SFG3931

SUSTAINABLE ENTERPRISE PROJECT (SEP)

ENVIRONMENTAL MANAGEMENT FRAMEWORK (EMF)

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Palli Karma-Sahayak Foundation (PKSF)

Contents

Abbreviations

BBB	*Built back better*
BP	*Bank Procedures*
CCCP	*Community Climate Change Project*
CFC	*Chlorofluoro carbon*
DG	*Director General*
DoE	*Department of Environment*
EA	*Environmental Assessment*
ECA	*Bangladesh Environmental Conservation Act*
EHS	*The Environmental, Health and Safety*
EIA	*Environmental Impact Assessment*
EMF	*Environmental Management Framework*
EMP	*Environmental Management Plan*
FEDEC	*Finance for Enterprise Development and Employment Creation*
GRC	*Grievance Redress Committee*
GRMO	*Grievance Redress Management Officer*
IDA	*International Development Association*
IEE	*Initial Environmental Examination*
IFAD	*International Fund for Agricultural Development*
IFC	*International Finance Corporation*
IPM	*Integrated Pest Management*
IVM	*Integrated Vector Management*
ME	*Microenterprise (s)*
NOC	*no objection certificate*
OP	*Operational Policies*
PACE	*Promoting Agricultural Commercialization and Enterprises*
PDO	*Project Development Objectives*
PKSF	*Palli Karma-SahayakFoundation*
PO	*Partner Organization(s)*
RH	*Relative Humidity*
SEP	*Sustainable Enterprise Project*
WBG	*the World Bank Group*

Executive Summary

1) The overarching development goal of the Sustainable Enterprise Project (SEP) is 'to increase adaption of environmentally sustainable practices by targeted microenterprises in Bangladesh'. Ninety-five percent of the budget is allocated for the project participants as specified in two project components that are 'Component-1: Enhancing services and enabling systems' and 'Component-2: Strengthened access to finance for environmentally sustainable microenterprises'. Component-1 will help facilitate investment in shared services such as common facilities for the cluster development, improve infrastructure for the climate vulnerable business clusters, and integration of Value Chain Development that will enhance the business efficiency of microenterprises and Component-2 will help expand income-generating opportunities for the targeted microenterprises by supporting investment in activities that are resource efficient, low polluting and environmentally sound. The supporting' Component-3: Project Management, Knowledge Management and Monitoring and Evaluation' takes up only five percent of the total budget. This component is to ensure timely and effective implementation of the project.

2) This EMF document defines the management procedures that allow the proposed Sustainable Enterprise Program (SEP) to "avoid, mitigate, and minimize adverse environmental impacts" of project activities and microenterprises. The EMF was prepared in accordance with the World Bank policies and Government acts and rules.

3) SEP aims to create environmental sustainability within the enterprises and to contribute to the integration of environmental considerations for microenterprise loan disbursement or business cluster development or sub-project preparation, plans and activities with a view to reduce their environmental impacts. PKSF will follow an evolutionary process of introducing environment-friendly practices by the MEs under SEP. Project should not fix a higher target to achieve all environmental standards and norms within a short-period rather will follow a gradual process to adopt environmentally sustainable practices by the microenterprises. All proposed microenterprise loan or sub-project interventions submitted by the POs will be thoroughly analyzed and categorized for environmental assessment by PKSF experts. As guided by the EMF, Environmental Screening and Initial Environmental Examination (IEE), if required, will be used in SEP considering nature of interventions and magnitude of impacts.

4) Project Management Unit (PMU) will be responsible for ensuring effective monitoring of environmental safeguard measures in close consultation with the implementing POs and POs will be responsible for ensuring effective implementation of the EMF at the field level. The PMU will assign full time Environmental Safeguard Specialists. The designated officers at PO level will ensure proper implementation of environmental concerns at micro-enterprise level. However, EMF is a living document that maintains the core environmental principles. It should not impose any unnecessary control over the growth of microenterprises rather it should help PKSF guide POs and microenterprises to improve environmental concerns in a sustainable way. Also, if necessary, in consultation with the World Bank, PKSF may review and update the EMF along with the maturity of the project.

1.0 Background and project description

5) Palli Karma-Sahayak Foundation (PKSF) was established by the Government of Bangladesh in 1990 as an apex development organization for poverty alleviation through employment creation. Since its inception, PKSF has been implementing various programs and projects for poverty alleviation through its Partner Organizations (POs). At present PKSF has more than 200 active Partner Organizations throughout the country.

6) PKSF launched its Micro -Enterprise Program in 2001 to extend financial services to the progressive clients of its partner organizations for undertaking micro-enterprises. This program termed AGROSOR is being implemented all over Bangladesh through 178 POs of PKSF. PKSF's role in microenterprise development has been strengthened through implementation of two projects with the support of IFAD namely 'Finance for Enterprise Development and Employment Creation (FEDEC)' project and 'Promoting Agricultural Commercialization and Enterprises (PACE)' project. The World Bank administered 'Community Climate Change Project (CCCP)' is one of the most successful grant management projects of PKSF.

7) Based on the success and lessons learned from the above-mentioned projects, PKSF is currently preparing 'Sustainable Enterprise Project (SEP)' with the financial support from the World Bank.

8) The project will support microenterprises in areas that are environmentally stressed and vulnerable to climate change and natural disasters including areas are prone to floods, drought, flash floods and salinity. The distinctive features of the project are to build resilience and promote sustainable technologies and practices among communities in environmentally vulnerable areas, and to adopt basic operational safety norms in project-supported enterprises. To maximize the positive environmental impacts, the project will prioritize polluting microenterprise business clusters.

1.1 Project development objectives (PDO)

9) To increase adoption of environmentally sustainable practices by targeted microenterprises.

1.2 Project Beneficiaries

10) The target group of the project will be economically-active micro entrepreneurs of the agri-business and manufacturing clusters of PKSF ME working areas. Project beneficiaries (micro entrepreneurs, family members and employees) will include informal microenterprises. There is no structured practice of registration 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 experience suggests that formalization offered limited advantages for microenterprises and the cost of formalization programs can be high compared to benefits.[1] However, PKSF acknowledges the benefit of registration for tracking the contribution in the national economy.

2.0 Project components

11) Component *1: Enhancing services and enabling systems*

[1] http://www.worldbank.org/en/programs/competitiveness-policy-impact-evaluation-lab/brief/benin-impact-evaluation-of-the-entreprenant-status

This component will enhance environmental positive impact, climate resilience, production efficiency and value chain development.

12) *Subcomponent 1.1*

- This subcomponent aims to support in common services which have a critical influence on productivity of MEs but are not commercially viable.
- This subcomponent aims to secure basic safety standards for microenterprises that use machinery, electrical equipment, or products that can easily lead to injuries in the workplace or are a hazard to human health. The longer term objective is to raise the productivity of labor as well as to demonstrate the positive effects on human health and environment of introducing safety measures, within a cluster.
- Meeting certified quality standards also helps to build customer confidence that products are safe and reliable. By not meeting such standards microenterprises may lose out potential markets.
- The project will support microenterprises in learning what standards are important for their products and how they can be obtained.
- The project will also support meeting environmental quality standards for each microenterprise product based on the customized national/international standards. A list of environmental quality standards across microenterprises to be supported under the project has been incorporated in the Project Operational Manual (POM).
- This subcomponent will also support/establish organization/s or one stop service which will provide microenterprises with knowledge of technologies and cost saving opportunities. Such technological platform will not only contribute to generating interests from microenterprises to apply for the project loan, but also to ensure sustainability of the project.

13) *Subcomponent 1.2*

- The capacity building at ME level will make the microenterprise willing to adopt changes in their existing business and perceive the criticality of environmental issues. Activities under this sub-component will help the long-term goal of moving the sector toward sustainable financing beyond the project's life time.
- The sub-component besides training of MEs on environmental issues pertinent to provide technical assistance to microenterprises on access to technology for safe businesses, as well as business plan development considering economic benefits. A critical part of this sub-component will be exposure visits for MEs, with an aim to sensitize them to best practices being adopted in other parts of the country. Similarly, technical advisory services, mentorship and training will be covered for innovative microenterprises. In addition, financial literacy training/education may be provided to increase understanding/acceptance by microenterprises.

14) *Subcomponent 1.3*

- This subcomponent aims to facilitate investment in shared services such as rural common services, micro storage, formation of producer collectives, and

integration of value chain players that will enhance the business efficiency of microenterprises as well as ME of the business clusters.

- These may include access to safe drinking water through desalination plants, installation of rainwater harvesting systems, construction of hygienic bio-toilets in the targeted cluster. Raising of market place through plinth raising combined with support to better house construction will be provided in the flood, flash flood and tidal surge area, if necessary. A small investment of the beneficiaries will always be required to ensure ownership of the improvements and encourage their proper continuous maintenance.

Table 1.List of Sample Shared Services

Improved physical connectivity/ facilities	• Potable water, • Bio-toilets
Improved common logistics	• Common storage • Common service center • Common waste collection facilities and Recycling • Access to solar power • Common fire safety facilities/health facilities • Sorting and grading facilities • Agri clinics
Improved market access/branding/business promotion	• Design Laboratory • Clean Technology • Tissue Culture

- The project will also support the promotion of informal producer collectives organized around similar microenterprise to augment bargaining power and thereby help them realize better prices for inputs as well as outputs. Experience shows that small individual producers who do not have direct access to the primary market and instead must work through local traders and settle for a lower price.

15) *Component 2: Strengthened Access to Finance for environmentally sustainable microenterprises*

- This component will expand income-generating opportunities for the targeted microenterprises by supporting investment in activities that are resource efficient, low polluting and environmentally sound.

- Under this component, PKSF, through its POs, will provide financing to microenterprises to undertake investments.

16) *Subcomponent 2.1:*

- This subcomponent will support borrowers who are interested in moving their existing business toward more sustainable practices or take up a new activity by adopting environmentally sustainable practices.

- The projects have prioritized the clusters with high negative environmental impact and formulate the possible remedies to reduce that impact.

- Types of ME clusters has been selected from the existing agribusiness and manufacturing/processing sectors and to ensure a substantial demonstration effect to the non-members of the clusters.

- Will provide loans for innovative, environmentally sound technologies and practices. “Innovation” here refers to technological aspects and practices that have not been tried in the area before but have been demonstrated in other parts of the country or abroad.

- To lower the risk of investing in innovative activities, special attention will be given to support activities such as technical mentorship, linkages to institutes of learning, training, and incubation, which can be provided from grant financing under the Component 1.

17) *Subcomponent 2.2:*

- This subcomponent will support the existing environmentally sustainable microenterprises across agriculture and manufacturing clusters such as, organic farming, fish farming using organic feeds, manufacturing with recyclable materials, honey collection, cultivation of high value medicinal plant, organic farming of floriculture and adaptation activities such as slatted housing for goat, rain-water harvesting, sunflower oil production, floating cultivation etc.

- The subcomponent will further benefit from market support and technical assistance support under component 1.

18) *Component 3: Project management, Knowledge Management and M&E*

This component will ensure timely and effective implementation of the project, building capacity at PKSF/PO level, knowledge management, and M&E.

3.0 Coverage of Probable Microenterprise Clusters under the project

19) The project will support the business clusters only under Agri-business and Manufacturing sector from different components of the project for further develop in a sustainable way. The following possible business clusters are belongs to the Agri-business and processing sectors.

S.N	**Agri-business Sector**
A	*Agriculture Production & Trade Sub-sector*
1	Aromatic Rice
2	Banana
3	Floriculture
4	Garlic
5	Ginger
6	Green Chilli
7	Guava
8	Herbal plant (Varieties)
9	High yielding variety vegetable and seed product
10	Litchi
11	Mango
12	Mug Bean
13	Pea Nut
14	Pineapple
15	Potato
16	Safe Vegetable
17	Sea weed
18	Soybean
19	Broccoli & squash
20	Spice
21	Summer Tomato

22	Vegetable
B	*Livestock Sub-sector*
1	*Beef Fattening*
2	Buffalo Rearing
3	Cow Rearing/Dairy farm
4	Goat Rearing
5	Sheep Rearing
C	*Poultry Sub-sector*
1	Duck Rearing
2	Layer Chicken Farms
3	Poultry (Native)
4	Poultry Farm/ Rearing
5	Turkey Rearing
D	*Fisheries Sub-sector*
1	Crab culture
2	Pisciculture
3	Fish Hatchery
4	Shrimp Culture
Manufacturing Sector	
A	*Non-Agri Sub-sector*
1	Aluminium Utensils
2	Automobile Workshop
3	Belt making
4	Brass & Bronze Utensil
5	Electronic item production
6	Embroidery/Handicraft
7	Furniture & Fixtures

8	Wig (hair) Processing
9	Hand Loom
10	Handmade Cap
11	Hosiery
12	Jewelry/ Imitation
13	Mini Garments
14	Omanian Cap
15	Leather Processing & shoe making
16	Power Loom
17	Silver Ornaments
18	Vermin Compost
19	Jamdani
20	Terracotta
B	*Agri Sub-sector*
1	Dry fish
2	Flour Mill
3	Gur
4	Honey
5	Mango bar
6	Milk Product
7	Potato Chips
8	Rice Mill
9	Salt

No large scale or Category A equivalent intervention will be financed and no project activities will be carried out in disputed lands or lands restricted for development or Environmentally Sensitive areas.

