

Social Fund for Development (SFD)
Environmental Management Plan (EMP)

Executive Summary of EMP

January 2010

1. Introduction: The Social Fund for Development IV project is expected to have important environmental and social impacts and benefits. Project components are similar to those of the previous phases, with the inclusion of a new **Labor Intensive Works (LIW) program component**. In 2006, SFD began to implement LIW programs as part of national efforts to reduce unemployment. Lessons learned from the first round of implementation of workfare programs will be included in this project, including enhancing the project's longer-term environmental rehabilitation impact. For public works programs, there will be greater consideration of agricultural lands and terraces that can be rehabilitated for the benefit of poorer households. The LIW includes the rehabilitation of community assets in the fields of soil protection, agricultural terraces rehabilitation, maintenance and improvement of local feeder roads, streets pavement and other types of labor-intensive work based on the demand and priority needs of each community. Cash will be provided to help mitigate the impact of increased food prices through temporary work opportunities through a well-tested community targeting mechanism, as well as supporting rehabilitation of basic community assets. The **Community and Local Development program (CLD) component** will continue to implement subprojects in various sectors, including education, health, special needs groups (disabled persons, orphans, women at risk, among others), water and sanitation, culture heritage, and agriculture and rural roads. With the experience gained from SFD I, II and III, as well as with SFDs in other countries, a wide range of potential environmental issues are expected relating to solid waste, water quality, wastewater treatment, air quality, natural resources management, protected areas management, and cultural heritage.

2. More than five years passed since the Environment Management Plan (EMP) of the Yemeni Social Fund for Development (SFD) was first established in May, 2004, and through these five years, three annual environmental audits have been conducted and a lot of experience has been gained in the environmental issues. As SFD-III is approaching its end by end of year 2010, and with the beginning of SFD-VI it becomes crucial to update the EMP based on the results of the previous environmental audits and experience. The Environment Management Plan (EMP) shall cater for the environmental needs of the SFD sub-projects in a simple, responsive and cost effective manner that will not unnecessarily overload or slow down the project.

Basic Elements of the Environment Management Plan: The main elements of the environment management plan could be briefed in the following:

- i. Environmental classification of sub-projects
- ii. A simple environmental screening and registration process using classification lists
- iii. A simple environmental assessment for sub-project using environmental assessment forms, checklists and guidelines
- iv. Environmental self monitoring, reporting and periodic inspection
- v. Environmental education, training and awareness
- vi. Periodic auditing and reporting

3. The project is classified as an **environmental Category B** according to the World Bank's Operation Policy on Environmental Assessment (OP 4.01), requiring partial assessment. The project is not expected to generate any significant negative impacts, though some subprojects may result in adverse environmental impacts which could be site-specific and temporary in

nature. Any potential negative impacts can be avoided or mitigated through the application of the Environmental and Management Plan (EMP). In addition, as SFD is implementing a relatively large number of subprojects, the potential for cumulative impacts will also be considered in the design and implementation of the subprojects. SFD has well established procedures for environmental/social screening and classifying subprojects; monitoring to ensure that mitigation measures as outlined in the EMP are implemented; and reporting on compliance with safeguard policies. SFD IV is classified as an environmental category B project and consequently IDA funds will not be used towards the funding of any category A type sub-projects.

4. Environmental Management Plan: The objective of the EMP is to cater to the environmental and social needs of SFD subprojects in a simple, responsive and cost effective manner that will not unnecessarily overload or slow down the project cycle. When implemented efficiently, the EMP should ensure that:

- Any environmental or related social issues or concerns are addressed in the design phase of the sub-projects.
- Mitigation measures minimizing environmental and social impacts are being implemented.
- Monitoring for compliance and sound environmental and social performance is continued.

The basic elements of the amended EMP are: *(i)* environmental classification of sub-projects; *(ii)* a simple environmental screening and registration process using classification lists; *(iii)* simple environmental assessment for sub-project using environmental assessment forms, checklists and guidelines; *(iv)* environmental self monitoring, reporting and periodic inspection; *(v)* environmental education, training and awareness; *(vi)* periodic auditing and reporting. The EMP also includes simple social indicators related to project location and implications.

4.1 Environmental Classification of Sub-Projects

The sub-projects of the SFD would be classified into three groups. Lists A, B, and C would represent these groups as follows:

List C:

These are sub-projects, which are known to have no adverse environmental impacts, and accordingly will not require any environmental assessment or follow-up. Training, institutional capacity building, awareness, minor rehabilitation and furnishing/equipping of schools and training centers are examples of sub-projects falling under this category and represent around 10% of the overall number of sub-projects.

List B:

This category of sub-projects represents a relatively large percentage of the overall number of sub-projects (about 85%). These are sub-projects that are likely to have only limited adverse environmental impacts. Sub-projects falling under this category would include, but are not limited to:

- Construction of schools, teacher's housing, training centers, etc.
- Construction of health units, dispensaries, maternity clinics, medical research and control centers, etc.
- Rural feeder roads (cut and fill is up to 60% of the total cost), stone pavement, bridges and water passage ways, etc.
- Construction of dams (up to 50,000 m³), rainwater harvesting cisterns and mechanized water systems
- Establishing livestock markets, small slaughter houses (up to 5000 beneficiaries), vaccination yards, etc
- All cultural heritage sub-projects such as rehabilitation of "Megshamats", Mosques, and fortresses, etc
- Rehabilitating terraces, and flood protection
- Wastewater systems (sewerage network and treatment plant) for population up to 2,000 capita
- Municipal solid waste collection and transportation
- Land fill up to 5,000 capita

