprises adapt to climate-change impacts and assess their climate-change vulnerability and implement adaptation measures. Component 2 will support building of infrastructure that increases the adaptive capacity of MEs clusters (for example, nature-based protection infrastructure). Best practices on climate-resilient infrastructure design and management will be applied to increase climate resilience. The detailed description of climate change adaptation and mitigation activities of the project is provided in Climate Change Technical Note P178996. As per the assessment, the total Climate Co-Benefits represent 41 percent.

82. **The project will have a robust citizen-engagement approach to contribute to achieving the PDO**. The approach includes (a) consultations with key stakeholders (that is, local communities, road users) during the selection, design, and implementation of the project, via field visits, focus groups, and roundtable discussions; (b) engagement of local communities in managing the common services (through community monitoring groups or already established environmental clubs); (c) establishment of a four-tiered Grievance Redressal Mechanism (GRM) to process complaints or grievances related to project activities, including GBV and personal safety-related complaints received in-person, via email/letter, and/or telephone calls; and (d) beneficiaries' feedback mechanisms, such as satisfaction surveys to track beneficiaries' perceptions of project progress and improved infrastructure, and surveys to assess the impact of training and capacity building carried out under the project. The citizen engagement intermediate results indicators of the project include (a) number of common facilities

[36]. Excel files for GHG accounting are available in the project file.

managed by ME committees; (b) number of environmental clubs established; (c) grievances related to delivery of project benefits that are addressed.

V. GRIEVANCE REDRESS SERVICES

83. **Grievance Redress**. Communities and individuals who believe that they are adversely affected by WB supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the Bank's Accountability Mechanism (AM). The AM houses the Inspection Panel, which determines whether harm occurred, or could occur, as a result of Bank non-compliance with its policies and procedures, and the Dispute Resolution Service, which provides communities and borrowers with the opportunity to address complaints through dispute resolution. Complaints may be submitted to the AM at any time after concerns have been brought directly to the attention of Bank Management and after Management has been given an opportunity to respond. For information on how to submit complaints to the Bank's Grievance Redress Service (GRS), please visit www.worldbank.org/GRS. For information on how to submit complaints to the Bank's Accountability Mechanism, please visit https://accountability.worldbank.org.

84. PKSF will establish and operate project and local level grievance mechanism (also responsive to SEA/SH) for the Project according to updated ESMS. Project level GRC will be formed within three months of the GoB approval and PMU is formed. The existing GRM of SEP will be utilized by SMART until the project level GRM is formed. The GRC at the local level will be established before commencement of sub-project activities and thereafter maintained and operated throughout Project implementation.

VI. KEY RISKS

85. **The overall residual risk is rated Moderate.** Risks are addressed using the Systematic Operation Risk Rating Tool (SORT) taking into account planned mitigation measures, including implementing the generally accepted accounting principles (GAAP), close supervision, and implementation-support missions.

86. **The Fiduciary residual risks are rated as Substantial.** PKSF has adequate experience in implementing Bank financed projects. However, procurement risk is rated as substantial due to following risks: (i) delays in the procurement process, particularly at the technical preparation stage (budget, technical design, specifications etc. before start of the procurement process) and at bid evaluation and contract award stages, contributed also by prolonged internal GoB approvals, and (ii) possible differences with GoB's procurement rules and decision-making in application of the Bank's Procurement Regulations. The procurement risks will be mitigated through the action plan provided in Annex 1 (Implementation Arrangements and Support Plan).

VII. RESULTS FRAMEWORK AND MONITORING

Results Framework
COUNTRY: Bangladesh
Sustainable Microenterprise and Resilient Transformation (SMART)

Project Development Objectives(s)

To increase resource-efficient and resilient green growth of microenterprises (MEs).