4.0 Environmental Management Framework (EMF)

20) The project is likely to have a large number of MEs and their locations to be identified. In view of the limited information based on lessons learnt from previous similar projects, an Environmental Management Framework (EMF) has been prepared in accordance with the Bangladesh Government environment acts and rules and the Safeguard Policies of the World Bank to assist PKSF, the project implementing agency, in preparation of the project EMF. The EMF provides general policies, guidelines, codes of practice and procedures for the management of environmental issues under this project. The framework approach has been adopted as part of the Environmental Assessment (EA) for proper management of MEs since details of the enterprises and their activities will remain unknown until the project implementation phase.

21) The EMF defines the management procedure that allows the proposed Sustainable Enterprise Project (SEP) to avoid, mitigate, and minimize the adverse environmental impacts of supported activities and micro enterprises.

22) The EMF provides and environmental screening process and other tools e.g., Environmental Management Plan (EMP) to assess and mitigate the possible potential adverse impacts of proposed activities where needed.

23) In order to achieve the main objective, the specific objectives of the EMF are to:

- identify the potential environmental risks that may arise as a result of the proposed project that it will support;
- specify appropriate roles and responsibilities of involved agencies and parties;
- develop a screening and assessment methodology for potential activities of the project, that will allow an environmental risk classification and the identification of appropriate safeguards instruments;
- develop environmental criteria for screening and prioritization within a portfolio of potential project activities;
- outline the required procedures for managing and monitoring environmental risks related to the project;
- determine the training, capacity building and technical assistance needed to successfully and effectively develop and implement the required safeguards instruments;
- establish the funding required to implement the EMF requirements; and
- Provide practical information resources for implementing the EMF.

24) The overall purpose of the EMF is to ensure that all activities supported by the Project are not harmful to the local communities and the environment as well as are environmentally sound and are in compliance with the requirements of pertinent Bangladesh laws and Legislations as well as World Bank safeguard policies.

5.0 Legal and Administrative Framework

25) Bangladesh has an environmental legal framework that is conducive to both environmental protection and natural resources conservation. In addition, a wide range of laws and regulations related to environmental issues are in place in Bangladesh. Many of these are cross-sectoral and partially related to environmental issues. This Section presents an overview of the major national environmental laws and regulations as well as World Bank's safeguard policies that are relevant to the project.

5.1 National Environmental Laws and Regulations

26) National Environmental Policy 1992

27) The concept of environmental protection through national efforts was first recognized and declared in Bangladesh with the adoption of the Environment Policy, 1992 and the Environment Action Plan, 1992. The major objectives of Environmental policy are to i) maintain ecological balance and overall development through protection and improvement of the environment; ii) protect the country against natural disaster; iii) identify and regulate activities, which pollute and degrade the environment; iv) ensure environmentally sound development in all sectors; v) ensure sustainable, long term and environmentally sound base of natural resources; and vi) actively remain associate with all international environmental initiatives to the maximum possible extent.

28) Bangladesh Environmental Conservation Act (ECA), 1995 and subsequent amendment

29) This umbrella Act includes laws for conservation of the environment, improvement of environmental standards, and control and mitigation of environmental pollution. It is currently the main legislative framework document relating to environmental protection in Bangladesh, which repealed the earlier Environment Pollution Control ordinance of 1977.

30) The main provisions of the Act can be summarized as:

- Declaration of ecologically critical areas, and restrictions on the operations and processes, which can be carried or cannot be initiated in the ecologically critical area;
- Regulation in respect of vehicles emitting smoke harmful for the environment;
- Environmental Clearance;
- Regulation of industries and other development activities with regard to discharge permits;
- Promulgation of standards for quality of air, water, noises and soils for different areas for different purposes;
- Promulgation of standard limits for discharging and emitting waste; and
- Formulation and declaration of environmental guidelines.

31) The first sets of rules to implement the provisions of the Act were promulgated in 1997 (see below: "Environmental Conservation Rules 1997"). The Act may be outlined as follows:

- Identification of different types and causes of environmental degradation and pollution;

- Initiating investigation and research regarding environmental conservation, development and pollution;
- Closing down the activities considered harmful to human life or the environment;
- Declaring an area affected by pollution as an Ecologically Critical Area.

5.2 World Bank Safeguard policies

32) The objective of these policies is to prevent and mitigate undue harm to people and their environment in the development process. Safeguard policies provide a platform for the participation of stakeholders in project design, and act as an important instrument for building ownership among local populations. The effectiveness and development impact of projects and programs supported by the Bank has substantially increased as a result of attention to these policies. The World Bank has ten environmental, social, and legal safeguard policies. The relevant policies for environmental safeguard are the following:

33) Environmental policies:

OP/BP 4.01 Environmental Assessment

OP/BP 4.04 Natural Habitats

OP/BP 4.09 Pest Management

OP/BP 4.11 Physical Cultural Resources

OP/BP 4.36 Forests

OP/BP 4.37 Safety of Dams

Social Policies

OP/BP 4.10 Indigenous Peoples

OP/BP 4.12 Involuntary Resettlement

Legal Policies

OP/BP 7.50 International Waterways

OP/BP 7.60 Disputed Areas

34) Applicable safeguards policies, IFC guidelines and Access to Information policies are discussed below.

Table-1: the summary of World Bank Safeguard Policies objectives including when they are triggered

Safeguard Policies	Objective	Triggered for the policy
OP/BP4.01 Environmental Assessment	The objective of this policy is to ensure that Bank financed projects are environmentally sound and sustainable, and that decision-making is improved through appropriate analysis of actions and of their likely environmental impacts. This policy is triggered if a project is likely to have potential (adverse) environmental risks and impacts on its area of influence. OP 4.01 covers impacts on the natural environment (air, water and land); human health and safety; physical cultural resources; and trans boundary and global environment concerns.	Depending on the project and nature of impacts a range of instruments can be used: environmental audit, hazard or risk assessment and Environmental Management Plan (EMP) when a project is likely to have sectoral impacts, sectoral EA is required. The Borrower is responsible for carrying out the EA.
OP/ BP 4.04 Natural Habitats	This policy recognizes that the conservation of natural habitats is essential to safeguard their unique biodiversity and to maintain environmental services and products for human society and for long-term sustainable development. The Bank therefore supports the protection, management, and restoration of natural habitats in its project financing, as well as policy dialogue and economic and sector work. The Bank supports, and expects borrowers to apply, a precautionary approach to natural resource management to ensure opportunities for environmentally sustainable development. Natural habitats are land and water areas where most of the original native plant and animal species are still present. Natural habitats comprise many types of terrestrial, freshwater, coastal, and marine ecosystems. They include areas lightly modified by human activities, but retaining their ecological functions and most native species. This bank policy prohibits financing for developments that would significantly convert or degrade critical natural habitats, and preference is on siting projects on already converted land.	This policy is triggered by any project (including any sub-project under a sector investment or financial intermediary) with the potential to cause significant conversion (loss) or degradation of natural habitats, whether directly (through construction) or indirectly (through human activities induced by the project).
OP/BP 4.36 Forests	The objective of this policy is to assist borrowers to harness the potential of forests to reduce poverty in a sustainable manner, integrate forests effectively into sustainable economic development and protect the vital local and global environmental services and values of forests. Where forest restoration and plantation development are necessary to meet these objectives, the Bank assists borrowers with forest restoration activities that maintain or enhance biodiversity and ecosystem functionality. The Bank assists borrowers with the establishment of environmentally	This policy is triggered whenever any Bank-financed investment project (i) has the potential to have impacts on the health and quality of forests or the rights and welfare of people and their level of dependence upon or interaction with forests; or (ii) aims to bring about changes in the management, protection or utilization of natural forests or plantations.

	appropriate, socially beneficial and economically viable forest plantations to help meet growing demands for forest goods and services.	
OP 4.09 Pest Management	The objective of this policy is to (i) promote the use of biological or environmental control and reduce reliance on synthetic chemical pesticides; and (ii) strengthen the capacity of the country's regulatory framework and institutions to promote and support safe, effective and environmentally sound pest management. More specifically, the policy aims to (a) Ascertain that pest management activities in Bank-financed operations are based on integrated approaches and seek to reduce reliance on synthetic chemical pesticides (Integrated Pest Management (IPM) in agricultural projects and Integrated Vector Management (IVM) in public health projects. (b) Ensure that health and environmental hazards associated with pest management, especially the use of pesticides are minimized and can be properly managed by the user. (c) As necessary, support policy reform and institutional capacity development to (i) enhance implementation of IPM-based pest management and (ii) regulate and monitor the distribution and use of pesticides. Pesticides in WHO Classes IA and IB may not be procured for Bank supported projects.	The policy is triggered; if procurement of pesticides or pesticide application equipment is envisaged (either directly through the project, or indirectly through on-lending, co-financing, or government counterpart funding); (ii) the project may affect pest management in a way that harm could be done, even though the project is not envisaged to procure pesticides. This includes projects that may (i) lead to substantially increased pesticide use and subsequent increase in health and environmental risk; (ii) maintain or expand present pest management practices that are unsustainable, not based on an IPM approach, and/or pose significant health or environmental risks.
OP/BP 4.11 Physical Cultural Resources	The objective of this policy is to assist countries to avoid or mitigate adverse impacts of development projects on physical cultural resources. For purposes of this policy, "physical cultural resources" are defined as movable or immovable objects, sites, structures, groups of structures, natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance. Physical cultural resources may be located in urban or rural settings, and may be above ground, underground, or underwater. The cultural interest may be at the local, provincial or national level, or within the international community.	This policy applies to all projects requiring a Category A or B Environmental Assessment under OP 4.01, project located in, or in the vicinity of, recognized cultural heritage sites, and projects designed to support the management or conservation of physical cultural resources.
OP/BP 4.37 Safety of Dams	The objectives of this policy are as follows: For new dams, to ensure that experienced and competent professionals design and supervise construction; the borrower adopts and implements dam safety measures for the dam and associated works. For existing dams, to ensure that any dam that can influence the performance ofthe project is identified, a dam safety assessment is carried out, and necessary additional dam safety measures and remedial work are implemented.	This policy is triggered when the Bank finances: (i) a project involving construction of a large dam (15 m or higher) or a high hazard dam; and (ii) a project which is dependent on an existing dam. For small dams, generic dam safety measures designed by qualified engineers are usually adequate. Dams with ≥15m in height review by an independent dam safety

		panel is required.
OP 7.50 Projects on international water ways	The objective of this policy is to ensure that Bank financed projects affecting international waterways would not affect: (i) relations between the Bank and its borrowers and between states (whether members of the Bank or not); and (ii) the efficient utilization and protection of international waterways. The policy applies to the following types of projects: (a) Hydroelectric, irrigation, flood control, navigation, drainage, water and sewerage, industrial and similar projects that involve the use or potential pollution of international waterways; and (b) Detailed design and engineering studies of projects under (a) above, include those carried out by the Bank as executing agency or in any other capacity.	This policy is triggered if (a) any river, canal, lake or similar body of water that forms a boundary between, or any river or body of surface water that flows through two or more states, whether Bank members or not; (b) any tributary or other body of surface water that is a component of any waterway described under (a); and (c) any bay, gulf strait, or channel bounded by two or more states, or if within one state recognized as a necessary channel of communication between the open sea and other states, and any river flowing into such waters.
OP 7.60 Projects in Disputed Areas	The objective of this policy is to ensure that projects in disputed areas are dealt with at the earliest possible stage: (a) so as not to affect relations between the Bank and its member countries; (b) so as not to affect relations between the borrower and neighboring countries; and (c) so as not to prejudice the position of either the Bank or the countries concerned.	This policy is triggered if the project will be in a "disputed area". Questions to be answered include: Is the borrower involved in any disputes over an area with any of its neighbors. Is the project situated in a disputed area? Could any component financed or likely to be financed as part of the project be situated in a disputed area?
The WB Group Environment, Health and Safety Guidelines	The General EHS Guidelines contain information on cross-cutting environmental, health, and safety issues potentially applicable to all industry sectors. The guidelines include; Environment • Air Emissions and Ambient Air Quality • Energy Conservation • Wastewater and Ambient Water Quality • Water Conservation • Hazardous Materials Management • Waste Management • Noise • Contaminated Land • Occupational Health and Safety Guidelines • Community Health and Safety • Construction and Decommissioning	This guideline will be followed during the preparation of mitigation measures. When host country regulations differ from the levels and measures presented in the EHS Guidelines, projects are expected to achieve whichever is more stringent. If less stringent levels or measures are appropriate in view of specific project circumstances, a full and detailed justification for any proposed alternatives is needed as part of the site-specific environmental assessment. This justification should demonstrate that the choice for any alternate performance levels is protective of human health and the environment.

