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INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED CREDIT

IN THE AMOUNT OF SDR75.5 MILLION
(US\$110 MILLION EQUIVALENT)

TO THE

PEOPLE'S REPUBLIC OF BANGLADESH
FOR A

SUSTAINABLE ENTERPRISE PROJECT

February 28, 2018

Environment and Natural Resources Global Practice
South Asia Region

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CURRENCY EQUIVALENTS

(Exchange Rate Effective {Mar 01, 2018})

Currency Unit = Bangladeshi Taka
(BDT)

BDT 81.375 = US\$1

US\$1.457 = SDR 1

FISCAL YEAR

July 1 –June 30

Regional Vice President: Annette Dixon

Country Director: Qimiao Fan

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Practice Manager: Kseniya Lvovsky

Task Team Leader(s): Nadia Sharmin, Suiko Yoshijima

ABBREVIATIONS AND ACRONYMS

BAU	business-as-usual
BFP-B	Business Finance for the Poor in Bangladesh
BSTI	Bangladesh Standards and Testing Institution
CCCP	Community Climate Change Project
CPF	Country Partnership Framework
DA	Designated Account
DSPP	detailed subproject proposal
EMF	Environmental Management Framework
EQS	Environmental Quality Standards
FID	Financial Institutions Division
FIRR	financial internal rate of return
GDP	gross domestic product
GIS	Geographical Information System
GoB	Government of Bangladesh
GRS	Grievance Redress Service
IUFR	interim unaudited financial report
ILO	International Labour Organization
M&E	monitoring and evaluation
ME	microentrepreneur
MFIs	microfinance institutions
MSMEs	micro, small, and medium enterprises
NGO	nongovernmental organization
NPV	net present value
OM	operation manual
PDO	project development objective
PKSF	Palli Karma-Sahayak Foundation
PMU	Project Management Unit
PO	partner organization
POM	project operational manual
PPSD	Project Procurement Strategy for Development
PSC	Project Steering Committee
RECP	resource-efficient cleaner production
REOI	request for expressions of interest
SCD	Systematic Country Diagnostic
SEP	Sustainable Enterprise Project
SMAP	Small and Marginalized Farmer's Agricultural Productivity Improvement and Diversification Financing Project
SMEs	small and medium enterprises
SMF	Social Management Framework
SPCN	Subproject Concept Note
TPF	Tribal Peoples Framework



BASIC INFORMATION

Is this a regionally tagged project? No	Country(ies)	Financing Instrument Investment Project Financing
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- Situations of Urgent Need of Assistance or Capacity Constraints
- Financial Intermediaries
- Series of Projects

Approval Date 29-Mar-2018	Closing Date 30-Jun-2023	Environmental Assessment Category B - Partial Assessment
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Bank/IFC Collaboration No

Proposed Development Objective(s)

To increase adoption of environmentally sustainable practices by Targeted Microenterprises.

Components

Component Name	Cost (US\$, millions)
Enhancing Services and Enabling Systems	24.00
Strengthened Access to Finance for environmentally friendly and resilient microenterprises	75.00
Project Management, Communication and Knowledge Management and Monitoring & Evaluation	11.00

Organizations

Borrower : Government of Bangladesh

Implementing Agency : Palli Karma-Sahayak Foundation (PKSF)



PROJECT FINANCING DATA (US\$, Millions)

<input checked="" type="checkbox"/> Counterpart Funding	<input type="checkbox"/> IBRD	<input checked="" type="checkbox"/> IDA Credit	<input type="checkbox"/> IDA Grant	<input type="checkbox"/> Trust Funds	<input type="checkbox"/> Parallel Financing
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Total Project Cost:
130.00

Total Financing:
130.00

Of Which Bank Financing (IBRD/IDA):
110.00

Financing Gap:
0.00

Financing (in US\$, millions)

Financing Source	Amount
Borrowing Agency	20.00
IDA-62090	110.00
Total	130.00

Expected Disbursements (in US\$, millions)

Fiscal Year	2018	2019	2020	2021	2022	2023
Annual	1.00	9.00	20.00	30.00	35.00	15.00
Cumulative	1.00	10.00	30.00	60.00	95.00	110.00

INSTITUTIONAL DATA

Practice Area (Lead)

Environment & Natural Resources



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

Gender Tag

Does the project plan to undertake any of the following?

a. Analysis to identify Project-relevant gaps between males and females, especially in light of country gaps identified through SCD and CPF

Yes

b. Specific action(s) to address the gender gaps identified in (a) and/or to improve women or men's empowerment

Yes

c. Include Indicators in results framework to monitor outcomes from actions identified in (b)

Yes

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

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



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

Safeguard Policies Triggered by the Project

Yes No

Environmental Assessment OP/BP 4.01

✓

Natural Habitats OP/BP 4.04

✓

Forests OP/BP 4.36

✓

Pest Management OP 4.09

✓

Physical Cultural Resources OP/BP 4.11

✓

Indigenous Peoples OP/BP 4.10

✓

Involuntary Resettlement OP/BP 4.12

✓

Safety of Dams OP/BP 4.37

✓

Projects on International Waterways OP/BP 7.50

✓

Projects in Disputed Areas OP/BP 7.60

✓

Legal Covenants

Sections and Description

• Section I.A of Schedule 2 of the Financing Agreement: Subsidiary Loan and Grant Agreement. To facilitate the carrying out of the Project, 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, under terms and conditions acceptable to the Association.

Sections and Description

• Section I.B of Schedule 2 of the Financing Agreement: Environmental and Social Safeguards. The Recipient shall ensure that the Project is carried out in accordance with the provisions of the EMF, SMF, TPF and all Safeguard Assessments and Plans and the requirements of the Grievance Redress Mechanism. In the event of any conflict between the provisions the EMF, SMF, TPF or any Safeguard Assessments and Plans, and the provisions of



this Agreement or the Project Agreement, the provisions of this Agreement or the Project Agreement shall prevail, in that order of priority.

Sections and Description

- Section I.A.1 of the Schedule to the Project Agreement: Implementation Arrangements. The Project Implementing Entity shall by no later than one (1) month after the Effective Date establish and thereafter maintain, throughout the period of implementation of the Project, a management unit with 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 afore-mentioned management unit shall be headed by a full-time Project coordinator and responsible for carrying out the management, financial management, performance evaluations, safeguards, monitoring and reporting activities under the Project.

Sections and Description

- Section I.A.2 of the Schedule to the Project Agreement: Implementation Arrangements. The Project Implementing Entity shall by no later than one (1) month after the Effective Date hire and thereafter maintain, throughout the period of implementation of the Project, two (2) full-time financial management specialists and one (1) full-time procurement specialist, with qualifications, experience and terms of reference satisfactory to the Association.

Sections and Description

- Section I.A.3 of the Schedule to the Project Agreement: Implementation Arrangements. The Project Implementing Entity shall (a) by no later than January 31st of each year during the period of implementation of the Project, furnish to the Association for its review and comments a proposed annual work plan and budget for the following fiscal year, giving details of the proposed work Project activities, cost estimates and budget proposals for the Project for the forthcoming fiscal year; and (b) proceed thereafter to implement such annual work plan and budget, taking into account such comments as may have been made thereon by the Association.

Sections and Description

- Section I.B of the Schedule to the Project Agreement: Operational Manual (OM). The Project Implementing Entity shall ensure that the Project is carried out in accordance with the arrangements and procedures set out in the OM, provided, however, that in the case of any conflict between the arrangements and procedures set out in the OM and the provisions of the Financing Agreement or this Agreement, the provisions of the Financing Agreement and this Agreement shall prevail, in this order of priority. Except as the Association shall otherwise agree in writing, the Project Implementing Entity shall not amend, abrogate or waive any provision of the OM.

Sections and Description

- Section I.C of the Schedule to the Project Agreement: Grants and Common Service Loans to Partner Organizations (PO). For purposes of the carrying out Part 1 of the Project, the Project Implementing Entity shall:



(a) appraise and select POs in accordance with the terms and conditions set forth in the OM; and (b) provide to the POs a portion of the proceeds of the Financing through Grants and or Common Service Loans, under Sub-project Grant Agreements and/or Common Service Loan Agreements, as the case maybe, on the terms and conditions set forth in the OM.

Sections and Description

- Section I.D of the Schedule to the Project Agreement: Sub-loans to Targeted Microenterprises. For purposes of the carrying out Part 2 of the Project, the Project Implementing Entity shall: (a) appraise and select POs in accordance with the terms and conditions set forth in the OM; and (b) on-lend to the POs a portion of the proceeds of the Financing under Participation Loan Agreements on the terms and conditions set forth in the OM.

Sections and Description

- Section I.E.1 of the Schedule to the Project Agreement: Safeguards. The Project Implementing Entity shall ensure that the Project is carried out in accordance with the provisions of the EMF, SMF, TPF and the relevant Safeguard Assessments and Plans.

Sections and Description

- Section I.E.2 of the Schedule to the Project Agreement: Safeguards. Whenever an additional or revised Safeguard Assessment and Plan shall be required for any proposed Sub-project in accordance with the provisions of the EMF, SMF and TPF, the Project Implementing Entity shall cause each PO through its Participation Loan Agreement to: (a) prior to the commencement of such Sub-project, have or cause to have such Safeguard Assessment and Plan: (i) prepared in accordance with the provisions of the EMF, SMF and TPF; (ii) furnished to the Association for review and approval; and (iii) thereafter adopted and disclosed as approved by the Association, in a manner acceptable to the Association; and (b) thereafter take such measures as shall be necessary or appropriate to ensure compliance with the requirements of such Safeguard Assessment and Plan.

Sections and Description

- Section I.E.5 of the Schedule to the Project Agreement: Safeguards. Without limitation on its other reporting obligations under this Agreement, the Project Implementing Entity shall collect, compile and submit to the Association on a bi-annual basis (or such other frequency as may be agreed with the Association) consolidated reports on the status of compliance with the EMF, SMF and TPF with respect to all Sub-projects, giving details of: (a) measures taken in furtherance of the said instrument; (b) conditions, if any, which interfere or threaten to interfere with the smooth implementation of the said measures; and (c) remedial measures taken or required to be taken to address such conditions.

Sections and Description

- Section I.E.6 of the Schedule to the Project Agreement: Safeguards. Prior to the provisions of any Grants, Common Service Loans and/or Sub-loans, the Project Implementing Entity shall: (a) set up the Grievance Redress Mechanism for purposes of handling and tracking any complaints under the Project, guiding resolution of such



complaints, and tracking and publicizing resolution of such complaints, as per the requirements of the SMF; and (b) publicize the Grievance Redress Mechanisms on its Project website.

Conditions

Type	Description
Effectiveness	<ul style="list-style-type: none"> Article 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 the Recipient to make withdrawals under it (other than the effectiveness of this Agreement) have been fulfilled.

PROJECT TEAM

Bank Staff

Name	Role	Specialization	Unit
Nadia Sharmin	Team Leader(ADM Responsible)	Environment & Climate Change	GEN06
Suiko Yoshijima	Team Leader	Cleaner Production	GEN06
Ishtiak Siddique	Procurement Specialist(ADM Responsible)	Procurement	GGOPZ
Mohammad Reaz Uddin Chowdhury	Financial Management Specialist	Fianancial Managment	GGOES
Aminata Ndiaye	Team Member	FCI	GFCSN
Anders Jensen	Team Member	M&E Specialist	GENOS
Angie Harney	Team Member	Team Assistant	SACBD
Antoine Coste	Team Member	FCI	GFCPN
Hosna Ferdous Sumi	Team Member	FCI	GFCS1
Iqbal Ahmed	Environmental Safeguards Specialist	Environmental Safeguard	GEN06
Jorge Luis Alva-Luperdi	Counsel	legal	LEGES
Mio Takada	Team Member	Agriculture	GFA06
Nagaraja Rao Harshadeep	Team Member	Geospatial Tool Advisor	GENDR
Poonam Rohatgi	Team Member	Program Assistant	GEN06



Priyani Malik	Team Member	FCI	GFCSS
Sabah Moyeen	Social Safeguards Specialist	Social Safeguard	GSU06
Simon C. Bell	Team Member	F&M Advisor	GFM2A
Tapas Paul	Team Member	Advisor	GEN06
Tijen Arin	Team Member	Economist	GEN06
Extended Team			
Name	Title	Organization	Location
Alok Misra	Micro Finance & Livelihood Consultant	Management Development Institute	
Jagat Shah	Enterprise Development Consultant		
Per Ryden	Consultant		Washington D.C.,



BANGLADESH
SUSTAINABLE ENTERPRISE PROJECT

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ANNEX 1: DETAILED PROJECT DESCRIPTION ERROR! BOOKMARK NOT DEFINED.