Project Development Objective Indicators

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
To increase resource-efficient and resilient green growth of microenterprises (MEs)							
Supported MEs adopting at least two climate-resilient RECP practices (Number)		0.00	0.00	0.00	30,000.00	48,000.00	64,000.00
Supported female owned MEs adopting at least two climate-resilient RECP practices (Percentage)		0.00	0.00	0.00	65.00	65.00	65.00
Supported MEs with improved knowledge on climate vulnerability (Number)		0.00	0.00	10,000.00	40,000.00	56,000.00	72,000.00
Supported MEs with increased		0.00	0.00	0.00	0.00	0.00	40,000.00

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
revenues by 10% or more compared to non-supported MEs (Number)							
Supported female owned MEs with increased revenues by 10% or more compared to non-supported female owned MEs (Percentage)		0.00	0.00	0.00	0.00	0.00	65.00

Intermediate Results Indicators by Components

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Enabling capacity and systems for green growth of MEs							
Non-revenue generating common facilities established or upgraded and operational (Number)		0.00	0.00	0.00	20.00	40.00	50.00
Non-revenue generating common facilities established or upgraded and operational owned by ME clusters that have women in the management committee (Percentage)		0.00	0.00	0.00	30.00	30.00	30.00
Supported MEs tracking at least one environmental key performance indicator		0.00	0.00	10,000.00	25,000.00	37,500.00	50,000.00

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
(Number): m3 of wastewater, kwh energy, solid waste in tons, ammonia in parts per billion, CO2 equivalent of GHG emissions (Number)							
Providing access to finance for MEs to enable green growth							
Climate-resilient RECP profiles prepared and validated for MEs (Number)		0.00	0.00	8,000.00	15,000.00	23,000.00	30,000.00
Climate-resilient RECP profiles prepared and validated for female owned MEs (Percentage)		0.00	0.00	65.00	65.00	65.00	65.00
Loans provided to MEs (Number)		0.00	0.00	35,000.00	60,000.00	70,000.00	80,000.00
Loans provided to MEs committed to adopting at least two climate-resilient RECP practices (Amount(USD))		0.00	0.00	150,000,000.00	200,000,000.00	240,000,000.00	251,000,000.00
Revenue-generating common facilities established or upgraded and operational (Number)		0.00	0.00	0.00	30.00	40.00	50.00
Improving PKSF Project Management, Communications, Monitoring Evaluations and Knowledge Management							
Environmental and Climate Change Units (ECCUs) established and operational at POs (Number)		0.00	0.00	20.00	30.00	40.00	50.00
Environmental clubs established and operational at ME clusters (Number)		0.00	0.00	15.00	25.00	35.00	50.00

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Grievances registered related to delivery of project benefits addressed in a timely fashion (Percentage)		0.00	0.00	100.00	100.00	100.00	100.00

Monitoring & Evaluation Plan: PDO Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Supported MEs adopting at least two climate-resilient RECP practices	Climate resilience indicator. The indicator counts the number of MEs that continue to use at least two climate-resilient RECP practices one year after these have been introduced to the MEs. Green growth business practices largely include resource-efficient cleaner production (RECP) practices. Climate-resilient RECP is implemented in line with environmental policies and regulations in Bangladesh. Climate-resilient RECP practices	Annual	POs' reports which reflect their direct observation or field survey in MEs	PMU reviews POs' reporting on the number of MEs that continue to use at least two climate-resilient RECP practices one year after these have been introduced to the MEs.	PMU M&E function

	include six practices on resource use (energy use, materials use and water use) and pollution (air emissions, wastewater, and waste) and reference indicators such as product output. These are used to calculate resource-productivity such as product output per unit of resource consumption and pollution-intensity calculated by emissions or waste generation per unit of product output. See annex 1 of the Project Appraisal Document for examples of climate-resilient RECP practices based on typology of ME activities. At appraisal, climate-resilient RECP assessments are conducted by the experts of air quality management, wastewater, and waste to identify business practices that will support MEs in achieving green growth. Based on the results of the climate-resilient RECP assessments and in				

	consultation with POs, the MEs decide which climate-resilient RECP practice they adopt.				
Supported female owned MEs adopting at least two climate-resilient RECP practices	Gender indicator	Same as the parent indicator	Same as the parent indicator	Same as the parent indicator	PMU M&E function
Supported MEs with improved knowledge on climate vulnerability	Climate resilience indicator. This indicator reflects knowledge improvements on the climate resilience of MEs through capacity building conducted by POs and PKSF. The methodology for conducting the knowledge assessments will be described in the Project Operations Manual. Climate resilience refers to the ability to withstand or bounce back from external shocks, particularly in dealing with the impact of climate change: e.g., (i) flood response; (ii) high salinity and drought resistant solutions; (iii) response to extreme heat; and (iv) other climate resilience enhancing approaches. See annex 1 of	Annual	POs' reports which reflect the results of knowledge assessments	PMU reviews POs' reporting on capacity building provided to the MEs and knowledge assessments undertaken.	PMU M&E function