35) OP/BP 4.01 Environmental Assessment

36) This policy is considered to be the umbrella safeguard policy to identify, avoid, and mitigate the potential negative environmental and social impacts associated with Bank lending operations. In World Bank operations, the purpose of Environmental Assessment is to improve decision making, to ensure that project options under consideration are sound and sustainable, and that potentially affected people have been properly consulted. The borrower is responsible for carrying out the EA and the Bank advises the borrower on the Bank's EA requirements. The Bank classifies the proposed project into three major categories, depending on the type, location, sensitivity, and scale of the project and the nature and magnitude of its potential environmental impacts:

1) Table-2: World Bank EA screening categories

Category "A"	An EIA is always required for projects that are in this category. Impacts are expected to be 'adverse, sensitive, irreversible and diverse with attributes such as pollutant discharges large enough to cause degradation of air, water, or soil; large-scale physical disturbance of the site or surroundings; extraction, consumption or conversion of substantial amounts of forests and other natural resources; measurable modification of hydrological cycles; use of hazardous materials in more than incidental quantities; and involuntary displacement of people and other significant social disturbances.
Category "B"	When the subproject's adverse environmental impacts on human populations or environmentally important areas (including wetlands, forests, grasslands, and other natural habitats) are less adverse than those of Category A subprojects. Impacts are site – specific; few, if any, of the impacts are irreversible; and in most cases, mitigation measures can be designed more readily than for Category A subprojects. The scope of environmental assessment for a Category B subproject may vary from sub-project to subproject, but it is narrower than that of a Category A sub-project. It examines the subproject's potential negative and positive environmental impacts and recommends any measures needed to prevent, minimize, mitigate, or compensate for adverse impacts and improve environmental performance.
Category "C"	If the subproject is likely to have minimal or no adverse environmental impacts. Beyond screening, no further environmental assessment action is required for a Category C sub-project.

37) A standalone Tribal Peoples Framework (TPF) has been prepared to address OP/BP 4.10.

38) IFC Environmental, Health and Safety Guidelines

39) The Environmental, Health and Safety (EHS) Guidelines of the World Bank Group (WBG)/International Finance Corporation (IFC), 2008 is the safeguard guidelines for environment, health and safety for the development of the industrial and other projects. They contain performance levels and measures that are considered to be achievable in new facilities at reasonable costs using existing technologies. When the host country regulations differ from the levels and measures presented in the EHS Guidelines, projects are expected to achieve whichever is more stringent. If less stringent levels or measures than those provided in these EHS Guidelines are appropriate, in view of specific project circumstances,

a full and detailed justification for any proposed alternatives is required as part of the site-specific environmental assessment. This justification should demonstrate that the choice for any alternate performance levels is protective of human health and the environment.

5.3 Implications of Policies and Regulations

40) The Environmental Conservation Rules (ECR) 1997 (DoE, 1997) classifies projects into four categories according to potential environmental impacts: (1) Green; (2) Orange A; (3) Orange B; and (4) Red. Green category projects are those with mostly positive environmental impacts or negligible negative impacts; Orange A category projects are those with minor and mostly temporary environmental impacts for which there are standard mitigation measures; Orange B category projects are those with moderately significant environmental impacts; while Red category projects are those with significant adverse environmental impacts. As per Schedule-1 of ECR-1997, there is no categorization found for household latrines; however, public toilets fall in Orange B category.

5.4 World Bank Safeguard Policies

41) According to WB Operational Policy (OP 4.01), the nature of environmental assessment to be carried out for a particular sub-project would largely depend on the category of the sub-project. As mentioned earlier, The World Bank Operational Policy (OP) 4.01 classifies projects into three major categories (category A, B and C), depending on the type, location, sensitivity and scale of the project, and nature and magnitude of potential impacts. This Sustainable Enterprise Project (SEP) does not appear to pose risk of significant adverse environmental impacts. The overall project is classified as a Category 'B', and the safeguard policy OP/BP 4.01 has been triggered for the proposed operation. The activities of the project will not include activities in forest areas or natural habitat areas, and will not relate to protection of dams. Hence OP 4.04, OP4.09, OP4.36 and OP 4.37 will not be relevant as well.

6.0 Environmental Management Procedure

6.1Key Principles of Environmental Management in SEP

42) As outlined in the Environmental Management, the key principles of the environmental management in the SEP are:

- All the sub-projects and microenterprises when funded for implementation under the SEP will be subject to an environmental screening and if necessary, initial environmental examination (IEE) in order to prevent significant long-term negative environmental impacts and also to plan and implement mitigation measures for less significant environmental impacts,
- PKSF will ensure due diligence to the related government regulations (ordinance, acts, rules etc.) and World Bank Policies and guidelines related to environment are being followed in sub-projects selection and implementation,
- No project activities will be carried out in disputed lands or lands restricted for development or Environmentally Sensitive areas,
- Prior to submission of Proposal, the PO will undertake community (i.e. members of the business clusters) consultation regarding their objectives, scopes as well as environmental safeguard implications.
- SEP will promote environmental sound design and environmental capacity building of PO staff, micro entrepreneurs and community (i.e. members of the business clusters).

6.2*Environmental Assessment*

43) Environmental assessment is a procedure to ensure that the environmental implications of decisions are taken into account before the decisions are made. Environmental assessment will be undertaken for microenterprise and sub-projects as well. Consultation with the business cluster member/community is a key feature of environmental assessment procedures. SEP aims to provide a high level protection of the environment and to contribute to the integration of environmental considerations for microenterprise loan disbursement or business cluster development or sub-project preparation, plans and activities with a view to reduce their environmental impact. All proposed microenterprise loan or sub-projects interventions submitted by the POs will be thoroughly analyzed and categorized for environmental assessment through POs internal expertise.

44) As guided by the EMF, two types of tools will be used in SEP considering nature of interventions and magnitude of impacts. The environmental assessment tools to be used by the POs are:

- Environmental Screening
- Initial Environmental Examination (IEE)

45) Using the major steps outlined below, this section of the EMF describes the process for ensuring that environmental concerns are adequately addressed through the institutional arrangements and procedures used by the project for managing the identification, preparation, approval, and implementation of Components. The major steps are:

- Screening and Impact Assessment
- Review, Approval, and Disclosure of Component Safeguard Instruments

- Implementation, Supervision, Monitoring, and Reporting

a. A schematic diagram showing the Environmental Management Procedure is shown below

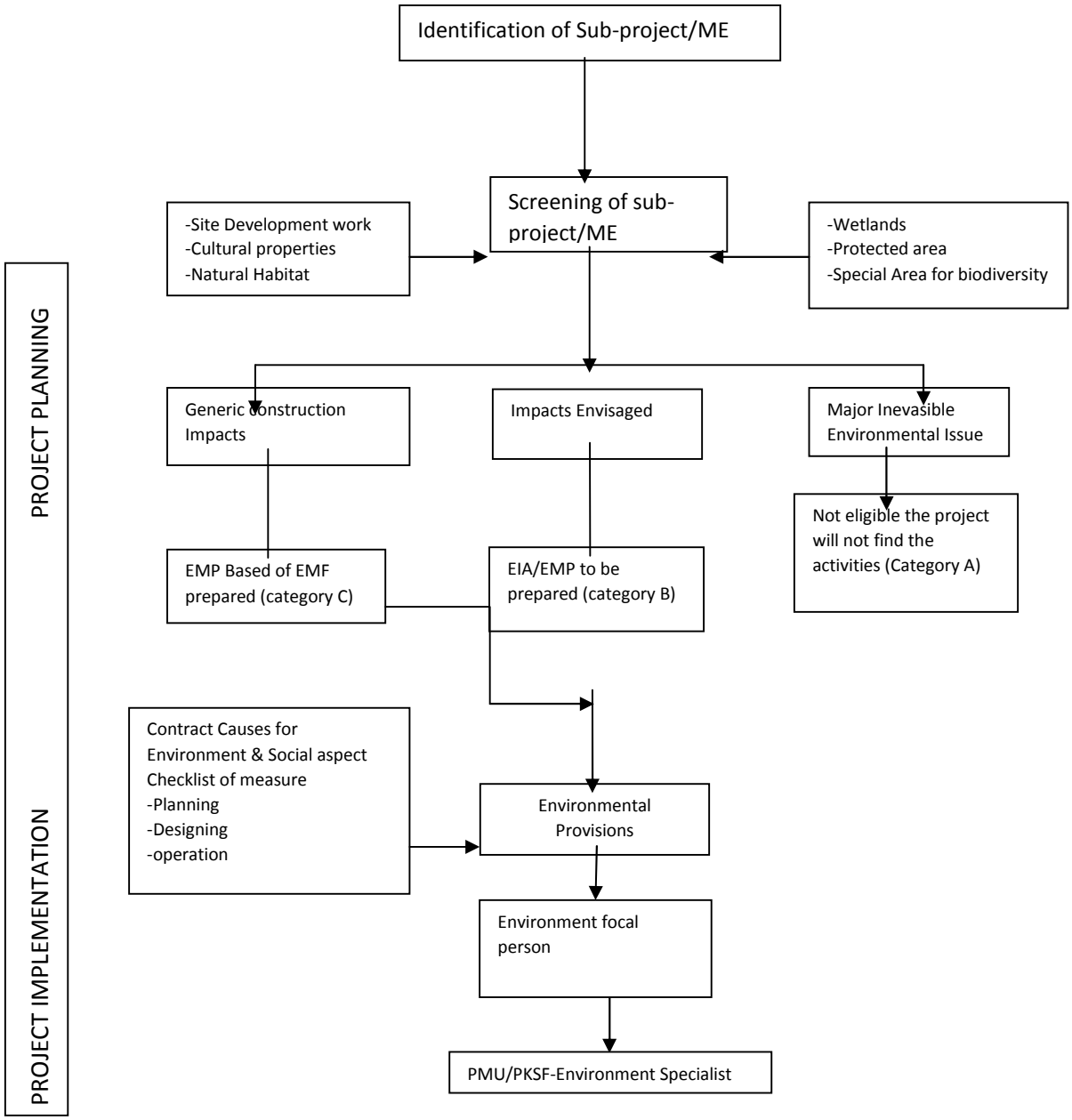


Fig: A schematic diagram for institutional procedures

d. *Environmental Screening*

46) The 'environmental screening' is a mandatory requirement for the design of a project or sub-project. The purpose of the environmental screening is to address environmental concern before further decision and/or design of a sub-project and to ensure that actions to mitigate environmental impacts. It is the first step to understand the possible environmental impacts and also to identify the environmental categorization of the project or sub-project. The participation and consultation with local communities are important to identify the potential impacts of the project interventions. The screening format for the sub grant projects under SEP is provided in Annex-2. The proposed screening criteria have been selected from the experience of other projects and typical environmental impacts of the proposed project interventions. It is the responsibility of the POs to carry out the environmental screening. Using the screening form, proposed sub projects will be screened by respective POs, to identify any potential adverse impacts/effects from the sub project cluster.

47) Steps for Environmental Screening:

- Review the list of negative attributes
- Review the design of interventions (if applicable)
- Review whole process of implementation.
- Review the list of environmental code of practice.
- Review the Screening Format (*Annex-2*) before going to field.
- Fill the screening format in the field.
- Prepare an environmental mitigation and management plan following prescribed format (*Annex-1*)
- Prepare a monitoring plan as per attached format (*Annex-1*)

e. *Initial Environmental Examination (IEE)*

48) The IEE is a review of the reasonably foreseeable effects on the environment of a proposed development intervention/activity. The IEE (*a sample structure of IEE if needed is provided in Annex-3*) is conducted if the project is likely to have minor or limited impacts, which can easily be predicted and evaluated, and mitigation measures could be prescribed easily. However, the IEE is also important to confirm whether the specific activity requires an EIA or not.

f. *Steps for IEE:*

Step-1: Describing Environmental Condition of the Project Area

49) This is the first step of the initial environmental examination (IEE). This includes collection of baseline information on biophysical, social and economic aspects of the project area. The description of environmental settings includes the characteristics of the area on which the activity of proposed project would occur. IEE should cover area affected by all impacts including potential area to address and potential area affected by its alternatives. Normally, information generated from secondary sources or from other existing documents and through field sampling.

Step-2: Assessing the potential impact

50) Prediction and quantification of the potential impact is the technical heart of the environmental examination process. The process involves the prediction of changes over time in various environmental aspects as a result of a proposed project. The impacts of the pre-construction, construction and post-construction operation & maintenance activities will be separately identified. The prediction of the nature, extent, and magnitude of environmental changes likely to result from a proposed project is aided by various tools and techniques.

51) *Step-3: Formulating Mitigation Measures*

52) Once the impacts have been identified, then analysis of the impacts is crucial i.e., whether they are acceptable, require mitigation measures, or are unacceptable. The scale Environmental Impact is to be considered depending upon time, place and condition. Afterward, measures will be devising to mitigate the anticipated environmental changes and consequential impacts during project implementation and operation, or further reduce the residual environmental changes inherent in the selected project design with a sustainable and low-cost method. It normally includes technical, social, and institutional measures to be implemented as integral elements of the project. During the development paradox, some of the decisions may cost the environment. For an example, in cases, where mitigation measures not directly possible in the saline prone area, potable water is one of the major concern. To setup a rain-water-harvesting tank, somewhere cutting of tree/s may be important, compensation measures i.e., plantation of more trees of similar species should be considered.

53) Step-*4: Environmental Management Plan (EMP)*

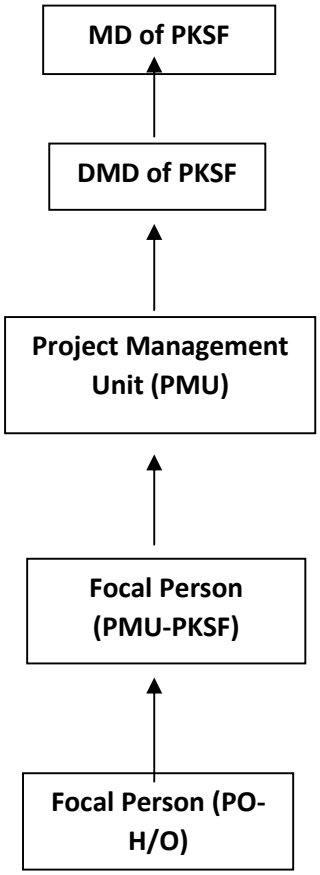
54) An EMP is a plan of scheduled actions that follows directly from a completed environmental assessment of a project. An EMP is the organized expression of the environmental safeguards for the project. EMP has 2 parts: i) Environmental Mitigation Plan; ii) Environmental Monitoring Plan. The mitigation plan is a major sub-plan of the EMP. The mitigation plan manages the potential negative impacts of the project. Mitigation measure is a modification of a proposed project activity using different types of actions, which can be applied individually or collectively like deletion of activity; change in location of activity; change in timing of activity; change in intensity of activity; isolation of activity and social or environmental compensation.