ANNEX 2: IMPLEMENTATION ARRANGEMENTS ERROR! BOOKMARK NOT DEFINED.

ANNEX 3: IMPLEMENTATION SUPPORT PLAN ERROR! BOOKMARK NOT DEFINED.



I. STRATEGIC CONTEXT

A. Country Context

1. Thanks to strong economic performances, poverty has markedly decreased in Bangladesh since the turn of the century—but it remains high. Sustained export-led growth of about 6 percent per year in the decade up to 2015 has allowed Bangladesh, a country with around 165 million inhabitants, to reach lower-middle income status. Between 2000 and 2010, 17 million Bangladeshis moved out of poverty as a result of better job opportunities for both men and women; these were created by structural shifts in the economy toward manufacturing and services and away from agriculture.¹ Based on the international poverty line at US\$1.90 per day (2011 PPP), the poverty headcount ratio declined from 44.2 percent in 1991 to 13.8 percent in 2016. Bangladesh nonetheless remains one of the poorest countries in South Asia and its pace of poverty reduction has decreased in recent years.² While rural areas continue to account for the bulk of the poor, the share and number of urban poor have increased since the 1990s, as more people move to cities in search of better employment and income opportunities.

2. Microenterprises are a critical segment of the economy for the poor in Bangladesh. Out of 7.8 million nonfarm economic units in Bangladesh in 2013, almost 7 million were cottage and microenterprises with less than 25 employees.³ These enterprises are estimated to account for around 14 million jobs, or 56 percent of total employment in all enterprises. Microenterprises are vehicles for diversifying economic activity and can make significant contributions to poverty alleviation through self- and wage-employment opportunities. Surveys in Bangladesh have found that households with microenterprises as an additional source of revenue had 36 percent higher per capita income than those that do not.⁴ Bangladesh is known for its success in pioneering approaches that support microenterprises as a way to alleviate poverty. In particular, microcredit has been widely used as a channel to provide financial and technical assistance to the poor. Notably, the Palli Karma-Sahayak Foundation (PKSF), an apex microcredit funding and capacity-building organization established by the government to reach out to the poor, started in 2001 as a microenterprises loan program implemented through 178 partner organizations (POs) throughout the country.⁵

3. Enhancing environmental sustainability and climate resilience are becoming increasingly important for sustaining Bangladesh's economic progress. Bangladesh ranked 173rd out of 180 countries on Yale's 2016 Environmental Performance Index. Globally, Bangladesh ranks among the countries with economies most at risk to the impacts of climate change. With two-thirds of its land mass less than 5 meters above sea level, the country is very vulnerable to sea level rise, cyclones, storms, and storm-induced tidal flooding. According to a World Bank study, 5.3 million of Bangladesh's poor will be vulnerable to the effects of climate

¹ World Bank. 2015. Bangladesh Systematic Country Diagnostic.

² Poverty Monitoring Report, 2016

³ From time to time, both cottage (fixed assets, excluding land and buildings of less than BDT 0.5 million, or with up to nine workers, including household members) and microenterprises (fixed asset value between BDT 0.5 million and BDT 5 million, or with between 10 and 24 workers) as defined by the government will be included in the project.

⁴ Shahidur R. Khandker, Hussain A. Samad, and Rubaba Ali, "Does Access to Finance Matter in Microenterprise Growth? Evidence from Bangladesh" (Policy Research Paper 6333, World Bank Group, Washington, DC, 2013).

⁵ As of the end of April 2017, BDT 426.2 billion (US\$5.3 billion) had been disbursed under this program; the number of microenterprise borrowers stood at 1.2 million, 77 percent of which were female; the average loan size was slightly above 100,000 BDT (US\$1,250).



change in 2050. An ongoing Country Environmental Analysis estimated that outdoor and indoor air pollution (PM_{2.5}) and workplace environment risks are responsible for productivity loss at about 1.6 and 0.5 percent, respectively, of gross domestic product (GDP). In particular, the rapid growth of manufacturing dominated by micro, small, and medium enterprises (MSMEs) has led to a massive increase in natural resource use and degradation and growing air, soil, and water pollution. Reducing negative environmental externalities has thus been identified as a priority area for Bangladesh to continue reducing poverty and inequality.⁶ Embarking on a greener growth pathway would provide major benefits for Bangladesh in terms of increasing productivity and innovation, gaining access to new markets, generating public revenue, and reducing vulnerability to shocks.⁷

B. Sectoral and Institutional Context

4. To promote a greener, cleaner, and climate-resilient economy, the Government of Bangladesh (GoB) has adopted several initiatives in recent years. It has set up priorities for sustainable development outlined in various strategic documents. It is also planning to support green investments—for instance, through tax incentives for renewable energy. Likewise, Bangladesh Bank has promoted green finance through policy guidelines and concessional refinancing schemes, including establishing a Green Transformation Fund for the export-oriented textile and leather industries in 2016. Despite this clear commitment to green and resilient growth, only a few initiatives to date have been aimed at promoting cleaner production practices and technologies in the microenterprise sector.

5. Half of the country's population is dependent on microenterprises for their livelihoods, but because of the number of microenterprises, their cumulative environmental ramifications are of growing concern, especially when microenterprises of a particular type operate in clusters and are exposed to climate vulnerability. Broadly, there are four groups of issues: (1) Small industries in Bangladesh are responsible for a substantial share of air and water pollution (due to their large numbers, even though individual contributions are small), notably in urban areas and clusters, and generally use environmentally and economically inefficient technologies.⁸ (2) Some microenterprises in agriculture and manufacturing are already producing environmentally sustainable goods (e.g., natural fertilizer in place of chemical fertilizer, making shoe soles from leather dust, etc.), but face obstacles to growth due to being disconnected from high value markets, lacking knowledge about how to adopt cleaner production and methodologies, and lacking access to quality financing (banking system, business registration). (3) Climate change is a major and growing threat for microenterprises in many sectors.⁹ (4) Unsafe practices and products (e.g., contaminated food) not only affect workers but everyone who consumes them.

6. Despite some overlap among these four issues, each is caused by different combinations of market failures, and thus require targeted interventions. The issues are detailed below:

⁶ World Bank, *Bangladesh Systematic Country Diagnostic* (Washington, DC: World Bank, 2015).

⁷ Economic Dialogue on Green Growth, *Green Growth Diagnostic: Bangladesh* (Geneva: Economic Dialogue on Green Growth, 2016).

⁸ World Bank, *Bangladesh Systematic Country Diagnostic*.

⁹ A baseline study by PKSF of microenterprises showed that 80 percent from agribusiness and 46.1 percent from the manufacturing sector reported being affected by climate change (e.g., experiencing reduced productivity and sales and increased production costs, disease outbreak, and pest attacks).



- (a) Microenterprises typically operate within very narrow profit margins and are often forced to prioritize short-term profitability objectives, ignoring environmental externalities and long-term financial sustainability. PKSF introduced environmental health and safety guidelines for microenterprises in 2004, but a 2013 environmental audit showed that only 6 percent of microenterprises disposed of their solid wastes properly.
- (b) The experience in Bangladesh and other countries shows that MSMEs' investments in resource efficient and cleaner production (RECP) can generate both economic gains for firms and environmental benefits for society. However, microenterprises often fail to make such investments due to capacity, technical, and financial constraints. The baseline study shows only 14 percent of microentrepreneurs (MEs) are aware of the environmental impacts of their business operations.¹⁰
- (c) Strengthening microenterprises' resilience to climate change and related environmental stress is key to reducing the risk that may push numerous people back into poverty. MSMEs in developing countries such as Bangladesh are particularly vulnerable to climate change impacts, but face more obstacles adapting to climate change than larger enterprises. Such obstacles include lacking information about climate risks for medium and long-term business viability, having low capacity to identify cost-effective adaptation measures, having limited technical capacity to implement such measures, and lacking access to financial products adapted to their risk-reward profile. The October 2017 baseline study shows on average only 3 percent of microenterprises from the manufacturing sector and 6 percent from the agribusiness sector are taking action to mitigate climate risks.
- (d) Microenterprises often follow unsafe practices that expose workers to occupational health risks and produce contaminated products. For example, one study showed that puffed rice from a kitchen market had lead concentrations of 3.39 mg/kg.¹¹ 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.

7. In the microenterprise sector, attention to environmental sustainability and climate resilience is limited due to a mix of capacity, market accessibility, knowledge, and financial barriers. While the statistics show that microenterprises significantly contribute to GDP, there is little evidence to show they are growing in a sustainable way. According to a Small & Medium Enterprise (SME) Foundation survey conducted in 2006–2007, the performance of MSMEs is limited in terms of revenue earnings, machinery use, capital-labor ratio, and growth of value added, except labor productivity in some instances. Negative externalities such as pollution, health impacts, or loss of productivity are typically not reflected in costs, thereby reducing the incentive for microenterprises to shift to more sustainable goods and services, or to collectively invest in better environmental technologies and infrastructure. The following barriers hinder the growth of microenterprises:

- (a) Information asymmetry: MEs are often unaware of current production inefficiencies and the potential resource and energy savings they could achieve with available RECP technologies and processes. Consumers may not demand cleaner or healthier products for lack of information regarding their benefits, or information asymmetries may prevent them from identifying cleaner

¹⁰ Baseline Survey for Sustainable Enterprise Project, October 30, 2017. The survey also indicates that 25 percent of MEs from the manufacturing sector and 18 percent of MEs from the agribusiness sector showed interest in investing in environmentally friendly practices and technologies.

¹¹ Department of Soil Science, *Consumption of Unsafe Foods: Heavy Metal, Mineral and Trace Element Contamination* (Mymensingh: Bangladesh Agricultural University, 2015).



products that could attract price premiums, which in both cases reduce the incentives for microenterprises to improve. Additionally, the baseline study shows that only 1 percent of MEs have access to technical and advisory services for climate response. This suggests a need for better information and communication.

- (b) Lack of access to technology: MEs have little technical capacity and knowledge to adopt new technologies and processes, and may be reluctant to change their equipment or inputs if they operate with low margins and lack certainty about success. This could be addressed by demonstrating technologies and providing technical support to firms.
- (c) High cost of enforcement: The 1997 Environmental Conservation Rules require microenterprises to obtain an environmental clearance certificate, but this is rarely followed. Forcing microenterprises to comply with environmental standards through enforcement or taxation is challenging given their large numbers, informal nature, environmental agencies' low capacity, and the high cost of compliance for both regulators and polluters.
- (d) Poor access to market: This is the major constraint for the growth of commercially viable microenterprises that already offer environmentally friendly products. Globally, markets for green goods and services grow dynamically, and an increasing proportion of consumers take sustainability into account in their purchase decisions.¹² The market for clean technology accessible to SMEs in developing countries through 2023 was recently estimated at US\$1.6 trillion, and the leading opportunity for clean technology for Asian SMEs was found to be in wastewater (US\$85 billion).¹³ In Bangladesh, environmentally sustainable microenterprises already exist in sectors (using slatted houses for goat rearing, using leather boards from leather dust, collecting crab seeds from hatcheries instead of the wild) but their growth is constrained by several factors. One is that microenterprises lack information with which to identify potential markets; another is that both domestic and international consumers lack information with which to ensure that products were made using green/environmentally friendly technologies. Microenterprises' ability to reach economies of scale and bring products to market can also be hampered by coordination failures or the risk of freeriding. This can be addressed by providing support to finance shared equipment and services. Finally, the niche nature of microenterprise products can be an additional obstacle to market accessibility, if the capacity of microfinance institutions (MFIs) to assess the potential viability of investments in these sectors is not strengthened. Furthermore, when markets do not create sufficient incentives for adaptation, public interventions can play a key role in encouraging and supporting microenterprises to invest in climate resilience, as well as help them realize and seize business opportunities that contribute to the resilience of others. This can include facilitating the transfer of information and providing both technical and financial support.
- (e) Low access to quality financing: Access to finance remains a major constraint for microenterprises¹⁴ and limits their ability to invest in new (and typically cleaner) technologies. The majority of microenterprise investment is financed out of informal sources such as individual savings and informal loans from friends and relatives.¹⁵ Informal moneylenders, however, charge exorbitant

¹² "The Sustainability Imperative," Nielsen, 2015, <http://www.nielsen.com/us/en/insights/reports/2015/the-sustainability-imperative.html>.