	the Project Appraisal Document for examples of climate-resilient RECP practices based on typology of ME activities.				
Supported MEs with increased revenues by 10% or more compared to non-supported MEs	This indicator measures the increased revenues of supported MEs to assess the impact of the adoption of climate-resilient RECP practices compared to a counterfactual.	End of the project	Sample-based enterprise surveys in supported and non-supported MEs	PMU contracts a third party to conduct sample-based enterprise surveys in supported and non-supported MEs.	PMU M&E function
Supported female owned MEs with increased revenues by 10% or more compared to non-supported female owned MEs	Gender indicator	Same as the parent indicator	Same as the parent indicator	Same as the parent indicator	PMU M&E function

Monitoring & Evaluation Plan: Intermediate Results Indicators					
Indicator Name	**Definition/Description**	**Frequency**	**Datasource**	**Methodology for Data Collection**	**Responsibility for Data Collection**
Non-revenue generating common facilities established or upgraded and operational	Non-revenue generating common facilities are established or upgraded to an acceptable standard (to be defined in the Project Operations Manual) in ME clusters to promote climate-resilient RECP and enhance	Annual	POs' reports which reflect the results of technical inspection upon completion of works	PMU reviews POs' reporting on the number of non-revenue generating common facilities established or upgraded and operational.	PMU M&E function

	green business growth businesses. The type of support will be identified by POs through consultations with the ME clusters.				
Non-revenue generating common facilities established or upgraded and operational owned by ME clusters that have women in the management committee	Gender indicator	Same as the parent indicator	Same as the parent indicator	Same as the parent indicator	PMU M&E function
Supported MEs tracking at least one environmental key performance indicator (Number): m3 of wastewater, kwh energy, solid waste in tons, ammonia in parts per billion, CO2 equivalent of GHG emissions	Key environmental performance indicators include wastewater (m3), electricity (kwh), solid waste (ton per year), air pollution (PM2.5 and/or ammonia concentration), GHG emissions (CO2 equivalent). The tracking of environmental key performance indicators depends on the business models of the specific ME as reflected in the RECP profiles. See annex 1 of the Project Appraisal Document for examples of climate-resilient RECP practices based on typology of ME activities. Based on climate-resilient RECP assessments and in consultation with	Annual	Reports from climate-resilient RECP monitoring system	PMU reviews POs' reporting on data collected from the RECP monitoring system.	PMU M&E function

	MEs, the POs decide which key environmental performance indicator to be tracked with a specific ME. Key environmental performance indicators can be tracked in the following ways: (a) Air quality meters installed in ME clusters, and data on PM2.5 and ammonia recorded manually and/or digitally; (b) Water quality meters installed where relevant; (c) GHG emissions can be calculated based on electricity consumption using free tools such as the Greenhouse Gas Equivalencies Calculator of the US Environmental Protection Agency (EPA): ; (d) Solid waste weighted when collected and/or disposed; and (e) Electricity using electricity bills of MEs.				
Climate-resilient RECP profiles prepared and validated for MEs	Climate-resilient RECP profiles include the key environmental performance indicators and input and output information of the MEs. POs obtain training	Annual	Climate-resilient RECP profiles and supporting documents	PMU reviews climate-resilient RECP profiles that are validated by POs and PKSF on a sample basis.	PMU M&E function

	from the assessment team to prepare climate-resilient RECP profiles in consultation with targeted MEs. Climate-resilient RECP profiles are validated by POs and PKSF on a sample basis. The RECP profiles provide the basis for the selection of the RECP practices of the PDO indicator 1. POs will develop in collaboration with PKSF and the assessment team criteria for the selection of MEs for RECP profile development.				
Climate-resilient RECP profiles prepared and validated for female owned MEs	Gender indicator	Same as the parent indicator	Same as the parent indicator	Same as the parent indicator	PMU M&E function
Loans provided to MEs	This indicator counts the number of loan agreements signed by MEs under the SMART project. A ME can sign more than one loan agreement.	Annual	Signed loan agreements	PMU reviews POs' reporting on the number of signed loan documents.	PMU M&E function
Loans provided to MEs committed to adopting at least two climate-resilient RECP practices	This indicator measures the volume of loans in the US$ million provided to MEs committed to adopting at least two climate-resilient RECP practices through the	Annual	Signed loan agreements	PMU reviews POs' reporting on the volume of loans to MEs committed to adopting at least two climate-resilient RECP practices	PMU M&E function