6.3 Institutional Arrangement

55) One fulltime Senior Environment Specialists and one or two environment personnel will be appointed during project implementation stage, as required, to provide support to the PMU throughout the EA process with advice, training, dissemination of good practice, and operational support. The Environmental Specialists will review all the screening report, monitoring reports etc. prepared by implementing agencies. The TOR of the Environmental Specialist is given in *Annex-4*.

56) During project implementation, Project Management Unit (PMU) will be responsible for ensuring effective implementation of environmental safeguard measures in each sub-project in close consultation with POs. POs will be responsible to ensure effective implementation of the EMF at the ME and sub-project level. The POs will assign a person as the Environmental focal person to be responsible for forging effective implementation of safeguard activities in each of the locations of the enterprise. The PMU will be responsible for incorporating environmental considerations in the agreement with the POs. During the project implementation, the PMU will assign the environment specialists to be responsible to monitor environmental issues. Designated staff at PO level will ensure environmental concerns are adequately addressed.

57) Possible Reporting mechanism (PO to PKSF)



6.4 *Grievance Redress Mechanism (GRM)*

58) Grievance Redress Mechanism (GRM) is a valuable tool, which will allow affected people to voice concerns regarding environmental and social impacts of the proposed project. A Grievance Redress Committee (GRC) will be formed to address grievances. The proposed project is to establish a Grievance Redress Mechanism (GRM) to answer to queries, receive suggestions and address complaints and grievances about any irregularities It was agreed with the World Bank that a single GRM will be followed for all safeguard documents (i.e. EMF, SMF and TPF) during implementation of this project. Detail of the GRM is presented in the Social Management Framework (SMF). So, no separate GRM is required for EMF and TPF.

7.0 Potential Environmental Impacts and possible Mitigation Measures

59) This EMF analyses the potential adverse impacts of the business clusters on the environment by looking at the probability and availability of effective measures as follows as (Environmental Mitigation and Monitoring Plan (EMMP) has been attached as *Annexure-1)*.

7.1 Possible Environmental Impacts

60) **Component-2: Strengthened Access to Finance for environmentally sustainable microenterprises**

61) Cluster *under Manufacturing and food processing sub-sectors;*

- *Power loom (shawl, shari, lungi and paposh); Jamdani*

('Category ECR, 7(2), 1997; Orange-B)

- If the electric wire is connected loosely into the motor and any types of faulty electrical circuit related accidents
- Workers including neighbors may face serious health problems due to high sound and vibration of the machineries
- If liquid wastes disposed improperly on land or solid wastes dumped on the surface. Some of the toxic compounds in these wastes find their way to ground water, aquifers or to nearby surface waters contaminating both the water and the aquatic biota through contaminating their tissues, thus causing health hazards to nearby inhabitants.

- *Handloom, Handicraft*

- Traditional handicraft and hand-weaving can have *negative effects on the environment* due to wastewater produced by using chemicals and surface water for bleaching and dyeing.

- *Leather processing and shoe making, Belt making*

(Category ECR, 7(2), 1997; Orange-A; capital up to 5 lakh taka)

- Leather processing is more harmful to the environment than the textile, fertilizer and paper industries
- Worst smell raised from rotten meat during processing leather is created and it affects the neighbors including workers badly
- Corrosive chemical use that could have potential effects on water and aquatic lives
- Worsen liquid waste produce and pollutes the water and soil extremely

- *Brass & Bronze and Aluminum utensils*

(Category ECR, 7(2), 1997; Orange-A)

- Generation of excessive amount of heat from the furnace is created during production
- Emission of soot and flue gasses comprising of oxides of sulphur and carbon monoxide from the melting furnace
- Water used for quenching is contaminated

- In metal works, the lathe machines, drilling machines may pose safety problem if precautionary measures are absent

- Solid waste from metal work is generated normally

➢ *Automobile workshop*

(Category ECR, 7(2), 1997; Orange-A; capital up to 10 lakh taka)

- Improper handling of welding work and gas cylinder can lead to accident
- Waste lubricating oil, brake oil may be generated
- Solid metallic waste may be generated

➢ *Hosiery and mini garments, omanian cap manufacturing*

(Category ECR, 7(2), 1997; Orange-B)

- If the electric wire is connected loosely into the motor and any types of faulty electrical circuit related accidents
- Workers including neighbors may face serious health problems due to high sound and vibration of the machineries
- Liquid wastes disposed improperly on land or solid wastes dumped on the surface. Some of the toxic compounds in these wastes find their way to ground water, aquifers or to nearby surface waters contaminating both the water and the aquatic biota through contaminating their tissues, thus causing health hazards to nearby inhabitants.

➢ *Furniture and fixtures*

(Category ECR, 7(2), 1997; Orange-A)

- There will be generation of wood cuttings and saw dust
- The operation is involved in use of polish. Varnish and thinners

➢ *Jewelry/ imitation; silver ornaments*

(Category ECR, 7(2), 1997; Orange-A)

- Excessive lead content used in the artificial jewelry (>300 ppm)
- Lead is the highly toxic heavy metal that does not break down in environment and causes a serious health problem

➢ *Electronic item production*

(Category ECR, 7(2), 1997; Orange-A)

- Heavy metals, are used in the production of electronic items, while others, such as Polycyclic Aromatic Hydrocarbons (PAHs) are produced by e-waste burning at low temperature.
- Burning the isolating plastic cover of cables in open barrels produces 100 times more dioxins than domestic waste burning
- landfills or recycling centers affecting the environment and/or public health
- CFCs escape from the e-waste dumping site

Food processing

➢ *Gur Processing, Mango bar processing, potato chips and Milk based product*

(Category ECR, 7(2), 1997; Orange-A)

- Emission of smoke from burning of fuel
- Waste water from processing will generate organic load
- Limited solid waste generation
- Workers are likely to suffer from health hazards due to long hours of exposure to high ambient temperature specially during the summer period
- Workers having contagious or infectious diseases will contaminated the food stuff

➢ *Flour mill*

(Category ECR, 7(2), 1997; Orange-A; up to 20 horse power)

- Dust problem seriously effects the worker

➢ *Rice mill*

(Category ECR, 7(2), 1997; Orange-A; up to 20 horse power)

- During operation, high speed moving parts may cause accident if handled carelessly
- Ash, dust, and other particulates affect neighbors health especially workers health

➢ *Dry fish processing*[2]

(Category ECR, 7(2), 1997; Orange-B)

- Worst smell generated that could effects on workers' health
- The poisonous chemicals, including DDT and different types of insecticides, are used to protect those from decomposition and cause of acute diseases for human health and contamination of surface water.
- Use of poisonous chemicals and other contaminated water directly pass into the nearest low lying areas and results of birds and commercial fish are exposed to danger.

➢ *Salt processing and trade*[3]

(Category ECR, 7(2), 1997; Orange-A, capital up to 10 Lakh taka)

- Health hazards (illness, acute diseases)
- fungal infection in different parts of the body due to moist air
- Safety hazards (accidents, injuries)
- Leakages of toxic liquid and gases that could contaminate the surface water sources
- Air pollution due to using acids and aggressive chemicals
- Excessive use of electricity etc.

Cluster under Agriculture, poultry, livestock and fisheries sub-sectors;

[2]http://www.sos-arsenic.net/english/environment/dryfish.html
[3]http://www.tifac.org.in/index.php?option=com_content&view=article&id=696&Itemid=205

➢ *Poultry & Dairy firm, Beef fattening, cow rearing, goat rearing, Buffalo rearing, duck rearing and sheep rearing*

(Category ECR, 7(2), 1997; Orange-A, up to 1000 in rural areas & 250 in urban areas for poultry, duck, for dairy firm, 10 cattle, goat, buffalo, sheep heads or below in urban areas and 25 cattle heads or below in rural areas)

- There can be *significant negative effects on the environment* if livestock and poultry are not properly managed because livestock can be affected by many different types of diseases (e.g., viral, bacterial, ecto-parasites and endo-parasites, etc.) and create waste.
- Viral and bacterial diseases can be easily transmitted from infected to non-infected poultry and livestock.
- Inappropriate use of veterinary drugs and improper disposal of related medical waste can pollute the surrounding environment.
- Improper management and burial of poultry and livestock that die as a result can cause air and water pollution. Certain zoonotic diseases (e.g., anthrax, brocelosis etc.) can even be transmitted to humans.
- Animal waste can also be a health hazard and contribute to environmental problems, as farmyard manure is often allowed to deteriorate on the ground or contaminate water systems.
- Worst smell from the poultry firm affects neighbors health adversely

➢ *Aquaculture (fish culture, fish hatchery, shrimp culture and crab culture)*

(Category ECR, 7(2), 1997; Orange-A)

- There could be minimal *adverse and/or positive effects on the environment* from small-scale aquaculture, such as resource optimization with the complementary utilization of land and water.
- If not properly managed, potential negative environmental impacts include loss of native species; pollution of water due to overuse of fertilizers; and the killing of predator fish by chemicals like rotenone, which can also have a negative impact on environment and human health.

➢ *Crop cultivation (flower cultivation, ginger, green chili cultivation, herbal plant, HYV vegetable seed production, litchi cultivation, mango cultivation, mung bean cultivation, pea nut cultivation, pineapple cultivation, potato cultivation, safe vegetable cultivation, broccoli and squash cultivation, garlic cultivation etc.) – (Category ECR, 7(2), 1997; Orange-A)*

- Crop cultivation can pose a threat to the environment in numerous ways including degradation of marginal and fragile lands, deforestation, loss of biodiversity, introduction of exotic species, soil erosion, nutrient depletion, loss of wildlife habitat, displacement of more appropriate land uses and reduction in water quality due to farm runoff.
- Pesticides pose a risk to the environment and human health if improperly used, including contamination of soil and water, harm to non-target organisms, destruction of natural pest control systems, and pest resurgence and resistance

Component 1: Enhancing services and enabling systems

➢ *Improved Physical Connectivity/ facilities: establishment or repairing of resilient architecture (flood & tidal flood); safe water supply, sanitation and desalination plant (Category ECR, 7(2), 1997; Orange-B)*

Establishment or repairing of architectures

- Damaging cultivable or agricultural land
- Possibility of loss of fertile land
- Health risks to labor involved in this activities
- Possibilities of adverse effects on locally valued ecosystem
- Possibility of water-borne diseases
- Noise problem etc.

Safe-water supply and improve market access

- Affect culture or capture fishery
- Affect quality of surface water
- Possibility of water-borne diseases
- Odor problem
- Damage of cultivable or agricultural land
- Loss of fertile top soil
- Water stagnation or drainage congestion/water logging situation/ affect storm run-off

Public toilets

- Sanitation activities can have negative impacts on the environment including the contamination of water sources and surrounding environment, as well as the occurrence of fecal and waterborne diseases, if facilities are poorly maintained.
- The improper disposal of refuse can have a significant effect on the health of communities, and can lead to pollution of surface water, as rain washes refuse into rivers and streams
- Refuse disposed of in storm drains may cause blockages and encourage fly and mosquito breeding.

7.2 **Possible Mitigation Measures**

62) Some of the MEs require general principals to apply for environment-friendly activities and some of the enterprises require standard environmental, health, and safety mitigation measures.