¹³ infoDev, *Building Competitive Green Industries: The Climate and Clean Technology Opportunity for Developing Countries* (Washington, DC: World Bank, 2014).

¹⁴ In a baseline survey carried out by PKSF, 32 percent of microenterprises identify access to finance as the second most significant constraint to business growth, after market access.

¹⁵ Shahidur R. Khandker, Hussain A. Samad, and Rubaba Ali, "Does Access to Finance Matter in Microenterprise growth? Evidence from Bangladesh" (Policy Research Paper 6333, World Bank Group, Washington, DC, 2013).



interest rates that range from 180 to 240 percent a year; this makes it difficult for microenterprises to borrow from these sources. MFIs have the potential to alleviate microenterprises' credit constraints. Those MFIs or POs that borrow from PKSF mobilize savings from members and obtain donations from foreign organizations while effectively charging interest rates of up to 25 percent, ensuring a sustainable source of borrowing for microenterprises. Furthermore, in the absence of well-designed technical and financial support, microenterprises, are often forced to maximize short-term sales, ignoring the environmental consequences and long-term financial sustainability of doing so. While the current lending ecosystem does not take into account the environmental and climate impacts or benefits of microenterprise projects, the government is interested in promoting innovation in microfinance that will help consolidate economic and environmental gains. This constraint could be eased by providing dedicated funds and improving the capacity of MFIs to identify financially viable microenterprise investments. The environmental externalities and the high costs involved in addressing those (due to MEs' lack of economies of scale) may provide rationales for targeted public subsidization. This might take the form of grants with which MEs could adopt more expensive technologies or practices for reducing pollution/waste, and/or subsidizing shared environmental facilities (such as common effluent treatment or waste disposal facilities).

8. Public sector interventions are needed because of (1) externalities/public goods related to environmental and climate resilience; (2) information asymmetry when microenterprises lack knowledge of markets, technologies, and practices, and when consumers lack knowledge of product quality and associated impacts; (3) capacity gaps of microenterprises, communities, and MFIs; (4) a poor regulatory environment that lacks certification and safety standards; and (5) the high cost of regulating microenterprises through enforcement. The public sector plays a catalytic role in mainstreaming environmental and climate resilience into microenterprises' 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 supports catalytic public-sector interventions aimed to infuse environmental dimensions into financial intermediation while utilizing access to finance for microenterprises 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 microenterprises that are geared toward greener and more environmentally friendly 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 microenterprise sector. Government interventions—such as investing in market infrastructure, raising awareness, building capacity, or offering financial support—are necessary to uncover opportunities for microenterprises and drive the potential to invest in green businesses or reduce environmental footprints.

9. Supporting microenterprises to become environmentally friendly and resilient can have broad economic, social, and environmental benefits, help eradicate poverty, and contribute to shared prosperity. Along with other elements—such as investing in monitoring and enforcement capacity and environmental taxation—the 2015 Systematic Country Diagnostic (SCD) for Bangladesh recommended providing support and incentives to adopt cleaner production in industries as a way to reduce pollution. While technical and financial barriers constrain microenterprises' investment and innovation capacity, they can adapt if adequately supported. There are growing examples that demonstrate the benefits for both individual



enterprises and the broader economy to more efficiently use resources, as well as opportunities to access new dynamic markets for green goods and services.

C. Higher Level Objectives to which the Project Contributes

10. The project's higher-level objective is to promote sustainable development in Bangladesh by mainstreaming environmentally sustainable practices in microenterprises. Green growth and climate resilience are strategic priorities for the GoB. The 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: (1) sustained economic growth; (2) development of priority sectors (agriculture, industry, energy, transport, and human resource development); (3) sustainable urbanization; (4) social security and protection; and (5) environmental, natural resources, and disaster management. Likewise, the seventh Five-Year Plan for fiscal years 2016–2020 emphasizes pro-poor economic growth while recognizing that in Bangladesh, poverty, growth, and environmental sustainability are inextricably linked.

11. The proposed project is fully aligned with the World Bank Group (WBG)'s priorities in Bangladesh. Specifically, it directly addresses all three pillars of the Country Partnership Framework (CPF) for FY16–20, namely (1) growth and competitiveness; (2) social inclusion; and (3) climate and environmental management. The project will support these pillars by (1) providing financial and technical support for microenterprises to improve environmental and safety practices and investing in shared service facilities for enhancing profit (CPF objective 1.4: Enhanced business environment and trade facilitation and CPF objective 1.5: Increased financial intermediation); (2) expanding livelihood opportunities for microenterprises by supporting investment in activities that are environmentally sustainable (CPF objective 2.4: Enhanced rural income opportunities for the poor); and (3) providing the first level of basic services and health for the intended clients to increase their productivity and ability to take up economic activities in environmentally sensitive, climate-vulnerable, and disaster-prone areas (CPF objective 3.1: Increased resilience of population to natural disasters in urban and coastal areas and CPF objective 3.2: Improved water resource infrastructure for climate resilience). Overall, the project supports the key transformation (adaptive delta management) and foundational priorities (institutions and business environment) identified by the SCD. The project could also play a role in maximizing finance for development using distributed private sector microenterprises to improve environmental sustainability, which is also a key part of the WBG strategic goals.

12. The project is expected to substantially contribute to the WBG's corporate goals. Microenterprises' contribution to poverty alleviation and household welfare is well established in Bangladesh. The benefits the project offers to the poorer sections of society, as per the PKSF mandate, should also help contribute to shared prosperity for Bangladesh's bottom 40 percent. The activities are designed to encourage environmentally sustainable production and address environmental and climate challenges; this also contributes to the WBG's sustainability goal. The project's enhancement of microenterprises that have the potential to scale up their activities can be part of a longer-term framework to maximize finance for environmentally sustainable development in Bangladesh.



II. PROJECT DEVELOPMENT OBJECTIVES

A. PDO

13. **The Project Development Objective (PDO) is to increase the adoption of environmentally sustainable practices by Targeted Microenterprises.**¹⁶¹⁷

B. Project Beneficiaries

14. The project will target commercially viable microenterprises from the manufacturing and agribusiness sectors. The manufacturing sector includes businesses that feature leather, mini textiles, light engineering, plastic factory, food processing, and metal products. The agribusiness sector includes businesses involving livestock, horticulture, aquaculture, and poultry. The average size of each loan will be US\$1,250. The baseline study shows that 34 percent of microenterprises are registered in the manufacturing sector, and 8 percent are registered in the agribusiness sector. Agribusinesses are largely owned by women, which clearly shows that women will require more support as they move from informal to formal sectors.

15. Project beneficiaries will include informal microenterprises. There is no structured registration practice for microenterprises 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. A recent World Bank report suggests that formalization offered limited advantages for microenterprises, and the cost of formalization programs can be high compared to benefits.¹⁸ However, PKSf acknowledges the benefit of registration for tracking the project's contribution to the national economy. Therefore, as part of the project, the following will be undertaken:

- (a) To be eligible for the line of credit under Component 2, all microenterprises 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).
- (b) During the project, PKSf will conduct a study to identify an appropriate registration system for microenterprises in Bangladesh.
- (c) Women entrepreneurs will be given extra attention to facilitate their adoption of the registration system.
- (d) As a specific intervention, the project will promote ambitious microenterprises (those with the potential to become small enterprises and need product verification), with progressively increasing targets of registration.

¹⁶ Environmentally sustainable practices are defined as business practices that ensure resource efficiency, low pollution, and/or improved climate resilience.

¹⁷ "Targeted Microenterprise" means an entrepreneur or microenterprise from the agriculture and manufacturing sectors with a legal recognition/registration as such from the Recipient, who is proposed to be receiving support from a PO and/or receive a Sub-loan after meeting the selection criteria set forth in the OM; and "Targeted Microenterprises" means, collectively, all such Targeted Microenterprises

¹⁸ "Benin: Impact Evaluation of the Entrepreneur Status," World Bank, April 21, 2017, <http://www.worldbank.org/en/programs/competitiveness-policy-impact-evaluation-lab/brief/benin-impact-evaluation-of-the-entrepreneur-status>.



16. Special attention will be paid to ensure that female entrepreneurs benefit from the project—76 percent of the MEs who take loans from PKSf are women, of which only 22 percent own the business. The baseline study for the project shows that the share of female entrepreneurs in the manufacturing and agribusiness sectors is 29 percent and 56.4 percent, respectively. Focusing on female entrepreneurs will help maximize the project’s benefit, as more women are likely to be found in agribusinesses such as beef fattening, homemade food production, goat rearing, vermicomposting, and cultivating medicinal plants. The constraints faced by microenterprises to access finance are compounded for women entrepreneurs, as certain loans require one of the guarantors to be their husband, the majority of whom refuse to act as such. Lack of entrepreneurial and technical skills, startup finance, management skills, information, access to business support, and self-confidence, along with gender discrimination, difficulty finding the right contacts for a business venture, balancing family and work, and being worried about societal acceptance were identified as major challenges that women entrepreneurs faced when they start their foray into microentrepreneurship.¹⁹ While women are already falling behind in their attempts to meet the challenges of entrepreneurship, adopting green technology becomes even more difficult because of the above reasons.

17. PKSf and the implementing POs will also be beneficiaries of the project, as they will be trained in environmental sustainability. PKSf is currently supporting 178 nongovernmental organizations (NGOs) for microenterprises that have a presence in the identified agribusiness and manufacturing clusters. Based on the type of activity and environmental condition, the number of potential POs has been deemed to be no more than 80, as per the preliminary assessment. The preliminary assessment followed PKSf’s own rating system and their capacity to implement this project. PKSf’s existing annual rating system covers the following broad areas: (1) financial efficiency; (2) economic efficiency; (3) operational efficiency; (4) growth indicators; (5) financial strength and risk management; (6) accounting and internal control system; (7) social performance; (8) human capacity; and (9) governance. In addition to the above criteria, the following conditions will be applied while selecting potential POs: (1) has a minimum of three years presence in the proposed business (for remote areas and emergency situations, this criteria can be relaxed); (2) has significant financial and/or nonfinancial service coverage within the subsector; (3) has no record of having been debarred by the World Bank; (4) has a separate unit for managing the microenterprise lending program; (5) has trained officials to manage such activities, including financial management; (6) can ensure a minimum of one environmental management expert on the subproject management team; (7) has good repayment behavior with PKSf; and (8) management is committed to the microenterprise program.

C. PDO-Level Results Indicators

18. The PDO-level indicators are the following:

- (a) Microenterprises targeted by the project that have adopted at least one environmentally sustainable practice (number);
- (b) Share of target beneficiaries with a rating of “satisfactory” or above on project interventions (disaggregated by sex) (percentage); and
- (c) Targeted Microenterprises that continue the adopted environmentally sustainable practice (disaggregated by sex of ME owner) (percentage).

¹⁹ L. Parvin, M.W. Rahman, and Jiajin Rong, “Determinates of Women Micro-entrepreneurship Development: An Empirical Investigation in Rural Bangladesh,” *International Journal of Economics and Finance* 4, no. 5 (2012): 254–60.



III. PROJECT DESCRIPTION

A. Project Components

19. The proposed project will support microenterprises in agribusiness and manufacturing clusters with a focus on areas that are environmentally stressed and/or vulnerable to climate change and natural disaster. To maximize its positive environmental impacts and climate co-benefits, the project will prioritize (1) a select number of polluting microenterprise business clusters that can reduce emissions and use resources more efficiently; and (2) the expansion of innovative economic activities that contribute to environmentally friendly, clean, and green²⁰ business practices and climate resilience. The project aims to support microenterprises through environmentally friendly investments (energy, water, and resource efficiency) to promote environmentally sustainable technologies and practices in environmentally vulnerable areas, induce changes in the micro-lending ecosystem, and support the adoption of basic operational safety norms in project-supported enterprises (see figure 1).