	line of credit for sustainable climate-resilient RECP practices and technologies to provide sub-loans and the line of credit for revenue-generating common facilities.			based on the signed loan agreements.	
Revenue-generating common facilities established or upgraded and operational	Revenue-generating common facilities are established or upgraded (to be defined in the Project Operation Manual) to promote climate-resilient RECP and green business growth practices. The type of support will be identified through consultations with MEs and POs.	Annual	POs' reports which reflect the results of technical inspection upon completion of works	PMU reviews POs' reporting on the number of revenue-generating common facilities established or upgraded and operational based on technical inspection after completion of works.	PMU M&E function
Environmental and Climate Change Units (ECCUs) established and operational at POs	POs institutionalize climate-resilient RECP principles by establishing permanent ECCUs at the POs' level. ECCUs at the PO level monitor ESF implementation to ensure that the activities of MEs meet the ESF requirements. An ECCU consists of one permanently employed specialist at minimum.	Annual	Minutes of meetings of ECCUs	PMU reviews workplans, timesheets, and minutes of meetings of ECCUs and the number of established and operational ECCUs reported by POs.	PMU M&E function
Environmental clubs established and operational at ME clusters	Environmental clubs are established in ME clusters to	Annual	Workplans and activity	PMU reviews workplans and activity	PMU M&E function

	strengthen awareness of MEs on climate-resilient RECP and to facilitate long-term behavioral changes.		reports of environmental clubs	reports of environmental clubs and the number of environmental clubs established and operational in ME clusters reported by POs.	
Grievances registered related to delivery of project benefits addressed in a timely fashion	Citizen engagement indicator. The project registers any grievances related to the delivery of project benefits from project beneficiaries in the MIS. Timely fashion means that grievances are responded to with follow-up action within two months after receipt of grievance.	Annual	Grievance register and follow-up actions	PMU reviews grievance register and follow-up actions and reports the percentage of grievances that are addressed within two months.	PMU M&E function

ANNEX 1: Implementation Arrangements and Support Plan

Implementation Arrangements

1. **SMART will be implemented in the field by POs that are selected according to criteria agreed upon with the World Bank.** POs are responsible for putting together a proposal that includes loans for the MEs and shared common services. POs will institutionalize sustainable microfinancing through establishment of permanent ECCUs at POs' level. POs will require technical, environmental management and standards, assessment of MEs on environmental norms, climate-change risks, and use of digital tools for project monitoring. ECCUs at POs level will monitor ESF implementation to ensure that the activities of MEs meet the requirements. The POs will be responsible for managing the cluster-level common facility. The POs can manage the units/parts by leasing new MEs assets or entering service contracts with them. The POs will encourage one ME to take over the common service, including all liabilities, revenues, and businesses in order not to be the responsibility of the PO after the project is over. However, where no ME is available to operate any shared service, the POs will continue to operate and manage that common facility for at least 10 years after the project closes. As part of the proposal for the cluster, the PO will, in detail, outline how the above objectives will be met. Once the proposal is approved, the PO will prepare a clear business plan (including detailed estimates of overall revenue, operation and maintenance costs, and periodic augmentation costs). PKSF will disburse money to the PO only after the business plan/concept is approved.

2. **PKSF's Environment and Climate Change Unit (ECCU) contributes to all PKSF projects (including SEP) in project implementation.** The unit supports subproject formulation and screening, contributes to preparing ESF documents, screening checklist, guidelines, capacity building, subproject monitoring, and assessment of subprojects performance as per updated PKSF ESMS. The project's proposed activities will be approved by the Subproject Evaluation Committee (SPEC), which comprises the head of the Environment and Climate Change Unit of PKSF and his/her deputy along with the other experts (external and internal environmental, social, and sectoral specialists). Proposed activities by POs will be critically evaluated by PKSF ECCU and approved by the SPEC. ECCU developed 15 sectoral protocols/guidelines for the MEs to operate their business in an environmentally friendly manner. ECCU will contribute to updating PKFS's existing ESMS.