Enterprise type	Possible mitigation measures
Component-2: Strengthened Access to Finance for environmentally sustainable microenterprises	
Cluster under Manufacturing and food processing sub-sectors	
Power loom (shawl, shari, lungi and paposh), jamdani	• A regulating checking on electrical connections should be maintained

(Category ECR, 7(2), 1997; Orange-B)	• Workers should be aware of accident risks from the faulty electrical connection • Well set-up of machineries, adequate height of the roof, and sound protection device should be maintained • Management of liquid wastes and solid waste properly, prevent passing to the water bodies and landfills should be ensured.
Handicraft *(Category ECR, 7(2), 1997; Orange-B)*	• Provide training for the participants to improve and/or adopt environmentally friendly production techniques for activities such as weaving, making silk string, dyeing, etc. • Raise awareness of producers on environmental management practices and encourage their use in off-farm activities supported • Foster value-addition and diversification of off-farm activities by linking them to other sectors, such as agriculture and tourism • Reuse water from the various rinsing steps involved in dying and other activities in order to increase the efficiency of water (most common in the processing of handicrafts
Leather processing and shoe making, Belt making *(Category ECR, 7(2), 1997; Orange-A; capital up to 5 lakh taka)*	• Leather processing unit should be established outside the residential and commercial areas • Least corrosive chemical may be used to protect bad smell • Properly disposed the liquid wastes to the nearby fixed point not to the water bodies • Workers should use Mask and Gloves during processing
Rice mill *(Category ECR, 7(2), 1997; Orange-A; capital up to 5 lakh taka)*	• High speed moving parts (fly wheels, electric motors) must be carefully handled • Workers in the rice mill must use mask during operation • Ash and dust must be dumped into the nearby fixed place
Automobile workshop *(Category ECR, 7(2), 1997; Orange-A; capital up to 10 lakh taka)*	• Proper training should be provided to the workers so that they can handle welding works effectively • The lubricating and other oils generated should be given to lube oil-recycling • The solid waste generated should be given to the steel re-rolling mills for recycling
Hosiery and mini garments. omanian cap manufacturing *(Category ECR, 7(2), 1997; Orange-B)*	• A regulating checking on electrical connections should be maintained • Workers should be aware of accident risks from the faulty electrical connection • Well set-up of machineries, adequate height of the roof, and sound protection device should be

	maintained • Management of liquid wastes and solid waste properly, prevent passing to the water bodies and landfills should be ensured.
Flour mill *(Category ECR, 7(2), 1997; Orange-A; up to 20 horse power)*	• To use cover in the rear of the machine to protect dust • Workers must use mask during operation
Brass & Bronze utensils *(Category ECR, 7(2), 1997; Orange-A)*	• Adequate exhaust fan and cross ventilation can control of room temperature • Installation of chimney of minimum 15 feet height. • The contaminated quenching water must be neutralized before disposal • Use of eye protective equipment • Maintain proper segregation and disposal of generated solid waste
Food processing(Gur Processing, Mango bar processing, potato chips and Milk based product) *(Category ECR, 7(2), 1997; Orange-A)*	• Certain height of chimney should be used (10 to 15 feet) • The waste should be separated for composting or to be converted as animal/poultry feed and fishmeal • Proper disposal to landfill • Provisions for temperature control through adequate ventilation • Regular health check-up of the workers should be ensured
Furniture and fixtures *(Category ECR, 7(2), 1997; Orange-A)*	• The solid waste generated may be used as fuel or dumped in a sanitary landfill • Nose mask use is suggested
Jewelry/ imitation; silver ornaments *(Category ECR, 7(2), 1997; Orange-A)*	• Awareness, encourage to use less lead content in the artificial jewelry or imitation • Mandates lead restrictions for certain of the specified materials allowed in manufacturing jewelry
Electronic item production *(Category ECR, 7(2), 1997; Orange-A)*	• Introduce 3R (Recycling, Reuse and Reduce mechanism • Properly dumping the e-waste (a dug with certain height)
Dry fish processing *(Category ECR, 7(2), 1997; Orange-B)*	• Discourage to use poisonous pesticides like DDT for fish drying • Promote to use mechanical driers • A faster flow of air over the fish results in even and rapid drying • Maintained the Relative Humidity (RH) for moisture

	content • Wastewater should be kept in a confined area • Workers must use noise mask during working hours • If pesticides use, then balance dose of pesticides should be used and use PPE during application
Salt processing and trade *(Category ECR, 7(2), 1997; Orange-A, capital up to 10 Lakh taka)*	• To promote safety practices and using PPE during operation • Promote to apply Best Management Practices (BMP) • Regular check of leakages of gas/toxic liquids • Promote to use solar • Promote to reuse wastewater • Train workers on safety management • Safety audits after regular interval • Ensure availability of sanitation, drinking water and proper housing • Housekeeping should be good- allowing sufficient space for material & worker movement without any obstruction.
Agri-business cluster	
Crop cultivation *(Category ECR, 7(2), 1997; Orange-A)*	• Introducing IPM (Integrated Pest Management) approaches to reducing the pest infestation on the crop land • Promote to use balance doses of chemical fertilizers and organic fertilizers on the crop land • Under this cluster, project will prepare a detailed '' Pest Management Plan (PMP)'' and make it available to the partner organizations level for field implementation.
Aquaculture (fish culture, fish hatchery, shrimp culture and crab culture) *(Category ECR, 7(2), 1997; Orange-A)*	• Develop and use Environmental Due Diligence Review (EDDR) checklist for potential aquaculture • Promote fingerlings (puna) from hatcheries rather than from natural bodies of water to reduce the burden on the ecosystem • Train producers in the application of GAPs, including proper feed preparation and application method and disease management • Encourage traditional practices, such as netting and drying of pond, for capturing predator fish • Train participants to apply balanced doses of organic and chemical fertilizers to the cultured water body. • Hormonal treatment will be discouraged.
Poultry & Dairy firm, Beef fattening, cow rearing, goat rearing, Buffalo rearing,	• Train business clusters on cleaning of poultry and goat/pig rearing hut and shed • Train business on disposal and dumping of poultry and

duck rearing and sheep rearing *(Category ECR, 7(2), 1997; Orange-A)*	goat/pig fecal matter to nearby safe dumping / collection corners • Aware to control odor, insects and mosquito breeding around the poultry and goat/pig rearing farm • Train business clusters on composting manure and how to compost slurry
Component 1: Enhancing services and enabling systems	
Establishment or repairing of architectures	• Develop and use a checklist to examine the suitability of proposed projects with regard to physical, biological, and socio-economic considerations • Promote proper positioning of construction sites and adherence to best engineering practices • Incorporate standard mitigation measures per type of rehabilitation/construction activity such as re-vegetation, planting trees, etc. into scheme designs
Safe-water supply and improve market access	• Conduct environmental screening prior to the construction of safe-water supply and improvement of market access structures as part of the site selection process • Analyze possible environmental shocks and stressors of target locations like flooding, soil erosion, landslides, water level scarcity, arsenic contamination, etc. as part of the site selection process taking into consideration local geology and hydrological consequences on a case by case basis. • Monitor harvested water to ensure it does not become a breeding ground for mosquitos • Ensure natural over-flow of water • Train communities to protect water sources to reduce likelihood of contamination • Train members of the community to maintain and properly use constructed water reservoirs and market access or approaches of improvement.
Public toilets	• Monitor use of lined pits to prevent contamination of water sources • Monitor use of lime or ash to kill fecal bacteria • Monitor awareness session on fecal management and disposal of solids

8.0 Stakeholder consultation and disclosure

63) Consultations will be inclusive of all stakeholders and used as a two- way communication strategy to provide information about the project and solicit support and agreements on the mitigations proposed. The community and relevant stakeholders shall be made aware of the scope of interventions for involving them in the decision making to the extent possible. To prepare the EMF, PKSF has carried out stakeholders' consultations in office and field level. Brief descriptions of these consultations are attached in the Annex-5 & 6.

64) PKSF will follow the disclosure requirements of the World Bank on environmental and social documentation. Summary of the EMF report and impact mitigation measures will be translated into Bengali language and disseminated locally. The EMF will be posted in the website of PKSF and POs and will be made available at the World Bank's portal. In addition, the comments on the public notice of the documents disclosed in the website and national dailies will be reviewed and incorporated in the final EMF report. The POs will also make the hardcopies available at their head office and branches.

65) During the implementation stage of project, the sub-project specific screening/assessment report will be periodically produced and if necessary, will be posted in the PKSF/PO website.

9.0 Conclusions and recommendations

66) This EMF is a document which provides guidelines as to how the environmental safeguard issues can be addressed both in the project management level and ME level. In general, the project is not expected to have significant environmental impact due to the nature of investments. However, the project may finance some infrastructure and install some equipment.

67) The PMU will build up institutional capacity to manage the project, including planning and implementation of actions to meet the environmental and safeguards requirements. At least one Environmental Safeguard Specialist should be appointed early in the project implementation. The Environmental Safeguard Specialist will be based in the PMU and be responsible for assisting the PMU on environmental screening of the sectors; and monitoring the implementation of the environmental components.

68) Under the above general recommendations, the following specific conclusions and recommendations have been derived from the work during EMF development.

- While the EMF provides the guidelines to ensure that environmental safeguards are implemented in the SEP, the awareness on the issue is essential for all staff involved in the project implementation including PO and PKSF.

- Best practice in environmental management must be inherent in project preparation and implementation. Provisions to this end must be included in technical specifications, sitting, design criteria, contracts, operations and maintenance.

- The EMF identifies various environment related issues and recommends remedial measures. It is essential that these recommendations are implemented for making the EMF functional especially in building human resources at all level.

- The Environmental reporting and monitoring recommended in the EMF document should be done at regular intervals by the POs and PKSF as these are essential for successful implementation of the EMF.

ANNEX 1: ENVIRONMENTAL MITIGATION AND MONITORING PLAN (EMMP)

Enterprise type	Potential negative impacts	Possible mitigation measures	Responsible parties	Monitoring schedule	
				Indicators	How often
Component-2: Strengthened Access to Finance for environmentally sustainable microenterprises					
Manufacturing and Food processing cluster					
Power loom (shawl, shari, lungi and paposh), jamdani	If the electric wire is connected loosely into the motor and any types of faulty electrical circuit related accidents	A regulating checking on electrical connections should be maintained			
(Category ECR, 7(2), 1997; Orange-B)	Workers including neighbors may face serious health problems due to high sound and vibration of the machineries	Workers should be aware of accident risks from the faulty electrical connection			
	Liquid wastes disposed improperly on land or solid wastes dumped on the surface. Some of the toxic compounds	Well set-up of machineries, adequate height of the roof, and sound protection device should be maintained			

Enterprise type	Potential negative impacts	Possible mitigation measures	Responsible parties	Monitoring schedule	
	in these wastes find their way to ground water, aquifers or to nearby surface waters contaminating both the water and the aquatic biota through contaminating their tissues, thus causing health hazards to nearby inhabitants.	Management of liquid wastes and solid waste properly, prevent passing to the water bodies and landfills should be ensured.			
Handicraft *(Category ECR, 7(2), 1997; Orange-B)*	• Traditional handicraft and hand-weaving can have negative effects on the environment due to wastewater produced by using chemicals and surface water for bleaching and dyeing.	Provide training for the participants to improve and/or adopt environmentally friendly production techniques for activities such as weaving, making silk string, dyeing, etc.			
		Raise awareness of producers on environmental management practices and encourage their use in off-farm activities supported			
		Foster value-addition and diversification of off-farm activities by linking them to other sectors, such as agriculture and tourism			
		Reuse water from the various rinsing steps involved in dying and other activities in order to increase the efficiency of water (most common in the			

Enterprise type	Potential negative impacts	Possible mitigation measures	Responsible parties	Monitoring schedule	
		processing of handicrafts			
Leather processing and shoe making, Belt making *(Category ECR, 7(2), 1997; Orange-A; capital up to 5 lakh taka)*	Leather processing is more harmful to the environment than the textile, fertilizer and paper industries	Leather processing unit should be established outside the residential and commercial areas			
	Worst smell raised from rotten meat during processing leather is created and it affects the neighbors including workers badly	Least corrosive chemical may be used to protect bad smell			
	Corrosive chemical use that could have potential effects on water and aquatic lives	Properly disposed the liquid wastes to the nearby fixed point not to the water bodies			
	Worsen liquid waste produce and pollutes the water and soil extremely	Workers should use Mask and Gloves during processing			
Rice mill *(Category ECR, 7(2), 1997; Orange-A; capital up to 5 lakh taka)*	During operation, high speed moving parts may cause accident if handled carelessly	High speed moving parts (fly wheels, electric motors) must be carefully handled			
	Ash, dust, and other particulates affect neighbors health especially workers health	Workers in the rice mill must use mask during operation			
		Ash and dust must be dumped into the			

Enterprise type	Potential negative impacts	Possible mitigation measures	Responsible parties	Monitoring schedule	
		nearby fixed place			
Automobile workshop *(Category ECR, 7(2), 1997; Orange-A; capital up to 10 lakh taka)*	Improper handling of welding work and gas cylinder can lead to accident	Proper training should be provided to the workers so that they can handle welding works effectively			
	Waste lubricating oil, brake oil may be generated	The lubricating and other oils generated should be given to lube oil-recycling			
	Solid metallic waste may be generated	The solid waste generated should be given to the steel re-rolling mills for recycling			
Hosiery and mini garments. omanian cap manufacturing *(Category ECR, 7(2), 1997; Orange-B)*	If the electric wire is connected loosely into the motor and any types of faulty electrical circuit related accidents	A regulating checking on electrical connections should be maintained			
	Workers including neighbors may face serious health problems due to high sound and vibration of the machineries	Workers should be aware of accident risks from the faulty electrical connection			
	Liquid wastes disposed improperly on land or solid wastes dumped on the surface. Some of the toxic compounds in these wastes find their way to	Well set-up of machineries, adequate height of the roof, and sound protection device should be maintained			

Enterprise type	Potential negative impacts	Possible mitigation measures	Responsible parties	Monitoring schedule	
	ground water, aquifers or to nearby surface waters contaminating both the water and the aquatic biota through contaminating their tissues, thus causing health hazards to nearby inhabitants.	Management of liquid wastes and solid waste properly, prevent passing to the water bodies and landfills should be ensured.			
Flour mill *(Category ECR, 7(2), 1997; Orange-A; up to 20 horse power)*	Dust problem seriously effects the worker	To use cover in the rear of the machine to protect dust			
		Workers must use mask during operation			
Brass & Bronze utensils, Aluminum utensils *(Category ECR, 7(2), 1997; Orange-A)*	Generation of excessive amount of heat from the furnace is created during production	Adequate exhaust fan and cross ventilation can control of room temperature			
	Emission of soot and flue gasses comprising of oxides of sulphur and carbon monoxide from the melting furnace	Installation of chimney of minimum 15 feet height.			
	Water used for quenching is contaminated	The contaminated quenching water must be neutralized before disposal			