These sub-projects would require a scoping to be undertake and preparing an (limited) EIA using a simple "Form B" (attached in annex 1 of the EMP)

List A:

This list is limited only to those sub-projects with significant environmental impacts, and for which a full EIA needs to be prepared and reviewed. The list of sub-projects under this category would include, but might not be limited to:

- Landfill sub-projects for over 5,000 capita
- Centralized healthcare waste management projects (for towns or cities)
- Dams with capacities over 50,000m³
- Wastewater collection and treatment systems (sewerage networks and/or treatment plants) for population over 2,000 capita
- Rural feeder roads (cut and fill over 60% of the total cost)
- Slaughter houses serving more than 5,000 capita

4.2 Environmental Screening and Registering

Environmental screening would take place at an early stage of the SFD sub-project cycle. During the "Field Appraisal" stage, the project officer (PO), based on the subproject proposal and with the help of the classification lists, would classify the subproject into category A, B or C and register it in the Management Information System. The Branch Manger (BM) or the Head of the relevant Unit (UH) reviews the classification of the sub-projects and might re-classify the sub-project if he/she sees the necessity to do so. Sub-projects classified as "C" would be further processed with no environmental assessment or follow-up. Sub-projects under class "B" and "A" would be subject to environmental assessment and follow-up as described hereafter.

4.3 Environmental Assessment of Sub-Projects

Environmental assessment takes place during the second stage of the sub-project life cycle (preparation of project document). Sub-projects classified under category “B” would be subject to a focused EIA. The sub-project consultant would be required to complete a simple “EIA Form B”. The PO will provide the consultant with checklists and guidelines to help him/her identify and include the relevant mitigation measures. Mitigation measures indicated in the “EIA Form B” should be included in the project design and reflected in the project document. The SFD has already developed the “EIA Form B” and a number of checklists including:

- A brief and focused checklist for potential adverse environmental impacts of the following sub-projects categories: Roads; Schools; Health Care Units; Water Harvesting; Water Supply and Waste Water Management; Small dams; Solid Waste Management Projects
- Checklists for indicators/parameters to be included in the self monitoring plans of the above sub-projects categories
- A brief and focused checklist for mitigation measures to be considered for the different sub-projects categories.

Checklists are included in Annex 2 and 3 of the EMP report.

The EIA for the category “B” sub-project will first be reviewed by the PO in the Branch Office (BO) to check for any missing data, information or unaddressed issues. The sub-project document and the EIA, including the environmental self monitoring plan are then sent to the Unit Head (UH). The UH will forward a copy of the sub-project document and the EIA to an “External Environmental Reviewer” (EER) (or alternatively to an Environmental Coordinator “EC” within the Water and Environment Unit. The External Environmental Reviewer (EER) (or Environment Coordinator “EC”) will provide back to the UH his comments and opinion concerning the EIA. In particular he/she will evaluate and comment on the proposed mitigation measures, as well as the environmental self-monitoring and reporting plan. The sub-project document including the EIA Form as well as the opinion of the EER (or EC) is then put forward to the Project Appraisal Committee (PAC).

The EIA for class (A) sub-projects shall be conducted by a qualified consultant selected from a short list agreed with the EPA. The EIA shall be submitted to the EPA for approval. After having the approval, all sub-project documents shall be submitted to the PAC

4.4 Environmental Self Monitoring, Reporting and Periodic Inspection

Construction Phase:

During this phase the sub-project consultant would include in his/her periodic reports the status of the environmental concerns and the progress concerning the implementation of the mitigation measures as reflected in the EIA and sub-project document. The PO reviews the periodic reports

and follows-up periodically to ensure that environmental mitigation measures are being implemented.

Operation Phase:

The party assigned for implementing the self monitoring plan, would be required to prepare and present to the PO periodic self monitoring reports as stipulated in the self monitoring plan. These self monitoring activities would be simple, straightforward and would have been already agreed to in the self-monitoring plan and presented with the EIA. The Environmental Coordinator (EC) within the Water and Environment Unit will review the environmental self monitoring reports, and will periodically inspect sub-projects for environmental compliance and performance.

4.5 Environmental Education, Training and Awareness

To be able to efficiently implement the (EMP), it is important to provide to the SFD staff as well as the SFD consultants focused environmental training and awareness. The following environmental educational and training events are required as a minimum.

- A one day event to present to all SFD staff the EMP and explain its objectives and benefits. The process as well as roles and responsibilities will also be presented and discussed. During this event (workshop), guidelines and checklists will be provided and explained.
- A number of 3 days intensive courses for Project Officers and selected consultants on EIA. These EIA courses should not be theoretical in nature and should be tailored to address the requirements of the SFD sub-projects. These would be regional workshops and could include other parties associated with the SFD programs.
- A highly qualifying training course for local consultants to come to a short list of qualified consultants for conducting EIA studies for class (A) sub-projects and conducting the Annual Environmental Audit.

4.6 Environmental Auditing and Reporting

Annually an environmental consultant will be recruited to conduct an environmental compliance and performance audit. An audit report will be presented jointly by the consultant and the Environmental Coordinator (EC), and presented to SFD management. Based on the findings of this report, the Managing Director (MD) will forward an “Annual Environmental Report” to the World Bank. The Environmental and Social Management Plan for the SFD together with the relevant institutional roles and responsibilities are depicted in a chart in the EMP.