3. **Project implementation will follow the steps below, which will be further elaborated in the POM:**
    a. Step 1: Request for Expressions of Interest (REOI) with RECP principal guidelines. REOI announcement will be launched by SMART Call for Proposal workshop to the shortlisted Partner Organizations (calls will start on a rolling basis). PKSF will ensure continuous capacity development of POs on RECP and REOI process

    b. Step 2: POs will prepare Sub-project Proposal (SPP). Partner Organizations (POs) will consult and engage with MEs and other stakeholders to identify the needs and potential opportunities for Climate-resilient RECP and their business growth needs. The proposal includes Climate-resilient RECP technical assistance and loan demand of the microenterprises (MEs).

    c. Step 3: POs submit SPP (reflecting ME loan demand and technical support needs) (C1 & C2) to PKSF. SPP will be a combination of: Sub-project activities (with detailed budget and activities) for the sub-sector cluster development (environment and business) under component 1 (C1); ME loan demand will be under Component 2 (C2) within the identified sub-sector clusters.

d. Step 4: Proposal evaluated by PKSF & WB**.** The submitted SPP will be reviewed by the Project Management Unit (PMU) at PKSF with the assistance of the Environment and Climate Change Unit (ECCU) of PKSF. The SPP will be shared with the World Bank for parallel review and advisory support; WB will provide no objective clearance (NoC) of SPP. After PMU & WB clear the SPP submitted by POs, the SPP will be evaluated by the SPEC members (Internal and external) and recommended for revision, if required, by the PO or proceed for approval or rejection. Upon acceptance of SPP by the SPEC, the SPP will be approved by PKSF management.

e. Step 05: PKSF Proposal approval and sharing with WB**.** SPEC recommended SPP will be approved by the higher authority/Managing Director (MD) of PKSF. As per PKSF practice, loan component (C2) will be approved by PKSF Board. PO will be notified when the SPP is awarded for implementation of the sub-project. Finally, the SPP approved by PKSF will be shared with WB.

4. **Community of practice.** The Community of practice at regional level will include representatives of the private sector; young entrepreneurs; researchers; academia; social, environmental, and sectoral experts; and practitioners from GOs and NGOs who will be endorsed by PKSF's management. The Community of practices will be utilized throughout the subproject-design process and will help enhance the institutionalization of their contextual technical knowledge into practice. The Community of practice will enable POs to convene locally, share knowledge on climate-resilient RECP and develop knowledge products that raise MEs' awareness of climate-resilient RECP and climate change. PKSF will steer knowledge exchange periodically as and when required.

Financial Management

5. **Planning and budgeting.** A budget will be prepared and maintained for the entire term of the project. Detailed budgets for each fiscal year will also be produced to provide a framework for financial management for each year. The annual budget will be prepared based on the Procurement Plan and annual work program. The budget will be monitored periodically to ensure that actual expenditures are in line with the budgets and to provide input for necessary revisions.

6. **Staffing.** A PMU, set up in PKSF, will be responsible for the overall FM performance of the project. Five Financial Management staff will be assigned to carry out the day-to-day FM functions. Two out of the five FM staff will be dedicated to regularly visit the POs to oversee the transactions between the POs and the beneficiaries and vice versa to ensure that complete financial discipline is restored and the digitization and automation, introduced under the project, is working efficiently

7. **Co-financing Arrangement.** PKSF will finance US$48 million equivalent in Component 2 (Providing Access to Finance for MEs to enable Green Growth on joint financing basis and US$2 million equivalent in Component 3 on parallel financing basis (such as workshop allowances, sitting allowances, fuel, cash per diems, and honoraria). These expenditures will be reported through the quarterly IUFRs.

8. **Eligibility of Financing.** World Bank financing will not apply to specified categories of recurrent expenditures such as workshop allowances, sitting allowances, fuel, cash per diems, and honoraria. The list of excluded categories may be updated, from time to time, based on implementation experience. The World Bank financing will also not cover expenditures related to vehicles, and taxes will be allowable up to 15 percent of the total IDA credit.

9. **Financial reporting.** PKSF will prepare quarterly Interim Unaudited Financial Reports (IUFRs) and will submit the report within 60 days after the end of each quarter. The IUFR will be used to report quarterly expenditures and request advances for the subsequent two quarters based on expenditure forecast.