Enterprise type	Potential negative impacts	Possible mitigation measures	Responsible parties	Monitoring schedule	
	In metal works, the lathe machines, drilling machines may pose safety problem if precautionary measures are absent	Use of eye protective equipment			
	Solid waste from metal work is generated normally	Maintain proper segregation and disposal of generated solid waste			
Furniture and Fixers *(Category ECR, 7(2), 1997; Orange-A)*	There will be generation of wood cuttings and saw dust	The solid waste generated may be used as fuel or dumped in a sanitary landfill			
	The operation is involved in use of polish. Varnish and thinners	Nose mask use			
Jewelry/ imitation; silver ornaments	Excessive lead content used in the artificial jewelry (>300 ppm)	Awareness, encourage to use less lead content in the artificial jewelry or imitation			
(Category ECR, 7(2), 1997; Orange-A)	Lead is the highly toxic heavy metal that does not break down in environment and causes a serious health problem	Mandates lead restrictions for certain of the specified materials allowed in manufacturing jewelry			
Electronic item production *(Category ECR,*	Heavy metals, are used in the production of electronic items, while others, such as Polycyclic Aromatic Hydrocarbons (PAHs) are produced by e-waste burning at low temperature.	Introduce 3R (Recycling, Reuse and Reduce mechanism			

Enterprise type	Potential negative impacts	Possible mitigation measures	Responsible parties	Monitoring schedule	
7(2), 1997; Orange-A)	Burning the isolating plastic cover of cables in open barrels produces 100 times more dioxins than domestic waste burning	Properly dumping the e-waste (a dug with certain height)			
	landfills or recycling centers affecting the environment and/or public health				
	CFCs escape from the e-waste dumping site				
Food processing (Gur Processing, Mango bar processing, potato chips and Milk based product) *(Category ECR, 7(2), 1997; Orange-A)*	Emission of smoke from burning of fuel	Certain height of chimney should be used (10 to 15 feet)			
	Waste water from processing will generate organic load	The waste should be separated for composting or to be converted as animal/poultry feed and fishmeal			
	Limited solid waste generation	Proper disposal to landfill			
	Workers are likely to suffer from health hazards due to long hours of exposure to high ambient temperature specially during the summer period	Provisions for temperature control through adequate ventilation			
	Workers having contagious or infectious diseases will contaminated the food stuff	Regular health check-up of the workers should be ensured			

Enterprise type	Potential negative impacts	Possible mitigation measures	Responsible	Monitoring schedule	
Salt processing and trade *(Category ECR, 7(2), 1997; Orange-A, capital up to 10 Lakh taka)*	Health hazards (illness, acute diseases)	To promote safety practices and using PPE during operation			
	fungal infection in different parts of the body due to moist air	Ensure availability of sanitation, drinking water and proper housing			
	Safety hazards (accidents, injuries)	Promote to apply Best Management Practices (BMP)			
	Leakages of toxic liquid and gases that could contaminate the surface water sources	Regular check of leakages of gas/toxic liquids			
	Air pollution due to using acids and aggressive chemicals	Train workers on safety management			
	Excessive use of electricity	Promote to use solar			
		Promote to reuse wastewater			
		Safety audits after regular interval			
		Housekeeping should be good- allowing sufficient space for material & worker movement without any obstruction.			
Dry fish processing	Worst smell generated that could effects on workers' health	Discourage to use poisonous pesticides like DDT for fish drying			

Enterprise type	Potential negative impacts	Possible mitigation measures	Responsible	Monitoring schedule	
(Category ECR, 7(2), 1997; Orange-B)	The poisonous chemicals, including DDT and different types of insecticides, are used to protect those from decomposition and cause of acute diseases for human health and contamination of surface water.	Promote to use mechanical driers			
	Use of poisonous chemicals and other contaminated water directly pass into the nearest low lying areas and results of birds and commercial fish are exposed to danger.	Wastewater should be kept in a confined area			
		A faster flow of air over the fish results in even and rapid drying			
		Workers must use noise mask during working hours			
		If pesticides use, then balance dose of pesticides should be used and use PPE during application			
		Maintained the Relative Humidity (RH) for moisture content			
Agri-business cluster					

Enterprise type	Potential negative impacts	Possible mitigation measures	Responsible	Monitoring schedule	
Crop cultivation (*Aromatic rice cultivation, Mug bean Cultivation & Trade, peanut cultivation and trade, Pineapple cultivation and trade, potato cultivation & trade, banana cultivation & trade, ginger, green chili cultivation & trade, HYV. Vegetable seed production, safe vegetable cultivation, soya bin cultivation, specialized vegetables (Broccoli,*	Crop cultivation can pose a threat to the environment in numerous ways including degradation of marginal and fragile lands, deforestation, loss of biodiversity, introduction of exotic species, soil erosion, nutrient depletion, loss of wildlife habitat, displacement of more appropriate land uses and reduction in water quality due to farm runoff.	Introducing IPM (Integrated Pest Management) approaches like, intercropping, multi-cropping, mulching, perching, sex pheromone, light trap, biological trap/controls, botanic aroma etc. to reducing the dependency on pesticides.			
		Use of PPE (Personal Protective Equipment) during pesticides spray			
		Promote to use rain water through rain water harvesting			
		Crop rotation replenishes the soil, and proves to be very beneficial in keeping pests and diseases from developing resistance to the natural pesticides.			
	Pesticides pose a risk to the environment and human health if improperly used, including contamination of soil and water, harm to non-target organisms, destruction of natural pest control systems, and pest resurgence and resistance	Promote to use balance doses of chemical fertilizers and organic fertilizers on the crop land			
		Use organic manure (compost, vermi-compost etc.)			
		Emphasize on surface water irrigation			
		Use solar system irrigation			

Enterprise type	Potential negative impacts	Possible mitigation measures	Responsible parties	Monitoring schedule	
squash), garlic cultivation & trade, guava cultivation & trade, litchi cultivation & trade, mango cultivation & trade etc.) *(Category ECR, 7(2), 1997; Orange-A)*		Increasing rate of natural recharge			
		Project will prepare a detail 'Pest Management Plan (PMP)' to promote and reduces the dependency on chemicals on crop land in considering the verities of crops.			
Aquaculture (fish culture, fish hatchery, shrimp culture and crab culture) *(Category ECR, 7(2), 1997; Orange-A)*	If not properly managed, potential negative environmental impacts include loss of native species; pollution of water due to overuse of fertilizers; and the killing of predator fish by chemicals like rotenone, which can also have a negative impact on environment and human health.	Develop and use Environmental Due Diligence Review (EDDR) checklist for potential aquaculture			
		Promote fingerlings (puna) from hatcheries rather than from natural bodies of water to reduce the burden on the ecosystem			
		Train producers in the application of GAPs, including proper feed preparation and application method and disease management			
		Encourage traditional practices, such as netting and drying of pond, for capturing			

Enterprise type	Potential negative impacts	Possible mitigation measures	Responsible parties	Monitoring schedule	
		predator fish			
		Train participants to apply balanced doses of organic and chemical fertilizers to the cultured water body.			
		Hormonal treatment will be discouraged.			
Poultry & Dairy firm, Beef fattening, cow rearing, goat rearing, Buffalo rearing, duck rearing and sheep rearing *(Category ECR, 7(2), 1997; Orange-A)*	There can be significant negative effects on the environment if livestock and poultry are not properly managed because livestock can be affected by many different types of diseases (e.g., viral, bacterial, ecto-parasites and endo-parasites, etc.) and create waste.	Train business clusters on cleaning of poultry and goat/pig rearing hut and shed			
	Viral and bacterial diseases can be easily transmitted from infected to non-infected poultry and livestock.	Train business on disposal and dumping of poultry and goat/pig fecal matter to nearby safe dumping / collection corners			
	Inappropriate use of veterinary drugs and improper disposal of related medical waste can pollute the surrounding environment.	Aware to control odor, insects and mosquito breeding around the poultry and goat/pig rearing farm			
	Improper management and burial of poultry and livestock that die as a result can cause air and water	Train business clusters on composting manure and how to compost slurry			

Enterprise type	Potential negative impacts	Possible mitigation measures	Responsible parties	Monitoring schedule	
	pollution. Certain zoonotic diseases (e.g., anthrax, brucellosis etc.) can even be transmitted to humans.				
	Animal waste can also be a health hazard and contribute to environmental problems, as farmyard manure is often allowed to deteriorate on the ground or contaminate water systems.				
	Worst smell from the poultry firm affects neighbors health adversely				
Component 1: Enhancing services and enabling systems					
Establishment or repairing of architectures	Damaging cultivable or agricultural land	Develop and use a checklist to examine the suitability of proposed projects with regard to physical, biological, and socio-economic considerations			
	Possibility of loss of fertile land	Promote proper positioning of construction sites and adherence to best engineering practices			
	Health risks to labor involved in this activities	Incorporate standard mitigation measures per type of			

Enterprise type	Potential negative impacts	Possible mitigation measures	Responsible parties	Monitoring schedule	
	Possibilities of adverse effects on locally valued ecosystem	rehabilitation/construction activity such as re-vegetation, planting trees, etc. into scheme designs			
	Possibility of water-borne diseases				
	Noise problem etc.				
Safe-water supply and improve market access	Affect culture or capture fishery	Conduct environmental screening prior to the construction of safe-water supply and improvement of market access structures as part of the site selection process			
	Affect quality of surface water	Analyze possible environmental shocks and stressors of target locations like flooding, soil erosion, landslides, water level scarcity, arsenic contamination, etc. as part of the site selection process taking into consideration local geology and hydrological consequences on a case by case basis			
	Possibility of water-borne diseases	Monitor harvested water to ensure it does not become a breeding ground for mosquitos			
	Odor problem	Ensure natural over-flow of water			
	Damage of cultivable or agricultural land	Train communities to protect water sources to reduce likelihood of			

Enterprise type	Potential negative impacts	Possible mitigation measures	Responsible parties	Monitoring schedule	
		contamination			
	Loss of fertile top soil	Train members of the community to maintain and properly use constructed water reservoirs and market access or approaches of improvement.			
	Water stagnation or drainage congestion/water logging situation/ affect storm run-off				
Public toilets	Sanitation activities can have negative impacts on the environment including the contamination of water sources and surrounding environment, as well as the occurrence of fecal and waterborne diseases, if facilities are poorly maintained.	Monitor use of lined pits to prevent contamination of water sources			
	The improper disposal of refuse can have a significant effect on the health of communities, and can lead to pollution of surface water, as rain washes refuse into rivers and streams	Monitor use of lime or ash to kill fecal bacteria			
	Refuse disposed of in storm drains may cause blockages and encourage fly and mosquito breeding.	Monitor awareness session on fecal management and disposal of solids			

Annexure-2: Environmental Screening Checklists

Environmental Screening Checklist for Agri-based business Sector and climate change

Sl #	General intervention issues	Yes	No	N/A	If yes, please indicate specific intervention & location
	Agriculture sub-sector (Aromatic rice cultivation, Mug bean Cultivation & Trade, Pea Nut Cultivation & Trade, Potato cultivation & Trade, Safe Vegetable Cultivation, Vegetable cultivation & Trade, Specialised Vegetables (Broccoli, squash), HYV Veg. seed production, Tomato Cultivation (Summer), Soybean Cultivation, Banana Cultivation &Trade, Flower Cultivation)				
1	Practicing IPM based agricultural technologies?				
2	If yes, list down the name of IPM techniques?				
3	Use balance doses of chemical fertilizers in the crop field?				
4	If yes, how they know they are using balance fertilizers?				
5	Use PPE (personal protective equipment) during chemical pesticides application?				
6	If yes, list down the name of materials of PPE				
7	Do they know how to identify fake fertilizers, fake pesticides?				
8	If yes, how they usually identifying the fake or adulterated pesticides or fertilizers?				
10	Crop residues that may be used as fertilizers				
11	Involve use of pesticides/fungicide for pest /disease management				
12	Destruction of trees and vegetation or orchard or plant garden for crop production				

Sl #	General intervention issues	Yes	No	N/A	If yes, please indicate specific intervention & location
13	Possibility to increase soil erosion by ploughing or run-off by rainfall or flood.				
14	Involve use of sub-surface water for irrigation				
15	Use deep/shallow tube well for water lifting				
16	Use seed in local or indigenous for cultivation				
Livestock and poultry sub-sector					
1	Do they clean the poultry and goat/pig rearing hut and shed regularly?				
2	Do they disposal and dumping of poultry and goat/pig fecal matter to nearby safe dumping / collection corners?				
3	Are they aware to control odor, insects and mosquito breeding around the poultry and goat/pig rearing farm?				
4	Do they know how to prepare compost from slurry?				
5	If yes, they are involved for composting of slurry.				
7	Use the litter for composting and reduce the scattering of waste;				
8	Prohibition of mixing and outing during the epidemic period				
9	Drainage system is well established within				

Sl #	General intervention issues	Yes	No	N/A	If yes, please indicate specific intervention & location
	the farm house				
10	Cow dung/poultry litter used for bio-gas plant				
11	Slurry management of cow dung/poultry litter is well-established				
13	Waste generation from dead animal, carcass, slaughter house etc.				
15	Usable water and other liquid waste go into pond/canal or near the agricultural land??				
17	Maintain safe distances (10 ft.) between livestock farms/ poultry farms and to residential areas				
18	Dead body of livestock/poultry were decomposed or keep in open place				
19	Disposal syringe or other medical waste keep in proper management				
21	Keep the farm house clean or washout everyday				
22	Worst odor/smell sprayed surrounding the farm areas from livestock/poultry farm.				
Fisheries/Aquaculture sub-sector (Fish Culture, Fish Hatchery, Shrimp Culture, Crab culture)					
1	Do they apply balance feed, balance doses of organic and chemical fertilizers to the cultured water body?				