20. The proposed project will consist of three components: (1) enhancing services and enabling systems; (2) strengthened access to finance for environmentally friendly and resilient microenterprises; and (3) project management, communication and knowledge management, and monitoring and evaluation (M&E). These components are described in the following paragraphs.

Component 1: Enhancing Services and Enabling Systems (IDA US\$24 million)

21. The project will support the clusters to become more environmentally sustainable by enhancing low-polluting, environmentally friendly business practices at the cluster level. The business cluster will act as the first step toward introducing environmental sustainability to microenterprises, along with better market access facilities. This component will enhance resilience, efficiency, and value chain links, and will focus on the community/cluster level through three subcomponents. Subcomponent 1.1 will promote basic safety standards for microenterprises, certify eco-labeled²¹ products, build capacity in MFIs, and co-finance grants to investments in common services that have a critical impact on MEs' productivity but are not commercially viable—such as raising a cluster's plinths in a frequently flood-affected area, treating effluents, or providing a common space to dispose of or collect waste for recycling. The component will have the provision to replace the old technologies with resource-efficient new technology at the cluster level. Subcomponent 1.2 will support capacity building at the ME level. Subcomponent 1.3 will support investments in common services that are commercially viable and revenue generating, but essential for making environmentally friendly and green business successful. Component 1 will be a combination of loan and grant. Subcomponents 1.1 and 1.2 will consist of grants from PKSf to POs, while Subcomponent 1.3 will be a loan from PKSf to POs, which will work with businesses in the cluster. The POs are responsible for implementing Component 1. A description of the implementation arrangement of Component 1 is presented in Section III.A, Institutional and Implementation Arrangements.

²⁰ In this project, green business is defined as those businesses that pollute less than traditional ones.

²¹ Eco-labeling is a method of environmental performance certification that is practiced around the world.



Figure 1. Theory of Change: From Issues to Outcomes



Subcomponent 1.1: Support for Enabling Systems (US\$11.5 million)

22. This subcomponent aims to support common services that have a critical influence on MEs' productivity but are not commercially viable. The subcomponent will be a grant from PKSF to POs to support eco-labeling and premium market access for MEs, implementation of non-revenue-generating common services, capacity building of POs, and POs' operating costs for implementing Component 2.

23. Non-revenue-generating physical activities (US\$6.5 million): There are often some economic benefits associated with positive environmental externalities. These include providing access to safe



drinking/potable water through desalination plants at saline-affected areas in coastal districts due to sea level rise; installing rainwater harvesting systems; raising well heads; raising marketplaces or common storage facilities by raising plinths, combined with support for better housing construction; introducing supplemental and drip irrigation that reduces large crop failures in flood, flash flood, and tidal surge areas; and, if necessary, securing basic safety standards for microenterprises that use machinery, electrical equipment, or products that can easily cause workplace injuries or are a hazard to human health. All of these are examples of measures that can help reduce market failure. The project will favor solar energy operated technologies. However, these types of investments require a non-commercial approach, and as such will be provided as grants and result in improved climate resilience and resource savings at the cluster level. A small investment from the beneficiaries will always be required to ensure ownership over the improvements and encourage their proper and continuous maintenance.

24. Initiatives to increase eco-labeling and access to premium markets (US\$1 million): Under this subcomponent, the project will promote informal producer collectives that are organized around similar microenterprises to augment their bargaining power and knowledge sharing, and thereby help them realize better prices for inputs and outputs. Experience shows that small individual producers do not have direct access to the premium market; instead, they must work through local traders and settle for a lower price. In comparison, large producers have access to the primary market and get a better price by eliminating the local middleman. This approach also fits with the project's value chain approach as an example of horizontal integration. Based on the cluster approach, a cohesive group will also facilitate the training and technology transfer envisaged under Subcomponent 1.2. The project will also help each cluster develop a disaster risk management plan that will integrate climate risks into disaster preparedness and identify alternative trade routes in case of weather-related disruption to main routes.

25. The longer-term objective is to raise labor productivity and demonstrate the positive effects, on human health and the environment, of introducing safety measures within a cluster. The barrier to adopting these basic standards will be met through grants so that MEs do not perceive them as a cost burden. As the Bangladesh Labor Act 2006, adopted on July 15, 2013, still lacks several aspects of international standards recommended by the International Labour Organization (ILO) and does not cover microenterprises (only enterprises with at least 50 workers), it will be more useful to adopt international standards like the ILO Occupational Safety and Health Convention, 1981 (No. 155).²²

26. Meeting certified quality standards also helps build customer confidence to purchase eco-labeled products. By not meeting such standards, microenterprises may lose out on potential markets—for example, as serving as suppliers to companies with niche and international market access, or getting potentially better prices for their products. The Bangladesh Standards and Testing Institution (BSTI) listed 154 products for mandatory certification, of which microenterprises may not be aware. At the same time, the Import Policy Order listed 54 imported products for mandatory testing and certification obtained from the BSTI. The project will support microenterprises to learn what standards are important for their products and how they can be met. Such quality standards can both help microenterprises sell at premium prices and support a healthy environment. The project will also support meeting Environmental Quality Standards (EQS) for each microenterprise product based on the customized national/international standards. The budget for certification-related activities includes both cluster-level and specific ME activities. A study will

²² International Labour Organization, "ILO Statement on Reform of Bangladesh Labour Law," July 22, 2013, http://www.ilo.org/global/about-the-ilo/newsroom/statements-and-speeches/WCMS_218067/lang--en/index.htm.



be undertaken to find the best possible solution to ME quality certification. Before that study is conducted, PKSF POs may certify the quality of MEs' products.

27. Capacity building of the POs (US\$4 million): Being an innovative project, POs will need to be trained on issues like environmental management and standards; assessing MEs on environmental norms, climate risk, and using digital tools for project monitoring; and more specific services in which technologies for energy efficiency, cleaner production, and cost-saving opportunities can be identified and that POs can provide to MEs, especially those who have no idea what investments are needed, how to become more environmentally sustainable and resilient to disaster, and what technologies are available. Such technological advisory services will not only help generate microenterprises' interest in applying for the project loan, but they will also ensure the project's sustainability. Such services could be designed as part of the cluster-level Integrated Shared Facility, explained under the implementation arrangements, and, once it becomes financially viable, could eventually be taken up as a new business run by one of the microenterprises. Exposure visits to innovative practice areas and capturing lessons from best practices under the project will be another key area. The POs can be trained to develop franchise capacity in partnership with the international certification authority, too. Participating POs will assign environmental focal points in the subproject management.

28. POs will be required to set up a Project Management Unit (PMU) at the PO level to implement Component 1. POs' capacity building and the operating costs to implement Component 1 will also be covered under this subcomponent.

Subcomponent 1.2: Capacity Development of the MEs (US\$2.5 million)

29. This subcomponent aims to ensure that the MEs get the requisite technical capacity, skills, and exposure to incorporate environmentally friendly parameters into their businesses. Capacity building at the ME level will make microenterprises more willing to adopt changes to their existing business and appreciate the critical nature of environmental issues. Activities under this subcomponent will help the long-term goal of moving the sector toward sustainable financing beyond the project's lifetime. This component is essential for the success of other components, as institutional and individual capabilities will ultimately ensure the broader transformation and future sustainability of the microenterprise sector as a whole.

30. Besides training MEs on pertinent environmental issues, the subcomponent will provide technical assistance to microenterprises on access to technology for low polluting, greener, and cleaner resource-efficient business practices, as well as business plan development that considers economic benefits in hazardous climate situations. This component may support knowledge exposure to storage and preservation facilities, which will be helpful for preserving products in hotter environments, and alternative trade facilities, which help improve disaster preparedness during hazardous climate events. It will include exposure visits that aim to sensitize MEs to best practices being adopted in other parts of the country. Such visits are meant to feed into the innovation part of Subcomponent 2.1. Similarly, technical advisory services, mentorship, and training will be covered for innovative microenterprises. In addition, financial literacy and training/education may be provided to help microenterprises develop a loan proposal for Component 2. Finally, it will be important for the project's sustainability to raise awareness among the microenterprise community.



31. The design of training and other capacity-building components will take into account the participation barriers female entrepreneurs face. These include time and mobility constraints, sociocultural norms, and access to transportation. Training activities will be designed so they are held in locations and during hours that are conducive to women’s participation. Even in the case of social barriers, female entrepreneurs will be provided with dedicated capacity-building efforts.

Subcomponent 1.3: Investment in Revenue-Generating Common Services (US\$10 million)

32. This subcomponent aims to facilitate investment in shared services—such as design labs, artificial insemination centers, tissue culture services, micro-storage, and organic composting services—that will enhance microenterprises’ business efficiency, reduce environmental degradation, and be financially viable. For example, the project will support MEs to establish improved refrigeration for storing perishable products, which can mitigate the challenges posed by extreme heat. This is of major importance given microenterprises’ access to limited market/s and effective positioning that affects their profitability.

33. Even though these activities are relatively inexpensive, they are often neglected as they require investment and knowledge. They also frequently have positive environmental externalities beyond the project beneficiaries, and enable MEs to tap new markets with eco-labeled products that follow ecologic processes. These services will reinforce the mitigation of environmental issues being undertaken through Component 2. Acknowledging the considerable benefits of investing in improved market access, the subcomponent will aim to support activities that benefit multiple clients in a cluster. It will finance access to environmentally friendly practices and technologies that are now well known and have proven to be effective.

34. As the activities under this subcomponent can and should be financially viable, PKSF will provide loans to POs with which to create shared services. POs can undertake this activity through different means, such as doing it on their own, getting a ME to own and operate shared services, or use a hybrid approach that involves building, operating, and transferring the shared services/facilities after demonstrating viability. The overall guiding principle will for these services to be financially viable at the field level. Table 1 offers examples of services that can be supported under this subcomponent.

Table 1. Sample List of Shared Services

Improved physical connectivity/facilities	potable water, bio-toilets
Improved common logistics	common storage or service center, common waste collection and recycling facility, shared access to solar power, common fire safety/health facility, shared sorting and grading facilities, common agriclinic, shared access to organic compost
Improved market access/branding/business promotion	design laboratory, clean technology, tissue culture

35. This component will help strengthen and integrate the existing value chain of the identified clusters. For the purpose of this project, the value chain is described as the full range of activities that are required to bring a product or service from conception through the intermediary value addition phases and to the final consumer. For example, in the case of floriculture, the value chain can be thought of as comprising input suppliers, farmers, local traders, primary market traders, flower wholesalers, retailers, and end consumers. In a nonintegrated value chain for any commodity, there is asymmetric bargaining power across



various actors that leads to inefficiency (higher prices for the end consumer) and exploitation. Under the project, value chain integration will thus be both horizontal and vertical. Under this subcomponent, the project will provide shared services support to the 10 types of subsectors supporting 30 types of clusters under Component 2. The targeted cluster-/sector-specific studies will identify a cluster's specific needs for supporting environmentally friendly business practices.

Component 2: Strengthened Access to Finance for Environmentally Friendly and Resilient Microenterprises (IDA US\$75 million and PKSF US\$18 million; total US\$93 million)

36. This component aims to expand income-generating opportunities for the Targeted Microenterprises by supporting investment in activities that are resource efficient, low polluting, green, and resilient. Targeted Microenterprises include both registered and nonregistered microenterprises. During the implementation period, the project will encourage participating microenterprises to transition to more formal registration (more details are described in paragraph 15). Under this component, PKSF, through its POs, will provide financing to microenterprises to undertake environmentally friendly and commercially viable investments. Importantly, PKSF will continue using its standard and well-tested approach for appraising commercial viability and repayment capacity, building on its impressive performance of over 99 percent loan repayment. This project does not interfere with the commercial aspects of microfinance schemes, but rather uses the success of microfinance in Bangladesh to better target environmentally friendly and climate beneficial activities in a package with activities described in Component 1.