10. **Internal control.** The accounting system assessment shows that PKSF's financial system is automated and adequate for capturing the project's financial information electronically and facilitating the production of reliable annual financial reports. However, since preparation of IUFRs is based on Excel, the project needs to maintain satisfactory financial management activities at the PMU, including keeping all the mandatory books of accounts and practicing proper segregation of duties to ensure effective internal control.

11. **Fund flow.** The PMU will open a Designated Account with a national commercial bank in the form of a Convertible Taka Special Account (CONTASA) to receive funds from IDA for project implementation. IDA funds will flow to the DA based on withdrawal applications submitted to the World Bank, through Client Connection, by the authorized signatories. An alternative signatory arrangement will be made for the submission of withdrawal applications to ensure unhindered flow of funds. The PMU will be responsible for submitting disbursement applications to the World Bank based on the IUFR. POs shall maintain separate bank accounts dedicated for this project fund only. Transactions between the POs and MEs will take place, preferably, through the banking channel. Amounts paid from PKSF to the POs will be treated as advances, and POs will report expenditures back to PKSF based on the utilization of funds reported by the MEs. POs will be responsible for accounting and financial reporting to PKSF on the funds transferred to MEs. Therefore, audits will be carried out at both PKSF and PO levels. In the case of grants transfer will be made to Pos through banking channels and expenditure reporting will be done by POs to PKSF before withdrawal applications are submitted to withdraw from IDA.

12. **External audit.** PKSF is annually audited by an independent chartered accountant firm to ensure it meets the statutory requirement. The project's financial statements will also be annually audited by the same chartered accountant firm, and reports will be submitted to the World Bank within six months of the end of each financial year. The audited financial statements will be publicly disclosed. The PMU will take the necessary steps to resolve the audit observations within June 30th of the following year.

13. **Internal audit.** PKSF has a robust internal audit department that conducts continuous internal auditing across the organization including the POs. PKSF will share the Internal Audit report covering the activities of the POs relating to this project along with the Action Plan, prepared based on the IA recommendations, at least once annually within 120 days after the audit period.

14. **Retroactive financing.** Retroactive financing up to US$1 million under the IDA credit will be allowed for eligible expenditures including studies, capacity building and staffing under category four incurred by PKSF during the period between January 1, 2023, and the date of the signed Financing Agreement. All expenditures, for which retroactive financing is sought, will be submitted to the World Bank to verify their eligibility as per the following criteria related to the project description and disbursement table, safeguards policies and procurement requirements: (a) the activities financed by retroactive financing are related to the PDO and are included in the project description; (b) the payments are for items procured in accordance with the applicable Bank procurement rules; (c) the total amount of retroactive financing is up to US$1 million under the IDA credit; and (d) the payments are made by the government during the period between January

1, 2023, and the date of the signed Financing Agreement.

15. **The major FM risk** lies in the cash handling while making a disbursement to the beneficiaries and also during receiving repayments from the beneficiaries. As a mitigation, the project will introduce banking channels and, in cases where it is not feasible due to the absence of Bank accounts, mobile transfer using BKash, Nagad etc. (mobile operators). In this regard, the project needs to enter into a contract with a suitable mobile operator to have a good bargain as regards the charges/fees levied by the operator.

Procurement Management

16. The planned procurement includes goods, non-consulting services and consulting services. Goods expected to be procured under the project include office equipment such as laptops, printers, photocopiers and android Tablets, RBM & MIS equipment, server, and training equipment. Consulting Services is expected to include hiring of firms for Baseline Study, Resource Efficient and Cleaner Production (RECP) Partnership, Software Development, IOT-based Traceability, Communication Activities, and Psychometric Profiling of Microentrepreneurs, etc. Few individual consultants or firms will be hired to support technical, fiduciary and safeguard activities. No large value (OPRC level) contracts are anticipated under the Project.

17. The Goods packages are not expected to be complex or large value and are expected to be procured mostly through Open competitive bidding national market approach. The consulting services to be provided by firms will be procured mostly through Quality and Cost Based Selection advertised internationally and nationally, whereas individual consultants will mostly be selected through competitive process. Details of the procurement packages, applicable procurement methods and the Bank's review requirements are specified in the procurement plan based on the Project Procurement Strategy for Development (PPSD).