Sl #	General intervention issues	Yes	No	N/A	If yes, please indicate specific intervention & location
2	Do they use zeolite for removing oxygen deficiency?				
3	Do they use fingerlings from hatcheries rather than from natural bodies of water?				
4	Do the fish culture water body or gher has the drainage system?				
5	Do they use net for removing predators?				
6	Involve mono culture fish farming				
7	Use agricultural land for digging pond/canal.				
8	Possibility of breaching the dyke and flow of flood/waste water to the pond				
9	Deteriorate water quality through agricultural/ storm run-off				
10	Impact on fish habitat and migration				
11	Collect crab let from nature or open water body				
12	Agricultural land is used for crab fattening				
13	Crops land inundate by the saline water for cultured of crab/shrimp.				
14	Shrimp PL and Juvenile collect from nature				
15	Susceptible to disease				
16	Use agricultural land for hatchery building construction				

Sl #	General intervention issues	Yes	No	N/A	If yes, please indicate specific intervention & location
17	Deforestation of trees for establish hatchery				
18	Obstruction of natural connection between river and wetlands				
	Earth work/Plinth Raise				
1	Involves use of earth work or land filling				
2	Damage of cultivable land (area in decimal)				
3	Involves use of fertile top soil				
4	Water logging or water stagnation/ drainage congestion				
5	Erosion of slope of raised plinth of settled ground/road				
	Biodiversity/Ecosystem				
1	Negative or significant effect on threatened or endangered species.				
2	Negative or significant effect on designated wetlands or water body				
3	Negative effect on locally important or valued ecosystem				
4	Introduction of invasive species (plant or fish) which have negative impact on local environment				
5	Negative impact of electrical waste i.e. acid or lead from battery, used CFL bulb, polythene etc.				

Sl #	General intervention issues	Yes	No	N/A	If yes, please indicate specific intervention & location
Other					
1	Possibility of water stagnation/drainage congestion/water logging situation created for implementing interventions				
2	Require to cut/destroy tree				
3	Obstruction of natural connection between river and wetlands				
4	Increased noise due to construction activities				
5	Increased windblown dust from materials				
6	Health risk to labors involved in project activities				

Environmental Screening Checklist for processing sector

Sl. No	Environmental Screening Checklist	Check (✔)			Comments
		Yes	No	N/A	
	Environmentally conscious design				
Manufacturing sub-sector (Power loom, handloom and handicraft)					
1.	Types of business Power loom (shawl, shari, lungi and paposh,jamdani) handicraft/handloom				
2.	Liquid wastes disposed improperly?				
3.	If yes, list down the location of disposal?				

4.	Any risk causing the contamination of drinking water through this liquid wastes?				
5.	If yes, list downhow the water sources are contaminated?				
6.	Does it has adequate height of the roof of the shed and sound protection design?				
Leather processing and shoe making, Belt making					
1.	Does worst smell exist in the area?				
2.	Does liquid wastedisposes improperly to nearby water sources (surface water)?				
3.	If yes, do they have taken any preventive measures to protect surface water sources contamination from liquid wastes?				
4.	Workers use PPE (personal protective equipment during working hours)				
Rice mill					
1.	Does excessive ash and dust exist during operation?				
2.	If yes, ash and dust disposed in a fixed point after operation?				
3.	Do workers use noise mask during operation?				
Automobile workshop					
1.	Is there waste lubricating oil, brake oil generated?				
2.	Does solid metallic waste exist in the workshop?				
3.	If yes, how they disposed these metallic wastes?				
4.	Do the workers use PPE (personal protective equipment) during working hours?				
	Hosiery and mini garments. omanian cap manufacturing				
1.	Does liquid wastes disposed improperly on land or solid wastes dumped on the surface?				

2.	If yes, do they have taken any preventive measures to protect surface water sources from contamination?				
3.	Does regulating checking on electrical connections maintained in the industry?				
4.	Do they have well set-up of machineries, adequate height of the roof, and sound protection device maintained?				
5.	Do the workers have received fire and safety training?				
6.	Do the workers have used mask during operation?				
	Flour mill				
1.	Is there any preventive measures on dust?				
2.	Do the workers use mask during operation				
	Brass & Bronze utensils, Aluminum utensils				
1.	Does excessive amount of heat from the furnace is generated during production?				
2.	If yes, adequate exhaust fan and cross ventilation exists in the factory?				
3.	The height of the chimney 15 feet?				
4.	Do the workers use of eye protective equipment during operation?				
5.	Does it maintain proper segregation and disposal of generated solid waste?				
6.	Does the contaminated quenching water neutralized before disposal?				
	Furniture and Fixers				
1.	Does the solid waste use as fuel or dumped in a sanitary landfill?				
2.	Do the workers use nose mask during operation?				
	Jewelry/ imitation; silver ornaments				

1.	Does they use allowed lead contents for manufacturing jewelry?				
2.	Is there any awareness session on using allowed lead contents for manufacturing jewelry items?				
Electronic item production					
1.	Does the e-waste dumping properly (a dug with certain height)?				
2.	Does they practice 3R system (Recycling, Reuse and Reduce mechanism)?				
	If yes, how they use 3 R system in their factory?				
Food processing					
1.	The height of the chimney is 15 ft.?				
2.	Does the waste separate for composting or to be converted as animal/poultry feed and fishmeal?				
3.	Does the solid waste dispose properly?				
4.	Is there provisions for temperature control through adequate ventilation?				
5.	Regular health check-up of the workers is maintained?				
Establishment or repairing of architectures					
1.	Do they promote proper positioning of construction sites and adherence to best engineering practices?				
2.	Do they involve to re-vegetation, planting trees, etc. if needed?				
3.	Do the workers use PPE during operation?				
4.	Do they minimize the noise during operation through avoiding unnecessary hammering?				
5.	Do they manage solid waste properly?				
6.	If yes, how and where they dump the remnants?				

Safe-water supply and improve market access					
1.	Does it affect the water quality?				
2.	If yes, how?				
3.	Do water-borne diseases occurs frequently?				
4.	Do they monitor harvested water to ensure it does not become a breeding ground for mosquitos?				
5.	Does it ensure natural overflow of water?				
6.	Do the communities trained enough to protect water sources to reduce likelihood of contamination?				
7.	Does it occur the damage of cultivable or agricultural land?				
8.	Do the workers use PPE during operation?				
Public toilets					
1.	Monitor use of lined pits to prevent contamination of water sources?				
2.	Do they maintain 10m safe distance from latrine to tube-well/dug-well/pond/river/canal/ swarm areas?				
3.	If 10m is not possible, then do they use sand around the pit to protect water sources contamination from latrine?				
4.	Do they use lime or ash to kill fecal bacteria?				
5.	Do they clean the latrines regularly?				
6.	Are hand-washing materials (soap with water)available inside the toilet?				
	Name of evaluator: Signature: Date of evaluation:				

Annexure-3: A sample structure of IEE if needed

Table of Contents

Executive Summary

1. Brief project description proponent information;
    - Provide a list of facilities for which locations will be determined later.
    - Describe the benefits of the Project, including jobs created, local training, employment and business opportunities, and royalties and taxes generated that accrue to
2. Policy / Legal Administrative Framework, Procedure for DOE Clearance
3. Description of the Project's IEE Process and Methodology
4. Project Location and Area
5. Project Rationale
6. Project Development Plan, Process / Technology Options and Project Components
7. Baseline Environmental Conditions
8. Impact Assessment and Mitigation
9. Focus Group Discussion
10. Environmental Management Plan
    - Impacts Management Plan (Pre-construction, Construction, Operational, Abandonment)
    - Environmental Monitoring Plan (EMoP)
    - Environment Code of Practices
11. Conclusions
12. Recommendations
13. List of References
14. Appendices

Annexure-4: Terms of Reference of Environmental Safeguard Specialist

1) Palli Karma-Sahayak Foundation (PKSF) was established by the Government of Bangladesh in 1990 as an apex development organization for poverty alleviation through employment creation. Since its inception, PKSF has been implementing various programs and projects for poverty alleviation through its Partner Organizations (POs). At present PKSF has more than 200 active Partner Organizations throughout the country.

2) PKSF launched its Micro Enterprise program in 2001 to extend financial services to the progressive clients of its partner organizations for undertaking micro-enterprises. This program termed Agrosor is being implemented all over Bangladesh through 172 POs of PKSF. During 2015-16, PKSF disbursed loans of BDT 6.90 billion to POs under its microenterprise program. PKSF's role in microenterprise development has been strengthened through implementation of two projects with IFAD support namely a) Finance for Enterprise Development and Employment Creation (FEDEC) project and b) Promoting Agricultural Commercialization and Enterprises (PACE). The World Bank administered Community Climate Change Project (CCCP) rated PKSF's performance satisfactory in project implementation.

3) Based on the success and lessons learned from the above-mentioned projects, PKSF is currently preparing 'Sustainable Enterprise Project (SEP)' with the support from World Bank.

4) PKSF is undertaken to prepare an EMF (Environmental Management Framework) for the project to ensure the requirements and also for compliance of GOB (DOE) requirements for IEE and EIA (if applicable). Overall, the project is likely to have a positive impact on the environment as the project will facilitate coordinated investments in Environmental, Social and Quality (ESQ) compliance and monitoring. However, ME sectors have some negative environmental impacts may occur during construction activities and safety equipment, technical measurement equipment in addition there may be impacts due to improper operation of facilities constructed. The project is likely to have a large number of MEs to be identified and the location of MEs are yet to be specified. In view of the limited information, a framework approach for environmental management has been adopted for the project. The Environmental Management Framework (EMF) for the project has been prepared in accordance with Environment Conservation Rules 1997 of Bangladesh and the Safeguard Policies of the World Bank. The EMF document will provide the broad framework for the environmental management of MEs; while the investors will be responsible for preparing the MEs, IEE and EIA reports (if applicable) and proper implementation of Environmental Management Plan (EMP).

5) Objectives

6) The engagement of the Safeguard Specialist is to ensure effective and timely implementation of environmental safeguard activities, monitoring of the environmental impacts of components throughout the project period and environmental enhancement of project activities.

7) Scope of Services

8) The scope of service of the Safeguard Specialist:

- Review and identify the considerations and processes for timely implementation of environmental safeguard activities based on recommendations of the EMF and compliant with Bangladesh Environmental Conservation Act, 1995 and the guidelines of the World Bank;
- Prepare environmental check list for different activities of the project which will be the key tool to assess the potential risk and environmental sustainability and to determine required actions for each intervention;
- Develop deliver tailored training programmes for the implementing agencies on use of the environmental checklist and the environmental guidelines and safeguard procedures, the training programme will based on recommendations of the EMF and wherever necessary national and international training institutes/ personal will be used. The consultant has to monitor training activities to ensure environmental enhancement is achieved;
- Review existing interventions in the EMF and periodically update and revise EMF based on new regulations (if any) of Bangladesh Government.
- Extensive consultation with stakeholders including the implementing agencies, local government and communities to understand their views and requirements.
- Review all the screening report, EMFs, monitoring reports etc. prepared by implementing agencies.
- Devise and implement monitoring plan for EMP
- Prepare timely environmental assessment report or review of environmental assessment report;
- Incorporation of EMPs in the bidding and contractual documents;
- Monitoring and supervision of EMP implementation by the MEs
- Monitor status and compliance with mitigation measures in the EMP; and any challenges in safeguard implementation, solutions, and lessons learned.
- Pay special attention to issues of non-compliance. In case of any noncompliance or unresolved safeguards issues propose additional measures.
- Visit MEs with significant potential environmental issues.

9) Time Period

10) The environmental specialist shall be engaged for project duration depending upon his/her performance evaluated after 6 months.

11) Qualification and Experience

12) The Safeguard Specialist should have at least Master Degree in Environmental Science, Geography, Geology or Environmental Engineering. The environmental specialist must have at least 10 years of working experience of which 5 years in the field of environmental activities as consultant or working in an institution which deals with environmental concern. The environmental specialist must be aware of the environmental rules and regulations of Bangladesh and the World Bank and must have completed, or involved in the preparation of, environmental impact study of at least two projects in Bangladesh.

Annexure-5: Stakeholder consultation

1) Stakeholder consultations were carried out at the location of the enterprise. Enterprise level consultations were carried out through FGDs in local areas.

2) Community consultation at shoe factories

3) Bhairab, Kisoreganj

4) Date: 21/10/2017

5) A team of Environment and Climate Change Unit of PKSF visited Bhairabupazila of Kishoreganj district to understand detrimental environmental consequences of shoe factories. The team carried out interviews with individual entrepreneur of shoe factory in Bhairabupazila. The team compiled the consultations for developing environmental management guideline and environmental management framework.

6) Findings:

7) There are about 7,000 shoe factories at 20 villages of 7 unions in Bhairabupazila. About 2-2.5 lacs people are working in these factories. However, during field visit, it was observed that the waste management is very poor in this area. Huge harmful waste was indiscriminately dumped on road sides, crop field surrounding the factories etc.

Material used in shoe factories

8) Processed leather, rexin, foam, yarn, button and different types of clothes etc. are commonly used in these shoe factories. Besides, various colors, chemical (heavy metal), solution, nail, pin, zipper, small accessories made with steel or iron etc. are also used to make shoe in these factories.