37. PKSF has established performance criteria to rank the POs, which directly finance microenterprises. Those POs that demonstrate strong financial and social performance will be selected from the existing 80 POs. The criteria for selecting the MEs and tentative activities have been developed in consultation with PKSF and the POs. Subcomponent 2.1 will support innovative microenterprises and transform existing activities by supporting their adoption of environmentally friendly and resilient green business practices, while Subcomponent 2.2 will support the expansion of microenterprises that have already adopted these. The project has identified 68 types of priority microenterprise subsectors from the agribusiness and manufacturing sectors that are likely to yield the highest impact and demand. However, the line of credit will ideally remain flexible with regard to eligible activities to best support indigenous knowledge and innovation.

Subcomponent 2.1: Adoption of Innovative and Environmentally Friendly Technologies/Practices (IDA US\$37.5 million and PKSF US\$9 million; total US\$46.5 million)

38. This subcomponent will support borrowers who are interested in updating their existing business, or launching a new business or activity, to feature more sustainable practices. Under this subcomponent, the project has prioritized those clusters that have a high negative environmental impact and proven technical solutions for reducing it. A total of 30 types of priority subsectors/clusters selected from the agribusiness and manufacturing/processing sectors have been identified. They have been selected based on the idea that a sufficient proportion of microenterprises in each cluster can be reached to ensure a substantial demonstration impact on others. After the first year of the project, PKSF may add the subsectors for financing under this project in consultation with the Bank, if needed.



39. This subcomponent also aims to enlarge the number of environmentally sustainable enterprises through innovation to help borrowers overcome barriers to adoption of new technologies and practices. The subcomponent will provide loans for innovative, green, and environmentally sound technologies and practices. Innovation here refers to technological ideas and practices that have not been tried in the area before but have been demonstrated to work in other parts of the country or abroad. MEs may not be aware of the technology or may resist adopting it due to uncertainty. To lower the risk of investing in innovative activities, special attention will be paid to supporting activities such as technical mentorship, access to institutes of learning, training, and incubation, which will be provided under Component 1. The innovations can be multifaceted and will cover all parts of the value chain, including production, processing, and promoting trade. This subcomponent will encourage investment focused on energy, water, and resource-efficient technologies. The project will support microenterprises that will use solar power, technologies that reduce air pollution (both indoor and outdoor) and water pollution, and promote recycling and reuse. Examples of potential activities include supporting plastic microenterprises that promote recycling and reduce combustion of plastic waste, use edible colors for processed food, use vegetable dyes for mini textiles, and so on.

Subcomponent 2.2: Strengthening Environmentally Resilient/Green Microenterprises (IDA US\$37.5 million and PKSF US\$9 million; total US\$46.5 million)

40. This subcomponent will strengthen support to microenterprises across agriculture and manufacturing clusters that already use environmentally sustainable and low polluting technologies, processes, and practices. It will also encourage microenterprises to invest in technologies that strengthen resilience in areas affected by climate change. A total of 30 types of clusters from the agribusiness and manufacturing/processing sectors and areas have been identified, of which at least 12 are fairly dominated by women. Examples of potential activities include organic farming, fish farming using organic feeds, manufacturing with recyclable materials, collecting honey, organic floriculture farming, and adaptation activities such as using slatted housing for goats, harvesting rainwater, producing sunflower oil, adopting floating cultivation, introducing biogas plants in livestock clusters, and other activities that help build resilience to climate risks. The subcomponent will further benefit from market support and technical assistance support under Component 1. Like Subcomponent 2.1, this subcomponent will support manufacturing and agribusiness microenterprises that are already using technologies to reduce air pollution (both indoor and outdoor) and water pollution, are promoting recycling and reuse, and are dependent on renewable energy.

Component 3: Project Management, Communication and Knowledge Management, and Monitoring and Evaluation (IDA US\$11 million and PKSF US\$2 million; total US\$13 million)

41. This component will ensure that the project is implemented in a timely and effective manner. It will also build capacity at the PKSF/PO level, facilitate communication and knowledge management, and ensure M&E.

42. Project management and M&E (IDA US\$6 million and PKSF US\$2 million; total US\$8 million). A PMU will be established and be staffed with a project coordinator, program officers that are responsible for day-to-day supervision of and interaction with a group of POs, an M&E officer, a knowledge management coordinator, and a financial/accounting/procurement section. It will have full-time experts in some of the key technical aspects of the project, such as occupational health and safety, green business development,



quality certification, marketing, and economic analysis. The PMU will be responsible for executing overall project monitoring. The M&E component will include (1) an audit of PO operations by PKSf on the adoption of environmentally sustainable practices; (2) continuous onsite and offsite monitoring by PKSf; (3) a baseline study and two impact evaluations; (4) MIS development; and (5) citizen engagement mechanisms, including a survey of MEs’ satisfaction with project interventions (perception), and feedback loop and capacity support to PKSf and the POs.

43. Capacity building of PKSf (US\$2 million). This component aims to strengthen and mainstream PKSf, including its existing environmental unit. The activities to be covered include raising awareness, training on environmental sustainability, improving resilience, building environmental criteria and indicators into lending operations, and conducting training/exposure visits to learn about new technologies/practices that have been adopted in other countries. The environmental unit will cut across disciplines at both the PKSf and PO level. Capacity development at the PKSf level will act as a catalyst for making long-term changes to Bangladesh’s microlending industry.

44. Communication and knowledge management (US\$3 million). All project participants—PKSf staff, PMU staff, PO staff, and MEs—will generate and share knowledge throughout the project period. Knowledge management will aim to maximize all actors’ learning and to capture achievements and lessons learned in a variety of formats—from communiqués, to analytical studies, to radio interviews, to how-to instructive videos, such as those frequently available on the Internet for almost any product. This component will also innovate and design new learning events, as demand will be generated through implementation. Under this subcomponent, PKSf will conduct cluster- and product-specific studies that will help POs undertake the activities described under Component 1. These studies will include the EQS for each type of microenterprise; the market need, focusing on climate vulnerability; and required certification. In addition, recognizing the fact that certain activities for clusters often require effort at the national level and cut across POs, this subcomponent will enable PKSf to work on innovations such as brand building, product tracing (through a Geographical Information System, GIS) and certification, e-commerce initiatives, and folk plays on environmental issues.

B. Project Cost and Financing

45. The total cost of the proposed project is estimated at US\$130 million. A breakdown of costs for each component is provided in table 2. Counterpart funding will flow as parallel financing, including for the sub-loans part. Regarding sub-loans, counterpart financing will be used after US\$75 million IDA financing is disbursed. Counterpart financing shall cover the expenses that are not covered in the CPF, such as workshop allowances, sitting allowances, cash per diems, honoraria, and fuel on a parallel basis. Taxes to the extent of 15 percent may be financed from IDA.

Table 2. Project Costs and IDA Financing by Component (in US\$ millions)

Project Components	Project Cost	IBRD or IDA Financing	Counterpart Funding
1. Enhancing services and enabling systems	24	24	—
2. Strengthened access to finance for environmentally friendly and resilient microenterprise	93	75	18
3. Project management, communication and knowledge	13	11	2



management, and M&E			
Total costs			
Total project costs	130	110	20
Front-end fees			
Total financing required			

C. Lessons Learned and Reflected in the Project Design

46. The proposed project has incorporated lessons from global and national practices and analyses drawn from World Bank projects and other initiatives. The Sustainable Enterprise Project (SEP) builds on the local demand for microlevel business opportunities demonstrated under the World Bank-supported Community Climate Change Project (CCCP). The CCCP was limited to only climate change adaptive income-generating activities, but SEP seeks to expand support to integrating environmental sustainability in microenterprise development as a way to strengthen resilience and livelihoods. While the CCCP provided grants to support income-generating activities to the poor, SEP will provide loans for microenterprises. Therefore, SEP will target economically active MEs who have limited access to finance but collectively contribute to higher environmental pollution or are financially constrained to expand environmentally friendly businesses.

47. The CCCP was implemented through NGOs to introduce innovative adaptation practices in new locations, drawing on indigenous knowledge and benefitting from technical support from the project. Such approaches provided new opportunities for women to enter the workforce, and had wide demonstration impacts beyond the targeted beneficiaries. Collectively, these changes exemplified the capacity of local communities to become more financially self-reliant and resilient to extreme weather and climate risks.

48. The Kenya Micro, Small, and Medium Enterprise Competitiveness Project (P085007) stated that a principal conclusion of a review of past projects was that MSMEs need an integrated package of interventions (access to finance, improvements in the business environment, and business development services that build capacity) that address interrelated constraints and enable microenterprises to access markets on a sustainable basis. SEP follows this integrated approach; all project components are designed to be complementary. Component 2 is a line of credit that will increase access to finance for environmental sustainable microenterprises operating within a business cluster. Targeted Microenterprises will not only receive a loan (Component 2) but also a package of services (Component 1). Using a business cluster and value chain approach is intended to ensure faster scale up after successful cases are initially demonstrated, and these cases will be disseminated through knowledge management (Component 3). Training and knowledge management will play a critical role in raising awareness and building capacity to generate demand for loans and shifting microenterprises toward greener investments.

49. The use of a financial scheme to promote environmentally friendly practices is being demonstrated by the ongoing Additional Financing for Financing Energy Efficiency at MSMEs Project (P158033) in India, the objective of which is to increase demand for energy efficiency in target MSME clusters and build their capacity to access commercial finance. Marketing energy efficiency to MSMEs is not easy, as those investments are not typically high on their priority lists of capital uses. Therefore, it requires a large, holistic technical assistance effort, delivered over a longer term, to build a sufficient level of knowledge, acceptance, trust, and ultimate demand for energy-efficient goods and services. Subcomponent 1.2 reflects



lessons learned from this project.

IV. IMPLEMENTATION

A. Institutional and Implementation Arrangements

50. OP 10.00 Assessment (full assessment available). PKSF has been identified as the project's implementing agency. The proposed credit line under Component 2 will be provided to microenterprises through PKSF's POs. Therefore, it was designed in line with WBG policy OP 10.00 and the accompanying guidance note on financial intermediary lending.

51. A review of its financial performance indicates that PKSF is a viable financial institution with (1) good performance in terms of financial efficiency (return on assets, 4 percent); (2) strong capital adequacy (52 percent); (3) acceptable credit quality (nonperforming loan levels below 4 percent); (4) solid funding sources and diversification; and (5) adequate institutional capacity and systems. It is the view of the appraisal team that PKSF is qualified to act as wholesale organization for on lending IDA funds to the microfinance sector as required under OP 10.00. There are already multiple precedents of PKSF performing this role using IDA funds that date back almost 20 years. PKSF also has a good working relationship with the GoB.

52. 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 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 Project Operations Manual (POM), which will determine the eligible institutional criteria, eligible activities, detailed withdrawal procedures, and responsibilities of all parties implementing the credit line.

53. Implementation arrangement. All IDA funds, including sub-loans, will be made available to PKSF under a Subsidiary Loan and Grant Agreement with the Financial Institutions Division (FID) with the Ministry of Finance. A Project Steering Committee (PSC) will be formed to supervise the project activities. The PSC will be chaired by the Secretary, FID.

54. PKSF will establish a PMU. A project coordinator will lead the PMU and be in charge of overall implementation. S/he will directly report to a PKSF senior official and will be the day-to-day point of contact for the World Bank. The PMU will consist of technical and fiduciary specialists. The project will be implemented in the field by POs that are selected according to criteria agreed upon with the World Bank. The POs are responsible for putting together a proposal that includes loans for the MEs and shared services. The implementation arrangement of Components 1 and 2 is presented in figure 2. The POs will be responsible for managing the entire cluster-level Integrated Common Facility. The POs can manage the units/parts by leasing new MEs assets or entering into service contracts with them. The POs will encourage one ME to slowly take over the entire Integrated Common Facility, including all liabilities, revenues, and businesses, such that this does not remain a 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 the Integrated Common Facility for at least 10 years after the project closes. Depending on the risk, profitability, and innovative nature of the revenue-generating common service, PKSF to PO interest rate will range from



1 to 4 percent and the PO to microenterprise interest rate will be from 5 to 8 percent, with maximum 4 years tenure. As part of the Concept Plan for the cluster, the PO will, in detail, outline how the above objectives will be met. Once the Concept Plan is approved, the PO will prepare a clear business plan (including detailed estimates of overall revenue, operation and maintenance costs, and periodic augmentation cost). PKSf will disburse money to the PO only after the business plan/concept is approved.