18. Procurement under the project will be carried out centrally by PKSF. PKSF has experience in implementing Bank-financed projects including applying World Bank's Procurement Regulations. PKSF has its central procurement cell, which supports procurement functions and contract management but will need supplemental support for handling the additional procurement under the project which will be provided by a procurement consultant to be engaged for the initial period of the project. As per para. 2.2(b) of the Bank's Procurement Regulations, the Procurement Regulations will not apply to procurement, if any, by the MEs (private borrowers) using the proceeds of the sub-loans under Component-2 of the project.

19. PKSF with the support of the Bank will explore opportunities to incorporate, where feasible, Sustainable Procurement criteria, including environmental and social aspects, in the selection processes of relevant procurement packages, as well as initiatives for enhancing the participation of MEs/SMEs/MSMEs and women-led businesses in public procurement.

20. The PPSD is being finalized by PKSF which will spell out the detailed procurement arrangements and contract management plan, including the related risks and mitigation measures. As an output of the PPSD, the procurement plan will specify each contract to be financed under the proposed project including the procurement method, market approach, estimated cost, established timelines for completion of the key milestones in the procurement process, Bank's review requirements etc. The procurement plan will be uploaded and maintained in STEP and updated at least annually or when necessary, during implementation. A General Procurement Notice (GPN) will be published on the Bank's website and UNDB Online.

21. The procurement risks include (i) delays in the procurement process, particularly at the technical preparation stage (budget, technical design, specifications etc. before start of the procurement process) and at bid evaluation and contract award stages, contributed also by prolonged internal GoB approvals, and (ii) possible differences with GoB's procurement rules and decision-making in application of the Bank's Procurement Regulations. The procurement risk mitigation measures include:

    (a) Technical pre-requisites (budget approval, technical specifications/ToRs, environmental/safeguard requirements, etc.) to be completed in a timely manner before bids/proposals can be invited, based on a technical readiness plan to be agreed upfront and linked with the project procurement plan.

    (b) Assigning for the Project an adequate number (at least two) qualified PKSF staff experienced in carrying out procurement under World Bank financed projects, who will be responsible for managing all procurement under the project, with supplemental support to be provided during the initial project implementation period by PKSF engaging an individual procurement consultant for the first 24 months.

    (c) PKSF to prepare and submit to the Bank quarterly progress reports of project procurement performance.

    (d) Use of the Government electronic procurement (e-GP) system, with harmonized model bidding documents agreed by the Bank, for procurement of Goods under open competitive bidding national market approach.

    (e) Bank to provide training on application of the Bank's Procurement Regulations and STEP to the relevant project officials.

ANNEX 2: Assessment of PKSF from FIF Perspective

1. Since line of credit is included in the project design, an OP 10 compliance/FIF review is required. This annex provides a summary of the review. A detailed appraisal report has been internally filed with summary results presented in the table below. The review is based on discussions and interviews with the senior management, technical level staff, and PMU staff of SEP at PKSF; partner organizations (POs)/MFIs; the WB project team; and a review of available documentation such as (a) audited financial statements as of December 31, 2021; (b) written information provided by PKSF's Accounts and Finance Department; and (c) an interview with the Microcredit Regulatory Authority.

Table A2.1 Key data on PKSF

1. License	PKSF is a government apex institution founded in May 1990. Legally it is a not-for-profit company registered under the Companies Act. PKSF is not regulated by a financial regulator but falls under the purview of the Financial Institutions Department at the Ministry of Finance.
2. Owners/managers "fit and proper" governance quality	PKSF is governed as a public-private partnership, through a three-tier structure, composed of (a) the management team, (b) the General Body that approves the annual budget and audited accounts and meets twice a year (with strong private-sector representation); and (c) a Governing Body consisting of seven members who appoint the Managing Director. The General Body is currently a diversified Board composed of 22 members. The chairman must not be in the service of the Republic.
3. Good standing with supervisor	PKSF's external audit for FY2020–21 is unqualified. The entity level audit is conducted by a reputable external/independent audit firm. The Financial statements of FY22 are not audited yet. The financial statements are prepared in accordance with International Financial Reporting Standards (IFRSs) and other applicable laws and regulations.
4. Capital adequacy	PKSF's capital fund is BDT 57.6 billion (US$564.7 million). Its capital adequacy ratio is 77.63 percent.
5. Liquidity	Current Liquidity Ratio was 7.52:1 (legal minimum 2.5); debt-to-equity ratio was 0.48:1. PKSF's mandate authorizes its management to mobilize funds in the form of grants, loans, and contributions from a wide variety of sources that include the Government of Bangladesh (GOB), private individuals and organizations, foreign governments, international donors and lending agencies, and capital markets. To date, PKSF has received funds from the GOB, IDA/World Bank, USAID, the ADB and the International Fund for Agricultural Development (IFAD).
6. Profitability	At PKSF level, the return on assets is 4.97 percent, surplus as percent of average total assets is 3.13 percent.
7. Policies and risk-	PKSF represents, on average, 19 percent of POs' funding. All the POs funded by PKSF are in compliance with MRA regulations. They undergo a stringent selection process before they can become a PKSF PO, based on criteria stricter