9) Waste materials produced from the factories

10) The main wastes of these shoe factories are leather and rexin. A small shoe factory (per day capacity is about 50 pair of shoes and 3-5 laborers) monthly waste generation is around 60 kg. The factories having production capacity of 25-30 dozens pair of shoes per day, monthly generate 2.5-3 tons of wastes. Besides these wastes, plastic and rubber, residual of zippers etc. are produced in these shoe factories. Other wastes are colored chemicals, spirit, dust etc.

11) Present status of waste management

- Owners of shoe factories are least aware about waste management

- Factory owners and workers have not received any training on waste management. They are not aware about environmental compliance of shoe factories.
- They mostly dump the waste in open places or around their factories.
- Sometimes they dump in pond or canal and sometimes burn them.
- The factories are not constructed considering natural light, aeration and other environmental services.
- Few factories have environmental clearance certificate.

- The wastes sometimes directly mixed with surface water and pollute them
- Most of the wastes are not bio degradable. It exists long term in the soil and decrease crop production capacity.
- Workers do not use hand-gloves, masks and sun-glass which are threatening for their health.
- Some factory owners keep their wastes in bags for selling. However, it is very limited scale.

12) *Recommendation on the basis of community consultation*

- The design of shoe-factory must consider environmental issues such as wind circulation, natural lighting, dedicated places for storage of raw material and finished product and waste disposal etc.
- Factories should not be established in residential areas
- The factories must have fire-safety system
- The factory owners and workers should have training on waste management and on health-safety issues
- They should be aware about environmental compliances
- The waste should be dumped in a dedicated place or collected in drum. It must not be dumped in pond, canal, rivers or any wetland.
- The waste should classified as biodegradable, reusable, recyclable and manage accordingly.

- Waste should be dumped and collected from the sites specified by municipality or union parishad
- Reusable waste should collect for selling/reuse
- Use safety tools such masks, goggles, gloves etc. to address the health and safety issue.

List of participants in community consultation

Date: October 21, 2017

Location	Stakeholder (Individual)
Chonchora bazar, Bhairab	Md. Foisal
Chonchora bazar, Bhairab	Ripon miah
Chonchora bazar, Bhairab	Md. Sogir
Chonchora bazar, Bhairab	AbdurLathip
Chonchora bazar, Bhairab	Md. Sopon
Chonchora bazar, Bhairab	Md. Rasel
S.A Shoe Salam market , Bhairab	Sohidul Islam
Nurzahan Shoe, Salam market , Bhairab	SibliBegom
Maria Shoe, Salam market , Bhairab	Sha Alam
Salam market , Bhairab	Liton
Salam market , Bhairab	Motin
Salam market , Bhairab	Jalal Box

Annexure-6: Report on National Consultation on Safeguard Documents

1) Introduction

2) On 1 November, 2017, a national consultation workshop was held at PKSF Bhaban on three Safeguard documents of Sustainable Enterprise Project (SEP) project. The meeting/workshop was presided by Dr. Fazle Rabbi Sadeque Ahmed, Director, PKSF. Dr. Akond Md. Rafiqul Islam, General Manager & Project Coordinator, PACE Project, PKSF, Mr. Zahir Uddin Ahmed, Assistant General Manager, PKSF, were also present in the workshop. Other PKSF officials along with representatives from different organizations including 20 Partner Organizations (POs) of PKSF attended the workshop. In his introductory speech, Dr. Fazle Rabbi Sadeque Ahmed mentioned a grave fact that the year 2016 has surpassed all previous records of carbon emission. He emphasized on the fact that the world is busy with the race of development in the fields of science, technology, economy, infrastructure, and so on. But these will not help human race survive for a very long time in the universal context. He went back to the backdrop of environmental movement of the countries when Kyoto Protocol put an effort to persuade the developed countries of the world to reduce their rate of carbon emission. Later, the Paris Agreement called for proposals from all the countries of the world on their initiatives to prevent climate change. The Agreement aims to respond to the global climate change threat by keeping a global temperature rise of this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. He expressed his sorrow that people these days are busy in making quick money rather than establishing environmentally sustainable industries for themselves and for the future generation. He mentioned that nature will revoke its support from mankind if we continue exploiting it to the extreme. We should be very cautious and wise while deciding our way forward to development. We have to maintain a balanced development process for environmentally sustainable future. He also mentioned Japan as a possible model for waste management. We need to follow and devise ways to come up with a better management framework for sustainable business. We cannot recover natural resources such as soil, wet land, etc., if spoiled irresponsibly. He emphasized how SEP is focused on environmentally sustainable business units. He also expressed his determination in supporting environmentally sustainable enterprises through PKSF. He asked for sincere and committed support from its Partner Organizations for successful implementation of this SEP project.

3) Later, Dr. Akond Md. Rafiqul Islam joined in and presided over the rest of the workshop and conveyed his valuable perspectives regarding the Safeguard issues before the audience. Mr. Zahir Uddin Ahmed went through the presentations on EMF, SMF and TPF. The list of the workshop participants are attached to this report as *Annex 1*. The detail of the presentation, discussion among the participants, and their recommendations and suggestions are reported in this document.

Figure 1: Dr. Fazle Rabbi Sadeque Ahmed delivering his welcome speech

4) Presentation on Environmental Management Framework (EMF)

5) At first, Mr. Zahir Uddin Ahmed explained how SEP project came into initiation and how the components of this project emphasize the role of environment in it. He also mentioned that the EMF prepared by PKSF tried to maintain every rule and regulation introduced by the Government of Bangladesh (GoB). EMF was prepared following the 'Environment Conservation Rule 1997' (ECR) of GoB. According to the ECR, the enterprises are distinguished in four different categories -- Green, Orange A, Orange B, and Red. Green indicates enterprises that are already environment friendly, Orange A type enterprises require a little more attention in environment side. Orange B category enterprises are not in a very good shape considering their environmental sustainability and Red is the type that will not get access to the credit line. He also explained the conditions and rationality of an enterprise for receiving loans. These micro-enterprises are divided into two sub-sectors, agricultural sector and manufacturing and food processing sector. The business clusters are also recognized this way. Mr. Zahir Uddin Ahmed presented the screening formats before the audience for their clearer understanding. The institutional arrangement of the project was also described in the presentation. Mr. Zahir Uddin Ahmed also went through the mitigation measures for the environmental issues. He mentioned the key principles of environment to be discussed. He requested the representatives of the Partner Organizations to convey their own ideas and recommendations on EMF for further discussion.

6) Open Discussion

7) The participants of the presentation meeting brought forth many vital issues to be discussed with PKSF. The representatives raised questions regarding issues like loan limit, loan tenure, accounts system, indicators of environment friendliness and many more. They have offered suggestions regarding issues like environmental clearance process, credit line revision, environmental certification, knowledge management and capacity building for PO staff and micro-entrepreneurs. This discussion brought many vital issues into light. Mr.

Mojibor Rahman, Executive Director, SDS suggested that an environmental certification system should be managed from within the PKSF core management for a hassle-free initiation of enterprises. At this point, Dr. Fazle Rabbi Sadeque Ahmed suggested that a project-based environmental certification system can be initiated by PKSF for the enterprises that do not come under the certification criteria of GoB. Mr. Shantosh Chandra Pal, Director, SSS, suggested that environmental regulations could be a little relaxed for the already existing MEs. The Deputy Executive director of WAVE Foundation, Mr. Anwar Hussain, suggested that the trainings and knowledge the PO staff and project participants receive during the project should not go in vain after the project is completed. So they must be trained up for adapting this knowledge and environment friendly behavior so that we can establish sustainability of the goals and objectives. In short, we should not perceive the knowledge gained from this project only as a project-based result; rather it should bring about behavioral change within the organizations. Mr. Moshihur Rahman, Director of POPI, brought another issue into light that if we let the red enterprises remain as they are then there will be no collective change. So we should rather include them in the project for bringing a more sustainable change within the cluster and therefore in the environment. Mr. Md. Abdul Hye Mridha, Senior Deputy Director of InM, emphasized that environmentally sustainable interventions are not aimed at introducing something new; it in only for protecting what we already have. Mr. Alauddin Khan, Executive Director, NDP, put forth a remarkable suggestion of incorporating other organizations working for the same goal of environmental sustainability with this project. The recommendations are noted duly for further discussion with the World Bank.

8) Recommendations/ Suggestions

- Adequate environment and BDS related training required for the mainstream staff of the Partner Organizations (POs) for the sustainability of the lessons learned from the project;
- Waste management should be given most importance in this project;
- The areas restricted by government must be incorporated in EMF and made available for the POs before submission of proposals;
- To achieve the goal, entrepreneurs/ service providers who work in the same cluster of SEP project but are not direct project participants should also be included in awareness programmes to practice environment-friendly behavior for the improvement of the entire cluster.

- Taking environmental clearance for sub-projects/ micro-enterprises from the Department of Environment (DOE) of the government of Bangladesh is time consuming and causes delayed implementation of the operations for POs and micro-entrepreneurs at field level. POs implemented projects usually do not need environmental clearance. POs have suggested to keep SEP project out of the environmental clearance, otherwise it will not be possible to implement smoothly and on-time.

Figure 2: Dr. Akond Md. Rafiqul Islam presiding over the workshop

- The workshop participants recommended that since the project will be implemented in field level by selected POs, so it will better to follow one Grievance Redress Mechanism (GRM) for all the three Safeguard documents (i.e. EMF, SMF and TPF).

9) Presentation on Social Management Framework (SMF) and Tribal Peoples Framework (TPF)

10) After the open discussion session with the POs representatives, Mr. Zahir Uddin Ahmed went back to presenting on Social Management Framework (SMF) and Tribal Peoples Framework (TPF).

11) He explained that SMF includes regulations on social and gender issues with an aim of establishing equity. Child labor should be dealt with from practical point of view. Use of land is an important issue in both SMF and TPF. The project will try its best to avoid use of land. If essential, they may use public land if there is no presence of squatters. Even when land on voluntary contribution is used, it should be kept in mind that the activities cannot harm any inhabitant of that land. Land can be acquired on contribution against compensation as

Figure 3: Zahir Uddin Ahmed consulted in the open discussion session

well. In that case a few principles must be maintained by the implementing agency. In case of tribal peoples, use of land should be avoided. However, if essential, the POs can use public land under the condition that no person or household will get negatively affected by the interventions. Private land can be used only on contribution against compensation. No voluntary contribution is accepted according to the TPF. The cultural and religious attributes must not be hampered due to project implementation.

12) After the presentation on SMF and TPF, Mr. Zahir Uddin Ahmed went back to the open discussion session with the PO representatives for their valuable feedback.

13) Open Discussion

14) The representatives from POs had questions such as whether or not environmental certification is necessary during requisition of loan under SEP project. In answer to this question, Mr. Zahir Uddin Ahmed suggested them to keep an environment related organizational profile for each Micro enterprise applying for loan. Mr. Pankaj Kumar Sarker, Director, RRF, mentioned lack of technological support in manufacturing sector, which is a vital part in this project. Also, Mr. Shantosh Chandra Pal requested the loan tenure to be extended for this project. Mr. Kamruzzaman, Assistant Director of SDI, seconded his suggestion and put forth his own by mentioning that the loan amount limit should also be extended as well as its tenure. Mr. Anwar Hussain, Mr. Shantosh Chandra Pal and representatives of other POs brought forth an important issue which is the environmental certification process. It is a time consuming and troublesome process to procure environmental certification from the Department of Environment (DOE). So, a simpler way to provide certification for quality of the products and environmental clearance for the enterprises should be devised within the system.

15) Recommendations/ Suggestions

- The Safeguard documents must not impose any strict boundary for the sake of sustainable expansion and growth of Micro-Enterprises. The rigidity of the rules and regulations of those safeguard documents should not negatively impact the project implementation and its goal.
- The clusters and micro-enterprises require project grants if there is any infrastructure to be built.
- Partner Organizations of PKSF are already following and implementing the land use/ acquisition and resettlement regulations specified in the SMF and TPF. However, it was brought up in the consultation meeting that the POs will deal with the local level enterprises in this project and most of the entrepreneurs are not willing to engage local government with their business operations. According to their suggestion, only essential involvement from the part of local government is expected regarding acquisition/ use of lands.

16) Closing remarks

17) Dr. Akond Md. Rafiqul Islam, General Manager, PKSF, mentioned that common capacity building opportunities will be provided from within the project. Our country is no more lagging behind in world economy. International funding for Micro-Enterprises proves that. Dr. Akond Md. Rafiqul Islam also explained how the borrower level in rural areas has upgraded to a more aware and gender sensitive level. He also talked of his experiences in the field about how organic fertilizer and Integrated Pest Management (IPM) can reduce cost in agri-farming. The Safeguard documents are considered to be living document as it will be revised and updated along with the maturity of the project. These documents must not impose strict boundaries for the sake of sustainable expansion and growth of Micro-Enterprises. Instead, these should help PKSF guide the micro-entrepreneurs and POs to establish environmentally sustainable Micro-Enterprises. He also requested the POs to keep sharing their important views and perspectives that can enrich these safeguard documents in future.

Figure 4: Dr. Akond Md. Rafiqul Islam delivering his closing remarks

18) This national consultation meeting with the POs will play a vital role as a key step towards finalizing the project planning. The participants brought forward many significant thoughts and ideas that would eventually have essential impacts on the project design. Dr. Akond Md. Rafiqul Islam declared the end of the workshop with a vote of thanks to the PO representatives and other participants who attended the program.