B. Results Monitoring and Evaluation

55. The project makes a significant contribution to the environmental sustainability and profitability of microenterprises. 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 project management, PKSf, and the POs, and, more broadly, the NGOs and CSOs that support microenterprise development, as well as the staff of the ministries and agencies concerned with environmental and business development.

56. PKSf has its own intense monitoring system for subprojects that has proven to be a useful tool for keeping project implementation on track. The PMU will have an M&E section 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 when possible. These two systems will complement each other by integrating field implementation status and result outcome. A 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 would 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.

57. To ensure that monitoring is verified at the field level, the POs will conduct counter monitoring. Each quarter, the selected POs will visit the site for cross-monitoring and share the reports with PKSf. This would 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 should look into the adoption of environmentally sustainable practices and their environmental effects, along with the economic aspects of reducing pollution and using resources more efficiently. Doing so 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 into the program, and impacts will be measured against it after the subproject is implemented. Also, a third party will conduct a satisfaction survey regarding project interventions.



Figure 2. Components 1 and 2, Implementation Arrangement

Step 1: REOI to selected POs in a workshop by PKSF for first round/year 1

Step 2: Interested POs prepare proposals

1. Interested POs will collect information from the grassroots level (clusters) and identify MEs' needs (environmental and business development) and loan demand.
2. Discuss with citizens their needs and proposed activities.

Step 3: Proposals (SPCN and ME loan demand) are submitted to PKSF

A combined proposal of:

1. SPCN (with tentative budget and detailed activities) for the cluster development (environmental and business) under C1 for the whole project period. The last SPCN submission should be accepted no later than six months prior to the SEP closing.
2. Proposal for ME loan under C2 for the MEs within the identified clusters for the project period.

Step 4: Proposals are evaluated by PKSF and the World Bank

Combined proposals will be evaluated by the Internal Committee (PKSF and PMU). If the SPCN under C1 and ME loan proposal under C2 is accepted, the proposal will be forwarded to the World Bank for its consent (SPCN, C1; ME loan, C2).

No objection from World Bank

Step 5: POs will be awarded for ME loans (C2) and invited to submit a DSPP

1. PKSF will follow its procedure (agreed upon with the WBG) of ME loan disbursement to the POs for the first/year 1.
2. POs will be asked to submit the DSPP under C1.

Step 6: Proposals are evaluated by the Technical Committee (TC)

1. PO submitted DSPPs will be reviewed by the TC (comprised of reputed, relevant, technical and environmental experts) and recommended for revision, approval, or rejection.
2. PO will be asked to revise the DSPP for reevaluation by the TC and, if positive, will be recommended for approval.

No objection from World Bank

3. Recommended DSPP will be approved by the higher authority/MD of PKSF and PO will be awarded loans for implementation.

Step 7: Receiving second round/year 2 proposals

1. If any amount remains/is unallocated under C1 in the first round, PKSF may request a second-round invitation of proposals from the POs.
2. New proposals will be solicited from the selected POs using steps 1 to 6 for C1 and C2.
3. POs awarded in the first round will send subsequent year ME loan demand, which is a part of the ME's original whole project period loan demand, under C2, with the 10% of C1 progress and 90% progress prior to one year at the closure of the subproject.
4. PKSF and PMU will review the POs' performance under C1 and C2 and share the report with the World Bank.
5. Recommendations for ME loan disbursement for the following years under C2.
 6. PKSF will follow the existing procedure for ME loan disbursement to the POs for the following years.

Step 8: Continuation of ME loan disbursement to POs under C2 according to the sanction considering their performance

Note: REOI = request for expressions of interest; ME = microenterprise; C1 & 2 = Component 1 and 2; MD = Managing Director of PKSF; PMU = Project Management Unit; SPCN = subproject Concept Note; DSPP = detailed subproject proposal



C. Sustainability

58. The project aims to build environmental norms in microenterprise lending and gradually mainstream these through PKSF's intervention. In doing so, the project will move the microenterprise sector toward a greener tomorrow. Though the project uses a financial intermediary route, it is more geared toward changing the nature of financial intermediation and through it, ME operations, rather than being focused on boosting access to finance for microenterprises; this also provides the rationale for public funding. A critical aspect of the project lies in the fact that it uses a holistic package that goes beyond environment-focused finance to move the sector toward an environmentally friendly future. It accomplishes this by (1) creating common service facilities, which cannot be done by individual entrepreneurs; (2) supporting the adoption of environmental certification; and (3) raising individual and institutional capabilities in green lending. 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 approach to nudge the microfinance sector and MEs toward sustainability by mainstreaming environmentally friendly parameters in their operations. The mix of financial and capacity-building components is geared toward making a sustainable impact.

59. Project objectives appear sustainable beyond the project's duration, on two counts. 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 microenterprise loan program—distinct from its microcredit program—in 2001. As of April 2017, 178 POs were implementing microenterprise loan programs, and the number of microenterprise borrowers under the program stood at 1.3 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 microenterprise lending have good financial sustainability—PKSF's Capital Adequacy stands at 52 percent, with its Return on Assets at 4.1 percent—and PKSF evaluates all POs selected to participate in the microenterprise loan program with a diversified rating tool that focuses on credit quality and profitability. Having an impressive geographical and microenterprise 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.

60. PKSF has been at the forefront of addressing environmental challenges and has successfully implemented the World Bank-financed CCCP (2012–2016). The CCCP was implemented by PKSF through POs/NGOs, and increased the resilience of households to both current and future climate stresses. It helped them improve infrastructure, adopt climate-resilient agricultural practices, and identify innovative sources of income. Several other projects across the globe have shown that demonstration impacts like these lead to wider replication and thereby feed into a project's sustainability.

61. Thus, SEP has a strong focus on sustainability, which is reinforced by three interrelated aspects: (1) holistic project design; (2) PKSF's past experience and focus on the environment; and (3) wide coverage of MEs, because the POs have significant demonstration impact. Around 40,000 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 (i.e., a cleaner environment and better health and worker safety).



D. Role of Partners

62. 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 the completed Bangladesh Climate Change Resilience Fund-supported CCCP. The project will complement the Business Finance for the Poor in Bangladesh (BFP-B) project (executed by the Bangladesh Bank and funded by the U.K. Department for International Development) and the Small and Marginalized Farmer's Agricultural Productivity Improvement and Diversification Financing Project (SMAP) (funded by the Japan International Cooperation Agency). The SMAP provides financial support through the MFI for the agriculture, agro-machineries, and livestock sectors. The BFP-B project is trying to introduce loans for micro and small enterprises through commercial banks, which are currently unavailable. Both the SMAP and BFP-B can benefit from Component 1. SEP will also engage the Food and Agriculture Organization's know-how for the agriculture sector in green agribusiness. Finally, the project will use indigenous knowledge from NGOs and communities.

V. KEY RISKS

A. Overall Risk Rating and Explanation of Key Risks

63. The overall risk for the project is Substantial. This results from risks are associated with the following:

- (a) Political and governance: High. Political and governance risks, political influence, and corruption are the key country risks. The political and governance risks are both high and reach far into most aspects of public and NGO service performance at national and local levels. Eventually, the selection of MEs and POs may put the project at a reputational risk, if adequate mitigation measures are not in place. The project agreed on the criteria for selecting POs and MEs to minimize the risk.
- (b) Macroeconomic: Moderate.
- (c) Sector strategies and policies: Substantial. While there are sets of useful acts, policies, and strategies for the microenterprise sector, the environmental sustainability is neither practiced nor considered part of the microenterprise sector's strategies and policies. Because such strategies and policies feature micro-level interventions, the cumulative environmental impact is overlooked. The project will support registration and technical support for meeting EQS and certification opportunities. The intervention may ultimately bring the microenterprise sector in line with stronger environmental strategies and policies.
- (d) Technical design of the project: Substantial. The multisectoral nature of the project requires joint focus on some of the most pressing constraints of each sector. The selection of activities linked to environmental sustainability will require in-depth, cluster-specific studies. Streamlining environmental focus into microenterprise activities may pose higher initial costs, which will be compensated by providing support to common facilities through the project. Due to the project's innovative nature, there is a risk of low demand, which could affect disbursement. To address this risk, the design integrates a range of environmentally sustainable/green practices, including those already becoming more widely used. It also uses a cluster-based approach that generates peer



pressure and provides benefits from shared facilities, and uses the standard PKSF procedure of providing loans to MEs based on commercial viability. Furthermore, the project will be closely monitored during implementation, and early mid-term review will be conducted to adapt the design if/as needed.

- (e) Institutional capacity for implementation and sustainability: Substantial. Both PKSF and the POs are expected to have limited experience with and knowledge of green business development, environmental compliance, and occupational health and safety. Because the project is the first to take the risk of integrating environment in the usual business, the potential risk of failure will be mitigated by closely monitoring implementation. The project will help establish multilayer monitoring by introducing results-based monitoring and GIS monitoring under Component 3.
- (f) Fiduciary: Substantial. PKSF demonstrated strong fiduciary capacity in the earlier World Bank-funded project. Because multiple NGOs will implement the project in the field, the fiduciary risk is rated Substantial. During preparation, the World Bank team conducted the fiduciary assessment, which took into account PKSF's institutional capacity to manage budgeting, procurement, accounting, flow of funds, internal controls, and financial reporting. In addition, the assessment looked into the degree to which planning, bidding, evaluation, contract award, review of the procurement decisions, and resolution of complaints, contract administration arrangements and practices, and oversight provide reasonable assurance that the operation will achieve the intended results. PKSF has its own fiduciary criteria for assessing the POs. The project will only support those POs that have a certain level of competency according to PKSF's fiduciary assessment.
- (g) Social and environmental: Moderate.
- (h) Stakeholder risk: Substantial. The proposed project will be designed in consultation with the MEs and POs. However, the POs that are not selected for project implementation—due to their lack of compliance with selection criteria—may put the project at a reputational risk for which strong communication and transparency on sharing information will be supported by the project. The project will also focus on the sectors that are related to larger industries. It will include all levels of stakeholders during subproject preparation and implementation. Regular satisfaction surveys will be conducted during project implementation.

VI. APPRAISAL SUMMARY

A. Economic and Financial (if applicable) Analysis

64. The project will invest US\$93 million (US\$75 million in IDA financing and US\$18 million in PKSF contributions) in environmental condition improvement-based lending to MEs; US\$21 million in creating cluster-wide shared services and helping microenterprises adopt environmental, health, and occupational standards and certifications; and US\$3 million in building the capacity of MEs. These investments are expected to benefit around 40,000 MEs over a five-year period spanning 2018–2023, mostly across 15 types of clusters.

65. The project's financial and economic cost-benefit analyses were carried out comparing business-as-usual (BAU) and with-project scenarios. At present, MEs face significant barriers to adopting improved



production technologies and environmentally friendly product and process standards. The barriers to adopting better production and environmental practices include limited awareness/skills, lack of common enabling infrastructure or business support services, and limited availability of affordable finance for investment and operating capital. Consequently, MEs generate low-value products and, cumulatively, negatively impact the environment and public and worker health in significant ways. At present, where microfinance is available—only about 24 percent of the 318,000 MEs in the 15 cluster types currently have microfinance loans—technical advice regarding production technologies is unevenly available among different types of clusters and geographical areas. Furthermore, advice and joint facilities for environmental management are nonexistent. This baseline situation is expected to continue in the absence of a systematic, large-scale initiative. Through its holistic package of services, the project will address MEs' awareness/skills, common facilities, and financial constraints to expand and/or enhance borrowing. Emphasis will be placed on improving enterprises' overall profitability and enhancing key environmental standards. Cluster-wide shared facilities or services (such as common waste management facilities) will be financed by the project and will minimize individual MEs' investment costs.