management functions	than the MRA's minimum requirements. The review found strong risk management at PKSF. POs are adequately supervised by both the MRA and PKSF. PKSF has developed a comprehensive rating system to annually assess the performance of POs along nine dimensions: (a) financial efficiency, (b) economic efficiency, (c) operational efficiency, (d) financial strength and risk management, (e) growth, (f) accounting and internal control system, (g) social performance, (h) human capacity, and (i) governance. A six-point rating system has been developed using letter designations (AAA, AA, A, B, C and D) corresponding to scores of up to 1,000. The 125 rating criteria under the nine dimension and scoring were reviewed from filings of SEP OP10/FIF assessment and are reconfirmed from PKSF that the rating mechanism has not been changed since then. In our assessment, the rating system is sound.
8. Asset quality and provisions	The NPL ratio is at 2.94 percent. The overall loan collection rate is 99.45 percent.
9. Internal audit and controls	The Audit Division is responsible for internal and external audit for both PKSF and its POs. The Division is responsible for fraud detection, internal controls, and monitoring compliance. The internal audit/control systems are of adequate quality. Audits are carried out in accordance with the Bangladesh Standards on Auditing, which, we are informed, are very close to International Standards on Auditing (ISAs).
10. Adequate MIS	The IT and MIS system is of adequate quality and meets PKSF current needs.

2. The review of PKSF's financial performance and institutional arrangements indicates that it is a viable financial institution with (a) good performance in terms of financial efficiency (4.97 percent return on assets), (b) strong capital adequacy (77.6 percent), (c) acceptable credit quality (NPL levels below 5 percent), (d) solid funding sources and diversification, and (e) adequate institutional capacity and systems. The appraisal team's view is that PKSF is qualified to act as wholesale organization for on-lending IDA funds to the microfinance sector; this will benefit private-sector financing. There are already multiple precedents of PKSF performing this role utilizing IDA funds. PKSF also receives the support of the Government of Bangladesh.

3. PKSF is not regulated or supervised in the traditional way that a financial institution usually is. Having said that, PKSF has a solid governance structure. PKSF's Governing body, subject to the general control and supervision of the General body, is responsible for pursuing and helping achievement of the goals of PKSF. It holds the financial control of the organization, including approval of projects and making grants, donations, loans or other financial assistance to the POs. The Governing body consists of seven members (including managing director) and four out of seven members are nominated by FID and the rest are selected by PKSF's governing body. A review of the backgrounds of current members suggests sufficient professional qualifications and no known political affiliation. Unlike many of the state-owned banks, the current structure, history, and background of the governing body members give assurance that PKSF is reasonably free from undue political influences. This is also supported by PKSF's 20+ years of experience of delivering WB projects with IDA funds. Additionally, a Project Steering Committee will be established to provide oversight. The review of sub-project proposals submitted by POs will be done by Evaluation Teams comprising specialists hired by PKSF. The project implementation unit will be provided with sufficient resources to hire the

necessary staff to maintain oversight with transparency.

4. PKSF has its own Operation Risk Assessment Framework (ORAF) and procedures embedded in their institutional setup (and publicly available on their website) to solve the problems of high-risk sub-projects. Their ORAF risk matrix includes risks relating to project stakeholders, governance, fraud and corruption (sub-category of governance), and various other project related risk categories.

5. This project meets the overall commercial approach advocated by OP 10 and is compliant with the requirements of FIF considerations. All aspects of FIF will continue to be monitored throughout the life of the project and further elaborated in the Project Operation Manual.