Financial Analysis

66. For each cluster type, a subproject was modeled, including enhancements in production technology and environmental practices, that an average ME is likely to implement based on PKSF's and POs' prior experience with similar MEs. The average loan amount varies between US\$375 (for goat rearing) and US\$7,500 (for light engineering/automobile workshop). The MEs would invest an equal amount of their own funds. In the with-project scenario, revenues are modeled as higher than in the BAU scenario due to increases in sale prices and/or increased production resulting from a combination of improved quality, increased productivity, and value added from the cluster's joint facilities. Annual revenue increases are conservatively projected at 2–3 percent (depending on cluster type) in year 2; 3–4 percent in years 3 and 4; and 4–5 percent in year 5. In addition, improved ME environmental management is expected to increase revenues because of one or more of the following factors: increased demand for products; fewer losses in worker productivity; and reduced product losses (such as aquaculture product fatalities). Given the novelty of the project's approach and, therefore, a lack of documented experiences with such revenue increases, we conservatively assumed annual rates of revenue increases between 0.3 percent and 1.5 percent depending on the cluster type. In some cluster types, selling recyclable wastes can generate additional revenue streams for MEs. Importantly, the models incorporate relevant input cost increases that result from higher production.

67. For the MEs that presently lack access to microfinance,²³ the BAU scenario suggests they would be unable to take any loans or make investments in their business. Hence, the net returns on investments made in the with-project scenario are considered the benefit of the project. For the MEs that do have access to microfinance, it is assumed that in the BAU scenario they would take a similar loan amount but would not enjoy any of the technical assistance or common facilities provided by the project. In the with-project scenario, they would invest in improved technology and practice better environmental management.

68. The modeled indicative with-project subprojects yield solid financial internal rates of return (FIRR) that range from 45 percent (light engineering/plastics) to 106 percent (goat rearing) and exceed the FIRRs

²³ The current microfinance use rate among MEs in the 15 cluster types (24 percent, on average) is used as a proxy for access to finance.



of the BAU subprojects in most cluster types. The relative superiority of the with-project FIRRs over the BAU FIRRs is sensitive to the realization of benefits from improved environmental practices as well as assumptions made regarding the productivity and price improvements resulting from the adoption of enhanced production technologies. However, it is important to note that the additional costs of environmental practices in the with-project scenario will be minimal, ranging from 0.03 percent of total costs in the case of mini textiles/mini garments to 1 percent in the case of aquaculture.

Economic Analysis

69. The individual cluster type models were aggregated to 40,000, assuming the same distribution of ME numbers per cluster types as in the universe of 318,000 MEs, from which 40,000 will be drawn. We converted financial prices in the ME models and project costs to economic values to account for worker opportunity cost of time and the value-added tax, among others. We did not estimate the economic benefits associated with Component 1 because benefits from ME capacity development, awareness raising, and common facilities are integrated into the economic benefits associated with the ME access to finance component.

70. The project is economically viable, as evidenced by the estimated net present value (NPV) of US\$218 million at a 10 percent discount rate and economic internal rate of return (EIRR) of 66 percent. As the high EIRR also indicates, the NPV is not sensitive to the discount rate. NPV is somewhat sensitive to the number of beneficiary MEs achieved; reducing from 40,000 MEs to 30,000 MEs would reduce the NPV to US\$159 million, while the EIRR would only be reduced slightly to 62.8 percent.

71. The economic value of the project is further enhanced when one thinks of the following factors, which went uncaptured in the analysis. Specifically, project-supported, improved environmental practices will reduce a number of environmental and public health externalities that extend well beyond ME premises and have significant aggregate impacts. However, no documented studies exist on such impacts, largely because no large-scale initiative like this project has ever been undertaken. Furthermore, the current analysis limits itself to five years of loans. In fact, given the near perfect loan repayment rate (99 percent) that characterizes the PKSF's microcredit line to enterprises, the microcredit fund is expected to fund significantly more rounds of finance.

Maximizing Finance for Development

72. The project will maximize financing for developing environmental sustainability. As per PKSF's financing policy, MEs are required to contribute a minimum of 20 percent as borrower co-financing; however, the baseline study found to be 40 percent on average. Considering the current loan repayment timeline (POs to PKSF 3 years and MEs to POs 12 months) and five rounds of financing to each ME, it is found that US\$93 million of financing will lead to an actual cumulative financing of US\$460 million to MEs over five years. Based on the simulation that takes into account actual yearly project disbursements, it can be deduced that US\$460 million of cumulative financing will involve US\$184 million (at 40 percent), ideally of MEs' own contribution. However, adopting environmental sustainability will be a parameter for selecting MEs for refinancing in the 2nd year, and all MEs may not be eligible to take a loan five times. Assuming that 30 percent of MEs will receive loans five times, it is estimated that US\$61 million will come from MEs' own contribution. On the assumption that 5 percent of MEs will be upgraded to SMEs during the last year of the project, the project-supported MEs can take around US\$4 million from formal banks and invest in the



microenterprises. Cumulatively, the amount of investment from MEs is estimated at US\$65 million. This value is consistent with the estimated FIRRs ranging from 45-106 percent.

B. Technical

73. The World Bank Group has a track record of assisting clients on various fronts, including promoting SME sector development, improving the livelihoods of the poor, building entrepreneurial ecosystems, creating job opportunities, integrating environmental sustainability into businesses, and improving occupational health and safety. It has achieved this through a combination of policy advisory services, technical assistance, and lending instruments. This project benefits from the expertise and lessons from similar experiences around the world.

C. Financial Management

74. Following the World Bank's operational policies and guidance, the financial management capacity assessment of the implementing agency, PKSf, has been conducted. The assessment included PKSf's current financial management systems and practices in development projects, with the aim of evaluating its risks and mitigation measures. The project's overall financial management risk is assessed to be "substantial" mainly because of the diverse nature of the activities and the inclusion of multiple NGOs at implementation. PKSf has very recently implemented the CCCP, which was ended in the last financial year; another project is currently under implementation. The financial management performance of these PKSf-implemented, World Bank-financed projects has been satisfactory. As of now, there is no pending audit report from PKSf for other World Bank-financed projects. Based on the assessment, the following financial management arrangements were discussed and agreed to with the agency:

(a) Planning and budgeting. Like all other development projects in Bangladesh, 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. The annual budget will be prepared based on the Procurement Plan and any other relevant annual work plans. These budgets will be monitored periodically to ensure that actual expenditures are in line with the budgets and to provide input for necessary revisions.

(b) Reporting. The PKSf will submit interim unaudited financial reports (IUFs) to the World Bank within 60 days of the end of each quarter. The IUFs shall be prepared in an agreed upon format and supported by appropriate sets of documents and evidence.

(c) 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 financial reports. The project will be required to maintain a satisfactory financial management system, which includes keeping all the mandatory books of accounts and preparing quarterly and yearly financial statements.

(d) Internal audit. During assessment, it was noted that PKSf has an internal audit department; it was agreed that this department would carry out the complete review of financial activities (including those of the POs) at least once per year. A copy of the internal audit report shall be submitted to the World Bank within 120 days of the end of each audit period.



(e) Disbursements. It is agreed that IDA fund disbursements to the project will be made based on IUFs. IDA funds will be disbursed through a single Designated Account (DA) that will be maintained in a commercial bank in accordance with the approved government procedures that govern the establishments of the DA. According to PKSf's existing practices, authorized PKSf signatories will operate the DA. The POs shall maintain a separate bank account that is dedicated for this project fund only. Preferably, transactions from POs to MEs will take place through the banking system. Amounts paid from PKSf to the POs will be treated as advances, and POs would report expenditures to PKSf to include as expenditures in the IUF. The first advance paid to MEs as per Participation Agreements would be recognized as expenditures in the IUFs and subsequently recognized based on MEs' reporting. Advances can be provided to MEs based on requirements. 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 the PKSf and PO level. PKSf will maintain a separate set of accounts and budget for each financing source.

(f) Governance and oversight arrangements. PKSf is annually audited by an independent chartered accountant firm to ensure it meets the statutory requirement. Accordingly, 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.

(g) Staffing. PKSf will hire two financial management staff (an accounts officer and one financial management consultants that have professional accountancy qualifications). While the senior financial management specialists will be responsible for the project's overall financial management, the junior financial management staff will look after the loan management or fund outflow and inflow to the POs and beneficiaries. The accounts officer will support the financial management specialist in the project's day-to-day financial activities. PKSf will obtain concurrence on the terms of reference of said specialists from the World Bank.

(h) Retroactive financing. The project is likely to incur some expenses before signing of the Agreement that are eligible under the Bank's Procurement and Consultant guidelines and the arrangement agreed for the project in the POM. Every activity under the project must be screened from an environmental and social point of view as per approved, consulted, and disclosed safeguard documents in order to assess the eligibility of the underlying expenditure. Such expenditures for Component 3 incurred on or after August 1, 2017, and for Components 1 and 2 incurred on or after April 1, 2018, will be reimbursed to PKSf from the World Bank up to the ceiling of US\$22 million (20 percent of total IDA financing, US\$5 million for Component 1, US\$15 million for Component 2, and US\$2 million for Component 3) under retroactive financing. The retroactive financing will support the expenses for the project as stated in the legal agreement. The POM needs to be approved by the World Bank before starting Component 1 & 2 operation.

D. Procurement

75. PKSf has a long experience implementing similar World Bank-funded projects. There has been no major procurement management issue, except inexperience of the POs with conducting procurements in accordance with the World Bank's procurement principles, which resulted in delays. In the recently



completed CCCP, PKSF successfully developed and disseminated simplified procurement documents and instructions for the POs. In addition, PKSF also provided continuous hands-on support and training to the POs in executing day-to-day procurement activities. As a result of those interventions, and despite initial delays, all procurements were completed within the project duration and no major deviation was observed during the procurement audits. However, in light of the decentralized nature of the procurements envisaged under this project, and the capacity of the newly selected POs in handling procurements in accordance with the World Bank's procurement principles, the project risk is rated as "substantial" from the standpoint of procurement operation and contract management. Several risk mitigation measures are either in place or would be put in place by PKSF, as detailed in the Project Procurement Strategy for Development (PPSD) document. These include: (1) hiring a full-time procurement specialist for the entire duration of the project; (2) training the new POs in procurement and contract management, and providing the necessary hands-on support; and (3) ensuring the quality of the procurements conducted by the POs through regular reviews by the specialist and of the audits by the hired audit firms.

76. All goods, works, and both non-consulting and consulting services required for the project that will be funded out of the proceeds from the financing shall be procured in accordance with the requirements set forth or referred to in the World Bank's "Procurement Regulations for Borrowers under Investment Project Financing," dated July 1, 2016 (Procurement Regulations), and the provisions of the Procurement Plan, the PPSD document, and the project's POM accepted by the World Bank.

77. In agreement with the World Bank, PKSF prepared a PPSD document that considered activity level risks, PKSF's capacity to manage those risks, the value of the activities, prevailing market conditions, geographic locations of the activities, and so on. The PPSD spelled out the appropriate procurement strategy for this project. It is a live document and will be updated at least annually. As an output of the PPSD exercise, the initial Procurement Plan for the project was prepared. The agreed Procurement Plan contains procurement activities to be financed under the project, the different selection methods for procurement, including applicable conditions, market approaches, contracting arrangements, estimated costs, World Bank's prior review requirements, applicable standard procurement documents, and time frames.

E. Social (including Safeguards)

78. No large-scale infrastructure development is envisioned. The project will retain the option for the beneficiary community to voluntarily contribute land, and/or directly purchase it collectively. The POs may also opt to purchase land directly, if communities are unable to do so. The project will not support involuntary land acquisition or purchase. Therefore, OP 4.12 will not be triggered for this project. There is also a possibility that the project will work in areas where indigenous people reside. Thus, OP 4.10 is triggered and the relevant framework is in place. Many children are reportedly employed in the family-owned microenterprises. The project aims to put a robust monitoring system in place to make sure child labor practices do not violate the World Bank Group Environmental Health and Safety (WBG EHS) Guidelines. Additionally, the project will also run a community-based social mobilization campaign to encourage full-time schooling for children and raise awareness about childhood stunting, health and nutrition, and the dangers of potentially hazardous work. The Social Management Framework (SMF) includes a Social Impact Assessment (SIA) of probable sample areas and similar activities/interventions and guidelines for voluntarily donating lands (in terms of consultation and documentation) and establishing grievance redress systems and consultation strategies. Gender issues are covered, as are labor standards,



which in rural economies tend to be informal and family based. A stand-alone Tribal Peoples Framework (TPF) has also been developed along with appropriate screening formats.

79. Citizen engagement. The project explicitly seeks to support the engagement of targeted beneficiaries (MEs and their employees and business clusters) through consultative processes and feedback mechanisms; these will help elaborate on and adjust the approach to maximize positive environmental impacts and climate co-benefits. The project focuses on a select number of polluting microenterprise and business clusters that can reduce emissions and increase resource efficiency; it also focuses on expanding innovative economic activities that contribute to environmentally friendly, low polluting business and climate resilience. Feedback mechanisms will be developed to ensure transparency, accountability, and learning, as well as a continuous dialogue with the targeted beneficiaries and other stakeholders. Particular attention will be paid during implementation to the capacity of PKSf and its POs to close the feedback loop and report on action taken in this regard. The specific elements of the framework for citizen engagement include support to a feedback mechanism from targeted beneficiaries to be designed to process concerns and questions at ME level with a view to resolving these concerns and questions in a timely fashion. Furthermore, third-party monitoring of project activities will be supported three times during project implementation (in the first year, at mid-term, and at completion) to ensure transparency and feedback. The protocol and mechanisms for elements of this citizen engagement framework will be detailed in the POM.

Table 3. Citizen Engagement Framework

Contribution to PDO: to increase the adoption of environmentally sustainable practices by Targeted Microenterprises	Relevant citizen engagement activities	Citizen engagement results and approach to positive environmental impacts and climate co-benefits
<p>The PDO is supported by citizen engagement as:</p> <p>(1) an integrative tool for social accountability toward targeted MEs and their employees and the clusters</p> <p>(2) a means to provide a voice to and engage with targeted beneficiaries to ensure that issues pertaining to livelihoods and safe and healthy work environments are addressed</p>	<p>1. Feedback mechanism across landscapes (third-party monitoring) and closing of the feedback loop through fora for engagement (focus group discussions)</p> <p>2. Capacity building of PKSf and POs in social accountability, delivery of interventions to take account of feedback, and closing the feedback loop</p>	<p>PDO indicator: Share of targeted beneficiaries with a rating of “satisfactory” or above on project interventions (dimensions: livelihoods, safe and healthy work environments) (disaggregated by sex) (citizen engagement) (percentage)</p> <p>Data source: survey by third party</p>

F. Environment (including Safeguards)

80. From the likely activities, the project is classified as Category B, and the Environment Assessment (OP/BP 4.01) safeguard policy has been triggered. The project may involve small improvements to existing market facilities, toilet construction, and the establishment of a small-scale desalination plant. The project will also facilitate microenterprises’ ability to manage solid waste, reduce emissions, discharge treated effluents, and so on. Water supply and sanitation activities will be facilitated within the cluster areas of specific enterprises to improve the environment. The impact for using water is very much localized; it does not influence or connect with any surface water body or groundwater sources that flow through a neighboring country, and no project activity features the potential use or pollution of international waterways. In view of the limited information (subproject nature, activity, location, and so on), a framework approach for environmental management has been adopted. The Environmental Management Framework



(EMF) was prepared in accordance with ECR 1997 of Bangladesh, the Safeguard Policies of the World Bank, and the WBG's EHS Guidelines. PKSF's Environment Unit prepared the EMF, SMF, and TPF in consultation with relevant stakeholders. The safeguard documents, translated into Bangla, were disclosed on January 4, 2018, on PKSF's (www.pksf-.bd.org) and the World Bank's operational website.

G. Other Safeguard Policies (if applicable)

81. None.

H. World Bank Grievance Redress

82. Communities and individuals who believe that they are adversely affected by a World Bank (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 WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit <http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service>. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.



VII. RESULTS FRAMEWORK AND MONITORING

Results Framework
COUNTRY : Bangladesh
Sustainable Enterprise Project

Project Development Objectives

To increase adoption of environmentally sustainable practices by Targeted Microenterprises.

Project Development Objective Indicators

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Name: Microenterprises targeted by the project that have adopted at least one environmentally sustainable practice		Number	0.00	20000.00	Bi-annually	Quarterly progress report from the POs to PKSF Report provided by certifying agencies/NGOs' review of report provided by certifying institution	PMU at PKSF

Description: Environmentally sustainable practice is defined as a business methodology or technology that provides (1) resource efficiency; (2) low pollution; (3) and/or climate resilience.

Adoption of environmentally sustainable practices will be measured by certification with respect to applicable EQS. In addition to existing certifying agencies, such a



Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
<p>certification could be also given by NGOs, by counter monitoring responsibility, or certifier agencies.</p> <p>Examples of applicable EQS:</p> <ol style="list-style-type: none"> 1. X tons of waste reduced in shoe making microenterprises from recycling leather/rubber soles 2. Environmentally sustainable practices met in x number of sunflower oil microenterprises 3. X number of microenterprises received organic certifications in the market <p>For example, meet EQS in x number of sunflower oil microenterprises (y is the number of sunflower microenterprises that sign the contract). Y value will be captured in IRI 1.</p> <p>End of project target is 20,000, which is 50% of the total of 40,000 microenterprises supported by the project.</p>							

Name: Share of target beneficiaries with a rating of “satisfactory” or above on project interventions		Percentage	0.00	60.00	Annually	Survey report conducted by third party	PMU at PKSF
disaggregated by sex		Percentage	0.00	30.00			

Description: Dimensions: livelihoods and adoption of new environmentally sustainable practices (disaggregated by sex)

Beneficiaries include the owners, family members, and workers in the microenterprises supported under the project.

This will be measured with semi structured questionnaire which will capture the self-sufficiency in livelihood and adoption of new environmentally sustainable practice. The survey questionnaire will incorporate questions on household income, labor income and other livelihoods questions, and mechanisms and feasibility of adoption of new environmentally sustainable practices.

Target beneficiaries are owners, family members, and workers in the microenterprises. The survey will focus on livelihoods and adoption. The survey questionnaire will incorporate questions on household income, labor income, and other livelihood-related questions, and mechanisms and feasibility of adoption of new environmentally sustainable practices.



Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Name: Targeted micro-enterprises that continue the adopted environmentally sustainable practice		Percentage	0.00	40.00	Biannually	Quarterly progress report from the POs to PKSF	PMU at PKSF
disaggregate by sex of ME owner		Percentage	0.00	30.00			
<p>Description: This indicator will monitor the sustainability of the project. Those who receive financing first time for adopting environmentally sustainable practices will continue to invest in these practices so the activity continues even after the project ends.</p> <p>The target is set at 40% of the MEs who received a loan once. Since the indicator shows interest in taking the loan, two factors will influence the target value: (1) MEs do not need any more loan, they have already moved to the next level; and (2) MEs do not want to continue the task.</p>							

Intermediate Results Indicators

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Name: Micro enterprise clusters provided with common services		Number	0.00	25.00	Annually	Cluster assessments Progress report from the POs to PKSF, including onsite monitoring	PMU at PKSF



Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection																																	
<p>Description: This is an intermediate indicator for PDO 2. Different clusters will have different needs. The type of support will be identified by cluster assessment. The services will be disaggregated by type of service, such as storage facilities, water supply, and resilient architecture (flood, tidal flood). The activities will complement Component 1 to ensure that MEs receive common facilities to support environmentally and economically sustainable businesses.</p> <p>The types of clusters are as follows:</p> <p>Manufacturing Sector</p> <table border="1"> <thead> <tr> <th>SL</th> <th>Name of Sector</th> <th>Type of Cluster</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Leather processing and shoemaking</td> <td>Leather product (belt) and shoemaking</td> </tr> <tr> <td>2</td> <td>Mini textile</td> <td>Hosiery, Mini garments, Loom</td> </tr> <tr> <td>3</td> <td>Light engineering Battery</td> <td>Automobile workshop, Electric item,</td> </tr> <tr> <td>4</td> <td>Plastic factory</td> <td>Plastic factory</td> </tr> <tr> <td>5</td> <td>Food processing</td> <td>Honey processing, Dairy product Gur processing, Salt processing and trade Dry fish processing, Rice mill</td> </tr> <tr> <td>6</td> <td>Metal work</td> <td>Metallic utensils, Imitation jewelry</td> </tr> </tbody> </table> <p>Agribusiness Sector</p> <table border="1"> <tbody> <tr> <td>1</td> <td>Livestock</td> <td>Beef fattening, Dairy farm, Buffalo rearing Goat rearing, Sheep rearing</td> </tr> <tr> <td>2</td> <td>Horticulture</td> <td>Vegetables (tomato, peanut, & sunflower) Fruits (mango, litchi, banana, & pineapple) Floriculture, Pulses (mung bean), Seaweed</td> </tr> <tr> <td>3</td> <td>Aquaculture</td> <td>Pisciculture, Crab culture, Fish hatchery</td> </tr> <tr> <td>4</td> <td>Poultry</td> <td>Poultry farm, including poultry feed</td> </tr> </tbody> </table>								SL	Name of Sector	Type of Cluster	1	Leather processing and shoemaking	Leather product (belt) and shoemaking	2	Mini textile	Hosiery, Mini garments, Loom	3	Light engineering Battery	Automobile workshop, Electric item,	4	Plastic factory	Plastic factory	5	Food processing	Honey processing, Dairy product Gur processing, Salt processing and trade Dry fish processing, Rice mill	6	Metal work	Metallic utensils, Imitation jewelry	1	Livestock	Beef fattening, Dairy farm, Buffalo rearing Goat rearing, Sheep rearing	2	Horticulture	Vegetables (tomato, peanut, & sunflower) Fruits (mango, litchi, banana, & pineapple) Floriculture, Pulses (mung bean), Seaweed	3	Aquaculture	Pisciculture, Crab culture, Fish hatchery	4	Poultry	Poultry farm, including poultry feed
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Name: Share of targeted microenterprises provided with capacity-building support to adopt environmental sustainable		Percentage	0.00	70.00	Annually	Progress report from the POs to PKSF Reports on training	PMU at PKSF																																	



Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
practices							
of which female-owned enterprises		Percentage	0.00	30.00			
<p>Description: This is an intermediate indicator for PDO 1 and 3. Number of microenterprises that received trainings or participated in exposure events. If the MEs are not being trained on a new way of doing business, the awareness and expertise will not be developed. This is the first step toward achieving environmental sustainability. Share is against a total number of targeted microenterprises supported by the project (40,000).</p>							
Name: Microenterprises that sign loan agreements with PKSF under the project		Number	0.00	40000.00	PMU at PKSF	Progress report from the POs to PKSF	Biannually
of which female-owned enterprises		Percentage	0.00	30.00			
<p>Description: This is an intermediate indicator for PDO 1. Microenterprises need to apply for a loan from the project to adopt environmentally sustainable practices.</p>							

**Target Values****Project Development Objective Indicators**

Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	End Target
Microenterprises targeted by the project that have adopted at least one environmentally sustainable practice	0.00	3000.00	6000.00	10000.00	15000.00	20000.00	20000.00
Share of target beneficiaries with a rating of "satisfactory" or above on project interventions	0.00	0.00	0.00	40.00	50.00	60.00	60.00
disaggregated by sex	0.00						30.00
Targeted micro-enterprises that continue the adopted environmentally sustainable practice	0.00	0.00	10.00	20.00	30.00	40.00	40.00
disaggregate by sex of ME owner	0.00						30.00

Intermediate Results Indicators

Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	End Target
Micro enterprise clusters provided with common services	0.00	0.00	5.00	10.00	25.00	25.00	25.00
Share of targeted microenterprises provided with capacity-building support	0.00	10.00	20.00	30.00	50.00	70.00	70.00



Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	End Target
to adopt environmental sustainable practices							
of which female-owned enterprises	0.00						30.00
Microenterprises that sign loan agreements with PKSF under the project	0.00	5000.00	15000.00	25000.00	30000.00	40000.00	40000.00
of which female-owned enterprises	0.00						30.00

